

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

**DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)**

**DOCKET NO. 14-CRB-0001-WR
(2016-2020)**

**INTRODUCTORY MEMORANDUM
TO THE WRITTEN REBUTTAL STATEMENT
OF THE NATIONAL ASSOCIATION OF BROADCASTERS**

The National Association of Broadcasters (“NAB”) respectfully submits this Introductory Memorandum to its Written Rebuttal Statement. This Memorandum includes a summary of NAB’s Rebuttal Case and describes the testimony of its witnesses.

Summary

In its October 6, 2014 written direct case, SoundExchange, Inc. argues yet again for significant increases in the per-performance rates applicable to all commercial webcasters. As its sole basis, SoundExchange relies on its fifth reprise of an analysis of the license fees charged by the major record companies to interactive on-demand services. That benchmark was accepted wholesale by the Judges in Web II, but as evidence demonstrating its flaws mounted, the same benchmark was met with skepticism by the Judges in Web III and was rejected by the Judges in SDARS II.

SoundExchange asks the Judges to adopt, for the first time, a “greater of” rate structure for all commercial webcasters. SoundExchange’s proposal would require all webcasters,

including radio station simulcasters, to calculate “Attributable Revenue” on a monthly basis using a complex formula and to pay a confiscatory share of that revenue (55%) to SoundExchange if the calculated amount exceeded the per-performance royalty that would otherwise be due. SoundExchange also seeks various changes to the terms and conditions that accompany the rates, all to the detriment of webcasters.

In response, NAB’s rebuttal case establishes several key points:

First, the per-performance rates for all commercial webcasters should go down substantially, not up. Existing rates were based either directly or indirectly on SoundExchange’s “interactive services” benchmark analysis. The evidence presented by NAB and other services in their direct cases demonstrated that this analysis has always been flawed, among other reasons because the benchmark market has always been infected by the absence of competition among the major record companies in licensing the interactive services. Thus, that market cannot properly serve as a benchmark in a rate setting proceeding that requires the Judges to set license fees that would exist in an effectively competitive market. [[REDACTED] [REDACTED]], that SoundExchange’s favored benchmark market was not competitive when it was used by SoundExchange in the past, is not now competitive, and consistently has resulted in license fees that exceed even monopoly prices.

Moreover, as NAB’s rebuttal evidence will show, SoundExchange’s new analysis of its preferred benchmark is flawed on its own terms and is biased to overstate license fees by a factor of more than four. If only the readily quantifiable flaws in SoundExchange’s benchmark analysis are corrected, and without adjusting for additional flaws that provide significant upward bias, the benchmark would support per-performance rates for statutory services on the order of \$0.0005, as proposed by NAB.

Second, NAB’s rebuttal case demonstrates that for multiple reasons, radio station simulcasting should be subject to a rate at the low end of any zone of reasonableness established by the Judges. In its direct case, SoundExchange made clear that its principal theory for higher rates was an alleged “convergence” between statutory and interactive services, with statutory services purportedly becoming more customized and interactive. On rebuttal, NAB will show that, to whatever extent other statutory services may or may not be “converging” with interactive services, simulcasting is not. Simulcasting of a broadcast provides the same radio-like experience that it always has, and it does not involve the customization that SoundExchange claims operates to the detriment of its directly licensed interactive services. SoundExchange’s witnesses acknowledge the fundamentally different nature of simulcasting. Thus, there is no basis to argue that simulcasting substitutes for other record company revenue streams. Indeed, because it is essentially radio, radio simulcasting has the same promotional benefits as radio, benefits that that the record companies devote hundreds of employees and spend hundreds of millions of dollars each year to secure. For all of these reasons, to the extent that the Judges ascertain a zone of reasonableness for statutory rates, the rate for simulcasting should be set at the bottom of that zone.

Third, NAB’s rebuttal case demonstrates that, even if certain webcasters are willing, based on their particular business models, to accede to SoundExchange’s proposed greater of rate structure including a percentage of revenue formula, that approach is inconsistent with the statutory standard and with sound economic theory. A percentage of revenue fee would improperly reward SoundExchange when the service created value, rather than reflecting the parties’ relative contributions as required. A percentage of revenue fee, particularly at or anywhere near the range sought by SoundExchange, would also improperly distort and diminish

the services' incentives to innovate and invest in new offerings that will improve service to the public and optimize consumer welfare and choice.

A greater of formula including a percentage of revenue is particularly inappropriate for radio station simulcasters. The benchmark agreements relied upon by SoundExchange for the "greater of" formula are pure music delivery services in which all or essentially all revenue is related to the licensed performance of sound recordings. In contrast, radio broadcasters have substantial operations and revenues that are not subject to royalty (among other things, their terrestrial radio operations), and their music usage can vary widely, both among stations and even during different parts of the day. Advertising is often sold in undifferentiated, single-fee bundles that may include attributable, non-attributable, and potentially attributable components. Any percentage of revenue-based fee must account for these differences. Thus, unlike the 100% music services that SoundExchange postures as representative, the use of a "greater of" formula requiring monthly calculations of revenues attributable to simulcasted performances of sound recordings would raise complex revenue allocation issues and would be a recipe for controversy, uncertainty, and substantial additional expense.

Finally, NAB's rebuttal case shows that SoundExchange's other proposed changes to the rates and terms are either unsupported by evidence or otherwise improper. For example, SoundExchange's proposal to remove the requirement that a CPA perform any audit would eliminate important safeguards that are intended to protect the subjects of audits and the integrity of the process. Nor is there a basis for shortening the limited time provided for payment of royalties and submission of required reports.

Witness Testimony

The National Association of Broadcasters' rebuttal case comprises the following witness statements and accompanying exhibits:

John Dimick is the Senior Vice-President of Programming and Operations at Lincoln Financial Media Company ("LFMC"), which operates radio stations in the Atlanta, Miami/Ft. Lauderdale, Denver, and San Diego markets. Mr. Dimick previously presented testimony regarding the economics of simulcasting, the importance of non-music programming to radio broadcasters, and the great promotional value of radio broadcasts to record companies and artists. In his rebuttal testimony, Mr. Dimick explains that simulcasting is distinct from other webcasting and lacks the customization that SoundExchange relies upon to support its fee proposal. Mr. Dimick explains that the content of a simulcast stream is the same in all material respects as the over-the-air broadcast, and that streaming, like broadcasting, is a one-to-many medium rather than the customized one-to-one medium that SoundExchange witnesses discuss in their testimony.

Michael Katz is NAB's lead expert economist and holds the Sarin Chair in Strategy and Leadership at the University of California at Berkeley.¹ In his Written Direct Testimony, Dr. Katz explained, among other things, that the current per-performance rates for statutory webcasting are excessive and are based on a flawed interactive services benchmark presented by SoundExchange and originally accepted by the Judges in the Web II proceeding. On rebuttal, Dr. Katz reviews the latest iteration of SoundExchange's interactive services benchmark, as presented this time by Daniel Rubinfeld. Dr. Katz presents testimony showing that prior flaws in the analysis remain uncured, and that new flaws infect Dr. Rubinfeld's analysis. Dr. Katz

¹ Dr. Katz's background and qualifications were discussed in the Introductory Memorandum filed October 7, 2014 with NAB's Written Direct Case.

demonstrates that, with the most quantifiable flaws corrected, an interactive services analysis would conservatively lead to a per-performance rate on the order of \$0.0005, as proposed by NAB, not the \$0.0025 - \$0.0029 that SoundExchange now demands.

Based in part on new evidence that SoundExchange refused to produce in discovery, but for which the Judges compelled production, Dr. Katz demonstrates that [[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]. As such, the major record companies are able to extract rates from these services that exceed even the rates that a monopolist would charge. Given [[REDACTED]], and the other evidence that he discusses, Dr. Katz concludes that use of the noncompetitive interactive services licenses as benchmarks to set rates in a target market that must be at least effectively competitive would result in substantially inflated rates and that the taint from the lack of competition, while substantial, is not easily removed.

Dr. Katz also demonstrates numerous other flaws in Dr. Rubinfeld's benchmark calculation, each of which creates significant upward bias and all of which together result in an indefensibly high per-performance rate. Among other issues, Dr. Rubinfeld: fails to account for revenue associated with advertising-supported services, which is the predominant business model of statutory services (including simulcasters); relies upon an assumption regarding the relationship of license fees to output prices that is both contrary to fundamental economic principles and empirically unjustified; gives improper weight to the interactive services paying higher fees; fails to account properly for differences in promotion and substitution between

interactive and statutory services, including specifically the differential effects of simulcasting; and fails to account for differences in the relative importance of licensed music. Dr. Katz shows that, correcting only the first three of these biases, each of which is easily quantified, the benchmark would imply a rate of approximately \$0.0005. That rate would still be conservative, as it would not account for the other upward biases in Dr. Rubinfeld's calculation.

Dr. Katz also addresses Dr. Rubinfeld's justifications for and calculation of a "greater of" royalty structure that would include for the first time in a webcasting proceeding a percentage of revenue fee. Dr. Katz demonstrates that a percentage of revenue fee would be distortionary and contrary to the statutory goal of having license fees reflect relative contributions to value. Dr. Katz also discusses the fact that such a license would be particularly difficult to administer for simulcasters. Finally, Dr. Katz demonstrates that the same flaws that make the Rubinfeld calculation of a per-performance rate unreliable and excessive also infect his calculation of a 55% percent of revenue fee.

Roman Weil is a Certified Public Accountant and the V. Duane Roth Professor Emeritus of Accounting at the Booth School of Business at the University of Chicago. He is also currently a visiting professor at the Department of Economics at Princeton University and the McDonough School of Business at Georgetown University. He holds a B.A. in economics and mathematics from Yale University and an M.S. in industrial administration and Ph.D. in economics, both from Carnegie-Mellon University. Dr. Weil has served on the faculties of numerous leading universities and has published extensively, including co-editing four professional reference works and authoring more than 80 articles in academic and professional journals.

Dr. Weil's testimony addresses the difficult allocation issues, burdens, and controversies that would arise if radio simulcasters were required to pay sound recording royalties under a fee

structure that included a percentage of revenue component, as SoundExchange proposes. As Dr. Weil discusses, there is no uniquely correct way to allocate revenue among different business activities. As such, without a detailed, agreed set of rules, as parties might implement via contract, attempted allocations will be expensive, time-consuming, and subject to dispute. Even then, issues will arise for which resolution will be uncertain.

Dr. Weil explains the reasons why revenue allocation is particularly problematic for broadcasters. Unlike webcasters who do nothing other than stream music, for whom all or essentially all revenue is subject to fee, simulcasters by definition have terrestrial broadcast operations (and often other revenue producing activities) for which no royalties are due to SoundExchange. In addition, local radio stations (and, thus, simulcasts) vary widely in their use of music. Thus, revenue allocation issues necessarily arise. These are exacerbated by the fact that advertising on a station or group of stations may be sold as bundle, with no readily ascertainable mechanism to separate revenues into those that are and are not attributable to streamed performances of sound recordings. As such, Dr. Weil concludes that, at present, a percentage of revenue fee (or a “greater of” fee including a percentage of revenue component) should not be implemented for simulcasters. Rather, it is more appropriate to continue with a per-performance rate that does not require attribution of revenue.

Dr. Weil also explains the reasons that some of SoundExchange’s other proposed changes to rates and terms should not be adopted. In particular, removing the current requirement that a CPA conduct any audits could compromise the integrity of the audit process. As Dr. Weil discusses, CPAs are subject to professional and ethical standards that promote objectivity and integrity. Those standards would not be applicable under the revised regulation that SoundExchange proposes.

Dominique M. Hanssens is the Bud Knapp Distinguished Professor of Marketing at the University of California at Los Angeles Anderson School of Management. He holds an M.S. and Ph.D. degrees in management from Purdue University. Dr. Hanssens' research is focused on strategic marketing problems, to which he applies his expertise in data-analytics methods such as econometrics and time series analyses. He has co-authored a book on market response models and is the author of numerous papers that have appeared in academic and professional journals. He is also the recipient of the Churchill Lifetime Achievement Award of the American Marketing Association, among other awards.

Dr. Hanssens conducted a consumer survey to determine the relative value assigned to music and other programming elements by listeners to Internet simulcasts of AM/FM music-formatted stations. Using the reliable survey methodology that he details in his testimony, Dr. Hanssens asked survey respondents to assign relative values to the following programming elements on simulcasts of their favorite music-formatted AM/FM radio station: music; news/talk/weather/sports; hosts/DJs and on-air personalities; local events information; contests; advertisements; and other elements. For these simulcasts, Dr. Hanssens found that approximately 57% of total value was attributed to music, with approximately 43% being ascribed to other features (with news/talk/sports and hosts/DJs/personalities/talk tied at approximately 12%). The results obtained in Dr. Hanssens' survey highlight the inappropriateness of SoundExchange's proposal that all webcasters pay the same percentage of revenue fee and corroborate Dr. Katz's assessment that sound recording performances contribute a lesser share of value to simulcasters than to all-music services.

John R. Hauser is the Kirin Professor of Marketing at the Massachusetts Institute of Technology Sloan School of Management and is an expert in survey design and evaluation. Dr.

Hauser has co-authored two books and has published numerous articles that have been recognized with national and international awards, including several articles concerning conjoint analysis. iHeartMedia and NAB jointly present Professor Hauser's testimony in rebuttal of the Testimony of Daniel L. McFadden, who designed and performed a complex survey in an attempt to estimate the relative value that consumers place on certain features of music streaming services. Professor Hauser explains that Professor McFadden performed his survey so that another SoundExchange witness, Daniel L. Rubinfeld, could incorporate the estimated values into his own rate calculations. Professor Hauser designed and conducted an experiment to test respondents' understanding of the McFadden survey. Professor Hauser explains, based on that experiment and his expertise in designing and conducting surveys, why Professor McFadden's survey data are not reliable for various reasons and cannot be used in a scientific or reliable manner. He also explains why neither Professor McFadden's nor Professor Rubinfeld's interpretations based on that survey data can be relied upon in this matter. In particular, Dr. Hauser explains that, due to flaws in the design, and as revealed in both Dr. McFadden's report and Dr. Hauser's own testing, consumers could not understand or misunderstood material aspects of the McFadden survey.

Steven R. Peterson is an Executive Vice President at Compass Lexecon, a leading economic consulting firm. Dr. Peterson has an A.B. from the University of California, Davis, and Ph.D. from Harvard, both in economics. He focuses his work on the economics of competition and antitrust, valuation, and the licensing of intellectual property.

Dr. Peterson provides rebuttal testimony directed to several issues raised by SoundExchange. First, Dr. Peterson rebuts the claims by Dr. Blackburn on behalf of SoundExchange that webcasting is a healthy market with numerous entrants and that it is

therefore unlikely that the current statutory rates are “choking off” growth. As Dr. Peterson explains, “not choking off growth” is not a proper economic standard. In any event, most of the entrants and putative success stories on which Dr. Blackburn’s study relies are not paying the full commercial rates he is attempting to justify, but rather much lower non-commercial fees and/or pureplay rates negotiated under the Webcaster Settlement Act. When properly analyzed, the data show that webcasters paying the full commercial rates fail at a much higher rate than other webcasters. Dr. Peterson presents data showing a number of other respects in which the health of the webcasting industry is not nearly as strong as Dr. Blackburn suggests, particularly among the webcasters who are forced to pay the full commercial rates (which SoundExchange now is seeking to raise).

Dr. Peterson also rebuts Dr. Blackburn’s claim that statutory services do not promote sales of sound recordings, pointing out the lack of evidence supporting Dr. Blackburn’s claim and discussing the wealth of evidence to the contrary.

Dr. Peterson also responds to the survey presented by Dr. McFadden, and the use of that survey’s results by Dr. Rubinfeld. Dr. Peterson notes that the McFadden results show a low willingness to pay for streaming, contrary to SoundExchange’s claim that consumers would migrate to high-cost interactive services if statutory services were unavailable. Dr. Peterson also shows that the average willingness to pay for certain features reported by Dr. McFadden both masks divergent preferences and cannot be used to provide insight into market prices or how consumers will respond to market prices. Dr. Peterson also explains why Dr. Rubinfeld’s “interactivity adjustment,” a key component of his interactive services benchmark, is not supported by the McFadden survey data.

**CONTENTS OF THE NATIONAL ASSOCIATION OF BROADCASTERS
WRITTEN REBUTTAL STATEMENT**

Volume 1 consists of (A) this Introductory Memorandum; (B) an index of the National Association of Broadcasters' written testimony; (C) an index of the National Association of Broadcasters' exhibits, which includes identification of restricted exhibits; and (D) the redaction log required pursuant to the Protective Order entered in this case. Pursuant to 37 C.F.R. § 350.4(a), the National Association of Broadcasters is filing an original and five copies of the materials in Volume 1, and will file two copies of Volume 1 with the Public Version of its direct statement.

Volume 2 consists of the National Association of Broadcasters' written rebuttal testimony. Pursuant to 37 C.F.R. § 350.4(a), the National Association of Broadcasters is filing an original and five copies of the Restricted Version of the testimony in its entirety – including those portions that include Restricted and Confidential materials – and will file five copies of the Public Version of this testimony with the Restricted and Confidential portions redacted.

Volume 3 consists of the National Association of Broadcasters' exhibits, including both the Public Versions as well as the Restricted and Confidential Versions, designated as such on the index of exhibits. The National Association of Broadcasters is filing an original and five copies of the exhibits – including exhibits that include Restricted and Confidential materials – and will file five copies of the Public Version of the exhibits with the Restricted and Confidential exhibits redacted.

Statements or exhibits from four of NAB's witnesses include material designated as Restricted Information by a party under the Protective Order.

Respectfully submitted,

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February 23, 2015

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<u>Witness</u>	<u>Title</u>
John Dimick	Senior Vice President of Programming and Operations, Lincoln Financial Media Company
Michael L. Katz, Ph.D.	Sarin Chair in Strategy and Leadership , University of California at Berkeley Haas School of Business
Roman L. Weil, Ph.D.	V. Duane Rath Professor Emeritus of Accounting, University of Chicago Booth School of Business
Dominique M. Hanssens, Ph.D.	Bud Knapp Distinguished Professor of Marketing, UCLA Anderson School of Management
Steven R. Peterson, Ph.D.	Executive Vice President, Compass Lexecon

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<u>Ex. No.</u>	<u>Restricted</u>	<u>Sponsored By</u>	<u>Description</u>
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NAB Ex. 32	RESTRICTED	Michael L. Katz	[REDACTED], SNDEX0269898-902
NAB Ex. 33	RESTRICTED	Michael L. Katz	[REDACTED], SNDEX0269154-177

Written Rebuttal Statement Redaction Log

<u>Document</u>	<u>Citation</u>	<u>Description</u>
Written Rebuttal Testimony of Michael L. Katz	Table of Contents, p. i.	Characterizations of testimony contained in the Restricted Deposition of Daniel L. Rubinfeld, December 11, 2014. Restricted designation made by SoundExchange.
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Written Rebuttal Testimony of Steven R. Peterson	¶ 45, fns. 46, 47, 48	Promotional information designated RESTRICTED by SoundExchange, NAB and iHeartMedia.

Written Rebuttal Testimony of Steven R. Peterson	¶ 46, fn 49	Promotional information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 47	Promotional information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 48	Promotional expenditure information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 49, fn 54	Promotional information and listener spending behavior designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 52	Promotional information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 61, fn. 73	Substitution information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 63	Information regarding the differences between terrestrial radio simulcasts and subscription webcasting services designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 64	Information regarding the differences between terrestrial radio simulcasts and subscription webcasting services designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 65, fn. 79	Information regarding the differences between terrestrial radio simulcasts and subscription webcasting services designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 67, fns. 80, 81	Information regarding listener behavior designated RESTRICTED by SoundExchange. Confidential Nielsen study information produced by NAB.

Written Rebuttal Testimony of Steven R. Peterson	¶ 68, fns. 84, 85	Information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 69, fn. 86	Information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 70, fns. 87, 88	Information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 71, fn. 89	Information regarding listener willing ness to pay for subscriptions, designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 72	Information designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 82	Information regarding listener willing ness to pay for subscriptions, designated RESTRICTED by SoundExchange.
Written Rebuttal Testimony of Steven R. Peterson	¶ 91, fn. 107	Information designated RESTRICTED by SoundExchange.
Index of Rebuttal Exhibits	Ex. Nos. 28, 29, 30, 31, 32, 33 and 35	Author, title and date information regarding documents designated as restricted by SoundExchange. Information redacted at the request of SoundExchange.
NAB Ex. 28		Designated as Restricted by SoundExchange.
NAB Ex. 29		Designated as Restricted by SoundExchange.
NAB Ex. 30		Designated as Restricted by SoundExchange.
NAB Ex. 31		Designated as Restricted by SoundExchange.
NAB Ex. 32		Designated as Restricted by SoundExchange.
NAB Ex. 33		Designated as Restricted by SoundExchange.

NAB Ex. 35		Designated as Restricted by SoundExchange.
NAB Ex. 36		Designated as Restricted by SoundExchange.
NAB Ex. 40		Designated as Restricted by SoundExchange.
NAB Ex. 41		Designated as Restricted by SoundExchange.
NAB Ex. 42		Designated as Restricted by SoundExchange.

CERTIFICATE OF SERVICE

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/s/ Christopher M. Mills

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:

**Determination of Royalty Rates
for Digital Performance in Sound
Recordings and Ephemeral
Recordings (Web IV)**

14-CRB-0001-WR (2016-2020)

**DECLARATION AND CERTIFICATION OF MICHAEL L. STURM
(On behalf of the National Association of Broadcasters)**

1. I am counsel for the National Association of Broadcasters (“NAB”) in the above-captioned case. I respectfully submit this declaration and certification pursuant to Rule 350.4(e)(1) of the Copyright Royalty Judges’ Rules and Procedures, 37 C.F.R. § 350.4(e)(1), and per the terms of the Protective Order issued October 10, 2014 (“Protective Order”) in support of NAB’s submission of its February 23, 2015 Written Rebuttal Statement. I am authorized by NAB to submit this Declaration on NAB’s behalf.

2. I am familiar with NAB’s Written Rebuttal Statement, and I have also reviewed the definitions and terms provided in the Protective Order. After consultation with my client, my colleagues and I have determined that to the best of my knowledge, information, and belief, pursuant to this definition, certain of the exhibits and testimony are “Restricted,” as they contain either material designated as Restricted in this proceeding by another party, and/or commercial or financial information that NAB has reasonably determined in good faith would, if disclosed, competitively disadvantage the Producing Party, provide a competitive advantage to

another party or entity, or interfere with the ability of NAB to obtain like information in the future.

3. The material and exhibits marked "Restricted" consist of material designated as Restricted by SoundExchange or another party, and non-public financial and commercial information provided to NAB under an obligation to maintain the information in confidence.

4. Under Rule 350.4(e)(1), I therefore declare that to the best of my knowledge, information, and belief, the materials designated as restricted either meet the definition set forth in the Protective Order or were produced to NAB as Restricted and another party therefore has represented that those materials meet the definition of the Protective Order.

Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury that, to the best of my knowledge, information and belief, the foregoing is true and correct.

Dated: February 23, 2015
Washington, D.C.



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I hereby certify that on February 23, 2015, I caused copies of the foregoing document to be served via email on the following parties, which have consented to email service:

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/s/ Christopher M. Mills

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PUBLIC VERSION

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:

**Determination of Royalty Rates
for Digital Performance in Sound
Recordings and Ephemeral
Recordings (Web IV)**

14-CRB-0001-WR (2016-2020)

**WRITTEN DIRECT STATEMENT OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

Witness Testimony

Volume 2 of 3

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October 7, 2014

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CURRICULUM VITAE1

I. INTRODUCTION AND OVERVIEW

1. The Copyright Royalty Judges (“Judges”) have commenced a proceeding to determine reasonable rates and terms for public performances of sound recordings by means of eligible, nonsubscription transmissions, under Section 114 of the Copyright Act, and the making of an ephemeral recording in furtherance of making a permitted public performance of the sound recording, under Section 112 of the Copyright Act, for the period beginning on January 1, 2016, and ending on December 31, 2020.¹ The Judges are charged with establishing reasonable royalty rates to be paid by eligible, nonsubscription services.² In determining these royalty rates, “the Copyright Royalty Judges shall establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller.”³

2. At the request of counsel for the National Association of Broadcasters (“NAB”), I have conducted an economic analysis of what rates meet the statutory standard as I understand that standard as an economist. I have also examined the implications of this standard for the validity of certain benchmarks that have previously been used or that are likely to be proposed in the present proceeding. Previous rate proceedings have consistently considered royalties for the public performance and ephemeral recording

¹ *Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV)*, 79 FR 412 (January 3, 2014) (hereinafter, *Web IV Commencement*).

² Copyright Act, 17 U.S.C. § 801.

³ Copyright Act, 17 U.S.C. §§ 112(e) and 114(f)(2)(B).

rights in combination because there is no sound basis for attributing an independent economic value to the latter.⁴ I therefore consider the two rates together in my analysis that follows.

3. My central finding with respect to the validity of past benchmarks is that the statutory rates adopted in the second webcasting proceeding (“Web II”) were based on a severely flawed benchmark analysis conducted by Dr. Pelcovits that led to rates well in excess of those that would have been negotiated by a willing buyer and willing seller in an appropriate market. Moreover, by strongly influencing the private parties’ expectations regarding future statutory rates, the rates set in Web II created significant upward pressure on rates in the Webcaster Settlement Act (“WSA”) agreements subsequently negotiated and, thus, rendered those agreements inappropriate benchmarks for what a willing buyer would have paid a willing seller in the absence of the statute. In short, there is a need to break with the past by taking a close look at new benchmarks that are meaningfully similar to the licenses at issue and that do not reflect undue licensor market power.

4. With respect to appropriate benchmarks for the current proceeding, my central findings are that: (a) an analysis of the economic relationship between record companies and terrestrial radio broadcasters establishes that the lower bound for reasonable royalties

⁴ See, e.g., *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Final Rule, 78 FR 23054 (hereinafter, *SDARS II Decision*) at 23055-56; *Determination of Royalty Rates for Digital Performance Right in Sound Recordings and Ephemeral Recordings*, Final Rule and Order, 79 FR 23102 (April 25, 2014) (hereinafter, *Web III Remand Decision*) at 23104-105; *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, Final Rule, 72 FR 24084 (May 1, 2007) (hereinafter, *Web II Decision*) at 24101-102.

to be paid by webcasters that simulcast terrestrial radio broadcasts (“simulcasters”) is near zero, and (b) an analysis of the statutory rate set in the most recent Satellite Digital Audio Radio Services proceeding (“SDARS II”)⁵ establishes that, when expressed as a percentage of a music-formatted radio station’s simulcasting revenues, a royalty of 13 percent or higher would be unreasonably high. In fact, percentage royalties that were lower but near 13 percent (or per-performance royalties that were equivalent to a rate near 13 percent) of simulcasting revenue would also be unreasonably high. Given the data available to me at this point in the current proceeding, I am unable to reach a conclusion as to how much lower than 13 percent of applicable revenue the upper bound on reasonable rates for simulcasting is. I anticipate being able to reach such a conclusion after reviewing additional information that I expect will be introduced into the record by other parties or made available in discovery.

5. Turning to specific findings, drawing on my training and experience as an economist, my review of the public record in related proceedings, and my analysis of the relevant industries, I find that:

- *From the perspective of economics, the willing-buyer/willing-seller standard is most appropriately interpreted as asking what would happen in an effectively competitive market in the absence of the statutory licensing regime. Congress’s decision to create a rate-determination process with a willing-buyer/willing-seller*

⁵ *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services* (hereinafter, *SDARS II*). *SDARS II*, in turn, relied in significant part on the result in the first satellite radio case before the Judges, *Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services* (hereinafter, *SDARS I*).

standard can best be reconciled with economic principles and common sense by interpreting willing buyers as those who have meaningful choices among competing sellers, rather than facing a single, all-or-nothing offer from a monopolist or sellers with equivalent market power. This interpretation is fully consistent with the Librarian of Congress’s statement in Web I that the willing-buyer/willing-seller standard calls for rates that would have been set in a “competitive marketplace”⁶ and the Judges’ statement that, although the standard does not require that there be perfect competition, it does require that benchmark agreements be reached in effectively competitive markets.⁷

- *Effectively competitive prices promote consumer welfare and economic efficiency.* From the perspective of economics, a standard requiring royalty rates to be set at the levels that would emerge from an effectively competitive market is a sound one. Economists and public policy makers have long recognized that competition delivers benefits to consumers in the form of lower, cost-based prices, greater innovation and variety, and/or improved product and service quality. Promoting efficiency through competition is widely recognized as the most effective means in most markets to promote overall consumer welfare. And, in particular, competitive prices are recognized as providing incentives to buyers and sellers

⁶ *Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings and Ephemeral Recordings*, Final Rule and Order, 67 FR 45240 (July 8, 2002) (hereinafter, *Web I Decision*), at 45244-45.

⁷ *Web III Remand Decision* at 23114, n. 37 and sources cited therein.

alike to behave in ways that maximize the total benefits society enjoys from available resources.

- *Competition pushes prices towards marginal costs.* A competitive supplier will find it profitable to engage in licensing as long as the license fees it expects to earn exceed the expected costs of issuing and administering the license. Hence, rivalry among competing licensors drives license fees toward the incremental costs of issuing the licenses. In the case of an idealized, perfectly competitive market, price would fall all the way to marginal cost. In less competitive markets (*e.g.*, workably competitive or effectively competitive markets), the prices will not fall all of the way to marginal cost, but they will strongly tend in that direction and will be near marginal cost.
- *Effectively competitive prices will reflect any other benefits that the buyer provides to the seller.* To the extent that a buyer provides benefits to a seller in addition to the price paid for the good or service, the competitive price will reflect those benefits. In particular, to the extent that a licensee provides valuable promotional benefits to the seller, a competitive seller will be willing to accept a lower—and, in some cases, even negative—price in recognition of the fact that those promotional benefits are a form of compensation to the seller. As I will discuss below, the evidence indicates that simulcasting generates significant promotional benefits, which indicates that in many instances the license fee for the simulcasting of a musical recording could be *negative*.

- *A market cannot be effectively competitive in the absence of buyer choice.*

Competition arises *only* when buyers have the ability to substitute the offerings of one seller for those of another. It is this possibility of substitution that drives each seller to offer higher quality and lower prices in order to attract buyers to itself rather than its rivals. For this reason, a market with a single, monopoly seller cannot be effectively competitive: there are no alternative suppliers to which buyers can turn for substitutes. It is also the case that a market in which suppliers offer strongly complementary products cannot be effectively competitive. By definition, when the supplier of a complementary product lowers its price, that lower price benefits its rivals rather than places competitive pressure on them. Therefore, the sellers of complementary products do not compete with one another.

- *The rates set in Web II were substantially above the rates that would exist in an effectively competitive market.* The rates set in Web II were based on an analysis of the major record companies' licenses with certain subscription-based, interactive services; the analysis was conducted by Dr. Michael Pelcovits, an economic expert for SoundExchange. This analysis was critically flawed in several respects:
 - An interactive service requires licenses to all of the major record companies' catalogs in order to be commercially viable. Thus, licenses to the majors' catalogs are complements and, as described above, it is a well-established principle of economics that this fact implies that the record

companies do *not* compete against one another in the sale of licenses to interactive service providers. Where licensors do not compete with one another, the license terms necessarily neither reflect competition nor constitute competitively priced benchmarks.

- Interactive services are not sufficiently similar to the target services, and, therefore, the interactive services agreements used as the basis for Dr. Pelcovits's analysis are not appropriate benchmarks for establishing statutory rates for the target services. As described below, Dr. Pelcovits's analysis relied on license fees for subscription, interactive services as benchmarks for *non*interactive services that are predominantly *non*subscription. Dr. Pelcovits failed to correct for important differences between the business models of the two types of services, most notably that for nonsubscription, noninteractive services, advertising revenues per play are far lower than subscription fees per play. Dr. Pelcovits also based his analysis on a biased sample of contracts drawn from a nascent, rapidly changing industry. Although those may have been the only data available to him at the time, those data should not serve as a legacy basis for present or future statutory rates.

- *The license fees negotiated in the NAB/SoundExchange WSA Agreement are not a valid benchmark.* The statutory rates set in Web II, which were far above effectively competitive levels, strongly influenced the rates reached in the WSA agreement between the NAB and SoundExchange. The Web II rates established

the parties' expectations and eliminated the incentive of the NAB to rely on a possible return to the Copyright Royalty Board ("CRB") to set rates for 2011 through 2015. In addition to the effects of Web II on the WSA negotiations, the NAB faced a monopoly seller in SoundExchange. Accordingly, the NAB/SoundExchange WSA Agreement cannot be considered to reflect rates that would be agreed to in an effectively competitive market. In addition to distorting the overall level of royalties in the agreement, the Web II decision distorted the rate structure. Specifically, the licensees under the NAB/SoundExchange WSA agreement paid for short-term relief from the overly high Web II rates by agreeing to higher future rates in return for lower current rates during a period of overlap with the Web II rates. Hence, the rates in later years of the NAB/SoundExchange agreement were even higher relative to an effectively competitive rate than was the average rate, which itself was above any effectively competitive level.

- *An analysis based on record company behavior demonstrates that the lower bound of the zone of reasonableness for statutory license fees for simulcasting is near zero.* Because of the promotional value associated with simulcasts, an effectively competitive license fee for simulcasting could well be negative for many recordings and simulcasters. Taking into account the heterogeneity in promotional value and the possibility of strategic behavior by potential licensees, I find that a negative statutory license fee would be unreasonable, but that the lower bound of the zone of reasonableness for a statutory rate for web simulcasting is near zero.

- *Analysis of the findings in SDARS II demonstrates that statutory license fees equivalent to 13 percent or more of a music-formatted simulcaster's revenues from simulcasting would be unreasonable and the upper bound on reasonable rates is lower.* Given the information currently available to me, I cannot determine the precise upper bound for a reasonable simulcasting license fee. I can say, however, that the upper bound is no higher than the rate in SDARS II before the Judges applied the Section-801(b) adjustments. Empirical evidence indicates that copyrighted music is no more important to music-formatted simulcasters than to Sirius XM. Moreover, the SDARS II rate reflects the SDARS I analysis, which resulted in a rate higher than that which would be reached in an effectively competitive market. Therefore, a royalty rate of 13 percent or higher of the simulcast revenues of music-formatted radio stations would be unreasonably high, as would be rates lower than, but near 13 percent.⁸

6. The remainder of this statement explains these conclusions in greater depth and provides details of the facts and analysis that led me to reach them.

II. QUALIFICATIONS

7. I hold the Sarin Chair in Strategy and Leadership at the University of California at Berkeley. I hold a joint appointment in the Haas School of Business Administration and in the Department of Economics. I have also served on the faculty of the Department of

⁸ As noted above, based on available data, I am unable to reach a conclusion as to how much lower than 13 percent of directly applicable revenue a rate would have to be in order to be reasonable, but I anticipate being able to reach such a conclusion after reviewing additional information that I expect will be introduced into the record by other parties or produced in discovery.

Economics at Princeton University and the Stern School of Business at New York University. I received my A.B. from Harvard University *summa cum laude* and my doctorate from Oxford University. Both degrees are in Economics.

8. I specialize in the economics of industrial organization, which includes the study of competition and pricing, as well as antitrust and regulatory policies. I regularly teach courses on microeconomics and business strategy. I am the co-author of a microeconomics textbook, and I have published numerous articles in academic journals and books. I have written academic articles on issues regarding the economic analysis of intellectual property law, the relationship between intellectual property law and antitrust policy, the economics of intellectual property licensing, and the economics of network industries and two-sided platforms. My curriculum vitae, which is attached to this testimony, lists all publications that I have authored or co-authored, with the exception of a few letters to the editor published in newspapers. I am a co-editor of the *Journal of Economics and Management Strategy* and serve on the editorial boards of *Information Economics and Policy* and the *Journal of Industrial Economics*.

9. In addition to my academic experience, I have consulted on the application of economic analysis to public policy. I have served as a consultant to both the U.S. Department of Justice and the Federal Communications Commission on issues of antitrust and regulatory policy. I have served as an expert witness before state and federal courts. For example, this past summer, I testified in federal district court in litigation brought by the U.S. Department of Justice against American Express. I was offered by the Department of Justice as an expert in economics and so designated by the

court. I have also provided testimony before state regulatory commissions and the U.S. Congress. In addition, I was commissioned by the Congressional Research Service to write a report on the economic effects of home copying on the markets for recorded music and for electronically recorded visual images.⁹

10. From January 1994 through January 1996, I served as the Chief Economist of the Federal Communications Commission. I participated in the formulation and analysis of policies toward all industries under Commission jurisdiction. As Chief Economist, I oversaw both qualitative and quantitative policy analyses.

11. From September 2001 through January 2003, I served as the Deputy Assistant Attorney General for Economic Analysis at the U.S. Department of Justice. I directed a staff of approximately fifty economists conducting analyses of economic issues arising in both merger and non-merger enforcement. My title as Deputy Assistant Attorney General notwithstanding, I am not an attorney.

12. I have also advised private clients on software licensing fees and product pricing.

III. THE STATUTORY STANDARD

13. Section 114 of the Copyright Act establishes a “willing buyer/willing seller” standard for the setting of statutory royalty rates applicable in this proceeding:¹⁰

In establishing rates and terms for transmissions by eligible nonsubscription services and new subscription services, the Copyright

⁹ Michael L. Katz, *Home Copying and Its Economic Effects: An Approach for Analyzing the Home Copying Survey*, Mar. 9, 1989, report commissioned by Congressional Research Service for *Copyright and Home Copying: Technology Challenges to the Law*, October 1989.

¹⁰ Copyright Act, 17 U.S.C. § 114(f)(2)(B).

Royalty Judges shall establish rates and terms that most clearly represent the rates and terms that would have been negotiated in the marketplace between a willing buyer and a willing seller. In determining such rates and terms, the Copyright Royalty Judges shall base their decision on economic, competitive and programming information presented by the parties, including—

- (i) whether use of the service may substitute for or may promote the sales of phonorecords or otherwise may interfere with or may enhance the sound recording copyright owner's other streams of revenue from its sound recordings; and
- (ii) the relative roles of the copyright owner and the transmitting entity in the copyrighted work and the service made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, and risk.

14. If interpreted literally and narrowly, the willing-buyer/willing-seller standard would exhibit a broad range of indeterminacy in the level of license fees. An economically rational party will not agree to a transaction that makes it worse off. This fact implies that:

- a seller will not agree to a price below its marginal or incremental cost of providing the good or service, including the opportunity cost of doing so; and
- a buyer will not agree to a price above the value that it derives from the good or service.

15. Conversely, faced with an all-or-nothing choice, a rational party will be “willing” to agree to a contract as long as it leaves that party in no worse a position than it would be in absent the agreement. Hence, interpreted in a narrow, literal sense, any price above marginal cost could be considered to be price at which a seller would be willing to transact. And, under this literal interpretation, even a monopolist charging the monopoly price would constitute a willing seller that faces willing buyers.

16. This literal reading of the standard is untenable for at least two reasons. First, there typically will be a very large gap between marginal cost (the minimum price that a seller is “willing” to accept) and the highest price at which a buyer would be willing to purchase at least some of the good, which typically will be even higher than the monopoly price. Hence, this interpretation would provide essentially no guidance for rate setting. Second, an interpretation under which even a monopolist charging the monopoly price would constitute a willing seller facing willing buyers would be inconsistent with past Congressional actions. Specifically, from the perspective of economics, it would make no sense for Congress to have enacted a statutory rate-determination process if Congress intended that monopolistic license fees could meet the statutory standard. If Congress had intended monopoly rates to prevail, then it could simply have created the statutory license and given SoundExchange antitrust immunity unilaterally to set rates on behalf of the industry. Congress did not do so.

17. The creation of a rate-determination process and its willing-buyer/willing-seller standard can best be reconciled with economic principles and common sense by interpreting willing buyers as those who have meaningful choices among competing sellers, rather than facing a single, all-or-nothing offer from a monopolist. This interpretation is fully consistent with the Librarian of Congress’s recognition in Web I that the willing-buyer/willing-seller standard calls for rates that would have been set in a “competitive marketplace.”¹¹ In related proceedings, an economist repeatedly retained by

¹¹ *Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings and Ephemeral Recordings*, Final Rule and Order, 67 FR 45240 (July 8, 2002) (hereinafter, *Web I Decision*), at 45244-45.

SoundExchange agreed that, in order for a privately negotiated licensing agreement to serve as an appropriate benchmark there should not be excessive market power on either the buyer side or the seller side of the market,¹² and in a similar proceeding testified that,¹³

for an economist, absent a public policy decision actually to *distort* pricing structure (through taxes or subsidies), the fundamental objective in a rate setting proceeding such as [SDARS I] should be to "mimic" what an effectively competitive marketplace accomplishes in an unregulated setting...

18. As I will now discuss, an effective-competition standard resolves the indeterminacy identified above, and it does so by identifying prices near marginal or incremental costs as the appropriate level.

IV. THE ECONOMICS OF EFFECTIVE COMPETITION

19. The degree of market competitiveness lies on a spectrum. At one end, there are markets satisfying the textbook conditions of perfect competition, with rivalry among a large number of sellers of identical products and the possibility of free entry into the

¹² In the previous proceeding, *Determination of Royalty Rates for Digital Performance Right in Sound Recordings and Ephemeral Recordings* (hereinafter, Web III), SoundExchange's economic expert, Professor Janusz Ordover, testified that

[c]onsistent with my testimony in the SDARS Proceeding, and more generally with a sound economic approach to the determination of rates that best conduce to long-run economic efficiency, licensing rates negotiated in an unfettered marketplace, that is, in a marketplace free of regulatory compulsion and undue market power on either side of the bargaining table, represent benchmarks that are most closely aligned with the statutory requirement.

(Written Rebuttal Testimony of Janusz Ordover, *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, June 7, 2010 (hereinafter *Ordover WRT Web III*) at 5.)

¹³ Testimony of Janusz Ordover, *Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, October 30, 2006 (hereinafter, *Ordover WDT SDARS I*), at 12.

market by additional suppliers. At the other end, there are markets subject to monopoly or a cartel, and into which further entry is blocked. It is evident that perfectly competitive markets are competitive and that monopolized markets are not. But what of markets in the middle? This question is of particular relevance in the present proceeding because, as the Judges have declared, the statutory standard is one of *effective* competition, not *perfect* competition.¹⁴

20. In order to understand what constitutes an effectively competitive price, it is valuable to understand the economics of why competitive pricing is desirable and, thus, why Congress would find it desirable to set rates that reflect the prices that would emerge from effective competition. It is also valuable to understand what price would emerge from a fully or perfectly competitive market because such a price serves as a baseline for identifying an effectively competitive price.

A. THE BENEFITS OF COMPETITION

21. Many U.S. public policies, including antitrust and regulatory policies, seek to protect competition because of the benefits it delivers to consumers. These benefits typically arrive in the form of lower, cost-based prices, greater innovation and variety, and/or improved product and service quality.

¹⁴ *Determination of Royalty Rates for Digital Performance Right in Sound Recordings and Ephemeral Recordings*, Final Rule and Order, 79 FR 23102 (April 25, 2014) (hereinafter, *Web III Remand Decision*) at 23114, n. 37 and sources cited therein.

22. Promoting efficiency through competition is widely recognized as the most effective means in most markets to promote overall consumer welfare. As the Federal Trade Commission has explained,¹⁵

Free and open markets are the foundation of a vibrant economy. Aggressive competition among *sellers* in an open marketplace gives consumers — both individuals and businesses — the benefits of *lower* prices, higher quality products and services, more choices, and greater innovation.

The Supreme Court has repeatedly reached the same conclusion. For example, the Court stated:¹⁶

The Sherman Act reflects a legislative judgment that, ultimately, competition will produce not only *lower* prices but also better goods and services. “The heart of our national economic policy long has been faith in the value of competition.” *Standard Oil Co. v. FTC*, 340 U. S. 231, 340 U. S. 248. The assumption that competition is the best method of allocating resources in a free market recognizes that all elements of a bargain -- quality, service, safety, and durability -- and not just the immediate cost, are favorably affected *by the free opportunity to select among alternative offers*.

Similarly, economists have long recognized the benefits of competition:¹⁷

Economic efficiency means that, under competitive conditions, the net value of society’s scarce resources is maximized...a competitive market creates a maximum of net social value. This means that society’s resources have been allocated in efficient fashion. The sum of consumers’ surplus and factor or producers’ surplus is maximized when net social value is maximized under competition.

¹⁵ U. S. Federal Trade Commission, *Guide to Antitrust Laws*, <http://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws>, emphasis added.

¹⁶ *National Society of Prof. Engineers v. United States*, 435 U.S. 679 (1978) at 695, emphasis added.

¹⁷ Robert B. Ekelund, Jr. and Robert D. Tollison (1997), *Microeconomics: Private Markets and Public Choice* (5th ed.), Boston: Pearson/Addison Wesley, at 97.

23. In addition to describing the benefits of competition, the quotations from the Federal Trade Commission and Supreme Court above identify the critical role of buyer choice in promoting competition. Indeed, competition arises only when buyers have the ability to substitute the offerings of one seller for those of another. As will be discussed below, it is this possibility of substitution that generates consumer benefits by driving sellers to offer higher quality and lower prices in order to attract buyers to themselves rather than to their rivals.

B. COMPETITIVE PRICES

24. The study of competitive prices is one of the oldest topics in economics. Indeed, in 1776, Adam Smith wrote that “The natural price, or the price of free competition ... is the lowest which can be taken...[It] is the lowest which the sellers can commonly afford to take, and at the same time continue their business.”¹⁸

25. In modern terminology, rivalry among competitive suppliers drives them to set prices near their incremental or marginal costs of supplying the relevant good or service. The reason competition has this effect is as follows. When a supplier lowers its price, it can expect to enjoy increased sales as buyers switch away from rival suppliers. If the supplier’s revenues rise by more than do its costs, then the supplier will enjoy higher profits when it lowers its price. Stated another way, the price decrease will be profitable as long as the incremental revenue associated with that price change is greater than the incremental cost of supplying the additional output sold as a result of the price

¹⁸ Adam Smith, *The Wealth of Nations* (1776), Book I, Chapter VII.

reduction.¹⁹ A supplier in a competitive market will face a demand curve that is highly responsive to the price that firm charges, so that the firm can significantly increase its sales without having to make large price cuts. For such a firm, the incremental revenue associated with selling an additional unit of output (*i.e.*, the firm's marginal revenue) will be approximately equal to the price at which the firm sells its output. Indeed, for a perfectly competitive firm, price and marginal revenue are equal to one another. As explained by a prominent economics textbook:²⁰

It is profitable for a firm to expand output as long as the extra revenue from selling an additional unit exceeds the extra cost of producing that unit. The extra revenue from selling an additional unit is price, and the extra cost is the marginal cost. That is, the optimal (profit-maximizing) production rule for a competitive firm is to expand its output until its marginal cost, MC, equals price, p.

26. Society will gain from increased consumption of a good or service whenever the consumer benefits from the additional consumption are greater than the costs of supplying the additional output. Similarly, net social benefits will fall from increased consumption of a good or service whenever the consumer benefits from the additional consumption are smaller than the costs of supplying the additional output. In other words, from the perspective of promoting social benefits, consumption should increase up to the point at which the marginal benefit of additional consumption is equal to the marginal cost.

¹⁹ Similarly, if raising price would reduce revenue by less than amount that costs would fall, a supplier would find it profitable to increase its price.

²⁰ Dennis W. Carlton and Jeffrey M. Perloff (2005), *Modern Industrial Organization* (4th ed.), Boston: Pearson/Addison Wesley, at 58.

27. One of the great virtues of competitive prices is that they guide consumers and firms to the point at which society's benefits are maximized (*i.e.*, the point at which the marginal benefit of additional consumption is equal to the marginal cost). Competitive prices do so because an economically rational buyer will purchase additional output as long as the marginal benefit is greater than the price. Therefore, a competitive price equal to marginal cost generates incentives for buyers to purchase additional units of the good or service up to the point that the marginal benefit derived from consumption is equal to marginal cost. This process, through which competitive pricing maximizes the net benefits society enjoys from the good or service, is what Adam Smith famously referred to as "the invisible hand."

28. In addition to maximizing society's overall benefits, competition also ensures that buyers face relatively low prices and, thus, buyers enjoy much of the benefit generated by the good or service. Price competition among incumbent firms, as well as the free entry of additional firms, leads to an equilibrium in which suppliers earn zero economic profits.^{21, 22} Protecting competition to promote consumer benefits is a fundamental objective of U.S. public policy such as antitrust enforcement and telecommunications

²¹ See, *e.g.*, N. Gregory Mankiw (2015) *Principles of Economics, Seventh Edition*, Cengage Learning, Stamford, CT, at 291.

²² Economic profits are not the same as accounting profits. The term "economic profits" refers to profits in excess of those necessary to provide a competitive return on the assets invested in the firm. ("Positive economic profits are returns above and beyond the total (explicit plus implicit) costs to the owner or investor in a firm. They are returns above the opportunity cost of the owner's capital investment in the firm, that is, they are above the normal return...." Robert B. Ekelund, Jr. and Robert D. Tollison (1997), *Microeconomics: Private Markets and Public Choice* (5th ed.), Boston: Pearson/Addison Wesley, at 218.) Economic profits include as a cost the opportunity cost of capital in its next-best use. Hence, even though economic profits are zero in a perfectly competitive market, accounting profits still are positive in such markets.

regulation. That is one of the reasons the quotations of the Federal Trade Commission and Supreme Court in the previous section refer to the virtues of “lower” prices. In summary, competition typically leads to a distribution of benefits that favors buyers; it does not necessarily split the gains from trade equally between buyers and sellers.

C. REASONABLE, WORKABLE, OR EFFECTIVE COMPETITION

29. The theoretical conditions of *perfect* competition often are not satisfied in actual markets. In particular, in the presence of economies of scale, marginal cost will be below average cost so that pricing all of its products at marginal cost would cause a supplier to incur losses. In the case of intellectual property and software markets, for example, marginal costs typically are near zero, so that marginal cost pricing would not allow suppliers to cover their fixed costs. Moreover, even when there are many different suppliers of a good or service, each supplier may offer output that is somewhat different from that offered by other suppliers. This product differentiation will tend to insulate each supplier from competition to some degree, leading to prices above marginal cost.

30. It is thus necessary to consider markets that are competitive, but not perfectly so. Economists have long examined this concept, beginning with Professor J.M. Clark, who introduced the concept of “workable” competition.²³ Economists also refer to such markets as reasonably or effectively competitive.²⁴ A prominent economics textbook recently stated an implicit definition as follows:^{25, 26}

²³ J. M. Clark (1940), “Toward a Concept of Workable Competition,” *American Economic Review*, **30**(2) Pt. 1: 241-56.

²⁴ SoundExchange’s economic expert in the SDARS I and SDARS II proceedings, Professor Ordober, defined effectively competitive markets as “markets not distorted by

Even though few industries fit the requirements of perfect competition, economists often speak of certain types of industries as being reasonably competitive if they have certain characteristics. Price-taking behavior, many firms, and free entry and exit are often used as criteria to judge the competitiveness of a market. Free entry and exit typically result in firms eventually earning zero [economic] profits.

31. Prices in reasonably, workably, or effectively competitive markets allow suppliers to cover their average costs. There are at least three points that should be kept in mind in assessing whether prices cover costs.

- First, costs should include a competitive return to capital invested in the firm but should not include supra-competitive or monopoly profits.²⁷
- Second, in free markets, there is no guarantee that any given supplier will be profitable. In earlier proceedings, the CRB concluded that the statutory license

undue exercise of monopoly power on the part of sellers or monopsony power on the part of buyers. (Testimony of Janusz Ordovery, *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, November 28, 2011 (hereinafter, *Ordovery WDT SDARS II*), ¶ 19; see, also, *Ordovery WDT SDARS I* at 25-26.)

²⁵ Dennis W. Carlton and Jeffrey M. Perloff (2005), *Modern Industrial Organization* (4th ed.), Boston: Pearson/Addison Wesley, at 85.

²⁶ As discussed above, a supplier earning zero *economic* profits will cover all of its costs, including the costs associated with financing its capital investments.

²⁷ It is important to recognize that capital refers to the market or replacement value of the productive assets that must be used by the firm to offer its goods or services. These investments do not necessarily equal the full amount that owners have paid to purchase a firm. The reason is that the sales price of firm earning excess economic profits would be capitalized into the sales price of the firm and treatment of the sales price as an investment in productive assets would thus mask the earning of excess economic profits.

fees should not be set with the aim of guaranteeing a given rate of return to any licensee.²⁸ Exactly the same economic principle applies to licensors.

- Third, in considering whether a firm's prices allow it to cover its costs, one must consider *all* of the products offered by that firm. For example, a record company derives several revenue streams from its catalog of recordings other than statutory license fees, and these revenue streams help cover the fixed costs the record company incurs to create recordings. The multi-product perspective also generates important insights regarding the effects of a shifting mix of products. For example, to the extent that consumers are increasingly listening to simulcasting as a substitute for listening to terrestrial broadcasts for which the record companies do not receive any performance royalty, *any* positive license fee for simulcasting means that greater listening to simulcasting results in an increase in the record industry's overall revenues and profits.

D. BUYER CHOICE IS THE ESSENCE OF COMPETITION

32. When examining whether specific licenses represent the outcomes of effectively competitive markets and therefore might serve as potential benchmarks, it is essential to recognize that buyer choice is the essence of competition. Specifically, competition

²⁸ In *Web III*, the analysis of Live 365's expert was rejected in part because it assumed that a representative willing buyer would not agree to a royalty that resulted in an operating profit margin of less than 20 percent. (*Web III Remand Decision* at 23107.) In *Web II*, the judges noted,

It must be emphasized that, in reaching a determination, the Copyright Royalty Judges cannot guarantee a profitable business to every market entrant. Indeed, the normal free market processes typically weed out those entities that have poor business models or are inefficient.

(*Web II Decision* at 24088, n. 8)

arises *only* when buyers have the ability to substitute the offerings of one seller for those of another. It is this possibility of substitution that drives sellers to offer higher quality and lower prices in order to attract buyers to themselves rather than their rivals.

Conversely, when buyers lack the ability to substitute among the offerings of different sellers, there is no competition among sellers to attract customers.

33. The conclusion that competition can exist only if buyers have the freedom to exercise choice among substitute offerings is valid whether one is considering perfect competition or effective competition. Indeed, the concept of buyer choice among several substitute suppliers plays a critical and central role in all of the definitions of workable or reasonable competition in the academic literature. A critical element of Professor Clark's concept is the "free option of the buyer to buy from a rival seller or sellers of what we think of as 'the same' product."²⁹ Nobel Laureate George Stigler also emphasized the importance of buyer choice when he wrote that³⁰

An industry is workably competitive when (1) there are a considerable number of firms selling closely related products in each important market area, (2) these firms are not in collusion, and (3) the long-run average cost curve for a new firm is not materially higher than that for an established firm.

²⁹ J. M. Clark (1940), "Toward a Concept of Workable Competition," *American Economic Review*, **30**(2) Pt. 1: 241-56, at 243.

³⁰ George J. Stigler (1942), "Extent and Bases of Monopoly," *American Economic Review*, **32**(2) Pt. 2, Suppl.: 1-22, at 2-3.

Professor Corwin Edwards also identified several conditions for a market to be workably competitive, one of which is that:³¹

There must be an appreciable number of sources of supply and an appreciable number of potential customers for substantially the same product or service. Suppliers and customers do not need to be so numerous that each trader is entirely without individual influence, but their number must be great enough that persons on the other side of the market may readily turn away from any particular trader and may find a variety of other alternatives.

Additionally, in the quotations of the Federal Trade Commission and Supreme Court above, which manifestly refer to real-world markets, the Commission identifies the virtues of “[a]ggressive competition among sellers,” and the Court identifies the benefits that flow from the “free opportunity to select among alternative offers.”³²

34. The fact that competition can exist only if buyers have the freedom to exercise choice among substitute offerings has two very important consequences: (1) a monopolized market is not effectively competitive, and (2) suppliers of complementary products do not compete with one another. I consider each, in turn.

1. A monopolized market is not competitive.

35. As used by economists when describing markets, the term *competition* refers to *rivalry among sellers* to attract the patronage of buyers. By definition, when there is only a single seller, buyers have no choice of seller and there is no competition.³³ There is

³¹ Corwin Edwards, *Maintaining Competition* (New York, 1949), at 9-10, as quoted by Jesse W. Markham (1950), “An Alternative Approach to the Concept of Workable Competition,” *The American Economic Review*, **40**(3): 349-361 at 356.

³² See paragraph 22 above.

³³ The distinction between competition and monopoly is central to the antitrust laws. “In the Sherman and Clayton Acts, as well as in the Robinson-Patman Act, ‘Congress was

sometimes confusion as to whether the presence of large, sophisticated buyers can offset a seller's monopoly power and somehow induce the competitive outcome. As I will now demonstrate, even if there were large, sophisticated buyers, they could *not* induce a competitive outcome in negotiating with the SoundExchange monopoly.

36. Economists have identified conditions under which large, sophisticated buyers may be able partially to offset seller power by promoting increased rivalry among sellers even when there are only a few suppliers in a market.³⁴ Large buyers can do so by: (a) having the ability to make well-informed choices among available options and to shift large purchases among competing suppliers on either a short- or long-term basis, or (b) promoting entry either by integrating into supply themselves or by sponsoring entry (by either committing to future purchases or providing financing).³⁵ Critically, neither (a) nor (b) is a feasible strategy in a market with a monopoly seller and no realistic chance that

dealing with competition, which it sought to protect, and monopoly, which it sought to prevent.' *A. E. Staley Mfg. Co. v. Federal Trade Comm.*, 7 Cir., 135 F.2d 453, 455." (*Standard Oil Co. v. FTC* 340 U.S. 231 (1951)).

³⁴ I focus on large buyers because economic theory identifies reasons why large buyers might be particularly able to offset seller market power. As will be evident from the discussion that follows, if large buyers cannot avail themselves of the strategies described below to offset seller market power, then neither can small buyers.

³⁵ See, for example, Mary Lou Steptoe (1993), "The Power-Buyer Defense in Merger Cases," *Antitrust Law Journal*, 61(2): 493-504.

The *Horizontal Merger Guidelines* make similar points:

The Agencies consider the possibility that powerful buyers may constrain the ability of the merging parties to raise prices. This can occur, for example, if powerful buyers have the ability and incentive to vertically integrate upstream or sponsor entry, or if the conduct or presence of large buyers undermines coordinated effects [among multiple sellers].

(U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines*, August 19, 2010, § 8.)

an entrant will be able to offer a viable substitute for the monopolist's product. The existence of a monopoly seller means that buyers can't shift purchases among competing suppliers (strategy (a)), and the lack of a realistic chance of entry precludes strategy (b). This finding is an important one because SoundExchange acted as a monopolist in reaching its Webcaster Settlement Act agreements with the NAB and Sirius XM, and it was—and remains—impractical for a webcaster to integrate into the music business or to sponsor meaningful entry of a new record company. Thus, these strategies for offsetting SoundExchange's market power were not available to either the NAB or Sirius XM.

37. In contradiction to the well-established economic theory just discussed, the *Web II Decision* expressed the view that a large buyer could offset monopoly power and obtain a “competitive” price even in the absence of competition. Specifically, it asserted that³⁶

... a “competitive” price could be deemed to have been set in a marketplace where sellers and buyers had roughly equal bargaining power, because the resulting price would be much closer to the perfectly competitive price than to a price determined in circumstances where the sellers exercised pure monopoly power or the buyers exercised pure monopsony power.

As described above, the conclusion reached in *Web II* also runs counter to Congress's apparent conclusion that the monopoly outcome would not be effectively competitive even in the presence of large buyers. If Congress had determined that the price resulting from bargaining between a monopoly licensor and various buyers was satisfactory, then there would be no reason to do more than mandate a statutory license and allow Sound Exchange to bargain with large buyers free from any statutory restraints. The most

³⁶ *Web II Decision* at 24093, note 23.

logical explanation for the statute’s creation of a judicial rate-setting process is that Congress did not want a monopoly price to prevail and did not think that large buyers could protect themselves.

38. Economic analysis demonstrates that there are, in fact, sound reasons to be concerned that buyers could not protect themselves. Economic analysis indicates that the price set in a market with a single seller and a few large buyers will tend to give rise to prices much closer to the pure monopoly price than to a competitive price even if the parties are equally skillful and sophisticated bargainers. In other words, the prices that result from bargaining between a buyer and seller with equal bargaining power do *not* satisfy a standard requiring prices at the levels that would obtain in an effectively competitive market.

39. In Part A of the Technical Appendix, I present a formal model using a standard approach to the economics of bargaining to demonstrate that—even when there is only a single, large buyer, which has equal bargaining with the seller—the resulting price would *not* be much closer to the perfectly competitive price than to a price determined in circumstances where the sellers exercised pure monopoly power.³⁷ Moreover, when a

³⁷ The present paragraph and Part A of the Technical Appendix describe a situation in which there is no statutory license available as an option, which is the setting in which various interactive licenses that have sometimes been used as benchmarks were negotiated. For negotiations involving rights for which a statutory license exists, the *outside option principle* indicates that the presence of a statutory license will have no effect the bargaining outcome unless the statutory fee is set lower than the level to which the parties would agree in a situation where the buyer had no option of a statutory license. (For a discussion of the outside option principle, see, Ken Binmore, Ariel Rubinstein, and Asher Wolinsky (1986), “The Nash Bargaining Solution in Economic Modelling,” *The RAND Journal of Economics*, **17**(2): 176-188.) In other words, when the statutory license fee is set above an effectively competitive level, it cannot induce private parties to

monopoly licensor faces two or more potential licensees, the resulting price will be even higher and, thus, further away from the competitive level. Intuitively, the monopolist will be able to play the potential licensees off against each other to obtain higher license fees: each music service will be in the position that, if it does not reach an agreement with the monopolist, it will go out of business, while the monopolist will be able to continue making sales to the other licensee(s). Hence, the monopolist is in a much stronger bargaining position.³⁸

2. Suppliers of complementary products do not compete with one another.

40. Two products are said to be economic complements if an increase in the price of one product decreases the demand for the other.³⁹ Intuitively, two products are complements when a buyer needs both products in order to enjoy the full benefits of either. For example, if computer printers and ink must be used together to produce printing services for consumers, then printers and ink are economic complements. Just as

negotiate an effectively competitive rate unless the bargaining takes place in what truly are effectively competitive markets.

³⁸ Under mainstream economic theories of bargaining, the license fee agreed to by a potential licensee and licensor is determined both by the total amount of value, or surplus, created by the transmittal of the licensor's content by the potential licensee and by the licensor's and potential licensee's "disagreement points," which are determined by what would happen to each parties' profits in the absence of an agreement.

If the parties cannot come to an agreement, then the potential licensee cannot transmit the content and will have to cease operations; it's disagreement point entails zero profit. However, in the presence of multiple potential licensees, the monopoly licensor can still earn profits from at least some of the sales that otherwise would have been made to the potential licensee with which it cannot reach agreement because those sales would be diverted to other licensees. In other words, the presence of multiple buyers strengthens the seller's disagreement point and, thus, its bargaining position.

³⁹ See, e.g., N. Gregory Mankiw (2015) *Principles of Economics, Seventh Edition*, Stamford, CT: Cengage Learning, at 98.

an increase in the price of a product would decrease the demand for that product, it would also decrease the demand for a complementary product that is consumed together with the product for which the price has risen. For example, a large increase in the price of ink will reduce the quantities of both ink and printers demanded.

41. By logic first identified by Cournot (1838), firms offering complementary products tend to set *higher* prices than would even a monopoly seller of the products.⁴⁰ This effect arises because each individual seller ignores the adverse effects that its price increases have on the other sellers, while a monopolist would internalize this effect. Professor Ordover and Dr. Pelcovits both agree with this economic principle.⁴¹ As discussed above, the monopoly price manifestly is neither a competitive nor effectively competitive price. It follows that the even *higher* price set by oligopolists offering complementary products is even further from the competitive level and, thus, is not effectively competitive.

42. This point can be seen another way. As described above, competition arises only when buyers have the ability to *substitute* the offerings of one seller for those of another. It is this possibility of substitution that drives different sellers to offer lower prices in order to attract buyers to themselves rather than to their rivals. When products are complements, buyers lack the ability to substitute among the offerings of different sellers.

⁴⁰ Cournot, Antoine Augustin [1838] (1897). *Researches into the Mathematical Principles of the Theory of Wealth* (translated by N. T. Bacon), London: Macmillan.

⁴¹ Written Rebuttal Testimony of Janusz Ordover, *Web III*, June 10, 2010, (hereinafter, *Ordover WRT Web III*) ¶ 53 and Appendix Two; Pelcovits, Hearing Tr., *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, April 19, 2010 (hereinafter, *Pelcovits Web III Hearing Tr.*), at 157-58, 164-66.

Indeed, under the strongest form of complementarity, a buyer must purchase all of the complementary products in order to derive benefits from any of them. Consequently, in this case, there is no competition among sellers to attract buyers.

43. The fact that an oligopoly of suppliers of complementary products might charge higher prices than would a monopoly supplier is an illustration of the fact that suppliers of complements do not compete with one another. This fact in no way renders the monopolist's pricing effectively competitive. To claim otherwise would be to demonstrate a fundamental misunderstanding of basic economics.

V. DR. PELCOVITS'S WEB II INTERACTIVE SERVICES BENCHMARK WAS SO SERIOUSLY FLAWED AS TO BE UNUSABLE.

44. Although the benchmark analysis provided by Dr. Pelcovits in Web II is not directly at issue in this proceeding, it was adopted by the Judges in setting the Web II rates, and those rates influenced the royalty rates set in private WSA negotiations and in the subsequent Web III proceedings. (See section VI below.) Thus, it is important to examine the Web II benchmark analysis in the light of evidence that has emerged since it was presented—not to provide corrections, but rather to demonstrate that it was so severely flawed that the analysis and the rates stemming from the analysis should be abandoned completely. Unfortunately, because it influenced the WSA negotiating process and the Web III remand decision, Dr. Pelcovits's flawed Web II benchmark analysis has had a significant and lasting effect in raising royalty rates above the effectively competitive level.

45. In the remainder of this section, I discuss several critical flaws in the analysis by Dr. Pelcovits on which the Web II decision relied. Most notably, Dr. Pelcovits failed to account for the lack of competition among the major record companies in selling their licenses to interactive services. Second, Dr. Pelcovits relied on a small sample of noninteractive, subscription services despite the fundamental differences between subscription and nonsubscription services. Third, although it was not known at the time, the services used by Dr. Pelcovits in his analysis were not in equilibrium. Finally, in limiting his benchmark to major label licenses, Dr. Pelcovits likely relied on a biased sample.

A. DR. PELCOVITS FAILED TO ACCOUNT FOR THE LACK OF COMPETITION AMONG RECORD COMPANIES SELLING TO INTERACTIVE SERVICES.

46. Dr. Pelcovits based his benchmark in Web II on a set of license agreements negotiated between the major record companies and a small set of interactive services providers. In doing so, he failed to account for the fact that the major record companies are not meaningful competitors in the sale of sound performance licenses to interactive services, so that these negotiated rates are well above competitive levels.⁴²

47. It is now well-recognized that, from the perspective of interactive services, licenses to the catalogs of the three major record companies are not substitutes for one

⁴² In addition to the failure of his empirical analysis to account for actual record company market power, his core theoretical framework is that of a monopoly seller facing atomistic buyers who are textbook perfect competitors with one another. (Testimony of Michael Pelcovits, *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, October 31, 2005, (hereinafter, *Pelcovits Web II WDT*), § IV.) This structure is manifestly not one of either equal bargaining power or effective competition in the sale of licenses. Thus, the underlying framework of his analysis would not generate the outcome that would be expected to result from effective competition.

another. That is, an interactive webcaster cannot choose to purchase a license to one major's catalog as a substitute for another major's catalog. Rather, an interactive webcaster needs to have licenses to all three major record companies' catalogs in order to have a commercially viable service. Because it needs licenses to all three catalogs, an interactive service cannot credibly threaten to refuse to take a license to one major record company and instead purchase a substitute license from another. The clear implication of this fact is that the major record companies do not compete with one another to sell licenses to interactive webcasters.

48. While acting as SoundExchange's economic expert in Web III, Dr. Pelcovits testified to this point and conceded that, because the record companies were not providing substitute products, there would not "be fierce price competition among substitutes" even if SoundExchange did not exist and the majors were individually negotiating with the services.⁴³ Because the major record companies do not compete with each other in the sale of licenses to interactive services, it follows that the license fees paid by interactive service providers to the major record companies were not determined under conditions of effective competition.

49. From the perspective of an interactive service provider, the major record companies offer complements rather than substitutes. As discussed above, two products are said to be economic complements if an increase in the price of one product decreases the demand for the other. For an interactive webcaster, a license to the catalog of one

⁴³ *Pelcovits Web III Hearing Tr.*, at 157-58. See also, *Pelcovits Web III Hearing Tr.*, at 164-66. See also his testimony in Web II, Pelcovits, Hearing Tr., *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, May 15, 2006, at 144-46.

major record company is worth little if the webcaster does not also have licenses covering the other two majors. Thus, in assessing whether to purchase a license from one major, the interactive webcaster needs to take into account the total amount it is going to have to pay for all three licenses. Consequently, an increase in the price of one license lowers the willingness to pay for the others, which is the economic definition of complements.

50. One of the two leading federal antitrust agencies, the Federal Trade Commission, recently assessed the nature of competition among the major record companies and found the major record companies' catalogs to be complements when licensing interactive services. Specifically the Commission examined the impact of the acquisition of EMI Recorded Music by Vivendi, S.A. (Universal) on competition to serve interactive music streaming services:⁴⁴

Staff focused on whether Universal would have enhanced bargaining leverage after the acquisition, allowing it to extract from streaming services superior financial terms, or advantaged positioning for its content. Commission staff sought to determine whether the transaction would lead to higher costs to interactive streaming consumers or a more limited selection of recorded music. Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive. Because each Major currently controls recorded music necessary for these streaming services, the music is more complementary than substitutable in this context, leading to limited direct competition between Universal and EMI.

Notably, the Commission staff explicitly found that, in connection with licensing interactive streaming services, the majors' music was "more complementary than

⁴⁴ Statement of Bureau of Competition Director Richard A. Feinstein *In the Matter of Vivendi, S.A. and EMI Recorded Music* September 21, 2012, available at http://www.ftc.gov/sites/default/files/documents/closing_letters/proposed-acquisition-vivendi-s.a.emi-recorded-music/120921emifeinsteinstatement.pdf, site visited August 5, 2014.

substitutable” even before the merger and that competition between Universal and EMI was already limited.⁴⁵ Each major record company already had considerable market power because it was essential to the commercial success of an interactive service. In other words, the majors were not constraining each other because they were not substitutes for one another. Following the merger, a license to the catalog of the combined company clearly would be even more important to the success an interactive-service provider than was a license to either of the separate companies pre-merger. Moreover, the overall market was even more concentrated. In other words, the industry moved even farther from being effectively competitive.

51. In summary, when the major record companies sell licenses to interactive webcasting services, the majors are selling complementary products. Consequently, the prices they individually extract will exceed even the monopoly price. It follows a fortiori that these are not effectively competitive prices and, therefore, are not appropriate benchmarks for the prices to which a willing buyer and willing seller would agree in an effectively competitive market.⁴⁶

⁴⁵ In Web II, the Judges cited testimony that “Yahoo! was able to operate its custom radio channels without Universal Music for two years” as contradicting the assertion “that the repertoires of all four majors are necessary as a prerequisite prior to undertaking the operation of a consumer music service in the various digital music service markets.” (*Web II Decision*, note 24 at 24093.) Importantly, custom radio is a noninteractive service where the service controls what is played, not an interactive service where the user controls what is played. Therefore, rather than supporting the proposition that the benchmark was a competitive market, this evidence confirms a critical difference between the benchmark and target markets.

⁴⁶ Another problem with relying on interactive services to estimate the effectively competitive prices for noninteractive services is that noninteractive services are likely to have greater promotional value due to music discovery (*i.e.*, the noninteractive service makes recommendations to the listener) and less cannibalization of other music sales

B. DR. PELCOVITS'S STATISTICAL ANALYSIS RELIED ON INAPPROPRIATE DATA.

52. In addition to improperly focusing on the license fees obtained by the major record companies in a market in which they don't compete with each other, Dr. Pelcovits's benchmark analysis of the interactive service licenses that formed the basis for the Web II rates suffered from other fatal defects.

1. Dr. Pelcovits based his analysis on data for services using a very different business model.

53. As I discuss below, in Web II, Dr. Pelcovits attempted to craft a royalty rate for noninteractive services based on the percentage royalty for interactive services, where the interactive service royalty was determined as a percentage of interactive subscription revenues. Dr. Pelcovits's focus on subscription revenues raises considerable doubt about the validity of his analysis given that the vast majority of noninteractive services consumed were (and are) nonsubscription services.⁴⁷ Nonsubscription, noninteractive services have adopted a fundamentally different business model than have the

(because interactive services allow a consumer to pick specific songs to be played at the time of the consumers' choosing, interactive services pose a much greater risk that consumers will substitute interactive services for CDs and paid downloads).

⁴⁷ At the time of Dr. Pelcovits analysis in 2005, I understand there were no significant noninteractive services that used a subscription model. (Interview with Elizabeth Moody, September 30, 2014.) Dr. Pelcovits stated that "[A]lthough the majority of listeners use free non-interactive services, subscription services do make up a significant part of overall listening." He does not quantify the "significant part." (*Pelcovits WDT Web II*, at 56.) Another SoundExchange economist, Dr. Erik Brynjolfsson, testified that, in 2005, nonsubscription services accounted for 91.8 percent of the total listening time to noninteractive services. (Written Direct Testimony of Dr. Erik Brynjolfsson, Web II, at 49-50, Table 10). On cross examination, Dr. Pelcovits stated that he relied on the 10 percent "slice of the market" represented by subscription services. (Pelcovits, Hearing Tr., *Digital Performance Right in Sound Recordings and Ephemeral Recordings*, May 15, 2006 at 273-74.)

subscription, interactive services and even subscription, noninteractive services; nonsubscription services rely on advertising revenue rather than revenue collected from listeners. The differences in the ways the services generate revenues (*e.g.*, whether the listener is charged or not) can be expected to result in the suppliers of these different services facing different demand curves, with different demand elasticities. These differences would, in turn, affect the service providers' derived demand for music licenses. Consequently, economic theory indicates that the royalty rates paid by subscription-based services in an effectively competitive market could differ substantially from those paid by nonsubscription services in an effectively competitive market. Given the different characteristics of the services (*e.g.*, the degree to which consumers can choose the songs to which they listen), economic theory indicates that the differences between royalty rates for subscription-based, interactive services and nonsubscription, noninteractive services could be particularly large.

54. Dr. Pelcovits attempted to counter criticism of his focus on subscription-based services in part by asserting that advertising revenue per play could rise to the level of subscription revenue per play.^{48, 49} Information from Pandora, by the far the largest

⁴⁸ *Pelcovits WDT Web II*, at 55 (“...it is by no means the case that ad-supported webcasters are, or will remain, the poor cousins to subscription services.”).

The *Web II Decision* (at 24094) appears to adopt this approach:

Therefore, to the extent that ad-supported revenues may not yet have equalized subscription revenues on a per-listener hour basis but are expected to grow over the term of this applicable license, SoundExchange's proposed phase-in of the per-performance rates to the level indicated by the benchmark analysis represents a wholly reasonable approach to dealing with this potential issue.

⁴⁹ Dr. Pelcovits offers several other defenses of his focus on subscription revenues. For example, in he asserts that

noninteractive webcaster,⁵⁰ demonstrates that Dr. Pelcovits's assertion was not borne out. In 2010 (the last year of the time period for which rates were set in Web II), for example, Pandora earned a far higher revenue per play from its subscription services than from its nonsubscription services. In 2010, Pandora's subscriber revenue per play was [[]] percent higher than its advertising revenue per play ([[]] for subscriber; [[]] for ad supported).⁵¹

55. The fact that the revenues per play have not equalized between subscription and nonsubscription services is not a surprise. Subscription and nonsubscription services have very different business models: one entails offering a high-value product to

the best evidence from the marketplace of the value that consumers attach to a good or service is the price they are willing to pay for the service in the free market. Indirect measures, such as the advertising revenue collected by non-subscription services, are likely to underestimate the true value of the music in the marketplace.

(*Pelcovits WDT Web II*, at 54.) This statement evinces a fundamental misunderstanding of how advertiser-supported media operate. Advertising-based music services function as what are known in the economics literature as *two-sided platforms*, and can derive value from either or both sides. Economics does not provide a basis for the claim that the "true value of music in the marketplace" is derived solely from consumer payments or even consumer valuations (in the case where consumers are not charged for the services).

His other rationalizations are similarly weak. For instance, he admits that "the majority of listeners use free non-interactive services" but justifies ignoring data based on these listeners on the grounds that "subscription services do make up a significant part of overall listening." *Id.* at 56.

⁵⁰ At the time of its initial public offering of stock, Pandora cited a November, 2010 report by Ando Media estimating that Pandora had in excess of a 50 percent share of "internet radio listening time among the top 20 stations and networks in the United States." (Pandora Media, In., Form S-1, February 11, 2011 at 1.) More recently, Pandora cited a September, 2013 report by Triton estimating that Pandora has more than a 70 percent share of "internet radio among the top 20 stations and networks in the United States." (Pandora Media, Inc. Form 10-K (transition report) for the eleven months ended December 31, 2013, at 3.)

⁵¹ In order to assess the validity of Dr. Pelcovits's numbers, we requested from Pandora and were provided with Pandora's revenue per subscription performance, revenue per nonsubscription performance, and overall revenue per performance for 2010.

subscribers for a fee, while the other offers a comparatively low-value product (because of the exposure of advertisements) to subscribers at no charge and earns revenue from a different source (*i.e.*, advertising). Economics provides no reason to think that the value of the licensed content should be the same under the two different business models.

2. Dr. Pelcovits based his analysis on data for an industry that was not in equilibrium.

56. Another reason that the royalty set in subsequent proceedings should not be based on Dr. Pelcovits's benchmark analysis in Web II is that his analysis was based on license fees charged to companies in a rapidly changing, nascent industry (interactive webcasting) and based on a comparison of subscription prices from two rapidly changing, nascent types of services (interactive and noninteractive webcasting). The evolving nature of the industry raises doubts about the reliability of a benchmark based on a snapshot of contracts and subscription prices. For example, the snapshot could well have been taken at a time when rates were unsustainably high or when subscription prices were not sustainable.⁵² Indeed, many of the services on which Dr. Pelcovits relied have not survived, which suggests that the services may have been paying royalties that their business could not sustain.

57. Dr. Pelcovits based his benchmark analysis on seven interactive services: Y! Music Unlimited; Musicmatch on Demand; Rhapsody Unlimited; Napster Membership;

⁵² In the Web I proceedings, it was recognized that negotiated rates in a nascent industry may not be reliable. See, for example, Report of the Copyright Arbitration Royalty Panel, *Rate Setting for Digital Performance Right in Sound Recordings and Ephemeral Recordings*, at 47 and 51-54.

MusicNow; MusicNet; and Virgin Digital.⁵³ Of these seven services, only Rhapsody continues to be offered. Two, MusicNet and MusicNow, were acquired by Napster.⁵⁴ A third, Virgin Digital, went out of business and its customers also were acquired by Napster.⁵⁵ Napster, in turn, was purchased by BestBuy.⁵⁶ Due to poor performance, BestBuy sold Napster to Rhapsody in 2011.⁵⁷ MusicMatch on Demand was acquired by Yahoo. However, Yahoo discontinued the service in 2007. Yahoo had another interactive service considered by Dr. Pelcovits, Y! Music Unlimited. This service was discontinued in 2008 and its users migrated to Rhapsody.⁵⁸ In summary, six of the seven services on which Pelcovits relied ceased to exist within a few years of his analysis.

⁵³ See, *Pelcovits WDT Web II*, Appendix Table 2.

⁵⁴ MusicNet: “Private Equity Firm Buying MusicNet,” *Forbes*, April 12, 2005, *available at* http://www.forbes.com/2005/04/12/cz_pkah_0412musicnet.html, *site visited* October 2, 2014; MusicNow: Billboard, “Napster Nabs AOL Music Now Subscribers,” January, 2007 *available at*: <http://www.billboard.com/biz/articles/news/1327824/napster-nabs-aol-music-now-subscribers>, *site visited* October 5, 2014.

⁵⁵ Billboard, “Napster Nabs AOL Music Now Subscribers,” January, 2007 *available at*: <http://www.billboard.com/biz/articles/news/1327824/napster-nabs-aol-music-now-subscribers>, *site visited* October 5, 2014.

⁵⁶ Billboard, “Rhapsody to Acquire Napster From Best Buy,” October 3, 2011, *available at* <http://www.billboard.com/biz/articles/news/1165403/rhapsody-to-acquire-napster-from-best-buy>, *site visited*.

⁵⁷ Rhapsody does not use the Napster brand in U.S. With respect to the U.S, it was primarily purchasing customers. (Interview with Jon Maples, digital media consultant focusing on music content, October 3, 2014; “Is it 2000? Rhapsody is Buying Napster,” *The Wall Street Journal*, October 3, 2011, *available at* <http://blogs.wsj.com/deals/2011/10/03/is-it-2000-rhapsody-is-buying-napster/>, *site visited* October 2, 2014.)

⁵⁸ Yahoo Launchcast Plus: Michael Liedtke, “Rising royalties send Yahoo’s Launchcast to CBS,” *AP Newswire*, December 3, 2008; “Yahoo! And Clear Channel Announce Entertainment Agreement, June 28, 2012, *available at* <https://yodel.yahoo.com/blogs/partnerships/yahoo-clear-channel-announce-entertainment-agreement-11445.html>, *site visited* October 2, 2014; Yahoo! Music Unlimited: Marshall Kirkpatrick, “The Final Days of DRM: Yahoo Music Store Closing, Will Eat your Purchased Music, *Readwrite*, July 24, 2008, *available at*

58. In addition, several of the noninteractive services used by Dr. Pelcovits also went out of business, including MSN Radio Plus, MusicMatch Radio Gold; Wolf FM Membership; and Howlin' Oldies Membership.^{59, 60} The experience of Yahoo Inc.'s noninteractive, Launchcast service is informative in this regard. In 2008, Yahoo ceased operating it as a standalone service because of the "dramatically higher fee for airing music online."⁶¹

3. Dr. Pelcovits relied on what is very likely a biased sample of contracts.

59. Lastly, Dr. Pelcovits relied on contracts that interactive webcasters had with the major record companies but not those with independent record companies.⁶² As noted in the *Web III Remand Decision* when discussing a similar problem in Dr. Pelcovits's Web III interactive benchmark, the failure to consider a significant set of contracts otherwise

http://readwrite.com/2008/07/24/yahoo_music_store_closing, *site visited* October 2, 2014.)

⁵⁹ These services were among several used in Dr. Pelcovits's regression analysis. Yahoo Launchcast also was used in Dr. Pelcovits's direct comparison of interactive and noninteractive subscription prices. (*Pelcovits WDT Web II*, Table 6.2.)

⁶⁰ MSN Radio Plus: "MSN Music Shutting Down for Zone," Neowin, November 3, 2006, *available at* <http://www.neowin.net/news/msn-music-shutting-down-for-zune>, *site visited* October 2, 2014; "MSN flips off switch on Pandora," Seattle Times, June 20, 2008, *available at* http://seattletimes.com/html/business/technology/2008007825_msnpandora20.html, *site visited* October 2, 2014; Howlin' Oldies Membership and WOLF FM Membership: "Station Update," *available at* <http://web.archive.org/web/20101010165639/http://www.wolffm.com/>, *site visited* October 5, 2014.

⁶¹ Michael Liedtke, "Rising royalties send Yahoo's Launchcast to CBS," AP Newswire, December 3, 2008.

⁶² *Pelcovits WDT Web II* at 3.

available to SoundExchange reduces the probative value of the analysis.⁶³ Moreover, the contracts on which Dr. Pelcovits focused are particularly inappropriate because, as discussed in the previous subsection, the major record companies had substantial market power with respect to interactive service providers, and the benchmark rates were not determined in effectively competitive markets.⁶⁴

60. More generally, the greater the buyer's ability to shift usage to or from a seller with whom the buyer is negotiating, the more competitive will be the resulting price. Hence, negotiations between any given buyer and small labels will tend to be closer to effectively competitive rates than corresponding deals between that buyer and a major record company because significant share shift is more likely to be possible with respect to the smaller labels.

61. This general consideration also reveals the inappropriateness of Dr. Pelcovits's reliance on contracts between interactive services and major labels in terms of the buyer side of the market. All else equal, a buyer with a greater ability to shift usage will pay a lower price than a buyer with a lesser ability to shift usage because the ability to engage

⁶³ *Web III Remand Decision* at 61.

⁶⁴ Dr. Ordover, an economic expert for Sound Exchange in the Web III (as well as SDARS I and SDARS II) testified in the SDARS I proceeding to the effect that the major record labels possess substantial market power that drives license fees upward: "A larger label with a broad catalog of popular recordings across a number of genres likely will negotiate a higher rate than each small label with the same collective catalog could negotiate. The bigger the label and the larger its catalog of popular recordings, the more important it is for Sirius XM to avoid operating at a competitive disadvantage due to the absence of that entire catalog...The nature of Sirius XM's tiered royalty structure is consistent with the presence of a positive relationship between a label's importance (as measured by share of plays) and the label's negotiating position vis-a-vis Sirius XM." (*Ordover WDT SDARS II*, ¶¶ 24-25.)

in substitution corresponds to the ability to create competitive pressure on the seller. Hence, the royalties paid by those buyers with the greatest ability to engage in substitution are the royalties that most closely approximate those that would emerge under effective competition. In other words, even buyers that cannot engage in extensive substitution should receive royalty rates based on a benchmark driven by buyers that can engage in extensive substitution. Interactive services have less ability to shift share among labels than do noninteractive services, including simulcasters. Hence, even for contracts that are not with majors, interactive license fees will be higher than those that would obtain under conditions of effective competition.

C. APPLYING DR. PELCOVITS’S METHODOLOGY TO ACCOUNT FOR NONSUBSCRIPTION SERVICES WOULD HAVE YIELDED A MUCH LOWER PER-PLAY ROYALTY.

62. Dr. Pelcovits’s methodology is based on the unsupported assertion that subscription, interactive services and noninteractive services should pay the same percentage of revenue as royalties. Even if one accepted his flawed framework, Dr. Pelcovits grossly erred in deriving a per-subscriber (and ultimately, per-play) royalty rate. He did so by applying the interactive service percentage of revenue to an estimate of noninteractive services’ revenues that totally ignored the predominant business model used by noninteractive services: nonsubscription, advertising-supported services.

63. As I show in Part B of the Technical Appendix, even if one accepted the remainder of Dr. Pelcovits’s flawed framework, applying his percentage-of-revenue figure to advertising revenue per play of the largest noninteractive service (Pandora) would have yielded a royalty rate per play ([[]]) that was only [[]] of

the rate Dr. Pelcovits recommended (\$0.00234).⁶⁵ Simply put, even accepting the flaws in his underlying interactive services benchmark, Dr. Pelcovit's Web II analysis grossly overstated what the noninteractive royalty based on that benchmark should be. This finding—as well as examination of the other weaknesses of his approach—indicates that there is a need for a clean break from Dr. Pelcovits's benchmark in setting the statutory, noninteractive royalty rates. Unfortunately, the errors in Dr. Pelcovits's benchmark were not confined to Web II, but instead have perpetuated themselves through the regulatory process.

VI. THE NAB/SOUNDEXCHANGE WSA AGREEMENT IS NOT A VALID BENCHMARK

64. The NAB and its members were not satisfied with the royalty rates set in Web II, which were based on an interactive-services benchmark and suffered from the flaws discussed above. As an alternative to the statutory process for rate setting for the 2011-2015 period, the NAB entered into a negotiation with SoundExchange under the Webcaster Settlement Act of 2008, to set rates for the 2009-2015 period.⁶⁶ These negotiations took place in a situation in which SoundExchange had been empowered by Congress to act as the licensor/seller representing the industry and the negotiations took place on a very compressed time frame set by the WSA. The parties had six weeks to

⁶⁵ My calculation uses Pandora internal data for 2010. For Dr. Pelcovit's recommended royalty, see, *Pelcovits WDT Web II*, Table 6.3.

⁶⁶ Webcaster Settlement Act of 2008, Public Law 110-435, 122 Stat. 4974 (hereinafter, *WSA*).

negotiate in early 2009, at a time when the radio industry was in poor financial condition due to the Great Recession.⁶⁷

65. The first topic of discussion between the negotiating parties was the royalty rate. The NAB also had a strong interest in obtaining a lower rate, but SoundExchange was unwilling to negotiate. According to the NAB's lead negotiator, SoundExchange made it clear that it was happy with status quo rates and relying on Web III in the event that no deal was reached. In contrast, it was important to the NAB to achieve some short-term relief in the rates effective for 2009-2010 and the NAB negotiators were concerned that the outcome in Web III might be even worse for webcasters than was Web II. According to the lead NAB negotiator, SoundExchange was willing to negotiate changes in the rates over time as long as the rates hit an average rate target over the life of the negotiated contract. This led to an agreement that the rates would increase over time, with some relief in the 2009-2010 contract years and higher rates later in the contract term.

66. SoundExchange was also willing to negotiate certain copyright issues regarding web simulcasts of terrestrial broadcasts (*e.g.*, preannouncements of songs) and accommodations regarding reporting requirements for small-market broadcasters.

67. In summary, the NAB negotiators perceived that they had little bargaining power, and the negotiations led to only a few, minor concessions by SoundExchange.

⁶⁷ Information about the NAB/SoundExchange negotiations is based on an interview with the lead NAB negotiator, Steve Newberry, President and CEO, Commonwealth Broadcast Corporation, September 5, 2014.

The NAB also had to negotiate with individual major record companies and the independent label association to get them to sign on too, so there was considerable time pressure. *Id.*

A. SOUNDEXCHANGE POSSESSED MONOPOLY POWER

68. From the perspective of economics, the outcome of the bargaining between the NAB and SoundExchange was unsurprising given that SoundExchange was a monopolist. Another way of thinking about a monopoly is that its existence implies that there is no possibility of a buyer's shifting sales among sellers and, thus, bringing competitive pressure to bear. In effect, the NAB was negotiating with the entire recording industry at once, so that the NAB could not credibly hold out the prospect that its members would increase the number of performances for a particular record label the way they might be able to do if they were in negotiations with individual labels. Hence, there was no means of generating competitive pressure of any sort.

69. As discussed in Section IV.D.1 above, even if there were two large buyers, each accounting for 50 percent of the royalty payments, the resulting outcome would not be an effectively competitive one when there is a monopoly seller. Therefore, even if "at the time of the WSA Agreement negotiations, the NAB broadcasters had accounted for over 50% of the royalty payments to SoundExchange in the immediately preceding calendar year,"⁶⁸ the NAB would not have had the ability to offset SoundExchange's market

⁶⁸ *Web III Remand Decision* at 23114. Although the *Decision* cites Dr. Ordover for this proposition, Dr. Ordover's statement was limited to the royalty payments "from Webcasters." (*Ordover WRT Web II* at 23.) He said nothing about the magnitude of those payments compared to other payments received by SoundExchange, such as those paid by SiriusXM for its SDARS service.

power to any meaningful degree. In short, these negotiations did not take place under conditions of effective competition.⁶⁹

70. Although apparently recognizing SoundExchange's monopoly position, the *Web III Remand Decision* stated that⁷⁰

It is not at all apparent, however, that the market power of SoundExchange to command a high rate would be appreciably greater (if at all) than the power of the major record companies, who owned approximately 85% of supply (the sound recordings) and therefore comprise an oligopoly. 4/20/10 Tr. at 299 (Pelcovits).

It is critical to recognize that the possibility that the major record companies might charge as much or more than SoundExchange does not change the fact that SoundExchange is a monopoly seller. And the potential exercise of oligopoly power does not imply that SoundExchange's monopoly price is the price that would be reached by a willing buyer and willing seller negotiating in an effectively competitive market. Indeed, the monopoly price is manifestly not an effectively competitive price. Consequently, the WSA agreement between the NAB and SoundExchange does not reflect the outcome of an effectively competitive market.

B. THE PARTIES' EXPECTATIONS AND WILLINGNESS TO LITIGATE

71. Under mainstream economic theories of bargaining, the nature of the agreement that is reached depends on how the parties expect to fare if they fail to reach an

⁶⁹ Professor Ordover recognized this point in *SDARS I*, when he testified that SoundExchange was likely to have "substantial market power" because the "record companies are allowed jointly to negotiate license fees with the SDARS under the auspices of SoundExchange." (*Ordover WDT SDARS I* at 21.)

⁷⁰ *Web III Remand Decision* at 23113.

agreement. The reason is that, in determining how hard to bargain, each party should account for the fact that strong demands might lead to a failure to reach agreement.⁷¹

72. The NAB negotiating team had what were, for it, pessimistic expectations at the time of the WSA negotiations.⁷² Based on the results of the Web II decision and the way those results were reached, the NAB negotiators were concerned that the outcome in Web III might be even worse for webcasters. In fact, Dr. Pelcovits submitted a similar study in Web III, but the judges recognized it as flawed in the light of additional record evidence provided by Dr. Michael Salinger. The Judges properly did not accept his proposed \$0.0036 rate.⁷³ However, the NAB negotiating team had no way of confidently predicting this outcome at the time the NAB/SoundExchange WSA Agreement was negotiated.

73. The NAB team's pessimism meant that the legal fees it might expend by participating in the proceeding were large relative to the expected benefits of litigation. In economic terms, future litigation was not an attractive option for the NAB, which weakened its bargaining position. In contrast, Sound Exchange was going to be involved in

⁷¹ Observe that the consequences of failing to reach an agreement matter even if the bargaining parties never actually walk away from each other. An analogy illustrates why. Suppose a town installed a camera at its main intersection and set the fine for running the traffic light at a very high level. Suppose, further, that these actions completely deterred red light violations. Then the high fine would influence driving behavior even though no one ever actually paid it.

⁷² Moreover, the NAB negotiators did not believe that later, direct negotiations with record companies would succeed in obtaining effectively competitive rates for NAB's members.

⁷³ In the *Web III Remand Decision*, the Judges did not adopt Dr. Pelcovits's \$0.036 royalty in total, but concluded that it was "of assistance in establishing a zone of reasonableness in this proceeding, but only after making certain significant adjustments to that proposed benchmark." (*Web III Remand Decision* at 23115.)

the litigation in any event and, based on the Web II outcome, had greater cause for optimism with respect to the likely Web III outcome. Moreover, Sound Exchange benefits from greater economies of scale: it amortizes the costs of participating in statutory rate-setting proceedings over all of the licenses. In contrast, any one licensee or group of licensees amortizes the costs of participation over only its own set of licenses.

74. In addition to NAB's agreement to the WSA rates, the CRB in Web III cited adoption of the NAB/SoundExchange WSA agreement rates by other entities as evidence that those rates constituted an appropriate benchmark. It observed that 404 entities had opted into the NAB agreement, including about 100 startups, so that "the rates contained in the NAB Agreement clearly were acceptable to a large number of webcasters."⁷⁴ However, this adoption merely demonstrates that these parties lacked more attractive options, not that the WSA agreement was effectively competitive.⁷⁵ More generally, the fact that a monopoly seller makes positive sales to some buyers at the monopoly price does not render the monopoly price competitive. The same critique applies to the CRB's Web III conclusion that the rates were an appropriate benchmark because the webcasters that entered into the NAB/SoundExchange agreement had advertising-based revenue models.⁷⁶

⁷⁴ *Web III Remand Decision* at 23111.

⁷⁵ Similarly, the *Web III Remand Decision* noted that several commercial webcasters had opted into the SIRIUS XM agreement and concluded that "[t]he fact that these webcasters, who did not participate in the negotiations, nonetheless adopted the terms of the agreement is evidence that the negotiated rates and terms were reasonable and acceptable to the webcasters." (*Web III Remand Decision* at 23111.) This conclusion is unwarranted for the same reasons discussed in the text.

⁷⁶ *Web III Remand Decision* at 23111.

C. THE ROLE OF PRECEDENT

75. After SoundExchange and the NAB had come to an agreement on the rate levels and structure over time, SoundExchange insisted on the agreement being precedential as a condition of doing the deal. The ability of SoundExchange to negotiate over whether a given agreement is precedential or not has two very significant implications for the resulting rate levels and their suitability as benchmarks. First, SoundExchange has the incentive and ability to create selection bias in the agreements that can be used as a precedent. This selection bias renders the available agreements inappropriate to serve as benchmarks. Second, the ability to use certain contracts as precedents tends to raise the prices in those contracts above effectively competitive levels.

76. Consider first the selection bias. SoundExchange allowed only a limited number of WSA agreements to be designated precedential. Five other WSA agreements were designated as being non-precedential.⁷⁷ Hence, the set of precedential licenses does not constitute a random sample. As an economically rational decision maker, Sound Exchange will consider the precedential value when negotiating whether a given WSA agreement is eligible to serve as benchmarks for statutory rates. SoundExchange has incentives to allow only those agreements with relatively high royalty rates to be precedential because doing so may result in higher statutory rates and, thus, higher

⁷⁷ See, Notification of Agreements Under the Webcaster Settlement Act of 2008, 74 FR 9293, 9294-95 (March 3, 2009) (agreement with Corporation for Public Broadcasting for 2008-10); *id.* at 9302 (agreement for “Eligible Small Webcasters”); Notification of Agreements Under the Webcaster Settlement Act of 2009, 74 FR 34796, 34797-801 (July 17, 2009) (agreement for certain “Commercial Webcasters, Including Small Pureplay Webcasters”); Notification of Agreements Under the Webcasters Settlement Act of 2009, 74 FR 40614, 40620-21 (agreement with Corporation for Public Broadcasting for 2011-15); *id.* at 40624-27 (agreement for certain noncommercial webcasters).

payments from webcasters not party to the present negotiations. Because these other webcasters, which will pay the statutory rates, are not parties to the negotiations, their interests will not be represented in the bargaining outcome. Stated another way, Sound Exchange has incentives to designate low rates as non-precedential, while designating high rates as precedential. The licensee in a specific WSA negotiation does not have offsetting incentives to protect other webcasters from potentially higher statutory rates by demanding that agreements with high rates be designated non-precedential. Indeed, it is even possible that a webcaster may indirectly benefit if its rivals are disadvantaged as a result of higher statutory rates. Consequently, economic logic indicates that the reported royalty rates are unrepresentative of what a willing buyer and willing seller would agree to absent the distortions induced by the statutory regime.

77. A similar analysis applies to the rate levels negotiated in WSA agreements. As an economically rational decision maker, Sound Exchange will consider the precedential value when negotiating private settlements that are eligible to serve as benchmarks for statutory rates. SoundExchange has incentives to seek high prices even for an agreement that is not precedential, but it has even greater incentives to do so for an agreement that is precedential because the higher prices obtained for the initial agreement may result in higher statutory rates and, thus, higher payments from webcasters not party to the present negotiations. The possibility of influencing statutory rates upward thus create an incentive for SoundExchange to bargain even harder for higher rates than it otherwise would. Just as described above for negotiations over whether an agreement is precedential, the licensee in a specific WSA negotiation does not have countervailing incentives. The reason is that holding down the rates paid by other webcasters is not a

benefit to the negotiating buyer. Indeed, to the extent that a webcaster's negotiated agreement to pay higher rates over a given period raises the statutory license rates likely to be paid by its rivals over some or all of that period, the precedential value of the higher rates may actually be a benefit for the licensee.

78. The *Web III Remand Decision* found that:⁷⁸

In the absence of any such evidence, the Judges cannot simply assume a multi-party conspiracy among SoundExchange, the NAB, and Sirius XM to increase the rates charged to the NAB and Sirius XM, in the hope that the Judges would utilize those WSA rates to establish the statutory rates.

However, this statement fails to recognize that the logic indicating WSA agreements will lead to overly high rates does not rely on the existence of an explicit conspiracy. For the reasons described above, while (a) SoundExchange has incentives to allow only WSA agreements with particularly high rates to be precedential, and it has incentives to seek especially high rates in any agreement that is precedential, (b) licensees negotiating WSA agreements do not have countervailing incentives. Thus, economic analysis clearly indicates that precedential WSA agreements present a biased sample with unrepresentatively high rates. The experience of the NAB/SoundExchange WSA negotiations is fully consistent with this analysis.

VII. THE ADVERSE EFFECTS OF THE WEB II RATES CONTINUE TO BE FELT

79. The overly high royalty rates set in Web II have biased the precedential WSA Agreements and the Web III statutory rates upward, so that they exceed the rates that would be observed in an effectively competitive market. The Web II rate was too high

⁷⁸ *Web III Remand Decision* at 23112.

because the major record companies' interactive service agreements were not reflective of effective competition; the benchmark analysis focused on subscription rates when a correct analysis would have reduced rates to account for far lower nonsubscription service revenue; and there were serious flaws with the underlying data analysis. The WSA agreement between the NAB and SoundExchange was a direct result of Web II. As in the case of Web II, the NAB/SoundExchange agreement did not reflect the price that would obtain in an effectively competitive market: rather, it was based on expectations set in Web II and SoundExchange was a monopolist. The WSA agreement between Sirius XM and SoundExchange suffered from the monopoly problem as well, and it is quite likely that the expectations set by Web II as well as the NAB/SoundExchange agreement led to a supra-competitive price. Lastly, the Web III statutory license rates were a direct result of the NAB/SoundExchange WSA agreement, "corroborated" by a reprise of the interactive service analysis that led to unreasonably high rates in Web II.

VIII. BOUNDS FOR SIMULCASTING RATES

80. In this section, I address the zone of reasonableness for the royalty rate that will be set in the current proceeding as it applies to simulcasters. I first show that the lower bound of such a zone is near zero. I then address the upper bound of the zone and find that it is lower than the upper bound established for Sirius XM, properly adjusted. Given the information currently available to me, I cannot determine an exact value of the upper end of the zone of reasonableness, but I expect to be able to make a more precise determination after reviewing evidence that is introduced by other parties or otherwise obtained in the discovery process.

A. THE LOWER BOUND OF THE ZONE OF REASONABLENESS IS ZERO PERCENT OF SIMULCASTING REVENUES.

81. Some forms of music performance generate promotional benefits that, on balance, stimulate the sale of recordings, to the benefit of record companies. For example, terrestrial radio broadcasts have long been recognized as an important source of promotion for sound recordings, leading to higher record company sales of music to consumers. The existence of promotional benefits has implications for the bargain that would be reached between a willing buyer and willing seller of music performance rights: the royalties agreed to by a willing buyer and willing seller would reflect the promotional benefits generated by the buyer. Specifically, because the promotional benefits are equivalent to a fee paid by the buyer to the seller (*i.e.*, a form of payment in kind), economic theory predicts that, all else equal, a buyer that generates greater promotional benefits will pay a lower royalty fee.

82. Experience with terrestrial radio broadcasts illustrates this economic prediction. Terrestrial broadcasters do not have to obtain a license to broadcast recorded music, and record companies typically collect no royalties for terrestrial airplay.⁷⁹ For this reason, one might expect record companies to discourage radio airplay (hoping to drive listeners to other forms of music consumption that yield revenue to the record companies) or, at least, not to encourage it. In fact, record companies spend millions of dollars per year to

⁷⁹ There reportedly are exceptions. An industry-leading broadcaster has agreed to pay certain labels a share of its terrestrial broadcasting revenues. (Ben Sisario, “Clear Channel-Warner Music Deal Rewrites the Rules on Royalties,” *The New York Times*, September 12, 2013, available at http://www.nytimes.com/2013/09/13/business/media/clear-channel-warner-music-deal-rewrites-the-rules-on-royalties.html?_r=0, site visited October 6, 2014.)

encourage terrestrial broadcasters to play musical recordings.⁸⁰ As Mr. Kocak has testified, record companies seek terrestrial radio airplay because of the promotional benefits:⁸¹

For as long as I have been in the business, record labels have sought to leverage our stations' relationships with their listeners in order to promote their artists and recordings. Record label representatives and artists actively seek spins on our stations, including their streams, through personal visits, calls, emails, provision of recordings, and participation in promotions, including artist visits and giveaways. Just as important as winning spins, record labels and artists also seek the endorsement of songs and artists by our on-air talent, whose opinions and recommendations listeners trust.

Even when record companies receive no cash compensation for terrestrial broadcasts of their recordings, they receive valuable compensation in the form of promotion, which drives listeners to consume music in other ways that do yield revenue for the record company. Indeed, the size of record company expenditures suggests that, if there were

⁸⁰ Evidence submitted in past proceedings confirmed the importance of radio promotion and the fact that record companies seek radio airplay and that activities related to securing radio airplay is a significant cost. (See, Radio Broadcasters' Proposed Findings of Facts and Conclusions of Law, *Web II*, December 15, 2006, § IV.A, especially ¶¶ 51-53 on promotion activities and ¶¶ 54-62 on the amount of spending on radio promotion. Although the figures for the amounts spent on radio promotion are redacted, the Radio Broadcasters conclude that the amount of spending is "hundreds of millions of dollars." (¶ 62). A Universal Music Group executive testified on the various types of radio promotion undertaken by Universal. (Kenswil, *Web II Hearing Tr.*, June 7, 2006, at 245-56.) Warner Music Group reported that it spent \$422 million on selling and marketing costs worldwide in 2013. (Warner Music Group, Form 10-K for the fiscal year ended September 30, 2013, at 59.) This figure includes all promotional activities, and no breakout is given for radio promotion in particular, but Warner indicates that radio promotion activities are included in its selling and marketing cost figures. (Warner Music Group, Form 10-K for the fiscal year ended September 30, 2013, at 11.)

⁸¹ Written Direct Testimony of Robert Frances Kocak (Buzz Knight), *Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV)* (hereinafter *Kocak WDT Web IV*), ¶ 3. See, also, ¶¶ 27-31. In addition, see Written Direct Testimony of John Dimick, *Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV)* (hereinafter *Dimick WDT Web IV*), ¶¶ 4, 41-50.

not laws prohibiting payments by record companies to obtain favorable airplay for their recordings, in many instances the license fee for terrestrial broadcasting of a musical recording could be *negative*.

83. The available evidence indicates that promotional benefits also arise from web simulcasts of terrestrial broadcasts. Specifically, simulcasts have the same content as the terrestrial, over-the-air broadcasts that they replicate and have the same relationship between the source and the listener (*i.e.*, they are noninteractive services in which the broadcaster/webcaster chooses the recordings to play and thus serves as an expert recommender to the listener). Mr. Dimick has testified.⁸²

Because our music station streams are simulcasts of our over-the-air broadcast, their music content is the same. The promotional effect of the music played is, therefore, no different. I have never had an artist or label tell me they did not want their music broadcast on our stream. In fact, our streaming technology has the added promotional effect of displaying the title, artist and album, as well as the ability to “tag” the song for future purchase on the stream display, which would facilitate the purchase of the music by the listener.

84. These considerations indicate that an effectively competitive license fee for simulcasting could well be negative for many recordings and simulcasters. However, in other situations, the value of promotion might be less, resulting in a positive price under effective competition. Moreover, a negative statutory rate would be problematical because a licensee that did not provide significant promotional benefits would have the ability to “game” the system by insisting on taking a license and getting paid. Taking into account the heterogeneity in promotional value and the possibility of gaming, I find

⁸² *Dimick WDT Web IV*, ¶ 51. See, also, *Kocak WDT Web IV*, ¶ 29.

that a negative statutory license fee would be unreasonable, but that the lower bound of the zone of reasonableness for a statutory rate for web simulcasting is near zero.

B. THE UPPER BOUND OF THE ZONE OF REASONABLENESS IS LESS THAN 13 PERCENT OF SIMULCASTING REVENUES FOR MUSIC-FORMATTED STATIONS.

85. From the perspective of economics, the standard for setting a statutory rate for satellite radio transmission (*e.g.*, the SDARS II proceeding) is similar to the effective competition standard in this matter, although, for satellite radio, there are four potential adjustment factors under Section 801(b) of the Copyright Act that are not applicable in the present proceeding.⁸³ In SDARS II, the judges found that 13 percent constitutes a sensible upper bound on the zone of reasonableness before adjusting to account for Section 801(b) factors.⁸⁴ The rate was then reduced by an additional two percent for the third 801(b) factor, which was specific to Sirius XM and the SDARS II proceeding.⁸⁵

86. The 13 percent that was a starting point for finding the upper bound for the zone of reasonableness for the SDARS royalty rate can also be used as an initial guidepost for finding the upper bound for the zone of reasonableness for simulcasting. Because SDARS and simulcasting transmit both music and non-music content, it is necessary to

⁸³ The Judges have approached the two standards in the same way, at times with the same starting benchmarks. In SDARS I, as in Web II, the Judges started with a subscription interactive services benchmark and made an interactivity adjustment (in SDARS I, the Judges then applied the Section 801(b) factors to the “marketplace” agreements). (*SDARS I Decision* at 4088 and 4093-94.) In SDARS II, the Judges reaffirmed this approach, citing SDARS I and explaining that the proper mode of analysis was to start with “marketplace benchmarks” and then “determine whether adjustments to the rate. . . if any, are warranted.” (*SDARS II Decision* at 23066.)

⁸⁴ *SDARS II Decision* at 23070-071.

⁸⁵ *SDARS II Decision* at 23068-70.

make an adjustment that accounts for the possibility that music may play a greater or lesser role in generating value for simulcasting than for Sirius XM.⁸⁶

87. This adjustment has two components. The first adjustment, which I call the *music-listening adjustment*, examines the percentage of total listening that is listening to music on simulcasting compared to the corresponding percentage on Sirius XM. The second adjustment, which I call the *music-revenue adjustment*, accounts for the fact that some radio stations do not play music at all and so would not be subject to sound performance royalties. Market data allow one to estimate these adjustments and to derive an estimate of the importance of music to simulcasting relative to music's importance to Sirius XM. These data indicate that music is responsible for a similar percentage of the value of the simulcasting of music-formatted AM/FM radio stations as it is for Sirius XM.

88. Consider first the music-listening adjustment. Survey data reveal that [[]] percent of listening to Sirius XM is to music.^{87, 88} The corresponding percentage of music

⁸⁶ “[T]he Judges [in SDARS I] plainly stated that it was their intention to unambiguously relate the fee charged for a service that an SDARS provided to the value of the sound recording performance rights covered by the statutory licenses. *SDARS-I*, 73 FR at 4087.” (SDARS II Decision at 23072).

⁸⁷ Edison Research, Share of Ear Survey, May 2014.

Edison Research conducted a survey in May 2014 in which 2,096 participants kept a listening diary. Each participant recorded what they listened to (including the audio source (*e.g.*, AM/FM radio, owned music, podcasts), audio type (*e.g.*, music, talk and information), and device type (*e.g.*, AM/FM radio, computer, Sirius XM receiver) during each 15-minute increment of a 24-hour period (or, noted that they did not listen to any audio).

⁸⁸ In SDARS I, Professor Ordover testified that music accounted for 55 percent of the value of all content distributed by the SDARS (*Ordover WDT SDARS I* at 41); and in SDARS II, he testified that music accounted for half of the value of Sirius XM. (*SDARS II*

listening on AM/FM radio simulcasts is $[[\quad]]$ percent.⁸⁹ Multiplying the Sirius XM rate by a factor of $[[\quad]]$ ($= [[\quad]]$ percent / $[[\quad]]$ percent) adjusts the Sirius XM royalty rate for the fact that music accounts for a lower percentage of listening on AM/FM radio than on Sirius XM.⁹⁰ Because the estimated amount of listening to music on AM/FM radio simulcast is based on a relatively small sample, I also examined the percentage of time listening to music on AM/FM radio overall (*i.e.*, including both terrestrial broadcasting and web simulcasting). The music-listening percentage on AM/FM radio overall figure is $[[\quad]]$ percent.⁹¹ Multiplying the Sirius XM rate by a factor of $[[\quad]]$ ($= [[\quad]]$ percent / $[[\quad]]$ percent) adjusts the Sirius XM royalty rate for the fact that music accounts for a lower percentage of listening on AM/FM radio than on Sirius XM. This adjustment is conservative because the Edison survey data on which it is based may exhibit an upward bias because respondents have to choose a single category of listening (*e.g.*, “music” or “news”) for each 15 minute listening period. The

Decision at 23063.) It would not be surprising for music to generate half of the value of both satellite and terrestrial radio while accounting for substantially more than half of the listening. As Mr. Kocak testifies, “... the music that a radio station plays is not exclusive to that station, and any musical niche that is developed can be readily copied by competitors. Thus, in order to succeed at a high level, our stations must do much more than play music.” (*Kocak WDT Web IV*, ¶ 2. See, also, ¶¶ 14-26.) In addition, see *Dimick WDT Web IV*, ¶¶ 3 and 30-32; Written Direct Testimony of Ben Downs, Bryan Broadcasting, *Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV)* (hereinafter *Downs WDT Web IV*), ¶¶ 26-31. Exclusive or unique non-music content provides greater opportunities for a radio station or webcaster to differentiate itself.

⁸⁹ *Id.*

⁹⁰ Of course, the percentage of value generated by music versus other content depends, in part, on the quality of the non-music content. This fact raises the question of whether Sirius XM might have more-valuable non-music content than AM/FM radio. However, if it did, then one would expect that value to manifest itself in a higher percentage of non-music listening on Sirius XM than on AM/FM radio, which is not what the data show.

⁹¹ Edison Research, Share of Ear Survey, May 2014.

bias can arise because music-formatted terrestrial radio stations frequently have significant non-music content.⁹² Hence, a survey respondent may listen to non-music content on a music-formatted radio station (via either a terrestrial broadcast or web simulcast) a significant number of minutes yet report his or her listening as having been all music. This bias is less likely to arise with Sirius XM because the channels in its lineup tend to be either all music or all non-music.

89. Consider next the music-revenue adjustment. It is necessary to account for the fact that non-music-formatted stations generally will not be paying royalties. Because the royalties will be paid on a base that is smaller than all industry revenues, it is necessary to scale up the royalty rate by a corresponding amount. In particular, if the royalty is being collected on a base of X percent of the industry revenues, then the royalty rate should be scaled up by a factor of $1/(X \text{ percent})$. I estimate the share of industry revenues accounted for by music-formatted stations using two different data sources.

90. First, Media Monitor provides estimates of advertising revenue for music-formatted terrestrial stations and other terrestrial stations. These data indicate that music-formatted stations accounted for slightly less than $[[\quad]]$ percent of terrestrial industry revenues.⁹³ Under the assumption that music-formatted stations are responsible for the same proportion of web simulcasting revenues, it is appropriate to scale the royalty rate upward by a factor of $[[\quad]]$ ($= 1 / ([[\quad]] \text{ percent})$).

⁹² See, for example, *Kocak WDT Web IV*, ¶ 2; *Dimick WDT Web IV*, ¶¶ 3 and 30; *Downs WDT Web IV*, ¶¶ 26-30.

⁹³ Media Monitor Data.

91. Second, according to data collected by BIA/Kelsey, radio stations with sports, news & talk, or religion formats accounted for about 23 percent of total radio industry revenues, indicating that music-formatted stations generated about 77 percent of industry revenues.⁹⁴ Under the assumption that music-formatted stations are responsible for the same proportion of web simulcasting revenues, it is appropriate to scale the royalty rate upward by a factor of 1.30 (= 1 / (77 percent)).

92. Applying the music-listening and music-revenue adjustment factors simultaneously yields the overall adjustment figure:

- Using the simulcasting listening percentage and the Media Monitor number yields an adjustment of $[[\quad]] = [[\quad]] \times 1/[[\quad]]$.
- Using the all-radio listening percentage and the Media Monitor number yields an adjustment of $[[\quad]] = [[\quad]] \times 1/[[\quad]]$.
- Using the simulcasting listening percentage and the BIA/Kelsey number yields an adjustment of $[[\quad]] = [[\quad]] \times 1/.77$.
- Using the all-radio listening percentage and the BIA/Kelsey number yields an adjustment of $[[\quad]] = [[\quad]] \times 1/.77$.

⁹⁴ BIA/Kelsey 2012 data as reported by InsideRadio, “Changes among radio’s top-billing formats,” *available at* <http://www.insideradio.com/article.asp?id=2710554&spid=32060#.VDBqZ2ddV8E>, site visited October 4, 2014. To be conservative, I have assumed that no religion-formatted stations would pay music royalties.

This range of numbers strongly suggests that an adjustment factor of one is appropriate. In words, the factor to account for the importance of music content in generating service revenues should be the same for simulcasting as for Sirius XM.

93. It is important to recognize that, although it follows that the reasonable royalty rate for simulcasting is no higher than 13 percent, there are strong reasons to conclude that the actual upper bound on the zone of reasonableness is significantly lower than 13 percent. In particular, the SDARS II rate is based in large part on an analysis of interactive services prices conducted in SDARS I that failed to adjust the benchmark rates downward to reflect the lack of competition.⁹⁵ Specifically, the SDARS I upper bound of 13 percent was based on an analysis of subscription, interactive music services conducted by Professor Ordover.⁹⁶ This analysis, like Dr. Pelcovits's analysis discussed in Section V.A above, suffered from a failure to correct for the lack of effective competition in the market for licenses to interactive services.⁹⁷ Hence, the resulting royalty rate was higher than what would have been reached in an effectively competitive market. The figure reached in the SDARS II Decision was based on the SDARS I analysis. Thus, this figure, too, is higher than the royalty rate that would have been reached in an effectively competitive market. Because of the lack of an adjustment to account for the lack of competition inherent in the 13 percent figure, setting a royalty rate

⁹⁵ See, *SDARS II Decision* at 23068-71.

⁹⁶ See, *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Final Rule and Order, 73 FR 4080 (hereinafter, *SDARS I Decision*) at 4093-94.

⁹⁷ *Ordover WDT SDARS I*, § V.B. Although Professor Ordover considered royalties for several different audio and video services, the SDARS I decision relied on the interactive subscription music services. (*SDARS I Decision* at 4093-94.)

near this rate in the present proceeding would be unlikely to represent the price that would be reached between a willing buyer and willing seller operating in an effectively competitive market.

IX. CONCLUSION

94. Drawing on my training and experience as an economist, my examination of the public records of earlier proceedings, and my analysis of the relevant industries, I find that the statutory rates adopted in Web II were based on a severely flawed benchmark analysis conducted by Dr. Pelcovits that led to rates well in excess of those that would have been negotiated by a willing buyer and willing seller in an effectively competitive market. The rates set in Web II created significant upward pressure on rates in the WSA agreements subsequently negotiated and, thus (along with SoundExchange's monopoly position), rendered those agreements inappropriate benchmarks for what a willing buyer would have paid a willing seller in the absence of the statute. Consequently, there is a need to break with the past by taking a close look at new benchmarks that are meaningfully similar to the licenses at issue and that do not reflect undue licensor market power.

95. I also find that: (a) an analysis of the economic relationship between record companies and terrestrial radio broadcasters establishes that the lower bound for reasonable royalties to be paid by webcasters that simulcast terrestrial radio broadcasts is near zero, and (b) an analysis of the statutory rate established in SDARS II demonstrates that, when expressed as a percentage of a music-formatted radio station's simulcasting revenues, a royalty of 13 percent or higher would be unreasonably high.

TECHNICAL APPENDIX

A. A MONOPOLIZED MARKET IS NOT EFFECTIVELY COMPETITIVE.

96. In this appendix, I examine a formal model of a situation in which there is a single seller and single buyer having equal bargaining power. Consider a hypothetical monopoly licensor facing a linear demand curve for licenses, which is the functional form used by Dr. Pelcovits in his benchmark analysis that was adopted in the *Web II Decision*.⁹⁸ Specifically, suppose that demand is given by $x = \alpha - p$. In addition, suppose that the marginal cost of production is c . As is well known, the monopoly price is $p^m = \frac{1}{2}(\alpha + c)$ and the competitive price is $p^c = c$.

97. There are multiple possible interpretations of what it means for the buyer and seller to have equal bargaining power. One interpretation is that the price that emerges from bargaining between a buyer and seller with equal bargaining power is the one that shares the gains from trade equally between the two parties. At a price of p , the buyer will consume $\alpha - p$ units of the good and enjoy surplus equal to $S(p) = \frac{1}{2}(\alpha - p)^2$. The corresponding profits earned by the seller will be $\pi(p) = (p - c)(\alpha - p)$. The bargaining price that equalizes the two parties' gains from trade is the solution to $S(p) = \pi(p)$, or $p^e = \frac{1}{3}(\alpha + 2c)$.

⁹⁸ *Pelcovits Web II WDT* at 32 and 33.

My use of this demand curve should not be taken to imply that I agree with the analysis that Dr. Pelcovits conducted making use of this demand curve; I do not.

98. Comparing the different prices, one finds that $p^m - p^e = \frac{1}{6}(\alpha - c)$, while $p^e - p^c = \frac{2}{6}(\alpha - c)$. In other words, the difference between the bargaining price and competitive price is twice as great as the difference between the bargaining price and the monopoly price even when there is only one buyer.

99. Another interpretation of the equal bargaining power is that the equilibrium price will maximize the so-called *Nash product*, $S(p) \times \pi(p) = \frac{1}{2}(\alpha - p)^3(p - c)$.⁹⁹

Straightforward calculations demonstrate that the solution is $p^n = \frac{1}{4}(\alpha + 3c)$.¹⁰⁰

Comparing the different prices under this interpretation, one finds that

$p^m - p^n = \frac{1}{4}(\alpha - c) = p^n - p^c$. In this case, the bargaining price lies halfway between the competitive price and the monopoly price even when there is only one buyer.

100. In summary, even when there is only a single buyer and that buyer has equal bargaining power with the seller, the resulting price is not closer to the competitive price than to the monopoly price, and such a price is not effectively competitive as that term would be understood by competition economics. Moreover, if there were two or more potential licensees, the price would be even higher.

⁹⁹ See, for example, Ken Binmore, Ariel Rubinstein, and Asher Wolinsky (1986), "The Nash Bargaining Solution in Economic Modelling," *The RAND Journal of Economics*, **17**(2): 176-188.

¹⁰⁰ The first-order condition simplifies to $\alpha - 4p + 3c = 0$.

B. APPLYING DR. PELCOVITS’S METHODOLOGY TO ACCOUNT FOR NONSUBSCRIPTION SERVICES WOULD HAVE YIELDED A MUCH LOWER PER-PLAY ROYALTY.

101. Ultimately, Dr. Pelcovits estimated a license fee for noninteractive services as a percentage of subscription revenue, which he then converted to a per-play rate. He did so based on a very unrealistic assumption about the revenues of noninteractive services. Even if one accepts the rest of Dr. Pelcovits’s methodology—which, as discussed in Section V above and the present section below, is highly flawed—correcting for his unrealistic revenue assumption leads to a rate well less than half of the rate asserted by Dr. Pelcovits.

102. Dr. Pelcovits explains his calculation of a per-play rate as¹⁰¹

Accordingly, to predict the per play rate that would be negotiated if the adjusted [redacted in original] play proved unacceptable to music services, my starting point is the per subscriber minimum derived for the non-interactive market. In this scenario, *the per play rate should be equal to the per subscriber rate divided by the number of plays.* [Emphasis added.]

Expressed algebraically:

$$\text{license fee per NI play} = \frac{\text{license fee per NI subscriber}}{\text{plays per NI subscriber}} .$$

103. Dr. Pelcovits derives a per-subscriber fee for noninteractive services based on data for interactive services. He does this by relying on the assumption that there is a constant ratio of license fee to consumer price. Specifically, he proceeds by estimating “the appropriate consumer subscription price in the noninteractive market and then

¹⁰¹ *Pelcovits Web II WDT* at 45.

applying the same ratio of license fee to subscription price that exists in the interactive DAT market.”¹⁰² Expressed algebraically:¹⁰³

$$\text{license fee per NI subscriber} = \text{revenue per NI subscriber} \times \frac{\text{license fee per I subscriber}}{\text{revenue per I subscriber}} .$$

104. Substituting the expression for license fee per NI subscriber from the second equation into the first and rearranging terms yields the expression:

$$\text{license fee per NI play} = \frac{\text{revenue per NI subscriber}}{\text{plays per NI subscriber}} \times \frac{\text{license fee per I subscriber}}{\text{revenue per I subscriber}} .^{104}$$

In other words, to derive a recommended value for the license fee per noninteractive play, Dr. Pelcovits multiplied his estimate of *revenue per play for noninteractive subscribers* times his estimate of the *percentage royalty rate paid by providers of interactive services*.

105. In his Web II testimony, Dr. Pelcovits calculated that:¹⁰⁵

$$\frac{\text{license fee per I subscriber}}{\text{revenue per I subscriber}} = .36 .$$

¹⁰² *Pelcovits Web II WDT* at 41. See, also, *Pelcovits Web II WDT* at 31.

¹⁰³ Because Dr. Pelcovits focuses solely on subscription-based services, his consumer subscription price corresponds to a service’s revenue per subscriber in his calculations.

¹⁰⁴ This expression corresponds to the logic expressed by Dr. Pelcovits:

Applying the methodology employed earlier, it is appropriate to set the per play rate for the non-interactive market by maintaining in that market the same ratio of license fee to consumer subscription price that exists in the interactive market.

(*Pelcovits Web II WDT* at 44.)

¹⁰⁵ This percentage is redacted in the text of Dr. Pelcovits’s Written Direct Testimony, but it appears later in the report at Table 6.3 as the unadjusted percentage of revenue royalty rate recommendation.

The license fee used by Dr. Pelcovits in this calculation was the average license fee from 17 contracts between interactive services and major record companies.¹⁰⁶ The revenue used was the average monthly subscription price of seven interactive services, where the average used both monthly subscription prices and the monthly equivalent price of annual subscriptions.¹⁰⁷ As discussed above, the use of a benchmark based on interactive services doesn't make sense when one is trying to establish a rate for noninteractive services.

106. Despite the problems with Dr. Pelcovits's estimated percentage of revenue, for present purposes I will assume that it is correct in order to highly the effects of other critical deficiencies of Dr. Pelcovits's analysis. Under the assumption that the license fee per interactive-service subscriber is 36 percent of the service provider's relevant revenues, Dr. Pelcovits's formula for the noninteractive, per-play royalty is

$$\text{license fee per NI play} = \frac{\text{revenue per NI subscriber}}{\text{plays per NI subscriber}} \times 0.36 .$$

107. Dr. Pelcovits estimated the fraction on the right-hand side of the equation above as follows. For the denominator, he estimated plays per noninteractive subscriber using data from Live365.¹⁰⁸ For the numerator, he estimated revenue per noninteractive subscriber as the average subscriber fee for interactive services multiplied by an

¹⁰⁶ *Pelcovits Web II WDT* at 36 and Appendix Table 1.

¹⁰⁷ *Pelcovits Web II WDT* at 36 and Appendix Table 2.

¹⁰⁸ *Pelcovits Web II WDT* at 45.

adjustment factor of .55, which was his estimate of the “value of interactivity.”¹⁰⁹ In doing so, Dr. Pelcovits used data for interactive services’ subscription revenues as a proxy for subscription, noninteractive services’ revenues, which he, in turn, used as a proxy for nonsubscription, noninteractive services’ revenues. Instead of adjusting proxy data to create another proxy measure, it would have been preferable to examine the actual revenues of nonsubscription, noninteractive services. In fact, actual data are available for Pandora, by far the largest provider of noninteractive webcasting services.¹¹⁰ Those data reveal that, in 2010, Pandora’s total revenue per play was [[]].¹¹¹ Hence, even if one accepted Dr. Pelcovits’s methodology, applying that methodology to the correct revenue figures yields a *license fee per NI play* of $.36 \times [[]] = [[]]$. This figure is far smaller than the \$0.00234 per-play royalty that Dr. Pelcovits advocated.^{112, 113}

¹⁰⁹ *Pelcovits Web II WDT* at 41.

¹¹⁰ See note 50 above.

¹¹¹ Pandora internal data.

¹¹² *Pelcovits WDT Web II*, Table 6.3.

¹¹³ Dr. Pelcovits may assert that his approach cannot be applied in this way because the relevant elasticity of demand for advertiser-supported services is not sufficiently close to that of interactive services. If that were the case, however, then he would have to admit that his entire methodology is inappropriate for setting the rate charged to licensees making use of by far the most predominant revenue model for interactive services. Thus, either his recommended *license fee per noninteractive play* should be less than half of the rate he advocated or it should not have been considered at all. In either event, there is no sound basis for concluding that \$0.0023 was an appropriate benchmark.

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EMPLOYMENT

- July 1987 to present* **Sarin Chair in Strategy and Leadership**
Professor of Economics
University of California, Berkeley
Joint appointment in the Economics Department and Haas School of Business. Member, Academic Senate Committee on Budget and Interdepartmental Relations. Former Director of the Institute for Business Innovation and Associate Dean for Academic Affairs. Past chair of Economic Analysis and Policy Group, Strategic Planning Committee, and Policy & Planning Committee. Research areas include competition and public policy in network and system industries, innovation, and pricing. Principal teaching in areas of business strategy and microeconomics.
- July 2007 to June 2009* **Harvey Golub Professor of Business Leadership**
New York University
Appointed to Department of Management and Organizations, Stern School of Business. Research areas included healthcare competition. Taught business strategy courses.
- September 2001 to January 2003* **Deputy Assistant Attorney General for Economic Analysis**
U.S. Department of Justice
Oversaw economic analysis in support of all Antitrust Division enforcement activities. Reported directly to the Assistant Attorney General for Antitrust. Managed unit of approximately 55 professional economists. Undertook multidimensional effort to integrate economists more fully into investigation, decision, and litigation processes.
- January 1994 to January 1996* **Chief Economist**
Federal Communications Commission
Responsible for integrating economics into all aspects of Commission policy making. Reported directly to the Chairman of the Commission. Formulated and implemented regulatory policies for all industries under Commission jurisdiction. Managed teams of lawyers and economists to design regulatory policies and procedures.
- July 1981 to June 1987* **Assistant Professor of Economics**
Princeton University
Conducted research on sophisticated pricing, standards development, cooperative R&D, and intellectual property licensing. Served as Assistant Director of Graduate Studies. Taught courses in microeconomics, industrial organization, and antitrust and regulation.

EDUCATION

D.Phil. 1982

Oxford University

Doctorate in Economics. Thesis on market segmentation and sophisticated pricing.

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Harvard University

As an undergraduate, completed courses and general examinations for Economics doctorate.

SERVICE

Coeditor, *Journal of Economics & Management Strategy*, 1991-2001 and 2003-present.

Editorial Board member, *Information Economics and Policy*, 2004-present.

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Editorial Board member, *California Management Review*, 1998-2000 and 2003-2007. Editor 2000-2001.

Board Member, Berkeley Executive Education, February 2013-present.

U.S. Advisory Board member, NTT DOCOMO, Inc., October 2011-April 2013.

Spectrum Policy Invited Expert, President's Council of Advisors on Science and Technology, September 2011-May 2012.

Member, Committee on Wireless Technology Prospects and Policy Options, The National Academies, 2003-2011.

Deputy Marriage Commissioner, City and Country of San Francisco, October 2, 2010.

Member, Computer Science and Telecommunications Board, The National Academies, 2000-2001 and 2004-2008.

Member, Spectrum Policy Working Group, Digital Age Communication Act Project, Progress & Freedom Foundation, January 2005-March 2006.

Member, Consumer Energy Council of America, Universal Service Forum, 2000-2001.

AWARDS AND HONORS

Chairman's Special Achievement Award, Federal Communications Commission, 1996.

The Earl F. Cheit Outstanding Teaching Award, University of California, Berkeley, 1992-1993 and 1988-1989. Honorable Mention, 1999-2000 and 1996-1997.

Alfred P. Sloan Research Fellow, 1985-1988.

National Science Foundation Graduate Fellow, 1978-1981.

John H. Williams Prize (awarded to the Harvard College student graduating in Economics with the best overall record), 1978.

GRANTS

- Principal Investigator, Nokia Corporation grant on business-model innovation, 2009-2012.
- Principal Investigator, Microsoft Corporation grant, "Research on Competition Policy for Intellectual Property," joint with Richard J. Gilbert, 2006
- Recipient, Berkeley Committee on Research grant, 2004-2005, 1996-1997.
- Recipient, Berkeley Program in Finance Research grant, 1990.
- Researcher, Pew Foundation grant: "Integrating Economics and National Security," 1987-1990.
- Principal Investigator, National Science Foundation grants:
- "A More Complete View of Incomplete Contracts," joint with Benjamin E. Hermalin, 1991-1993.
 - "Game-Playing Agents and the Use of Contracts as Precommitments," 1988-1989.
 - "The Analysis of Intermediate Goods Markets: Self-Supply and Demand Interdependence," 1985-1986.
 - "Imperfectly Competitive Models of Screening and Product Compatibility," 1983-1984.
 - "Screening and Imperfect Competition Among Multiproduct Firms," 1982.

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- “Increasing Connectedness and Consumer Payments: An Overview,” in *Consumer Payment Innovation in the Connected Age*. Kansas City: Kansas City Federal Reserve (2012).
- “Product Differentiation through Exclusivity: Is there a One-Market-Power-Rent Theorem?” co-authored with Benjamin E. Hermalin, *Journal of Economics & Management Strategy*, Vol. 22, No. 1 (Spring 2013).
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B

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In The Matter Of:)	
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)	
Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV))	14-CRB-0001-WR (2016-2020)
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**WRITTEN DIRECT TESTIMONY OF
STEVEN W. NEWBERRY, COMMONWEALTH BROADCASTING CORP.
(On behalf of the National Association of Broadcasters)**

1. My name is Steven W. Newberry. I am the President and Chief Executive Officer of Commonwealth Broadcasting Corporation, a twenty-station radio broadcast group, with facilities located in several markets in Kentucky. I have held this position since 1996. I offer this statement in support of the National Association of Broadcasters (“NAB”) in this proceeding. My statement is based on my long experience in the radio business as well as my personal involvement in the operation of Commonwealth and in the negotiations leading to the 2009 agreement under the Webcaster Settlement Act between NAB and SoundExchange.

Summary

2. As an owner and operator of radio stations and as a longtime veteran of the radio industry, I think that it is important to understand that a primary reason that people listen to local radio is the connection that the station develops with its community. This connection is developed in many ways, including through the

community-oriented information a station provides and the interaction of station personnel within the community. We are not just a music service. We take the obligation to broadcast in the public interest very seriously. Our stations, including our music-formatted stations, therefore, are constantly providing information about community news and events and participating directly in those events, such as by providing free air time for charitable functions and broadcasting local high school games. Our streams serve this same purpose of helping to create a sense of community that is the heart of local radio.

3. As the leader of the NAB team that negotiated the 2009 agreement between the NAB and SoundExchange under the Webcaster Settlement Act, I also want to comment on that agreement. I can say without any doubt that those negotiations did not result in an agreement between a willing buyer and a willing seller that was unaffected by the rate setting process. Rather, due to the 2007 decision by the Copyright Royalty Board dramatically hiking streaming rates, the lack of any reason for NAB to believe that another litigation would lead to a better result from the same Judges, the economic hardship in the industry resulting from the 2008 recession, and an opposing party that knew it had all the leverage while we had none, the agreement was really a take-it-or-leave-it result between a monopoly seller that held all of the cards and a buyer that had no viable alternatives. In these circumstances, the entirely one-sided nature of the agreement, including the rates and the “precedential” designation demanded by SoundExchange, is hardly surprising.

Professional Background and Commonwealth Broadcasting Corp.

4. I began my career in radio at the age of fourteen, when I took a job with a local station in Glasgow, Kentucky. As a high school sophomore, I worked 24 hours on the air on weekends, and continued to work as an on-air personality while obtaining my degree from the University of Kentucky.

5. In 1984, during the final semester of my senior year of studies, I purchased my first radio station. I was 21 years old. The station was a full-service Adult Contemporary formatted station that operated out of a double-wide house trailer in Cave City, Kentucky. I wore a variety of hats, which helped familiarize me with virtually all of the important aspects of the radio business. In addition to running the station and managing our small staff, I managed the station's sales, served as on-air talent for the morning show, did sports play-by-play, covered community events, and helped to keep the facilities operating by performing basic technical installations and repairs.

6. In 1996, I joined with the prior Governor of Kentucky, Brereton Jones, and formed Commonwealth Broadcasting. We started acquiring stations in 1997. The group quickly grew to 35 stations. In 2006, I acquired the Governor's interest in the company.

7. Commonwealth Broadcasting now has offices in seven small cities and towns in rural Kentucky, including Elizabethtown (population about 40,000), Glasgow (population about 15,000), Princeton, Madisonville, Elizabethtown, Campbellsville, and Bowling Green. A list of our stations and the communities they serve is attached as Appendix A.

8. I served as Chairman of the Joint Board (radio and television) of NAB, which functions as the Association's Board of Directors, from June 2009 through June 2011. Immediately before that, I served as Chairman of the Radio Board (the radio members of the Joint Board) from June 2008 through June 2009. I am a member of the board of directors and executive committee of the Radio Advertising Bureau. I have also served as President of the Kentucky Broadcasters Association (1993-1994).

9. I was honored to receive NAB's National Radio Award, the industry's highest leadership honor, in 2011. I have also been inducted into the Kentucky Broadcasters Association's Hall of Fame, and received their Distinguished Kentuckian Award in 2009.

10. I am a graduate of the University of Kentucky with a B.A. in Telecommunications. In 2013, I received the Outstanding Alumnus Award from the University's College of Communications and Information.

Radio Serves the Community and Offers a Connection to the Community

11. Local radio provides the community with a mix of information, entertainment, and personality. In fact, we are required by law to serve the public interest. More generally, local radio establishes and provides a connection to the community. People listen because of that connection. Radio, even radio that is described by a music format, is not simply a music service. Music is just part of what we offer; it is not the only thing. There are plenty of places for people to get music, if that is what they want, including their own albums and other types of services that focus entirely on music. Other services may call themselves "radio," but they do not

do what broadcasters do every day to serve their communities and they do not have obligations to serve the public interest under the law.

12. Commonwealth serves the communities in which it broadcasts in numerous ways, both on the air and off. We cover community news and events, annual Christmas parades, local school news, local obituaries, little league news, and local scouting stories. We provide free air time for charitable activities, such as Rotary club auctions and other fund raisers, and participate in events to benefit charities such as the American Cancer Society, the American Red Cross, local food pantries and dozens of other charities. We provide play-by-play coverage of local high school sports. We provide critical weather information, particularly during weather emergencies, such as tornado and storm warnings.

13. A good example of what radio can do for a community occurred in 1998, when the major employer in Campbellsville closed its plant that had employed 4,500 people. The town could have been devastated, but instead it banded together and overcame the adversity. I am proud to say that Commonwealth Broadcasting was able to help. We held a job fair, spent time on the radio talking about job opportunities, kept the community informed about developments, and generally provided a positive message and encouragement. The community was able to recover and convince new employers to come to town, including an Amazon.com distribution center.

14. At Commonwealth, we provide Internet streams of the broadcasts of four of our twelve primary music-formatted stations (and one secondary HD2 transmission) as another way to try to connect with and serve our communities. We

want to make it possible for our over-the-air listeners to hear our stations over the Internet, if that is what they want. Although the main way we reach our listeners is with our over-the-air broadcasts, streaming offers a secondary way to reach them. It is just another platform for the same audience to hear the same content as provided by our over the air signal. Only a very small percentage of our audience listens over the Internet.

15. The focus of all of our activities, including our streaming, is on our local listeners. We do not stream to try to reach listeners outside of our markets. Even if we reached other listeners, we could not convince our local advertisers that distant listeners offered them any value.

The 2009 NAB-SoundExchange Agreement Did Not Adopt Reasonable Fees.

16. In late 2008, I was asked by NAB to lead its negotiations with SoundExchange under the newly passed Webcaster Settlement Act. At the time, I was Chairman of the NAB Radio Board.

17. Congress passed the Webcaster Settlement Act in the wake of the Copyright Royalty Judges' decision setting streaming fees for 2006 through 2010. I understand that this decision is commonly referred to as "Webcasting II."

18. NAB believed that the Webcasting II decision was a major setback for streaming by broadcasters. It would be an understatement to say we were disappointed; more accurately, we were shocked by the outcome.

19. The Webcaster Settlement Act gave us an opportunity to try to make the outcome of the Webcasting II case less bad. Congress gave us a very limited time

to work out a deal with SoundExchange. The discussions started at the beginning of 2009. The law gave us a deadline of February 15, 2009 to reach an agreement.

20. We entered the negotiations with no leverage. Unfortunately, we knew that we had no leverage, and SoundExchange knew that we had no leverage. The rates set by the CRB for 2006 through 2010 necessarily formed the baseline of the discussions. SoundExchange knew that it had the benefit of those rates and was not willing to agree to significant financial changes.

21. SoundExchange claimed that any deal that it did to reduce broadcasters' rates would cause problems in its dealings with others. We could not judge the truth of this statement. Although SoundExchange knew what was going on in all of its discussions, we had no information about those discussions.

22. NAB did not consider litigation over rates for the 2011 to 2015 period to be a meaningful option. That proceeding had already begun by the time that we began our discussions with SoundExchange. Having received what we viewed to be highly unfavorable rates for the 2006-2010, we did not view the CRB as a forum that was likely to adopt reasonable license fees for broadcasters or webcasters in the next proceeding. The Judges had just raised the rate for streaming from 0.0762 cents per performance in 2005 to 0.19 cents per performance over the five-year period. We were concerned that there was a real risk that the Judges would continue to raise rates in a similar pattern. We did not believe that the rates adopted by the Judges were reasonable or that they reflected what broadcasters or webcasters would pay in a real marketplace, but we did not expect the same Judges

to be more favorably disposed to broadcasters in a proceeding in 2009-2010 than they were in the proceeding in 2006-2007.

23. At the time that we were negotiating, we also did not have the stomach to spend money to litigate over streaming. The country was suffering through the Great Recession of 2008-2009. That recession hit the radio industry particularly hard. The industry was in the middle of the worst downturn it had suffered in years. Radio revenues had declined dramatically during the period. Streaming was not a high enough priority for broadcasters to spend millions of dollars in litigation costs, particularly after the terrible outcome in the Webcasting II case.

24. During the negotiations, SoundExchange told us that it had an average rate that it needed to have for the period from 2009 through 2015. We were given the opportunity to meet that average by allocating the fees over the period. This was the only flexibility that SoundExchange showed on rates. We were unsuccessful in attempts to reduce the average.

25. We concluded that it would be better to try to reduce the rates in 2009 and 2010, even if that led to higher rates in the later years. Our hope was that, if the reduced rates kept stations from stopping their streams, it would help us to develop a more cooperative relationship with SoundExchange that would enable us to re-negotiate the rates for the later years. That hope proved to be misguided.

26. With little that we could do to negotiate the rates, we attempted to address other concerns that we had. We thought it important to address specific problems with the reporting requirements that smaller broadcasters were having. They often did not

have the resources in personnel or technology to provide census reports. Given that those stations were paying only the minimum fees, our view was that it did not make sense to impose further reporting or processing burdens either on the stations or on SoundExchange. To address those problems, we negotiated an exemption from the reporting requirements for very small broadcasters.

27. We also were concerned about the incompatibility between normal over-the-air radio practices and certain conditions on the statutory streaming license. For example, radio station disc jockeys often announce songs that are about to be played. Our understanding is that the record companies want us to do that so that listeners can identify recordings that they like and buy them. Radio stations also sometimes play a complete album side or sides or feature a particular group or artist with multiple consecutive songs. I am not a lawyer, but we felt strongly that we did not want broadcasters to be exposed to claims by record companies that they were committing copyright infringement by violating the terms of the statutory license simply for simulcasting the same type of programming that broadcasters had always provided over the air.

28. To address these issues, we negotiated a series of waivers of the statutory license conditions with the major record companies and with the American Association of Independent Music on behalf of its indie members. We did not negotiate the waivers with SoundExchange. Its negotiators had informed us that it could not provide such waivers. These waivers were an important part of the overall package and had significant value to us. I attach a copy of the waiver agreements as NAB Ex. 1.

29. We were also concerned about the incompatibility of certain broadcast practices with the need to count specific numbers of listeners for each song to determine the right royalty fee. It was our understanding that significant amounts of syndicated and network programming broadcast by radio stations was delivered to stations in ways that would not allow stations to count the number of listeners to each song included in those programs. Thus, we sought, and were given, the ability for broadcasters to pay SoundExchange for music used in a certain percentages of their programming on the basis of Aggregate Tuning Hours (assuming a certain number of songs played during each hour), rather than counting the actual performances in that programming.

30. The question of whether the agreement should be precedential was not something that we negotiated. As I recall, the language was included in a draft provided in the final weekend of the process by SoundExchange, after the business terms had been worked out. SoundExchange said that it needed the language for its negotiations with webcasters and other parties that were happening at the same time. I did not fully comprehend that SoundExchange would be able to use the agreement against broadcasters in the future, or claim that the agreement represented willing buyer/willing seller rates in future proceedings. I would have fought harder to keep the language out if I had understood that it could be used in that way. The agreement certainly did not reflect free market license fees – it was a direct result of the rates set by the Judges in Webcasting II.

**A Per-Performance Fee Should Be Applied with Caution as it Is Inconsistent with
the Way People Listen to Radio**

31. Finally, I would like to add a few thoughts about the per-performance basis on which broadcasters are required to pay for their streaming. From my experience, this approach is inconsistent with the way people use radio and may over-state a reasonable royalty. Radio is a passive experience, not an active one. It is common for people to leave their radio on without thinking about it. The radio often stays on, even if there is nobody who can hear it. The stream is, for many people, just like radio.

32. Our audience typically does not think of leaving the radio on as wasteful. It is not the same as leaving the water running. Water has a cost, radio doesn't. And our audience treats radio in this fashion no matter how it is delivered – whether over-the-air or through the Internet.

33. One flaw in the per-performance fee is that it is charged in a way that assumes someone is listening. If no one is listening, the performance has no value. With radio, it is often true that no one is listening. As a result, any per-performance fee should be set conservatively to account for the fact that it likely will be charged for streams that nobody is listening to.

34. In addition, it doesn't make sense to charge a fee for a song the listener demonstrates by his or her actions that he or she doesn't want to hear. If the listener quickly shuts off the stream, the song has no value to either the listener or to the radio station. When a listener quickly stops the stream, it is clear that the listener was not interested in hearing the song.

COMMONWEALTH BROADCASTING RADIO STATIONS

	CALLS	AM or FM	Format	Markets Served
1	WAVJ	FM	70s & 80s	Princeton
2	WCDS	AM	Sports	Glasgow
3	WCKQ	FM	Hot AC	Campbellsville/Greensburg
4	WGRK	FM	Country	Campbellsville/Greensburg
5	WHHT	FM	Country	Bowling Green/Glasgow
6	WIEL	AM	Sports	Elizabethtown
7	WKLX	FM	70s & 80s	Bowling Green/Glasgow
8	WKMO	FM	Country	Elizabethtown
9	WOVO	AM	AC	Bowling Green/Glasgow
10	WPKY	AM	Sports	Princeton
11	WPTQ	FM	Clsc Rock	Bowling Green/Glasgow
12	WRZI	FM	Clsc Rock	Elizabethtown
13	WTCO	AM	Sprts/Talk	Campbellsville/Greensburg
14	WTHX	FM	Sports	Elizabethtown
15	WTTL	AM	Talk/Sprts	Madisonville
16	WTTL	FM	Hot AC	Madisonville
17	WWKN	FM	Oldies	Morgantown
18	WWKU	AM	Sports	Bowling Green
19	WWKY	FM	Country	Madisonville
20	WXAM	AM	Sports	Hodgenville

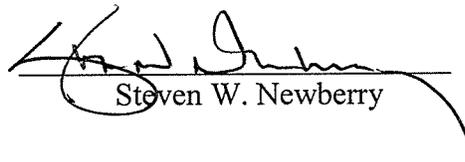
**Before the
COPYRIGHT ROYALTY JUDGES
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Recordings and Ephemeral)	
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DECLARATION OF STEVEN W. NEWBERRY

I, Steven W. Newberry, declare under penalty of perjury that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed this 6th day of October 2014.



Steven W. Newberry

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**Before the
COPYRIGHT ROYALTY JUDGES
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WRITTEN DIRECT TESTIMONY OF JOHN DIMICK
(On behalf of the National Association of Broadcasters)

Summary

1. My name is John Dimick. I am the Senior Vice President of Programming & Operations at Lincoln Financial Media Company (“LFMC”). I have 35 years of experience working in the radio industry, with the last seven years at LFMC. I offer this statement in support of the National Association of Broadcasters’ Direct Case. My statement is based on my own experience in the radio industry, my personal knowledge of LFMC operations and financial matters, and my work with other LFMC employees.

2. I am providing this statement in order to describe the economics of Internet simulcasts of our over-the-air radio broadcasts. Simulcast streaming is very challenging financially and I expect it to continue to be so for the foreseeable future. While LFMC has been attempting to make streaming of our music stations profitable for many years, streaming is not now profitable and it never has been. One of the major reasons is the cost of sound recording royalties. These royalties are our largest streaming

expense by a substantial margin. I believe that lowering the applicable per performance rate applicable to streaming to \$0.0005 would result in lower direct costs for our streaming operations and would allow LFMC to more aggressively pursue streaming listeners.

3. I also provide this statement to emphasize that the success of radio, even music formatted radio stations, depends primarily on how we differentiate our stations from other radio stations. We must attract listeners by developing a relationship with them. Critical elements include our development of on-air personalities, community programming, community involvement, and contests and events. In addition, we invest substantial time and effort on developing our website content and Internet blogs, growing our social media presence, and improving our technology in order to engage listeners to the greatest extent possible. We have found that simply playing music will not improve ratings nor will it create a loyal listener base, primarily because music is not unique to us and does not differentiate our stations from their primary competitors.

4. Over-the-air radio and simulcast streams provide enormous promotional value to labels and artists. Labels and artists know this, as their behavior demonstrates. Labels and artists stay in constant contact with our programming personnel (in many different ways, including in-person contact), provide stations with notification and copies of new and pre-release music, engage independent third parties to promote their artists and recordings to broadcasters, and make artists available to stations for in-studio performances and appearances. My consistent experience is that radio is a key component of a new release becoming a hit or a new artist breaking out to become well known.

Professional Background

5. As Senior Vice President of Programming & Operations, a position I have held since 2010, I oversee all over-the-air and digital operations (which includes streaming and other interactive elements of our operations) for LFMC. Prior to assuming my current position, I was Vice President of Programming & Operations at LFMC, a position that I held from 2007 to 2010. From 2004-2007, I was the Program Director of HOT 97 (WHQT) in New York City, one of the most recognizable and listened-to stations in the country. Prior to that position, I was the Operations Manager for Jefferson-Pilot Communications Company (“Jefferson-Pilot”) in San Diego from 1998 to 2004. Before 1998, I was the Program Director of WNCI in Columbus, Ohio (during which period I was promoted to Vice President of Programming) and before that I held programming positions with Fisher Broadcasting and KPLZ in Seattle, Washington. All told, I have overseen radio programming operations in numerous cities (including New York, Seattle, Denver, San Diego, Atlanta, Miami, and Salt Lake City), and with many different formats (including Top 40 (CHR), country, soft rock, adult hits, hip hop, sports, oldies, and classic hits).

6. I have a Bachelor of Arts degree. I am active in the National Association of Broadcasters, served on the Agenda Committee for Country Radio Broadcasters for several years, and was a Board Member for the Media Ratings Council from 2008 through April 2014.

Lincoln Financial Media Company’s Radio Stations

7. Lincoln Financial Media Company operates radio stations in four of the top twenty media markets in the country. In 2006, LFMC acquired the radio stations of

Jefferson-Pilot. LFMC is based in Atlanta, Georgia and operates as a wholly-owned subsidiary of Lincoln National Life Insurance Company. The broadcasting operation of LFMC is a separate legal entity and is operationally and financially segregated from its parent company.

8. LFMC now owns and operates sixteen radio stations serving listeners in four markets: Atlanta, Denver, Miami, and San Diego. Ten of our stations have music formats and six are sports, comedy, or talk stations. All four of our markets provide radio broadcasts in analog and in digital “HD” transmissions. Our current station lineup is as follows:¹

Atlanta (9th Largest Market)²

WSTR Star 94 FM	Hot Adult Contemporary
WQXI ESPN 790 AM (“The Zone”)	Sports

Miami/Ft. Lauderdale (11th Largest Market)

WMXJ Magic 102.7 FM	70s and 80s Classic Hits
WLYF 101.5 LITE FM	Soft Adult Contemporary
WAXY 104.3 FM /WAXY 790 AM (“The Ticket”)	Sports

San Diego (17th Largest Market)

KBZT 94.9 FM	Alternative
KIFM Easy 98.1 FM	Soft Adult Contemporary

¹ In addition to HD1 broadcast of the primary station’s programming, our stations also broadcast the following additional HD channels: WSTR HD2 (Simulcast of ESPN 790 AM - The Zone); WSTR HD3 (Mainstream Urban “Streetz 94.5”); KYGO HD2 (Simulcast of 103.1 Comedy); KQKS HD2 (Mile High Sports); WMXJ HD2 (Oldies-1950s and 60s); WMXJ HD3 (Simulcast of WAXY AM); KIFM HD2 (Smooth Jazz); KBZT HD2 (Bob Radio); KBZT HD3 (“Glow” Dance Music); KSON HD2 (Legendary Country). We stream all of the HD1 stations, as well as KSON HD2 and KBZT HD2 and HD3. LFMC tracks revenue, expenses, performances and royalties for these HD stations as part of the licensed station for which they are associated.

² Market rankings are per Nielsen.

KSON/KSOQ FM Country

Denver (19th Largest Market)

KYGO 98.5 FM Country

KQKS 107.5 FM Rhythmic Top 40

KKFN 104.3 FM (“The Fan”) Sports

KEPN 1600 AM (“The Zone” – Sports), Sports

Comedy 103.1 FM Comedy

KWRZ 950 AM Oldies

9. LPMC’s stations are leaders and innovators in the industry. For example, LPMC’s San Diego KIFM Easy 98.1 FM was nominated as a 2014 NAB Marconi Radio Award finalist for Station of the Year and received the 2005 NAB Macaroni Award for Smooth Jazz station format. Several other LPMC stations have also won NAB Marconi Radio Awards: Denver KQKS (2014 award for Best Contemporary Hits format station); Denver KYGO (2011 award for Best Country format station); Miami WMXJ (2009 award for Oldies format station); and San Diego KSON (2012 award for Station of the Year (large market)). KYGO has been a finalist for the Country Music Radio Station of the Year Award seven times, and has won the category three times (including 2009).

Lincoln Financial Media Company’s Streaming Operations

10. LPMC’s stations began streaming in the late 1990s when they were owned by Jefferson-Pilot Communications. During the 2002-04 time period, Jefferson-Pilot elected to stop streaming due to issues with advertising agencies regarding the right to transmit radio advertising over the Internet. In around 2005-06, the stations began streaming again because they were able to replace over-the-air commercials with other material to avoid these issues.

11. LFMC now streams all of its stations. For in-market listeners, these streams are simulcasts of the over-the-air broadcasts; the stream is virtually identical to the over-the-air broadcast, with the only potential difference being minor commercial changes. The stream is also identical for out-of-market listeners with respect to non-commercial program content, but we replace more commercials for out-of-market listeners at the request of our advertisers and to obtain additional ad insertion revenue.

12. We limit access to most of our streams to the continental U.S. At our direction, most listeners outside of the U.S. are blocked from receiving the stream by our streaming provider. Our Miami and San Diego stations permit out-of-country streaming to the Caribbean and Mexico, respectively. In June 2014, we limited our KWRZ 950 AM station to the state of Colorado. We have also adopted measures to limit streaming sessions to ninety minutes. These timing and geographic restrictions have been implemented to reduce costs and avoid potential out-of-country license fees.

13. Our streaming provider is Triton Digital, which provides the technology backbone for the stream for all of our stations. We have used Triton Digital (previously Ando Media) to provide streaming services since approximately 2009.

14. LFMC's stations are streamed through each station's website, through TuneIn, a website and mobile streaming application, and through station applications available for mobile devices. LFMC streams in order to provide another way for our audience to hear our radio programming. Part of the value we provide as a broadcaster is enabling our listeners to hear our programming in the car, at work, in their home, and wherever else they may be.

The Challenges We Face in Monetizing Streaming

15. LFMC has worked hard to monetize our streams, but this effort has not met with great success. I do not believe that we are alone in this regard; I understand from colleagues in the industry that few broadcasters are able to boast a profitable streaming operation. In the current environment, streaming presents broadcasters with numerous economic challenges.

16. As discussed in more detail below, the cost of streaming far outweighs the revenue we can earn from the stream. This has been the case for many years, and we foresee it being the case for at least the next several years.

17. The sound recording performance royalties increase with every additional listener. However, an incremental listener does not necessarily bring any additional revenue. This disincentivizes expansion of our streaming audience. There is no reasonable likelihood of earning additional revenue to cover the increased royalty fees, let alone to make a profit. It has simply not been the case that such additional revenue from streaming is readily available. This is true even for the major markets in which we operate (Atlanta, Miami, Denver and San Diego).

18. There is a marketplace gap in how advertisers value simulcast streaming. Many of our advertisers are unwilling to pay anything extra for inclusion of their advertisements on our streams. Many even take the position that streaming should be thrown in for free. Although I believe advertisers understand that there are some listeners for the stream, a major problem with converting that understanding into advertising dollars has been the lack of a demonstrated audience or a consistent ratings boost based on the streaming listenership. While streaming audience measurement remains in its infancy, advertisers have a high comfort level with over-the-air ratings. Radio

advertising rates are based on well-established ratings information and broadcasters generally have not been able to provide accepted ratings data with respect to the streaming listenership.

19. As part of our effort to monetize streaming more effectively, we recently moved to Nielsen's Total Line Reporting ("TLR") for our music stations, which is a change in ratings methodology provided by Nielsen that provides (i) ratings for a broadcasters' stream on a station-by-station basis, and (ii) a cumulative overall rating for a station (that is, a cumulative rating for the over-the-air broadcast and the streaming simulcast). Some of our stations moved to Nielsen TLR in September 2013, while others were transitioned in early 2014. Nielsen TLR has strict compliance requirements and has been endorsed by the Media Ratings Council.³ We moved to Nielsen TLR because the revenue from ad insertion on the stream and streaming pre-roll advertisements was minimal and because the ad insertion technology resulted in a lower quality sound for the streamed programming. We could not sell all of the time available on the stream (for ad insertion) and what we could sell was at unacceptably low rates. As part of our effort to sell available streaming time, we engaged third party brokers for this activity (Katz and Triton), which further diminished our revenue because of commissions. Despite all of our efforts, we could not sell all of the available advertising time. This resulted in excessive runs of public service announcements and duplicative advertising, which degraded the listening experience. We moved to Nielsen TLR with the goal of capturing the streaming audience within our Nielsen rating, thereby perhaps obtaining increased advertising rates. We hope that the Nielsen TLR will allow advertisers to accept and value our streaming

³ In order to participate in the Nielsen TLR, LFMC is required to fully simulcast its over-the-air program, with very limited exceptions.

audience, but we cannot be sure that will occur. Even if it eventually does, stream audiences remain a very small fraction of our over-the-air audience despite the fact that we have been streaming continuously for more than eight years.

20. The Nielsen TLR reports we have received show that streaming has not had a material effect on our audience ratings. For example, for KQKS (Denver – Rhythmic Top 40), KYGO (Denver – Country), and WMXJ (Miami – 70s and 80s Classic Hits) our Nielsen reports reflect virtually no streaming audience since we began TLR for those stations. That is, in 2014 there are no recorded AQH Persons⁴ for our relevant age demographic for these stations, no independent AQH Rating⁵ for those stations and, therefore, no increase in the total rating (terrestrial plus the stream) for those stations. We have had slightly more success with WLYF (Miami – Soft Adult Contemporary); however, even that station’s AQH Persons is a small fraction of its terrestrial AQH Persons. The stream garners no independent AQH Rating, and it has only increased the overall AQH Rating by a 0.1 in January and August of 2014.

21. These low and inconsistent figures do not allow us to argue forcefully to advertisers that they should pay more because our over-the-air programming is also streamed. Advertisers base their buys and the rates they are willing to pay on consistent, demonstrated ratings. An upward flicker in the rating of 0.1 (the smallest possible increase) will not enable LFMC to demand more for its spots.

⁴ Nielsen defines AQH Persons as the “average number of persons listening to a particular station for at least five minutes during a 15-minute period.”

⁵ Nielsen defines AQH Rating as the “AQH Persons estimate expressed as a percentage of the population being measured.”

22. Despite the challenges, LFMC actively seeks revenues from its streams. Sales staff have both over-the-air revenue targets as well as targets for our “interactive” audience (which includes revenue from our websites, social media, texting, streaming and contesting). Growth of our digital and streaming revenue is a focus of LFMC and our executives and managers are charged with making streaming a profitable enterprise.

Streaming of our Over-the-Air Broadcast is Done at a Loss

23. Streaming currently loses money for LFMC’s music stations. Presently (2014), our direct revenue for streaming comes from (i) pre-roll advertisements (that is, advertisements that precede the stream once a listener clicks on the “listen now” button), and (ii) ad-insertion for our out-of-market listeners.⁶ We do not believe our listeners would pay a subscription fee to receive our streams.

24. LFMC has put accounting procedures in place for tracking streaming revenue at all of our stations. We have done so in an effort to more carefully track the revenue and expenses associated with streaming; however we have historical streaming revenue data only for our Denver and Miami markets.⁷

25. As can be seen from the table below, revenue that we can directly attribute to streaming is relatively minimal. Revenue also drops off in 2014 (as compared to 2013), because we now have less ad insertion revenues from the stream due to our move to Nielsen TLR. The move to Nielsen TLR, however, was intended to allow us to capture our total listening audience (over-the-air plus streaming), thereby potentially

⁶ Prior to our implementation of Nielsen TLR, we inserted ads more frequently within market.

⁷ Our Atlanta and San Diego markets have not yet been able to implement the new procedures for tracking streaming revenue and expenses.

improving our ratings. As discussed above, we have not yet seen the ratings boost necessary to drive additional advertising revenue.

26. As can be seen from the table, the revenue attributable to the stream is almost the same as, or is exceeded by, LFMC's applicable performance royalty fees for our Miami stations in 2013. Likewise, the performance royalties are more than half of the streaming revenue for our Denver stations in 2013. In 2014, the applicable performance royalties are outpacing our streaming revenue for three of the four stations reported below. The amount paid to SoundExchange grew consistently from approximately [[

]] in 2013. The decline in royalty fees was due to our geofencing and limitations on the amount of streaming time. For 2014, royalties are on track to be approximately the same as 2013, perhaps slightly above. The fees paid to SoundExchange are, by far, the single largest expense that we track for our streaming operations. They exceed the total of our streaming connectivity costs, ad insertion fees, and composer royalty fees.

27. Obviously, music performance royalties are not the only expense associated with streaming. We have at least three other major expenses directly attributable to streaming: (i) the cost of the stream itself (fees paid to Triton), (ii) our costs for insertion for advertisements into the stream (tracked as "scheduling" fees), and (iii) our additional composer royalty fees for ASCAP, BMI and SESAC. If these costs are taken into account, the non-viability of streaming as a stand-alone financial operation becomes even more clear, with each of the four stations operating at a loss for 2013 and 2014:

Time Period	Station	Streaming Revenue⁸	Sound Recording Royalties paid to SoundExchange	Streaming Bandwidth, Scheduling, Composer Royalties⁹	Approximate Loss
2013 (full year)	Miami WLYF	[[]]	[[]]	[[]]	[[]]
	Miami WMXJ	[[]]	[[]]	[[]]	[[]]
	Denver KYGO	[[]]	[[]]	[[]]	[[]]
	Denver KQKS	[[]]	[[]]	[[]]	[[]]
2014 (through 8/31)	Miami WLYF	[[]]	[[]]	[[]]	[[]]
	Miami WMXJ	[[]]	[[]]	[[]]	[[]]
	Denver KYGO	[[]]	[[]]	[[]]	[[]]
	Denver KQKS	[[]]	[[]]	[[]]	[[]]

28. There are additional costs of streaming as well. Executives, including myself, our head of Digital Strategy, and our station managers and advertising

⁸ These revenues are net of the advertising commission paid. 2014 direct streaming revenues are tracking to be materially lower than 2013 because ad insertion revenue is down sharply due to our transition to the Nielsen TLR.

⁹ LFMC tracks the SESAC fees applicable to streaming; however, ASCAP and BMI fees applicable to streaming are not specifically tracked with respect to streaming. Therefore, the ASCAP and BMI fees included herein were calculated using the direct streaming revenue multiplied by the applicable ASCAP / BMI license fee of 1.7% (for the base fee) x 75% (for streaming). Last, streaming bandwidth and schedule fees were taken from LFMC's standard profit and loss statements, which are rounded to the nearest thousand dollars.

executives, must spend a portion of our time on our streaming operations. These individuals must ensure that the technical requirements of streaming are met, which includes interacting with and overseeing Triton, ensuring our other technology is functioning properly to enable the stream, staying abreast of technical innovations, and overseeing applications development. There are other functional requirements and hard costs, such as implementing accounting policies to track streaming revenue and expenses, costs of applications development, etc. While we have not specifically quantified these costs, they undoubtedly are real and increase our loss on our streaming operation. Furthermore, to the extent we can ever confidently allocate a portion of over-the-air net advertising sales to our stream based on Nielsen TLR or other data, such an allocation would have to take into account the costs associated with the programming included in the streamed content, as well as the sales and marketing costs associated with the over-the-air advertising. Indeed, if streaming is viewed as an independent operation, our streamed music stations are already getting the benefit of fully programmed content (music selection and organization, on-air personalities, contests, etc.), the costs of which are not reflected in the above figures.

29. In sum, SoundExchange royalties are the greatest impediment to the financial viability of our streaming operations. If we convert an over-the-air listener to a streaming listener (or to a listener of both over-the-air and streaming), our costs increase. Furthermore, there is no benefit to us because of scale - we pay the same amount of royalties for our first streaming listener as we would for our millionth listener.

Our Non-Music Programming is Critical to the Success of our Music Stations

30. Six of our stations are sports or comedy formatted stations that broadcast little or no music. Our remaining ten stations have music formats. Differentiating our station programming is critical to our success particularly for our music-formatted stations, because everyone has access to the same music. We have competitors in our markets with similar music formats, so we must differentiate our stations and attract listeners with personalities, contests, social media, Internet blogs, events, and other programming.

31. Our on-air personalities are an important part of differentiating our music-formatted stations. Our music stations typically have morning, mid-day, and afternoon (drive-home) personalities. Depending on the station, on-air personalities can be our number one priority in terms of programming decisions. We search for and develop good talent and we highly compensate that talent as well. We attempt to groom our personalities for higher ratings time slots. In sum, all of our competitor music stations are playing roughly the same music; however, the on-air personalities distinguish one station from another.

32. Our morning shows on KQKS (Larry, Kendall & Kathie Show) and KYGO (Ryno & Tracy Show) are top morning shows in Denver. These programs draw listeners and drive advertising revenue. The personalities are paid salaries reflective of their importance to the success of the stations. A great morning show can even draw listeners from outside the base music demographic of the station. On the other hand, an unsuccessful morning show can require substantial resources and expense to get back on track. For example, we are in the process of retooling the morning show on WSTR in Atlanta because the show has not been effective.

33. LFMC stations also serve their communities in many ways. We take seriously our obligation to operate our stations in the “public interest, convenience and necessity.” Our stations provide the basic information listeners expect from radio, such as providing news, weather, school closings, and traffic updates. Of course, we also broadcast emergency information.

34. We go beyond these basic obligations by engaging in, and informing listeners of, other community activities. We announce community events over-the-air and display them on our websites. For example, our station websites have links to dozens of community events, including charity walks, art events, food and wine festivals, pet adoptions, children’s activities, clothing drives, etc. NAB Ex. 2. Station personalities often appear at these events in order to engage with listeners directly and increase station awareness, for example, by participating in a walkathon or bike ride for a particular charitable organization, or attending a food festival.

35. We also organize and sponsor events and fundraising, raising substantial funds for important organizations. NAB Ex. 3. For example,WSTR in Atlanta hosted its 6th annual Little Black Dress party in early September 2014, benefitting, for the past three years, the Young Survival Coalition, a breast cancer organization aimed at assisting young women facing this disease. This event has raised over \$70,000 since its inception in 2008. KSON in San Diego hosted its 26th Annual Radiothon in December of 2013, which has raised over \$11 million in the past 25 years for the benefit of St. Jude Children’s Research Hospital. We often broadcast these events in their entirety, or cut to the events for brief periods during our over-the-air programming.

36. Contests and promotions, such as Denver KYGO's Workday Payday contest where listeners have the chance Monday through Saturday to win \$100 an hour from 9am-4pm, are an integral element of creating brand loyalty. NAB Ex. 4. WLYF provides a chance to win up to \$1,000 five times a day, including mid-day working hours. A popular contest or promotion can draw attention to a station and thereby attract new listeners. We believe that it also may increase streaming listenership by encouraging working listeners to tune-in throughout the workday.

37. We also put a great deal of effort into our Internet presence to grow and reinforce our stations' brands and to directly connect to our audience. Various LFMC stations use different approaches, but many have blogs aimed at certain listener groups, tributes (for example, to overseas troops), contests, events, local news and traffic, and a presence on Twitter, Instagram, Facebook, and Pinterest. NAB Ex. 5.

38. Many of our stations have blogs that focus on listener interests. For instance, our Denver KQKS Morning Show has a blog, which primarily focuses on humorous items of interest. WSTR in Atlanta has Cindy's Mommy Blog focusing on "All Things Mommy" and San Diego's KIFM has an Easy Blog that covers a wide variety of topics such as entertainment, events, food, health, lifestyle, music, and San Diego news.

39. Our websites provide an important connection for the local events that are discussed above. They also serve to honor local individuals. For example, KYGO in Denver has a "Wall of Honor" recognizing the sacrifice of Colorado men and women serving away from home. NAB Ex. 6.

40. In addition, all of our stations have a presence in social media – Twitter, Instagram, Facebook, and Pinterest – so that listeners can interact directly with our on-air talent. This facilitates building relationships with individual listeners and, even more importantly, a community of listeners, to a station or particular program. NAB Ex. 7.

Our Broadcasts Provide Promotional Value for the Music We Play

41. We also go to great lengths to provide an enjoyable music experience to our listeners—identifying and playing the music they want to hear, introducing them to new songs and artists, and selecting and organizing music for our listeners. Our program directors, music directors and on-air personalities have extensive knowledge of the musical genres they program.

42. The nature of our industry is such that we develop relationships with labels, promoters and artists. Radio stations are important outlets through which record companies can introduce new artists and songs to listeners (prospective music purchasers). I strongly believe that record labels and artists agree and that they remain focused on obtaining airplay for their songs. My personal experience, which includes being a program director in several major markets including New York City, is that record labels and artists devote a great deal of energy and money to ensuring that radio stations have their music and will play that music. We engage with labels, promoters and artists regularly in this regard; however, our focus is on our listeners and we make artist and song selections for airplay based on our own judgment, which includes our experience and knowledge of our listeners.

43. In my experience, record label promotional activities directed to radio have remained strong over the past decade. There has been some change because of label

mergers and cost cutting; however, I think the level of intensity and focus remains the same. Some of the promotional activity comes in different forms now – for example, we get more email blasts of new releases from labels, as these are lower cost communications. I have not seen, however, a change in attitude from the labels in terms of their view of the value of radio play for their artists.

44. Record labels continue to heavily promote their music to radio programming personnel in many different ways. I polled our program directors for several stations with respect to the level of promotional activity from labels. Live communications (in person meetings and phone calls) remain one of the key ways label and independent promoters seek the attention of programming personnel.

a. Our program directors are constantly interacting with labels and independent promoters of music. Our Program Director for KSON (San Diego – Country) advised he interacts with 32 record label representatives and approximately eight independent promoters on a regular basis, taking calls throughout the week and during scheduled music call times once per week. Our KYGO Program Director in Denver has lunches and dinners with label representatives about ten times per month, and is regularly interacting with about ten label representatives via phone, email and text. Our Atlanta Assistant Program Director/Music Director speaks with twenty different label representatives per week. My experience is that such regular contact is pervasive throughout the industry.

b. Some of our program directors set aside particular times to speak with label personnel. Scheduled appointments are sometimes necessary to limit

the amount of time spent with labels. It is important to note that stations and markets are different. For example, in Atlanta, we may get more “in-person” promotional activity, as many label personnel maintain homes here, while our Denver stations might receive more calls and email communications.

c. Radio station music programmers can receive a great deal of attention of from the labels (especially those at high profile stations). My experience at HOT 97 in New York, where I was the programming director, was that both the music director and I were bombarded with requests for airplay and air time. HOT 97 was and is an important Hip Hop station that can take an artist from obscurity to success simply by playing his or her music. Artists would ask for our music director to come to recording sessions, listen to unreleased music, and help identify the best song for airplay. Promoters would beg for our time and airplay. We could have spent virtually all of our available time interacting with artists and labels in this way.

d. Record labels will also invite our programming staff to “off-site” events. This often includes taking program personnel to artist concerts and performances. Labels use these types of events to help build relationships with stations and encourage airplay for the music they are promoting.

45. We also receive email communications from promoters asking us for airplay, requesting meetings, identifying new releases and artists, informing us of hits and airplay of their artists by other stations, etc. NAB Ex. 8. We also receive acknowledgements and messages from labels and promoters thanking us for our role in making their song, album or artist a success. NAB Ex. 8. Our stations and program

directors have scores of elaborate plaques presented to us by the labels recognizing our role in their success and sales. NAB Ex. 9.

46. Labels and independent promoters continue to send us new music. Our program directors informed me that, on average, they receive 5-10 new singles a week from labels, which come in the form of CDs and digital .wav files. Our stations may only add a few new songs each week, so the labels are vying for these spots. LFMC programming personnel also receive a few new full length CDs per month. Additionally, we receive new music through online music services (*e.g.*, PlayMPE). Our program directors have accounts with these services and labels will identify music to our program directors through these services, making the music available for downloading. We also receive email blasts of new releases. Labels will also frequently ask our program directors for feedback on new artists and music. For example, they may ask for our opinion on which single of a new album should be played on the air. This reflects the value that labels place on our distribution capabilities as well as our expertise in knowing what will become a hit.

47. In addition to sending us current music and interacting directly with our program directors, artists at the behest of their labels – will give their time to our stations, providing interviews, attending events, performing, recording station liners and video greetings, and interacting with local fans. Artists and labels do so in order to strengthen their ties to our stations and obtain our support. For artists with whom we have strong ties, we may give their new music additional consideration and perhaps make room for their new release or take a risk that we might not take for another artist. It is my experience that this is the case throughout the industry and the labels foster and rely on

these relationships. There is time and great expense associated with some of these activities and I simply do not think the labels would incur these expenses unless they believed that there was a significant benefit to them.

48. For example, numerous artists visit our stations for interviews and in-studio performances. For KSON in San Diego (Country format), the following artists have visited the stations since May 2014: Justin Moore (Valory Records); Dylan Scott (Sidewalk Records); Dean Alexander (WEA Records); Olivia Lane (Big Spark Music Group); Jackie Lee (Broken Bow Records); Kelsea Ballarini (Black River); Hunter Hayes (Warner Bros); Kristian Bush (Streamsound Records); Samantha Landrum (Star Farm Entertainment). For KQKS in Denver (Rhythmic Top 40), we have had the following artists visit the station in the past six months: Lil Jon (Epic); G-Eazy (RCA); August Alsina (Def Jam); TydollaSign (Atlantic); Jeezy (Def Jam); Wiz Khalifa (Atlantic); Rico Love (Interscope); Adrian Marcel (Republic); Schoolboy Q (Interscope). In Atlanta, recent station visits include: Hilary Duff (RCA); One Republic (Interscope); Echosmith (Warner Brothers); Matt Nathanson (Vanguard); Paramore (Roadrunner); Eric Hutchinson (In2une); Neon Trees (Island); Us The Duo (Republic). There are many other examples.

49. Artists will often perform at specific events that we arrange. These might be charity events or contest winner events. For example, Ed Sheeran (Atlantic Records) performed at the Star Lounge on July 8, 2014, for 100 of our winners of A-List Lounge. Better Than Ezra (ADA Records) performed at our “Little Black Dress Party” on September 6, 2014, which, as I mentioned above, was for the benefit of a local breast cancer charity. Christina Perri (Roadrunner) performed at the Star Lounge on August 20,

2014, at the Marietta Museum of Art, for 100 winners of our New Music Room Live contest. These performances were provided at no charge¹⁰ and we organize similar events in all of our markets. While these events are good “branding” for the labels and the artists, labels also use them to build their relationships with our stations.

50. Record labels provide other benefits to our listeners and fans at no charge to LFMC, such as concert tickets and trips, backstage passes and autographed merchandise. Although not quite as popular now as in the past, labels have also provided large quantities of CD’s for on-air giveaway to help advertise that new music is in stores and available for purchase. There are also private “meet and greets” as well as offers for exclusive sound check parties for our listeners. All of this is done to expose potential consumers to the artist and the artist’s new product.

51. Because our music station streams are simulcasts of our over-the-air broadcast, their music content is the same. The promotional effect of the music played is, therefore, no different. I have never had an artist or label tell me they did not want their music broadcast on our stream. In fact, our streaming technology has the added promotional effect of displaying the title, artist and album, as well as the ability to “tag” the song for future purchase on the stream display, which would facilitate the purchase of the music by the listener.

¹⁰ We do pay for travel and incidental expenses, if needed.

Conclusion

52. Over the course of nearly a decade LFMC has made a serious effort to make streaming a financial success. We have yet to achieve that goal, or even reach a break-even point, primarily because the royalty rates for sound recordings present such an obstacle. Although we are moving to a new model using Nielsen Total Line Reporting, I have not seen evidence that the situation will be fundamentally changing in the near to medium term. Unfortunately, many advertisers are unwilling to pay for streaming ads, and certainly not at rates that would cover royalties and all of the other costs associated with streaming. For the time being, in my view, the primary beneficiaries of our streams are the record labels, who receive the promotional benefit of their music being on our stream while we incur all of the associated costs.

Before the
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LIBRARY OF CONGRESS
Washington, D.C.

In The Matter Of:)
)
)

Determination of Royalty Rates)
for Digital Performance in Sound)
Recordings and Ephemeral)
Recordings (Web IV))
_____)

14-CRB-0001-WR (2016-2020)

DECLARATION OF JOHN DIMICK

I, John Dimick, declare under penalty of perjury that the matters set forth in my
Written Direct Testimony in the above-captioned proceeding are true and correct to the
best of my knowledge, information and belief.

Executed this 7th day of October 2014.


John Dimick

D

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:

**Determination of Royalty Rates
for Digital Performance in Sound
Recordings and Ephemeral
Recordings (Web IV)**

14-CRB-0001-WR (2016-2020)

**WRITTEN DIRECT TESTIMONY OF
ROBERT FRANCIS KOCAK (BUZZ KNIGHT)
(On behalf of the National Association of Broadcasters)**

Summary

1. My name is Robert Francis Kocak. I have spent over thirty-five years in the radio industry, beginning as a disc jockey at my college radio stations. Since early in my career, I have been known professionally as Buzz Knight; that is the name by which most people in the industry know me. For the last seven years, I have held the position of Vice President of Program Development at Greater Media, Inc., where I have overall responsibility for the content broadcast and streamed by twenty-one FCC-licensed full power AM and FM radio stations with varying formats. My statement below is based on my own extensive experience in the radio industry.

2. Most successful radio stations, including most music-formatted stations, owe their success to elements other than music. I believe this is important to understand in the context of setting royalty rates for streaming. By their nature, commercial radio stations strive to attract and retain listeners and, thus, advertisers. Successful radio stations must bring something unique and different in order to stand out. In my experience, the key is to build an individual brand

identity for each station and to integrate that station into its local community so that it becomes prominent and well-known. That effort requires: a substantial commitment to memorable on-air talent, particularly in the morning drive but also at other times in the day; consistent and prominent station involvement in the community, such as at charitable functions; informative and interesting on-air coverage of local issues and events; and active promotion of the station's brand, including through social media. Over time, listeners develop a sense of trust in our on-air personalities and in the stations themselves. It is through these efforts that we develop loyal listener bases, both for our over-the-air broadcasts and our streams of those broadcasts. In contrast, consumers can turn to a wide variety of sources and when they want to hear nothing but music. Likewise, the music that a radio station plays is not exclusive to that station, and any musical niche that is developed can be readily copied by competitors. Thus, in order to succeed at a high level, our stations must do much more than play music.

3. For as long as I have been in the business, record labels have sought to leverage our stations' relationships with their listeners in order to promote their artists and recordings. Record label representatives and artists actively seek spins on our stations, including their streams, through personal visits, calls, emails, provision of recordings, and participation in promotions, including artist visits and giveaways. Just as important as winning spins, record labels and artists also seek the endorsement of songs and artists by our on-air talent, whose opinions and recommendations listeners trust.

Professional Background

4. During my long career in radio, I have served as on-air personality, program director, operations manager, and programming executive at numerous radio stations in diverse markets around the country.

5. I graduated from the University of Dayton in 1978 with a bachelor's degree in communications. During college, I worked on-air at two on-campus radio stations. After graduation, I worked briefly at WKQQ in Lexington, Kentucky, and then moved to WRKI in Connecticut, where I worked from 1978 to 1987. At WRKI, I started on-air and eventually also served as assistant program director, program director, and then operations manager of the station, along with an AM sister station, WINE.

6. From 1984 to 1987, I also worked part time at WNEW FM in New York City as weekend on-air talent. WNEW was a legendary New York radio station that helped set the trends for rock music radio during the 1970s and 1980s. The station was very engaged in the local community and, among many other events, ran major fundraisers to benefit food banks, sponsored and organized concerts in the New York area, and broadcast live music from venues like the Hard Rock Café. The station's ethos embodied not just the music on its airwaves, but the culture and spirit of New York City in and around that music.

7. From 1987 to 1990, I worked at WLWQ- QFM96 in Columbus, Ohio. I started with an on-air position and also served as program director, but ultimately chose to concentrate my efforts on the program director position.

8. From 1990 to 1992, I worked at WNOR, a Saga Broadcasting station in Norfolk, Virginia, as program director. Then, in 1992, I moved to WZLX in Boston, Massachusetts. I was with WZLX until 2002. During that time I programmed WZLX. I also served as the classic

rock format captain for WZLX's parent company and helped with programming projects for stations outside of Boston.

9. In 2002, I joined Greater Media as program director of WMGK in Philadelphia, Pennsylvania. Later, I also began programming WROR in Boston, another Greater Media station. My role evolved to include advising rock and classic rock stations throughout the Greater Media portfolio on programming. I was named Vice President of Program Development at Greater Media on January 1, 2007; I have held that position in the company ever since.

10. In my current position, I supervise programming for all of the Greater Media stations, including streamed content. I work with the company's CEO and local teams, including the program director and general manager of each station, to plan, coordinate, and market their programming in a way that best serves the interests of their audiences, clients, and local communities. I spend most of my time working with the stations in each individual market to monitor performance and, when appropriate, help strengthen each station's brand and ratings performance.

11. I am actively involved in several industry organizations, including the National Association of Broadcasters' Committee on Local Radio Audience Measurement, the Arbitron (Now Nielsen) Radio Advisory Council, and the Council for Research Excellence (including Committees on Local Measurement, Social Media and Education). I was named among "Best Programmers" by Radio Ink Magazine in 2007 and 2010.

Background of Greater Media

12. Greater Media presently owns and operates twenty-one AM and FM radio stations in the Boston, Charlotte, Detroit, Philadelphia, and New Jersey markets. In addition to its radio stations, Greater Media also operates a group of weekly newspapers in New Jersey and owns several telecommunications towers throughout the United States. Greater Media was founded in

1956 by two Yale classmates and is a privately held company with its headquarters in Braintree, Massachusetts. From the beginning, Greater Media and its operating companies have stressed the autonomy of local management, dedication to local community service, and leadership in developing and adapting to new technology and services to improve the overall perception of the industry.

13. Greater Media currently operates the following radio stations:

<u>Market</u>	<u>Station</u>	<u>Format</u>
Boston	Magic 106.7	Adult Contemporary
Boston	105.7 WROR	Classic Hits
Boston	102.5 WKLB-FM	Country
Boston	Hot 96.9	Rhythmic AC
Boston	Radio 92.9	Alt. Rock
Charlotte	WBT 1100 AM / 99.3 FM	News-Talk
Charlotte	107.9 The Link	Personality Hot AC
Detroit	94.7 WCSX	Classic Rock
Detroit	Detroit Sports 105.1 FM	Sports
Detroit	101.1 WRIF	Rock
Philadelphia	102.9 WMGK	Classic Rock
Philadelphia	93.3 WMMR	Rock
Philadelphia	95.7 WBEN-FM	Adult Hits
Philadelphia	97.5 The Fanatic	Sports
New Jersey	98.3 WMGQ	Adult Contemporary
New Jersey	1450 WCTC	News Talk
New Jersey	105.5 WDHA	Rock

New Jersey	1250 AM WMTR	Classic Oldies
New Jersey	95.9 WRAT	Rock
New Jersey	100.1 WJRZ	Classic Hits

Greater Media streams all but one of these stations over the Internet. We have chosen not to stream WMTR, a New Jersey oldies AM station. The streams for Greater Media’s stations can be accessed through the stations’ websites, iHeart Radio, or station apps available for iPhones and Android phones.

Local Programming and Presence Is Key to Traditional Radio Stations’ Continued Success.

14. Five of our twenty-one stations, including WBT in Charlotte, which is licensed and broadcasts on both the AM and FM bands, are news-talk or sports-formatted stations that broadcast essentially no music. The remaining sixteen Greater Media stations are varieties of what would traditionally be considered music-formatted stations. Even as to these stations, however, it is my view that music is not the primary driver of success. That is true both with respect to the broadcasts and the associated streams.

15. For as long as I have been affiliated with Greater Media, we have always focused on integrating our stations into the local community. This is more challenging, risky, and costly than simply playing music that is widely available elsewhere. In an article I wrote for Radio Ink on May 21, 2012, I suggested that radio industry professionals should “Watch for local angles to serve topical cause related needs that help your communities and expose your radio station at the same time. Radio plays a vital role in serving our communities. If you follow your heart, you’ll do the correct thing for your brand and your market.” I continue to believe that today.

16. One critical component of our stations that is both local and exclusive is our on-air personalities. While morning drive is generally considered to be the most important day part

for personalities, in my view, they are important in building a successful station throughout the day. Our on-air personalities consistently wear a lot of hats; they are curators, they are concierges, and they are companions and friends. We feature personalities who have built their audiences over the course of decades on the air. For example, Nancy Quill and David Allen Boucher have been on the air at Magic 106.7 in Boston since the station began broadcasting more than thirty years ago; neither is currently on the morning drive. The Loren and Wally Morning Show has been broadcast on WROR in Boston for over twenty-five years. On 107.9 WLNK in Charlotte, we have personalities throughout the day, starting with the Bob & Sheri Morning Show, followed by mid-days with Kelly McKay, followed by Matt & Ramona in the afternoon, and then Anthony Michaels in the evening. Our Detroit Classic Rock station, WCSX, and our New Jersey Rock station, WRAT, have had most of the same on-air talent for years; thus, a relationship has been built with listeners. Our rock station WRIF has rocked Detroit since 1971 as a radio brand with live and connected personalities, many of whom have a long legacy with the market. Because of this wealth of on-air talent, which is generally exclusive to us, listeners have a reason to listen to our stations

17. Local personalities have always been important in radio. The growth of social media has, if anything, increased that importance, particularly in major markets. When I began in radio, the opportunities for listeners to interact personally with on-air talent were limited primarily to call-ins and local appearances; the relationship with the audience therefore had to be developed primarily through the one-way broadcast transmission. Now, communication runs both ways, with listeners interacting directly with our on-air talent through Twitter, Facebook, Instagram, and other social media. This facilitates building relationships with individual listeners and, even more importantly, a community of listeners to a station or particular program.

18. Even with the development of social media, our General Managers recognize the continuing need for their stations and their on-air personalities to be active and visible in their communities; tweeting is not enough. We nurture and promote our local connection through charity drives, public concerts, and other events such as: the Preston & Steve Campout for Hunger in Philadelphia, which raises tens of thousands of dollars and tons of food to support the local charity Philabundance; the Radio 92.9 Earthfest in Boston, a free live concert held at the Boston Hatch Shell each May to promote environmental awareness and earth-friendly products and services; John DeBella's Veterans Radiothon at WMGK in Philadelphia, which, over the last eight years, has raised well over a half a million dollars for veterans' charities (earning John in 2012 "Veteran Champion of the Year" from the Philadelphia Small Business Association); WCSX in Detroit and the Stone Soup Project, where listeners and local companies donate to build a car for charity; and WBT and WLNK in Charlotte creating Holiday on Ice and an outdoor skating rink for listeners in the heart of the city.

19. Of course, there are costs to a local, personality-driven approach. Talent can be costly, particularly when it has developed a large following in a market. Development of new talent, or the introduction of talent to a new market, can require a substantial investment of time and marketing expense. We are always seeking to build our bench strength so that a new personality can, for example, move from overnight to a more prominent day spot. We are also looking outside for new talent. Even with all of this investment, there is no guarantee of success. For every Loren & Wally Morning Show, there are legions of failures – far too many to count. And every one of those failures has nonetheless incurred substantial expense for the station's owners; except perhaps in very small markets, nothing gets on the air without analysis, testing, refinement, and promotion, all of which cost money.

20. Being part of the community also requires providing information. While we have five stations that are entirely dedicated to news, talk, or sports, the vast majority of our stations provide regular updates on local news, traffic, sports, and weather information, at least during the morning drive and, in some cases, during other day parts. In some markets, stations have individuals dedicated to providing these services; in other markets, these resources are generally shared but can be provided by individual stations when needed. Our listeners expect to receive this type of information, and it is part of the basic value package that attracts listeners to our stations.

21. While news, talk, sports, and weather information are always important, they assume particular (and sometimes overriding) significance when there are major events in the community. Depending on the particular situation, listeners may turn to us to receive essential information, to share their concerns, to feel a sense of community, or to vent their frustration. For example, our station WRAT in New Jersey became a primary source of news during the Hurricane Sandy crisis; I am proud to say that station management and staff demonstrated their responsibility to the community through their excellent reporting, winning an award for their news coverage of the crisis. In Boston, our cluster of stations provided extensive coverage and news alerts in connection with the Boston Marathon bombing and the citywide lockdown and manhunt that followed. This was accomplished with our stations' own resources and also in partnership with television station WCVB. In these types of situations, and others like them, it is particularly important that listeners interact with or receive information from on-air personalities with whom they already have a connection. We are also there with our listeners to celebrate happier times, such as sports championships; all of this is possible because we are primarily local broadcasters.

22. Another way that we increase the interaction with our audience is through contests and other promotions. Contests and promotions have been an integral element of local radio for as long as I have been in the business. A popular contest or promotion can draw tremendous attention to a station, build a sense of community and connection, and increase ratings. WMMR in Philadelphia has frequently done an on air promotion supported by direct mail marketing called “Grand Band,” which results in a listener winning \$1000 after hearing three songs from a station core artist.

23. Our stations’ websites are also an important way that we keep in touch with our audience. Station websites, which are accessible directly or through our general company website, www.greatermedia.com, display information about station personalities and programs, news and entertainment items that may be of interest to our listeners, information about current promotions and contests, photos of gatherings and events, and tabs that allow listeners to see what songs have been played recently, in addition to advertisements. These sites, along with our Facebook pages, are important resources for our listeners, as well as serving as a portal to our stream.

24. Obviously, our radio stations compete most directly with the other stations in their local markets. But our local presence is also an asset when listeners are deciding what to listen to over the Internet. We can leverage our local talent, connections, and engagement in each of our marketplaces to provide a complete service to our listeners and customers that goes beyond just providing a collection of songs. For completeness, I should note that we have had two stations that are atypical for us in that the programming is almost all music. On one of these stations, Adult Alternative Rock station Radio 92.9 in Boston, we are developing a new sound and featuring more personality. The station personalities include Amy Brooks, who is featured prominently on the station’s website, and Paul Jarvis (known as “Jarvis”), who, in addition to

serving as Assistant Program Director, also hosts morning drive on the station. Radio 92.9 also hosts and sponsors many local concerts, festivals, and other events in the community.

25. Our variety hits station 95.7 BEN FM in Philadelphia has a similar model with Marilyn Russell hosting the morning show and Rich Desisto (Assistant Program Director) and Kristen Hermann hosting the remainder of the day. Marilyn also does a regular community feature called “Woman of the Week” shining the spotlight on influential women from around Philadelphia.

26. About two years ago, I was interviewed by allaccess.com. In connection with a question about how radio had changed over the last few years, in particular with the adoption of the “people meter,” I noted:

At the beginning and still to this day, I come away with the feeling that as much as technology has changed things, it all still comes back to great brand management and a meticulous attention to detail in managing those brands. As much as the [portable people meter] changed certain things that required an adaptation in your thought process, in many respects very little has change[d]. It’s still about things that make great radio tick – great content from great personalities who have a great understanding of the market. That’s the localism that’s really important is the ability to always build your programming to the point where your listeners feel that if they miss a day from your station, they feel like they’ve missed a lot.

I continue to believe that, as I stated in the interview, the key to success in radio is to make your listeners feel that, if they miss a day at your station, they have missed out on something. Music alone cannot inspire that feeling. When I started in the radio business, people had their collections of vinyl records, which subsequently migrated to cassettes, CDs, and then MP3s. Now, if people want to hear a particular song, they can either go to their iTunes collection or go to Spotify or some other interactive service. But we cannot give people that “I don’t want to miss that” feeling with respect to music, because we do not have music exclusivity, and it is

readily available from many other sources. Instead, we create that feeling by the content we create and the relationships that we build with our listeners.

Record Companies Depend on Local Radio Play To Promote Their Music.

27. Throughout my career, it has been clear that record companies rely on radio stations to promote and sell new music. Today, record companies are still highly invested in increasing spins or air time for their artists on our radio stations, including the station streams.

28. As I discussed above, neither Greater Media's stations nor any other radio stations can offer truly unique music programming, because the same songs by the same artists are available not only to all of our direct radio competitors but also through innumerable other sources. One thing we can do, however, is to present a better musical experience for the listener through a combination of research and our own knowledge and experience in programming. We spend a significant amount of time and money to provide a curated musical experience for our listeners. Many of our on-air personalities are known for their expertise in particular musical genres and can guide and aid listeners in their enjoyment of music. Nancy Quill, for example, our midday host at Magic 106.7 in Boston, has a degree in music education to go along with her thirty years of experience in radio broadcasting. Pierre Robert, our mid-day personality from WMMR, has had a thirty-year friendship with Jon Bon Jovi, which has included in-studio visits, acoustic performances, numerous interviews, and shout outs from on stage during Philly concert appearances. Jon Bon Jovi even recently asked Pierre to write the liner notes for his greatest hits box set, and he had Pierre host on stage a storyteller-like performance with full band for a private concert experience for one thousand of our listeners. WMMR was allowed to broadcast the hour long event in afternoon drive. The credibility of our on-air talent and their relationship with their

audience – in many cases a relationship developed over the course of many years – are invaluable to the record labels in promoting music sales.

29. Radio stations are important outlets through which record companies can introduce new artists and songs to prospective record purchasers, and where repeated play can propel a song to hit status. Record companies understand that radio is still vital to music discovery and engagement, and treat it as such. Never once has a label representative ever said to me “please don’t play my song on the air – it might keep someone from buying it.” To the contrary, they have always wanted airplay to gain sales. And, to be clear, since we started streaming, no record company representative or artist has ever indicated any aversion to being on our streams. The content on the stream is the same as it is on the broadcast, and the promotional effect should be no different. In fact, the stream has an added benefit in that, if accessed through our website or the app, a listener can readily identify a song that we are playing that he or she may wish to purchase. We also employ a feature in the majority of our markets called Tag Station, which enhances the in car listening experience with something called “Artist Experience,” which displays the artist’s name, song title, and album art for the recording being performed.

30. Record companies encourage radio stations like ours to consider playing their songs by offering prizes that radio stations use in on-air promotions. They also regularly offer backstage passes, autographed merchandise, and on-air interviews with their stars to help promote their product on-air.

31. Record companies also drive spins through direct asks to the station personnel, particularly program directors and music directors. Local and national label representatives, independent promoters, and artist representatives will personally visit our stations to push specific recordings or artists, lobbying us to add a song, increase spins, or keep a song in the

rotation because “it’s not done yet.” These visits often occur on a weekly basis; some stations have to limit the hours in which these visits will be accepted. It is also very common for record company representatives to email station personnel statistics linking the number of plays a certain song or artist has received on that station with record sales and downloads; even though I am no longer directly programming a particular station, I receive these emails constantly to this day. In addition to these direct efforts, labels will advertise extensively in trade publications such as FMQB (Friday Morning Quarterback) in order to publicize airplay and encourage more airplay. None of this massive effort would make sense unless the record labels believed – as I believe – that radio spins promote sales of recorded music.

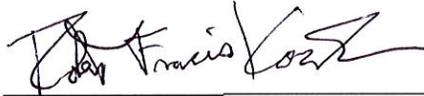
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for Digital Performance in Sound)	
Recordings and Ephemeral)	
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DECLARATION OF ROBERT FRANCIS KOCAK

I, Robert Francis Kocak, declare under penalty of perjury that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed this 3rd day of October 2014 at Boston, Massachusetts.



Robert Francis Kocak

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for Digital Performance in Sound)	
Recordings and Ephemeral)	
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**WRITTEN DIRECT TESTIMONY OF
JOHNNY CHIANG
(On behalf of the National Association of Broadcasters)**

Summary

1. My name is Johnny Chiang. I am the Program Director for the radio stations in the Cox Media Group in Houston, Texas. My statement below is based on my own extensive experience in the radio industry. The royalty rates to be applied to radio stations that stream sound recordings should take into account the enormous promotional benefit that radio brings to record companies. Record companies go out of their way to induce us to play their recordings and acknowledge that radio play is the single most important way that the labels can introduce new artists and promote their music to the public.

Professional Background

2. I have been a commercial radio Program Director and Content Producer for over 25 years, with major market experience in various radio formats: News/Talk, Adult Contemporary, Adult Hits, Classic Hits, Classic Rock, Contemporary Country, and Classic

Country. I graduated from California State – Northridge in 1991 with a bachelor’s degree in journalism. Following graduation, I was hired by KFI-AM radio, a Cox radio station, as a morning show news editor. I left KFI in 1993 to become a news writer for KCAL TV, which was owned by Disney. In 1994, I returned to radio to become the assistant program director and music director for KOST-FM, an Adult Contemporary format station, where I remained until 2000. I was promoted to program director in 1999. I moved to Houston, the 6th largest radio market in the country, in 2000 to join Cox as the program director for radio station KHPT. By 2010, I became the program director for all three of the Cox radio stations in Houston: KKBQ FM Country 92.9FM (“The New 93Q”), KTHT FM Classic Country 97.1FM (“Country Legends 97.1”) and KGLK/KHPT FM Radio - Classic Rock 107.5 FM/106.9FM (“The Eagle 106.9 107.5”).

3. I have won several industry awards, including Radio Ink magazine’s “Top Major Market Program Director” in April 2013 and April 2012; and “Top Country Program Director” in 2014, February 2013, February 2011, February 2010 and February 2009. On November 1, 2014, I will be inducted into Texas Radio Hall of Fame. I have been a member of the Board of Directors of Country Radio Broadcasters, Inc., a non-profit organization based in Nashville, Tennessee created to promote the growth of country radio and the country music industry through educational programs, since January 2010. Country Radio Broadcasters’ Country Radio Seminar convention and trade show is one of the largest media gatherings of any kind in the United States, bringing together nearly 1,000 program directors, general managers, promotion managers, sales executives and air talent from country radio. Our stations also have won awards. For example, our Contemporary Country station KKBQ was named Country Station of Year at

the NAB Marconi Radio Awards in 2013, and Major Market Station of the Year (regardless of format) in 2014.

Record Companies Actively Seek Airplay from Local Radio Stations

4. I have worked in the radio industry programming music for twenty years. As program director, I am responsible for all content (except for advertising) that is produced and transmitted by the stations through on air, online, social media such as Facebook and Twitter, third party applications such as TuneIn Radio and I Heart Radio, and mobile apps. As part of my responsibilities, I manage and coach on air talent, listen to and select new music, adjust the stations' playlists (at least weekly and at most once every 2 weeks), schedule music played on air, work with the marketing and promotions department to schedule on air or community promotions; and work with the sales department to make sure needs of our advertisers are met. In my view, the title "Program Director" is archaic – it really should be "Content Manager" because I am responsible for all station content.

5. Record companies depend on radio airplay to promote and sell their music. A good example is this is our Country format station, KKBQ. Country is the No. 1 format in the United States, both by number of stations and share of listening. It is not surprising that KKBQ is inundated with requests from record labels to play music by their recording artists. I have daily contact with record label promotion managers – salespeople whose job is to get their label's songs played on radio stations. These promotions managers are in constant contact with radio program directors and music directors, both building and maintaining relationships and introducing them to new music from new and established artists. They do this through every

means possible – such as in person sales calls, on the phone, and bringing artists by the radio station to meet program directors and convince them to play and promote their music.

6. Label representatives and independent radio promoters hired by the labels often initially contact us a few weeks in advance of an “add date,” when a song is released for radio airplay. This gives us time to listen to the track and discuss whether to add it to the playlist. Sometimes these e-mails include digital files or invite us to download music through music services such as PlayMPE. An example of these emails is shown in NAB Ex. 26. These download services are paid for entirely by the record labels, and are free for us to preview and download music. The labels typically will provide the music track for airplay along with other supporting materials. However, I am an old school program director, and I prefer to receive hard copy CDs. Most of the promoters that we work with know this and will send me CDs with promotional material, at no cost.

7. The promoters will then follow up as they get closer to the add date. For example, last week I was contacted by a representative of Sony Music Nashville who is pitching Carrie Underwood’s new single “Something In the Water” (add date of October 6) as a great new song for KKBQ by an established superstar, and with a theme appropriate for the fall season. In addition to established artists like Carrie Underwood, we often get pitches from the labels for newer artists, claiming that we have never heard anyone like them before and we need to add them to our rotation. Current examples of this are a brand new group, The Railers who are promoting their first album, and emerging artist Sam Hunt, who is promoting a new single called, “Leave the Night On.”

8. The record labels expend considerable money and effort to convince radio stations to play their artists' songs. For example, The Railers are a new country act signed by Warner Music, which is heavily promoting their first album. Warner spent a year grooming the band and working on their album before recently putting them on a radio tour across the United States. Artists on these tours visit dozens of radio stations to (if possible) appear on air for interviews and performances, and very importantly, meeting with program directors. The mere travel cost of moving four band members and several label representatives across the country must be substantial - just to introduce the band to radio.

9. Other ways in which record companies try to convince our stations to play their music is through invitations to showcases and other opportunities to see acts perform live, get to know their music and judge whether they will appeal to our listeners. Our corporate policy prohibits acceptance of such trips, but label representatives still make offers out of respect for us. Last week, a label offered to fly me and our music director to San Diego to watch an established artist and a new artist in concert; we declined the offer.

10. The labels believe that that radio airplay promotes the sales of music. The promoters openly talk about how radio airplay turns into sales, giving us examples of how increased sales in the Houston market resulted from increased spins. The promoters never talk about the possibility that radio airplay substitutes for sales; it is generally accepted that the more we play a song, more often than not, sales will go up.

11. The labels constantly provide us with details touting the success of our airplay. I hear from them in person and on the phone about these successes constantly. Many of them send emails with information about how well the track and album are selling compared to the number

of plays, or “spins,” our radio stations make of those tracks – usually showing that the more we play those tracks, the more sales are made. I receive four to five of these emails per month from certain label representatives that believe that this helps convince us to give radio airplay to their singles. Just a few examples are shown in NAB Ex. 27. Emails are typified by a September 17, 2014 email to me from Jill Brunett at Mercury Nashville reports, “We had a great week of sales in Houston and I just wanted to share. Since you moved Canaan up, he’s increased every week. Two weeks ago, you went from 8 to 20 spins and his sales increased 125%, last week they increased another 53%. You also moved Scotty up last week. Those 23 spins helped him increase sales 73%!” An email to me from Ray Vaughn at WarnerAtlanticReprise Southwest Region opined, “**THE POWER OF KKBQ AIRPLAY IS PRETTY DARN IMPRESSIVE!**” and reported that Frankie Ballard’s “Sunshine & Whiskey” “Houston sales up 87% with 25 new spins” (compared with Minneapolis up 62% with 4 new spins; Orlando up 438% in sales (the #4 selling DMA this week) with 60 new spins; and St. Louis up 668% (the #5 selling DMA this week) with 12 new spins) and Dan + Shay “Show You Off” “Houston sales up 669% (the #1 selling DMA this week) THANK YOU VERY MUCH”. An email to me dated August 13, 2014, from Mark Niederhauser – Manager, Regional Promotion at Warner Music Nashville, reporting: “Cole Swindell ‘Hope You Get Lonely Tonight’ [up 68% nationally] - Sales double in Houston with 4 new spins” and “Hunter Hayes ‘Tattoo’ [up 27% nationally] - Houston up 40% with 15 new spins”. Another email to me from Mark Niederhauser dated September 4, 2014 reports, “BRETT ELDREDGE “Mean to Me” [up +11% nationally] Houston up about 5x vs. last week with 20 new spins... As always, thanks for Your Support!”

12. Occasionally, radio promoters at the record labels will attach detailed spreadsheets that they maintain from the Nielsen SoundScan database (sales of music) and

Mediabase database (number of spins that radio stations make). Examples of these spreadsheets also are shown in NAB Ex. 27. For example, an email from Ray Vaughn at Warner Music dated June 25, 2014, attaches a spreadsheet called “Top 50 Singles & Digital Sales Mediabase & SoundScan Week Ending: 06/22/2014.” The spreadsheet shows the number of spins by country radio stations, and the “sales per spin.” A spreadsheet showing our stations spins and sales, including “TW SPS” (this week sales per spin) was provided by Mark Niederhauser of Warner Music on October 2, 2014. This demonstrates that the labels believe that our radio spins are stimulating sales of the music.

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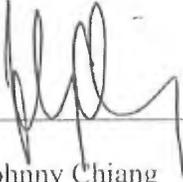
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14-CRB-0001-WR (2016-2020)

DECLARATION OF JOHNNY CHIANG

I, Johnny Chiang, declare under penalty of perjury that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed this 7th day of October 2014.



Johnny Chiang

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**Before the
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In The Matter Of:

**Determination of Royalty Rates
for Digital Performance in Sound
Recordings and Ephemeral
Recordings (Web IV)**

14-CRB-0001-WR (2016-2020)

**WRITTEN DIRECT TESTIMONY OF
BEN DOWNS, BRYAN BROADCASTING
(On behalf of the National Association of Broadcasters)**

Introduction and Summary

1. My name is Ben Downs. I am the Vice President and General Manager of Bryan Broadcasting, Inc. (“Bryan Broadcasting”). In this role, I am responsible for managing nine radio stations in the College Station, Texas area as well as publishing outlets and interactive and social media in this region. I have been managing these stations for nearly 25 years. This testimony is based on my experience in the radio broadcasting industry, as well as information provided to me by other Bryan Broadcasting employees.

2. Bryan Broadcasting currently streams eight of its nine radio formats over the Internet as a service to its loyal listeners. Doing so, however, has always resulted in losses to the company. This is, in large part, because the high royalties that SoundExchange collects from us under the current rate structure exceed the revenue we are able to generate from streaming advertisements. That, combined with the cost of purchasing bandwidth and other overhead expenses, has resulted in significant losses to the company from its streaming operations. That situation does not appear to be changing. Thus, if royalties for streaming sound recordings

remain at their current rates, we will have to reconsider whether we can continue to use our successful core business (*i.e.*, over-the-air broadcasting) to support unprofitable streaming. If we cannot do so, this would be a loss for both our listeners and the record companies and artists, who gain promotional value from streaming exposure.

Background and Experience in Radio Broadcasting

3. I have over forty-five years of experience in the radio broadcasting industry, having gotten my start in 1968 as a weekend announcer at KXAR AM in Hope, Arkansas (at the age of fourteen). I held that position for three years while attending high school. While attending Texas A&M University, I worked at WTAW in College Station, Texas as an afternoon and evening announcer as well as a news reporter. Since graduating from Texas A&M in 1976, I have generally been associated with radio broadcasting in this area. I was briefly Vice President of a small group of stations located in East Texas and lived in that area for two years, from 1987-1989. During my time in Bryan/College Station, I was manager of KORA/KTAM from 1983 to 1987, returning to College Station to manage WTAW/KTSR in 1989.

4. I have held various leadership positions in the radio broadcasting industry on a local, state, and national level. I was first elected to the Board of Directors of the Texas Association of Broadcasters in 1999 by other broadcasters in the Texas radio industry. I then was elected to serve as the Chairman of the Texas Association of Broadcasters (TAB) in 2003, and was recently re-elected to this position, effective for 2015. I will be the first broadcaster to have the honor of being Chairman twice. In 2010, the TAB voted me "Broadcaster of the Year." I have served as chairman of the TAB's EAS (Emergency Alert System) Task Force. At the national level, I was elected to represent the state of Texas on the National Association of

Broadcasters (NAB) Board of Directors; I served in that capacity from 2008 to 2014. While serving on the NAB Board, I was chairman of the AM Revitalization Task Force.

5. I hold a Bachelor of Business Administration degree (Magna Cum Laude) from the Mays Business School at Texas A&M. Since graduation, I have continued to contribute to the Bryan-College Station community in numerous capacities. I serve as a member of the Better Business Bureau Board of Directors for the Brazos Valley, the Treasurer of the Research Valley Partnership (an area-wide economic development group) Board of Directors Executive Committee, and I recently served as the Chairman of the Board of the Bryan-College Station Chamber of Commerce from 2012-2014. In January 2014, I was honored in a tribute as a supporter of the Brazos Valley Museum, and in September, I was recognized as a Business Patron of the Arts by the Brazos Valley Arts Council. I also was recognized for my dedication to the Bryan-College Station region with a Jefferson Award from The American Institute for Public Service in 2012.

Bryan Broadcasting

6. Bryan Broadcasting owns and operates nine different radio formats in the Bryan-College Station, Texas region (five talk and four music formats), with the first one (WTAW) having received a broadcast license from the Federal Communications Commission (FCC) over 90 years ago, in 1922. WTAW was licensed to “A&M College of Texas” in 1919 under an experimental license as station 5YA.

7. Our stations provide listeners access to local information and entertainment and are consistently acknowledged for their commitment to their communities through service and outreach. It is worth noting that, despite industry trends, the stations employ a large number of

full and part-time employees, presently 68 people. Our separate program formats are described below.

a. **WTAW 1620 AM** is one of the oldest radio stations in America, broadcasting a News/Talk/Sports format in the Brazos Valley. WTAW serves as the flagship for Texas A&M Athletics, and its news department is also one of the most recognized in the state. We have won the “Best Newscast in Texas” from the Associated Press for the past three years. WTAW is the home of not only some of the most noted local broadcasters in the Brazos Valley but several nationally syndicated talents as well. Our website updates daily with local news gathered by our news department. As a part of our commitment to the local community, WTAW broadcasts A&M Consolidated High School sports and conducts live candidate forums in the weeks before state and local elections. The station promotes local events through no-charge announcements twice hourly. Selected pages from WTAW’s website, <http://wtaw.com>, are attached as NAB Ex. 10.

b. **Zone 1150 AM (KZNE)** features local and national sports programming. The Zone is broadcast on 1150 AM and is home to Texas A&M sports talk and commentary in addition to national sports coverage through nationally syndicated shows from CBS Radio. Unlike most small market sports stations, KZNE features local talk shows from 8 a.m. to 6 p.m. daily. KZNE broadcasts the sports play-by-play of Bryan High School as well as several on-location local weekend sports programs. Selected pages from The Zone’s website, <http://zone1150.com>, are attached as NAB Ex. 11.

c. The Zone HD (KNDE-HD3) is usually a simulcast of our KZNE AM 1150 station. However, we program it separately when there are sports event schedule conflicts and also for play-by-play of Texas A&M Olympic sports.

d. **Candy 95.1 FM (KNDE)**, on air for about a decade, prides itself on service and contact with its audience. It broadcasts a Contemporary Hits Radio format and boasts a number of successful local radio personalities that have helped grow the Candy 95 brand. Candy 95 has large online followings at candy95.com, on Facebook, and on Twitter. In keeping with the belief at Bryan Broadcasting that public service comes first, Candy 95 spends countless time producing and promoting numerous area charity events. In 2012, the National Association of Broadcasters awarded the station its Crystal Award to recognize Candy 95's commitment to serving the local community. This year, KNDE was one of five finalists for the prestigious Marconi Award. In addition to community guests who appear to promote their events, Candy 95's Street Team will often appear at area events (at no charge) to provide music and on-air mentions. Selected pages from Candy 95's website, <http://candy95.com/>, are attached as NAB Ex. 12.

e. **Peace 107:7 FM (KPWJ)** is a relatively new station in the Bryan-College Station area, going on-air in 2012. Peace 107 airs Contemporary Christian music and programming and is home to a roster of locally broadcast shows and local on-air talent. These include daily shows hosted by our on-air staff Brian Christopher (6-10 a.m.), Kat McMullen (11 a.m.-1 p.m.), and Jami Mayberry (2-6 p.m.). The station bills itself as uplifting and encouraging. It does not proselytize but rather shares stories of encouragement and blessing with its listeners. Peace 107 also promotes local events

through no-charge announcements hourly. Selected pages from Peace's website, <http://peace107.com>, are attached as NAB Ex. 13.

f. **KAGC 1510 AM Christian Family Radio** is a Christian Teaching/Talk station that centers on providing the Bryan-College Station region with a focus on family, faith, and talk. The weekly schedule at KAGC 1510 AM includes sports, news, and weather in addition to the worship related lineup. The Christian-based elements of Christian Family Radio's segments feature nationally syndicated shows, including Chuck Swindoll's Insight for Living, The Dave Ramsey Show, and Family Talk with Dr. James Dobson. The station also broadcasts local programming, including "Bonus Breakaway with Ben Stuart" (a daily segment from the non-denominational weekly Bible study on the campus of Texas A&M), periodic local weathercasts, and daily local news headlines aired during drive times. The station has a Polka show that is broadcast on Saturday and Sunday afternoons. This long standing program is in recognition of the earliest settlers in this area and their descendants who emigrated from the Czech Republic region of Europe. KAGC is a daytime station, licensed to operate only during daytime hours. Selected pages from KAGC's website, <http://kagc1510.com>, are attached as NAB Ex. 14.

g. **Navasota News 1550 AM (KWBC)**, located in Navasota, Texas, is a local news station that broadcasts local news and syndicated talk programming. There are only two employees at the station; both are news people. Navasota News also broadcasts Navasota high school sporting events to the surrounding community. Before its acquisition by Bryan Broadcasting, the station had failed financially and was dark. Selected pages from KWBC's website, <http://navasotanews.com>, are attached as NAB Ex. 15.

h. **Rock Candy (KNDE-HD2)** broadcasts a rock format on an HD channel.

This station, launched in 2011, is a music-only format. Selected pages from Rock Candy's website, <http://aggielandsrock.com>, are attached as NAB Ex. 16.

i. **Maverick 102.7 (KNDE-HD4)**, launched in August 2014, airs country music aimed at younger audiences. In addition to airing country music, the station's programming includes daily morning, midday, and evening shows featuring local announcers. The station shares the news department with WTAW and broadcasts hourly local news in the morning as well as local public service announcements throughout the day. Selected pages from Maverick's website, <http://maverickradio.com>, are attached as NAB Ex. 17.

8. In addition to the nine active radio operations described above, Bryan Broadcasting is in the process of preparing to launch three additional stations in the area: WTAW-FM 103.5 (Buffalo, Texas); KVMK-FM 100.9 (Wheelock, Texas); and KKEE-FM 103.1 (Centerville, Texas). The specific content to be broadcast from these stations has not yet been fully determined.

9. For five consecutive years from 2008 to 2012, and again in 2014, the Texas Association of Broadcasters has chosen Bryan Broadcasting as the recipient of the Bonner McLane Public Service Award, which recognizes a radio or television station's contributions and service to its local communities. WTAW and KNDE have been finalists for the National Crystal Award every year from 2010 to 2013. WTAW has received numerous awards from the Associated Press for reporting. The stations also have received special recognition for no-charge public service commercial donations by the Texas National Guard.

Streaming

10. WTAW was one of the first radio stations to be streamed and has been available online since the mid-1990s. Bryan Broadcasting streams most of its other radio stations as well. The streams can be accessed at www.bryanbroadcasting.com and at www.radioaggieland.com, through our Radio Aggieland mobile app, and through the individual station websites. It is my understanding that our streaming audience is but a tiny fraction of our broadcast audience.

Bryan Broadcasting's Difficulty in Making Streaming Profitable

11. Despite our continuing efforts to monetize our streaming, it has always been a money-losing proposition for Bryan Broadcasting. While we make each of our stations' programming available online as a service to our listeners, many of whom are college students, the advertiser community to which we sell simply does not value streaming the way that it values our broadcasting operations. There is an aphorism that compares "Analog Dollars and Digital Dimes," which reflects our experience. Our cost per thousand (CPM) prices for over-the-air ads vary across our broadcast stations, but streaming in a market our size is of little or no value to advertisers. This makes it difficult for us to make money from it.

12. To illustrate, we have an ad insertion agreement with our stream provider, under which the provider undertakes to sell streaming-specific ads for a fee to advertisers for any or all of our stations. Bryan Broadcasting receives [[]] of the revenues from that effort. This agreement generates revenues across all of our stations of less than [[]] per month, often much less. For the first eight months of 2014, total advertising revenues across all of our stations from streaming were about [[]] – an average of about [[]] per month for all stations combined. NAB Ex. 18. Other than this insignificant income, the only other streaming revenue of note that we receive is unrelated to our music stations. We receive [[]] per month for the

splash screen on our mobile streaming player, and [[]] per month for the pre-roll that is activated when accessing the stream through the WTAW and KZNE talk station websites.

Although we have no technical way to limit the splash screen on our mobile app to a single station, the client (The Bank and Trust) bought the product for the WTAW talk show and news stream only.

13. The minimal income that our streaming has been able to generate and the lack of interest by advertisers in our streaming show how little advertisers value this medium, particularly for music stations. Local advertisers especially are uninterested in purchasing our streaming products. Streaming does not even have the same money-making ability as selling bumper stickers. For example, in July 2014 we were able to sell an ad on the back of our Maverick 102.7 bumper sticker with our initial order of 6000 stickers for [[]].

14. Apart from the few inserted ads discussed above, the ads on our streams are identical to those that Bryan Broadcasting runs over the air with the exception of national advertising, which we cover with public service announcements so as to avoid any issue with the American Federation of Television and Radio Artists (“AFTRA”) or its successor (now “SAG-AFTRA”). We do not receive any extra money for running these simulcast ads on our streams. Currently, our local advertisers are included in our on-line stream. If we were to remove their commercials from the stream unless they paid an additional charge, we would need to justify that increase in advertising cost to our advertisers. In my experience, unless it was an insignificant amount (like 50 cents or a dollar) they would simply ask that we not include their commercials in the stream. In fact, recently we received a rate request from an advertising agency that specifically requested that we treat streaming ads as “value added” items for which the advertiser

would not be charged. “Valued-added” is ad agency-speak for something that should be thrown in at no charge because the agency does not believe it has meaningful value.

15. We have been unable to interest advertisers in even our most listened-to streaming stations. Our most listened-to streaming station, WTAW AM, had [] average concurrent listeners (ACL) and [] aggregate tuning hours (ATH) during the 12-month period from October 1, 2013 to September 29, 2014. Our most listened-to music formatted station, Candy 95, had only [] average concurrent listeners (ACL) and [] aggregate tuning hours (ATH) during that same 12-month period. As mentioned above, it is my understanding that our streaming audience is but a tiny fraction of our broadcast audience. As discussed above, advertisers view streaming ads as something they want us to throw in for free when they purchase broadcast ads for any of our stations. To me, this demonstrates that, at least for markets and streaming audiences of our size, streaming ads have no intrinsic value to advertisers. Based on my experience, I am confident that even if we were able to grow our streaming audience to 100-200 average concurrent listeners, advertisers would still be unwilling to purchase streaming ads from us.

16. Our difficulty in making our streaming operations a viable standalone business is compounded by the linear nature of the royalties that we are required to pay to SoundExchange to perform sound recordings in our streamed programming. These royalties increase by a fixed amount for every additional listener to a sound recording performance. We are in a Catch-22. In order to even begin to interest advertisers in our streaming audience, we need to increase our listener base significantly. But if we become successful in doing that, our streaming royalties and other costs would increase dramatically and in direct proportion to that increased

listenership. Based on our understanding of our markets, our revenues would never catch up to the costs.

17. By way of example, our streaming ad income from our stream provider is measured by the cost-per-thousand (CPM), meaning the amount our Internet streaming provider receives for every 1000 ad impressions. An ad impression is a single instance of listener exposure to a streamed advertisement. Our provider's CPM for streaming on a weighted average for the January-August 2014 period was [[]]. NAB Ex. 18. We receive [[]] of that amount, which is equivalent to [[]] CPM, typically for 1 minute ads. NAB Ex. 18. The streaming royalties paid to SoundExchange at the 2014 rate of 0.23¢ per performance, alone, is equivalent to \$2.30 CPM.

18. The lack of demand limits the number of ads our stream provider can sell on our streams. Even if the provider could sell the same number of ads as there are songs in a period of programming, which they cannot, we would still come out way behind. For each 1000 listeners who hear ads, we receive only [[]]. During that same period, because there are more songs than ads, we would have to pay SoundExchange more than 1000 times \$.0023, or more than \$23.00. Further, we have not seen increases in demand for ad CPM, and do not expect increases in the foreseeable future. If we succeed in attracting more listeners, our costs increase at a faster pace than our revenues. The increase in rates scheduled to take effect in 2015 will only worsen this already untenable situation.

19. The linear increase in streaming royalties under the present rate structure compares very unfavorably to broadcasting, where our transmission costs are fixed and each incremental listener costs us nothing to serve. In that medium, the more successful we are, the more revenue we generate. With streaming, the opposite is true – the more listeners we attract,

the more it costs us in streaming fees and bandwidth charges. The additional costs, however, are not accompanied by a commensurate increase in revenues. For example, while our streaming revenues have remained insignificant over the past three years despite having added additional streaming stations, our SoundExchange royalties have increased from approximately [[]] in 2011, to about [[]] in 2012, to over [[]] in 2013. NAB Ex. 19. We generated streaming revenues of only about [[]] in 2012, [[]] in 2013, and [[]] in the first eight months of 2014. A system that imposes fee increases that far exceed any revenue growth is unsustainable.

20. So far in 2014, we have lost over [[]] on our overall streaming operations. Our total streaming revenue through August – for all of our stations combined (both talk and music formats) – is [[]]. More specifically, from January through August of this year we earned [[]] for our phone app splash screen and [[]] from streaming ad insertions – but as noted above the splash screen was actually purchased for use with a non-music station, WTAW. On the other hand, we incurred Internet bandwidth fees of [[]] (through July) (NAB Ex. 20), stream player fees of [[]] (through August) (NAB Ex. 21), and streaming royalties to SoundExchange of [[]] (through August) (NAB Ex. 19). Of course, a significant portion of our bandwidth and player expenses is associated with streaming of our non-music formats, but our SoundExchange fees are almost entirely attributable to the streaming of our music formats. Even setting aside all the other costs involved (such as sales commissions and general overhead expenses), and any allocations of our programming costs, our music streaming operations resulted in a significant loss for the company. With the current SoundExchange rate structure our sound recording performance fees alone already far exceed

our streaming revenues. If our audience grows, our losses will only increase unless those rates are reduced significantly from their current level.

21. The current rate structure, with its automatic annual increases, has already caused our streaming fees to increase even where the number of streamed performances has decreased from previous years. For example, in the following illustration based on KNDE-FM (Candy 95) and KNDE-HD2 (Rock Candy) we showed a [[]] decrease in listeners yet fees increased [[]]. For the months of January 2011 through August 2011, those stations' performances totaled [[]]. That number decreased to [[]] for the same eight month period in 2014. But the royalty paid for those performances increased from [[]] to [[]], an increase of [[]]. The increase for 2015 (to 0.25¢) will be 47% above 2011's rates, further compounding this problem.

22. The location of our audience base presents another catch-22. Eighty percent of our ads currently are from local businesses. As I have said, we cannot even convince those advertisers that our local streaming audience has any value. Our local listeners are the same ones who can listen to our radio stations over the air. With respect to the portion of our streaming audience that is non-local, which is a minority of our listeners, our advertisers are even less interested in reaching that audience. Why would someone from Chicago, for example, be interested in a special at a local restaurant? Yet I am required to pay SoundExchange royalties for both local and non-local listeners who I simply cannot monetize.

23. While we would like to continue offering streaming service to our listeners, we do not believe that it is essential to our existence. Like leather seats in a car, it is nice to have, but not necessary. If streaming royalties are not reduced, our losses will only continue to increase. We will have to consider dropping our streaming services and dedicating those resources to our

core business – *i.e.*, over-the-air broadcasting. Based on my review of our streaming financials in connection with preparing this testimony, I have concluded that our company should seriously consider ceasing our streaming operations, as we may already have reached the point where the costs associated with streaming, particularly for our music formatted stations that generate unsupportable SoundExchange fees, is too expensive to justify.

**Bryan Broadcasting Stations Succeed for
Reasons Other than Streaming Recorded Music**

24. The success of Bryan Broadcasting's stations, including its music formatted stations, is the result of their close ties with the local community that come from our staff's community involvement, listener loyalty, and on-air programming. We have found, after more than a decade of streaming experience, that streaming contributes very little, if anything, to our success.

25. There are a number of elements that contribute to the success of our radio stations, most of which have little or nothing to do with music content. Recorded music has almost nothing to do with the success of our four news/talk/sports stations, as we air virtually no featured music on them (it is worth noting, however, that we still must pay SoundExchange a minimum \$500 annual fee to stream these stations). Rather, these stations broadcast news, talk, teaching, and sports programming, including live sporting events. Our local sports coverage is very popular. When we broadcast Texas A&M football on WTAW, for example, we often reach on-line listening levels that far exceed those of our music formatted stations.

26. The key to the success of our music stations is their unique programming. Streaming our music stations is nice, but a song by Katy Perry sounds the same in LA as she does in College Station, Texas. The difference is presentation and what is between the songs. If

there were no unique entertainment proposition to the listener, they would not seek us out just because we are on-line. On-line music-only choices are legion. Music stations with unique College Station content are rare. This is illustrated, for example, by the spikes in Candy 95's listener volume that occur on each weekday when our most popular daily shows are broadcast, in contrast to the low level of activity for that station on weekends.

27. One of the most critical ingredients to the popularity of our stations is the people who work for them. Making the investment to have a full-time, local staff is an important driver of the success of our stations and forming listener loyalty with our brands. I believe that a full-time staff is vital to elevating our stations' identities in the marketplace. People crave friendship. A sincere voice talking about local "things" is often considered a friend who is never met. My background is programming. I sometimes will be a guest on the air of the stations because, as I tell my staff, "I didn't get into this business to read spreadsheets all day." My longevity in the market combined with these on-air appearances mean that I get to shake hands with people I've never met who believe they personally know me through on-air contact. People consider me a friend because we've laughed about some absurdity of life on the air. A jukebox never engenders that sort of connection or friendship. For that, you need people. Again: Katy Perry's music sounds the same in LA as it does back home, but in LA, they aren't talking about the new restaurant on University Drive or the excitement of the Christmas Parade on Sunday.

28. An important part of our staff – and people who contribute immensely to the success of our stations and enhance their connections with the surrounding community – is our on-air talent. These are the people that listeners keep tuning in to spend time with and with whom they form loyalties. For example, Candy 95 has morning, mid-day, afternoon, and evening local shows. The host of Candy 95's afternoon show, airing from 2-6 p.m. weekdays,

Adam Knight, has been the host for over ten years. Candy 95's morning show has been hosted by Tucker "Frito" Young for seven years. His show actually makes a point to emphasize that relational talk programming, rather than music, is its focal point, using the slogan "less music more talk." The show maintains dominance in the market by connecting to the audience every day via emails, texts, and phone calls. Receiving hundreds of text messages from listeners in a single morning is common.

29. We expect our personnel to connect with the communities that our stations serve and to promote our stations throughout those communities. To that end, our employees engage in a variety of activities to strengthen those community ties, including participating in charity events and performing volunteer work. For example, each year, KNDE and WTAW sponsor the Christmas Angels toy drive, which provides toys and clothing to 700 needy area children. Katy Dempsey raises money for the local Special Olympics athletes with a touch football tournament. Tucker Young adopts and fosters pets from the Humane Society; regular guests on his morning show. Mary Hatcher raises money for cancer research. Scott DeLucia is working to rebuild the Bryan Downtown area and to encourage local artists to locate there. Everybody works on fundraising for area charities and speaking to classes. We also send our staff to major community and fundraising events. For example, three of our staff recently attended a ribbon cutting ceremony for a local bank, which donated \$100,000 to the United Way. It was on the news the next morning. This connection to the community means that members of that community are comfortable calling us when they need assistance.

30. Another important ingredient of our stations – including our music-formatted stations – is the news, local weather, and other community information that they broadcast. It is valuable for our stations to have people in the local market talking about stories we covered and

the topics we brought forward. Our music stations, Candy 95, Maverick, and Peace, feature non-music related content that enhances listener loyalty. For example, Peace107 will often open the lines to callers on a topic like “the best advice Mother ever gave you.” One of Candy 95’s secret weapons is to solicit listener opinion about national – and especially local – issues (would you eat what the new lunchroom standards for kids mandates?). Maverick, being new, is still developing its relationship with listeners by taking on-air listener phone calls for requests, comments, and exploring what attracted listeners to the station. All three of our broadcast music stations feature local public service announcements every hour, provide morning local news updates, and make traffic announcements whenever traffic flow is slowed.

31. Our stations also broadcast many special features that enable our listeners to interact with us and thus further increase our ties with them. For example, we announce contests over the air that listeners can enter online, by calling in, or by texting. One example of such contests is a contest we recently ran on Candy 95, where we gave away movie tickets to the Twilight marathon to the 95th texter to respond. We received 4,000 texts in response to this contest within less than fifteen minutes, showing how engaged our listeners are in interacting with us. The on-air staff at Candy 95, Maverick, and Peace frequently take calls and invite discussion of topics of local interest.

32. In addition to our broadcast programming and on-air talent, the content that we display on our websites is another important tool in increasing our brand loyalty. For example, Peace107.com includes postings of upcoming community events of interest to listeners, allows listeners to submit calendar events, includes uplifting blog posts and daily scripture readings, as well as a link to an order form for obtaining free copies of our publication “Peace Magazine.” Candy 95’s website, Candy95.com, includes a web page that provides information about various

contests that listeners can enter on-line and/or listen for. Maverickradio.com features local news as well as music and local performance venue information. Our non-music stations post extensive news, sports, weather, and community interest information. The stations share a common “My Photo” site. Whenever we’re involved in a large event, we take many photos and upload them onto this site and encourage attendees to download them for free.

33. We further strengthen our listeners’ connections with many of our on-air personalities by providing more information about them on our station web pages. The Candy 95 web page, candy95.com, contains links to web pages for our on-air staff and for our Morning Candy show and its co-hosts, Frito (Tucker Young) and Katy. For example, Adam Knight posts the answers and winners of his daily “Road Warrior Trivia” contest on his web page.

Peace107.com contains self-descriptions of Peace 107’s on-air staff as well as frequent postings by the station’s DJs, such as short articles, recipes, and life lessons. Our recently-launched Maverick 102.7 website, maverickradio.com, includes web pages featuring our show “The Morning Mavericks with Drake & Mel” and our afternoon show “Drew Williams,” along with a blog site with postings by Drew.

34. We also maintain Facebook and Twitter pages for many of our stations and include links to those pages on our station websites so that listeners can more easily find them and communicate with us. For example, Candy 95’s website has links to its Facebook page, Twitter page, and You Tube page, as well as a link to the Facebook page for the Morning Candy show. The level of activity on these media fluctuates from week to week, but is always significant. As of October 2, 2014, Candy 95 had generated over 15,000 Facebook “Likes” and had a weekly reach of over 37,000. Interest generated by our Facebook posts involving issues of local interest far exceeds interest in our postings related to music. For example, some recent

Facebook postings by the station show that while new music posts reached about 1500 Facebook users (NAB Ex. 22), the station's posts about lost dogs have reached more than 10 times that amount – reaching over 15,000, or even 80,000. (NAB Ex. 23) Candy 95 currently has over 4,600 Twitter followers. As discussed above, our stations also make extensive use of texting to strengthen the bond between the station and its listeners. Candy 95 consistently receives thousands of texts each month.

Our Stations Promote Artists

35. Our music formatted stations are recognized as a means for artists to increase their exposure and become better known. For example, Maverick is a very new station but already has been sought out by musicians who are performing locally. Our studio is not even completely finished, yet last week, I watched an up and coming group put all five members, guitars, and a drum kit in the room to provide a demo to the audience. Radio is a particular friend to Country Music. Country artists, whether charted or not, recognize the promotional value that over-the-air radio provides – Maverick 102.7 has only been on the air for a couple of months, and, so far, these artists have visited or are scheduled to visit our small town station: Roger Creager, Aaron Watson, Josh Abbott, William Clark Green, Granger Smith, Kyle Park, Wade Bowen, Sean McConnell, JB and the Moonshine Band, Sam Riggs, Jason Eady, and Texas Tenors. These artists could simply put their music on YouTube and be in the digital, streaming world. But they choose to make appearances on our station and its stream.

Before the
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In The Matter Of:)
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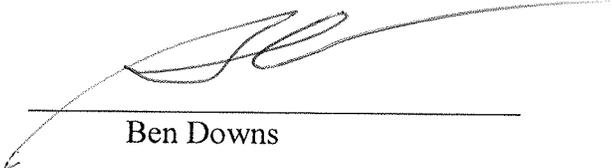
Determination of Royalty Rates)
for Digital Performance in Sound)
Recordings and Ephemeral)
Recordings (Web IV))

14-CRB-0001-WR (2016-2020)

DECLARATION OF BEN DOWNS

I, Ben Downs, declare under penalty of perjury under the laws of the United States that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed on October 6, 2014.



Ben Downs

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**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:)	
)	
Determination of Royalty Rates)	14-CRB-0001-WR (2016-2020)
for Digital Performance in Sound)	
Recordings and Ephemeral)	
Recordings (Web IV))	

**WRITTEN DIRECT TESTIMONY OF
JULIE KOEHN
(On behalf of the National Association of Broadcasters)**

INTRODUCTION

1. My name is Julie Koehn. I am the President and General Manager of Lenawee Broadcasting Company, the licensee of WLEN Radio, in Adrian, Michigan. I have held that position since 1990.

2. I offer this testimony to discuss why radio broadcasters and the programming they transmit are so important to the communities they serve. At any moment, we may be charged with keeping our community and the public at large safe in storms and power outages. At any moment, we may be charged with broadcasting an Amber Alert to help find a lost child, or helping find an adult who wanders off from a care facility. At any moment, we may be charged with broadcasting critical information regarding a local or national emergency.

3. I discuss below the ways in which WLEN fulfills this important role in the Lenawee County, Michigan community by providing local news, political coverage, weather, and community information, keeping our citizens safe during storms and power outages, providing tens of thousands of public service announcements each year, volunteering for various

causes, and supporting fundraising events. We also play music, but that is not the primary reason people listen to us, and it is not what makes us unique or important in the lives of the people in our community.

4. WLEN would like to simulcast its broadcast programming over the Internet in order to serve Lenawee County even more effectively, but we do not. Other than local sporting events, political debates, and government meetings of community interest, we do not stream. Our main reason for this is that we would be required to pay royalties to SoundExchange for the least unique part of our programming, and these royalties are much too variable and unpredictable to be able to design a stable business plan for streaming.

PROFESSIONAL BACKGROUND

5. I began my broadcasting career in 1985 after graduating from Michigan State University with a Bachelor of Science degree in both industrial and labor relations and political science. I have served as President of Lenawee Broadcasting Company for the past 24 years.

6. I currently serve on the Radio Board of Directors for the National Association of Broadcasters (“NAB”). I also have served on the Michigan Association of Broadcasters (“MAB”) Board of Directors, including service as chairman in 2005-2006. In addition, I have served on the Board of Directors for the MAB Foundation, serving as chairman in 2012-2013. I serve on the Radio Advertising Bureau Small Market Advisory Committee and have been a featured and panel speaker on small market radio at multiple NAB and Radio Advertising Bureau annual conferences as well as at MAB and the Illinois Broadcasters Association events.

WLEN RADIO AND ITS DISTINCTIVE PROGRAMMING

7. Lenawee Broadcasting, the licensee of WLEN, has always been a family company. My father put WLEN on the air in June 1965 at a time when few people had FM

radios. The station's first promotion was to give away FM radios so that people could hear the transmission. Unfortunately for many in our listening area, we went on the air two months too late, as devastating tornados swept a nearby community on Palm Sunday in April of that year. WLEN was not yet broadcasting to be able to warn the community of the danger, and two tornados in the same path on the same day killed many local citizens.

8. Our company is unique. We believe that "if you build it, they will come." WLEN has received national, regional, and state recognition for news, public service, and promotions. It has won many awards – including five NAB Crystal Radio Awards in 1998, 2001, 2005, 2010, and 2014 for excellence in community service, three NAB Education Foundation Service to America Awards, Service to Children Awards, one NAB Marconi Award for AC Station of the Year, and seven MAB Station of the Year Awards in 2002, 2003, 2005, 2006, 2008, 2009, and 2011. WLEN also was named the 2010 NAB Small Market Station of the Year and has been recognized by the University Press Club.

9. WLEN offers unique programming. We are located on a very crowded dial, with fifty-six small, medium, and major market signals coming into the community, so to distinguish ourselves, we have to offer programming that is different and relevant to the citizens of Lenawee County. We focus on local news and local community information, employing a full time news department and the services of a meteorologist. Our county has no local television stations and only one daily newspaper, so the public depends on us for local news and information. We aired nearly 4,000 newscasts and nearly 17,000 weather programs in 2013 alone and do over 100 remote broadcasts from the community each year. We have a weather line with the latest forecast available 24/7 as well as the local forecast from the National Oceanic and Atmospheric Administration ("NOAA") available on our website, and have even donated tower space for

NOAA's use. We broadcast a four-minute community calendar five times a day, a fifteen-minute local information program called "Community Conversation" four to five times weekly hosted by our Program Director, and "Partyline Now," a three-and-a-half hour talk show that serves as a citizens' public forum. We also cover city/village, township, and county government meetings each month as well as eleven local school districts. In addition, we air Radio Picoso, the county's only live and local Hispanic radio show each week connecting to the large Spanish speaking population in our community.

10. While we do play music and are considered an Adult Contemporary format station, music is not the number one reason why people listen to WLEN, and it is not what makes us unique. If listeners were only interested in hearing wall-to-wall music, there are many other ways for them to do so. Rather, it is our local community focus that makes us stand out in the crowd. Even our music programming is live and local, with the exception of two weekend specialty shows.

11. WLEN carries more local sports than any other local station in our area. In the fall, we carry Adrian High School Maple football and football from two of our colleges, Siena Heights University and the Adrian College Bulldogs. Our basketball schedule includes an all-county schedule of high school and college games. WLEN's coverage includes live play-by-play commentary on these events. A listing of the programming that we offer is included as NAB Ex. 24.

12. Our staff consists of fourteen full-time and three part-time broadcast professionals. This is a very large staff for a station in our size community. The reason we employ such a large staff is to be able to provide the citizens in our coverage area with the

information they want and need, with live announcers nineteen hours each day, Sunday through Friday, and eleven hours on Saturdays.

13. Our on-air talent and the loyalty our listeners develop towards those personalities is another reason WLEN stands out in a crowded market. Our morning show host, Steve Barkway, has been with the station for over thirty years. Our night shift DJ from 6 p.m. until midnight weekdays, Mike Reynolds, has been with WLEN for sixteen years. We have about 150 years of combined experience under our roof.

WLEN'S STRONG COMMITMENT TO COMMUNITY SERVICE

14. A core part of who we are is our service to the Lenawee County community in which we broadcast. WLEN takes community service very seriously. This is yet another attribute that makes radio broadcasters and their programming so different from online music services that simply play wall-to-wall music and have no real connection to the communities where their listeners are.

15. WLEN listeners are very loyal to the station because WLEN is loyal to its listeners. We donate over \$800,000 in cash and in-kind advertising and promotion to local nonprofits each and every year. Our announcers and staff volunteer hundreds of hours, both on and off the clock, sitting on nonprofit boards, emceeding local fundraising auctions, running coat and blanket drives, and collecting funds for homeless veterans and socks and pjs for our unattended youth. In 2012, we launched a public service announcement (“PSA”) contest for youth to bring awareness to bullying in our schools. WLEN also has participated in community events such as walking in the “Walk for Warmth” to help needy families pay their utility bills and has participated in “learn to read month,” reading to kids in schools. In 2013 alone, WLEN broadcast over 54,000 public service announcements and generated more than 400 hours of community affairs programming.

16. As I mentioned above, we also keep our listeners safe during weather emergencies. We are the only local station in our area to have auxiliary power at both our studio and transmitter sites, which keeps us on the air during power outages and storms.

17. Homelessness, hunger, and unemployment are priority needs in our community. WLEN has especially worked to meet those needs. While we have always served, we saw a much greater need when the great recession hit Michigan and the pool of those able to help greatly diminished with our population decline. People left the state to find work, and those who couldn't now needed services they never dreamed they would ever need. And those that needed services before the recession needed more services than ever before. Our focus was helping those in need and promoting ways to achieve self-sufficiency. As a 3,000-watt single FM station in a community of 20,000, we reach over 100 organizations; from local food banks to education and housing programs. In 2013, we assisted local non-profit organizations in raising over \$2,000,000 in community by giving through donations of cash, advertising, and promotion.

18. Several years ago, we implemented our "Hometown Hope" program because we saw a critical need in the non-profit community. Organizations needed help getting information out to the population that could help them. Each month, we donate a \$3,500 marketing grant to a different local non-profit organization. These organizations receive a two-hour live broadcast, a fifteen-minute interview on our "Community Conversation" program, and a live interview on our morning show, as well as a bank of 150 commercial/PSA announcements for their use during the month. We also featured these charities on our website. WLEN's 2013 Report to the Community describes the twelve charities that we helped in that year and many of the other ways in which we served the Lenawee County community in 2013. *See* NAB Ex. 25. We will always

work to continue to strengthen our local community and help people and organizations help themselves and help each other.

19. As a result of these strong community ties and the ways that we differentiate ourselves in the market, WLEN maintains a very large portion of the over-the-air radio audience in Lenawee County, Michigan.

WLEN'S DECISION NOT TO STREAM

20. We have considered whether to stream WLEN as another means of reaching our listeners. Other than local sporting events, political debates, and some governmental meetings of community interest, however, we decided against it because we are concerned with the unpredictable cost of SoundExchange royalties. These costs can rapidly spiral out of control under the current per-performance structure because they increase with increased listenership.

21. We are particularly concerned about incurring expensive and unpredictable SoundExchange royalties if our stream were to become popular among our listeners. To help me assess the potential financial impact on our station of SoundExchange royalties, I calculated what those fees would be if we had 100 listeners on average to our stream. At the 2014 rate of \$0.0023 per performance, and assuming that eleven recordings per hour are transmitted, those fees would be \$61 per day, or over \$22,000 per year. We do not believe that streaming would generate additional revenues sufficient to cover these significant royalties, let alone the other costs that would be incurred if we began to stream, which reinforces our decision not to stream. The more popular we become, the more unpredictable and expensive the costs would be, and we would be paying those costs for the least unique part of our programming; not for the programmatic reasons that listeners tune in to us. This is an unstable and unpredictable business model, and we cannot just roll the dice.

22. I am not aware of any small broadcasters who are streaming their broadcast programming and making a profit from it.

23. It would be possible for me to impose listener caps on online listening, but I do not believe that this makes business sense. I do not believe that it would be good for our brand, our reputation, or our service to our community if we offered streaming but then barred people from listening to it if it becomes too popular. How would you like to be listener number 101, who could not listen to the stream when you were trying to hear your daughter's name announced as our Student of the Day or as our 4-H member of the week? Or how would you like to be working in an area where you could not receive our terrestrial signal and you needed information because your child's school was just placed in lockdown, or where there was a chemical spill in your neighborhood and your kids were home alone? We would be doing a disservice to our community by limiting our stream.

24. We would reconsider our decision not to stream if the formula for streaming royalties becomes predictable, stable, and reasonable.

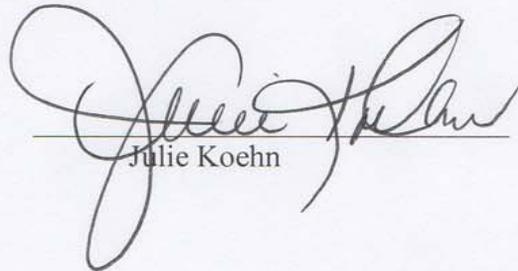
Before the
COPYRIGHT ROYALTY JUDGES
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Washington, D.C.

_____)
In The Matter Of:)
)
Determination of Royalty Rates) 14-CRB-0001-WR (2016-2020)
for Digital Performance in Sound)
Recordings and Ephemeral)
Recordings (Web IV))
_____)

DECLARATION OF JULIE KOEHN

I, Julie Koehn, declare under penalty of perjury that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed on 10/6/14



Julie Koehn

H

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:)	
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Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV))	14-CRB-0001-WR (2016-2020)
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WRITTEN DIRECT TESTIMONY OF JEAN-FRANCOIS GADOURY
(On behalf of the National Association of Broadcasters)

Summary

1. My name is Jean-Francois Gadoury. I am the Chief Technology Officer of Triton Digital (“Triton”). My primary role at Triton is to oversee the strategic direction of our company in terms of technology. I began my career as a programmer analyst and consultant for Cesart International, a Bell Canada company, where I was involved in VOIP and fax over IP, among other technologies. I later went on to work at CESCO, Tata Communications (formerly Teleglobe) and Atlas Telecom Mobile. I am a computer and networking expert with extensive software, hardware, and networking experience.

2. Triton Digital provides to many prominent audio broadcasters and webcasters a technology that allows them to stream over the Internet. Our customers include Cumulus, CBS Radio, Cox, NPR Digital Services and many others. I am providing this witness statement to describe some of the technological issues an audio

webcaster could face with respect to counting and identifying the number of listeners for streamed sound recordings.

3. To meet its reporting requirements, an audio webcaster may seek to count the number of performances of each sound recording, where the count represents the number of sound recordings streamed within a certain time period, and multiply each sound recording by the number of individuals who have listened to the applicable sound recording. When a service counts performances of sound recordings in a digital Internet stream, several situations may lead to counts that may not represent the true count. That is because there can be connections made to the stream that do not objectively represent an actual human listener.

4. Within the process of using technology to hear a digital Internet stream, a human must rely on hardware and software designed to render the digital content audible. These hardware and software components need to perform multiple operations to obtain content and play it for the human listener. In counting the number of listener sessions to an Internet stream, situations arise that could cause performances to be counted where they should not. I describe here two potential scenarios that illustrate the issues an audio webcaster seeking to count performances for reporting purposes could face.

Scenario 1 – Discovery Connection by a Media Application

5. In this case, the listener's media application will initiate a connection to a given stream and only seek to receive the header information returned by the streaming server software to which it is connecting. Upon receiving this information the media application might then proceed in connecting a second time to the streaming server. This

second connection will be the one that will be used to receive the actual audio content and playback to the listener will occur. This scenario occurs because of the way certain third party application developers have designed their applications.

6. This situation demonstrates one scenario in which, although two connections occurred, only one connection is valid for counting of sound recording performances. If each connection is used to count sound recording performances, the count of a performance for the sound recording playing during those two connections will result in a count of two even if only one of those two connections actually served to play content to the listener.

Scenario 2 - Disconnection of a user due to stream instability

7. The Internet is a network that is generally stable. At the same time it is also a dynamic environment in which network conditions can vary day by day or even second by second. When disruptions do occur, some applications that are using the Internet to send and receive data may be affected. Streaming of music is one such application and is therefore subject to those varying conditions.

8. When network conditions become unfavorable, it is possible that a media application playing back content to a user may get disconnected from the streaming server for various reasons.

9. When a disconnection occurs, the media application will automatically attempt to reconnect to the stream it was connected to. In this situation, the media application will usually reconnect very quickly, and a listener may not even notice the disconnection.

10. However this disconnection will result in a new session being generated and therefore there will now be two sessions spanning the same song performance. If the two sessions are used as is, the sound recording performance would be counted twice for the same sound recording.

11. On an individual basis this typically does not present a large problem for an audio webcaster seeking to count performances for reporting purposes. However, if the instability is sufficiently widespread enough, thousands, or tens of thousands, of media applications might be affected at the same time, and there can conceivably be a significant number of extra performances counted if each connection is counted as a performance, and corrections are not made to account for multiple connections being attributable to the same person.

12. The above can result in a count of performances that is high. That is, an audio webcaster seeking to count performances for reporting purposes may count connections or sessions during which a human heard one performance of a sound recording but the sessions reflect two performances of the sound recording.

**Before the
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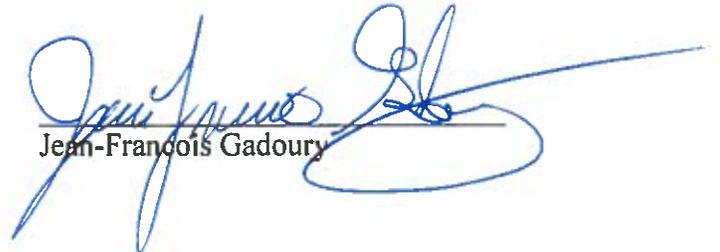
In The Matter Of:)	
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Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV))	14-CRB-0001-WR (2016-2020)
)	
)	

DECLARATION OF JEAN-FRANCOIS GADOURY

I, Jean-Francois Gadoury, declare under penalty of perjury that the matters set forth in my Written Direct Testimony in the above-captioned proceeding are true and correct to the best of my knowledge, information and belief.

Executed this 7th day of October 2014.

Executed on OCTOBER 10TH, 2014



Jean-Francois Gadoury

**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.**

In re

**DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)**

**DOCKET NO. 14-CRB-0001-WR
(2016-2020)**

**NOTICE OF SUBMISSION OF CORRECTED
WRITTEN DIRECT TESTIMONY OF STEVEN W. NEWBERRY**

The National Association of Broadcasters (“NAB”) respectfully submits the attached Appendix A to be included with the October 7, 2014 Written Direct Testimony of Steven W. Newberry filed as part of the NAB’s Written Direct Statement (“WDS”). Appendix A was referenced in Mr. Newberry’s testimony (¶ 7), but was inadvertently omitted from the filing of NAB’s WDS. Upon learning of the omission, NAB served Appendix A on all parties on November 4, 2014. Also submitted herewith is a corrected Volume 2 (Witness Testimony) of the electronic filing of the WDS of NAB. No other changes to the NAB’s electronic filings have been made.

February 23, 2015

Respectfully submitted,

By 

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*Counsel for the National Association of
Broadcasters*

COMMONWEALTH BROADCASTING RADIO STATIONS

CALLS	AM or FM	Format	Markets Served
1	WAVJ	FM	70s & 80s Princeton
2	WCDS	AM	Sports Glasgow
3	WCKQ	FM	Hot AC Campbellsville/Greensburg
4	WGRK	FM	Country Campbellsville/Greensburg
5	WHHT	FM	Country Bowling Green/Glasgow
6	WIEL	AM	Sports Elizabethtown
7	WKLX	FM	70s & 80s Bowling Green/Glasgow
8	WKMO	FM	Country Elizabethtown
9	WOVO	AM	AC Bowling Green/Glasgow
10	WPKY	AM	Sports Princeton
11	WPTQ	FM	Clsc Rock Bowling Green/Glasgow
12	WRZI	FM	Clsc Rock Elizabethtown
13	WTCO	AM	Sprts/Talk Campbellsville/Greensburg
14	WTHX	FM	Sports Elizabethtown
15	WTTL	AM	Talk/Sprts Madisonville
16	WTTL	FM	Hot AC Madisonville
17	WWKN	FM	Oldies Morgantown
18	WWKU	AM	Sports Bowling Green
19	WWKY	FM	Country Madisonville
20	WXAM	AM	Sports Hodgenville

CERTIFICATE OF SERVICE

I hereby certify that on February 23, 2015, I caused a copy of the foregoing Notice of Submission to be served via electronic mail on the following parties, who have consented to electronic mail service:

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<p>Harv Hendrickson, Chairman Russ Hauth 3003 Snelling Avenue, North Saint Paul, MN 55113 russh@salem.cc hphendrickson@unwsp.edu <i>National Religious Broadcasters Noncommercial Music License Committee</i></p>	<p>Jeffrey Jarmuth Law Offices of Jeffrey Jarmuth 34 E Elm St Chicago, IL 60611-1016 jeff.jarmuth@jarmuthlawoffices.com P: 312-335-9933 F: 312-822-1010 <i>Counsel for Accuradio</i></p>
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/s/ Christopher M. Mills

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In re

**DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)**

**DOCKET NO. 14-CRB-0001-WR
(2016-2020)**

**WRITTEN REBUTTAL TESTIMONY OF JOHN DIMICK
(On behalf of the National Association of Broadcasters)**

Summary

1. My name is John Dimick. I am the Senior Vice President of Programming & Operations at Lincoln Financial Media Company (“LFMC”). This past October, I submitted Written Direct Testimony in support of the written direct statement of the National Association of Broadcasters (“NAB”). I submit this additional testimony in support of NAB’s written rebuttal statement and, in particular, to address the contention of SoundExchange, Inc. (“SoundExchange”) that all statutory webcasting is “converging” and becoming more like and substitutable for on-demand streaming. As I explain below, that contention is simply not accurate with respect to the simulcast streams of LFMC and the many other radio broadcasters with which I am familiar. To the contrary, the programming of our streams is not customized to the listener or customizable by the listener; in that regard, it is the same non-customizable programming that we broadcast to our local audiences over the radio airwaves. Like our broadcasts, the same content is provided to all concurrent listeners. That basic premise has not changed since we began streaming, and to my knowledge is not in the process of changing.

Rather, our simulcast streams continue to be an internet-accessible version of our on-air programming. Accordingly, our simulcast streaming is not “converging” with on-demand music services, and any claim for higher rates based on this alleged “convergence” would not be applicable to simulcast.

2. In preparing this testimony, I reviewed the public (redacted) versions of the Testimony of Dennis Kooker of Sony Music Entertainment and the Testimony of Aaron Harrison of UMG Recordings, Inc. My rebuttal testimony below responds to certain of the statements made by Messrs. Kooker and Harrison.

Discussion

3. As an initial matter, Mr. Kooker asserts that: “[i]n a world in which access to streamed content is increasingly dominant, the wide range of streaming services (including statutory licensees) are competing for the potential of consumer dollars that were once spent at record stores and, decreasingly, at online stores for permanent downloads.” Kooker WDT at 11. Radio broadcasters and simulcasters, however, do not compete for consumer dollars that might have been spent at record stores or at online stores for downloads. Rather, broadcast radio and simulcasting have always been – and are still – free to the consumer and supported by advertising. I do not see any indication that that situation is changing now or that it will change during the upcoming license term, which I understand ends in 2020. Thus, even to the extent that Mr. Kooker’s statement may be true as to other non-simulcast statutory services, a matter as to which I express no view, it plainly is not true as to simulcasters. We compete for advertising dollars, not dollars that might be spent by consumers at record stores.

4. Mr. Kooker also asserts that:

One of the original justifications for allowing statutory services to pay these lower rates was that the offering under the statutory license would provide a user experience

similar to terrestrial radio. Statutory services could offer channels of particular musical genres, but the programming would be selected by the service. If listeners wanted to select their programming, they would have to pay for it through directly licensed services.

That fundamental distinction—between statutory services mirroring terrestrial radio and directly licensed services enabling customized music access—is rapidly disappearing. Statutory services now provide highly customized offerings to consumers. Statutory services employ sophisticated algorithms, user-interface controls, and other computer technology that allows users to communicate their preferences to the service, and the service to customize and curate programming tailored to the individual user. Examples include interfaces that enable a user to communicate to the service whether they like or dislike content the service is streaming—“thumbs up” or “thumbs down”—and for the service to use that feedback to select the programming it will stream to that user. Through this two-way communication, the user can significantly increase or decrease (or, with enough dislikes, eliminate completely) the likelihood of hearing more music by the same artists. The result is that statutory services can and do progressively refine the individualized programs streamed to their users, thus bringing the experience of listening on statutory services ever-closer to the experience of “on-demand” listening.

Kooker WDT at 15-16. For multiple reasons, these assertions do not apply to simulcasting.

5. First, to the extent that one of the original justifications for statutory licenses was that “the offering under the statutory license would provide a user experience similar to terrestrial radio,” as Mr. Kooker asserts in the quotation above, that is exactly what we as simulcasters have been doing and are still doing. As described in my Written Direct Testimony, since we have gone to Nielsen’s Total Line Reporting, our streams are the same as our broadcasts (including the commercials). Even before we went to Total Line Reporting, however, the content of our streams was fundamentally the same as the content of our broadcasts, with the primary difference being the advertising. Thus, for example, if the morning show was on the air,

it also would be on the stream, and if a particular song was played over the air, that same song would be played on the simulcast stream. Our streams are mirrors of the over-the-air broadcasts. Other than the method of access—traditional AM/FM radio for the over-the-air broadcast, and a personal computer or other web-connected device for the stream—it is the same LFMC product.

6. Mr. Kooker identifies various technologies that he claims allow statutory webcasters to mimic on-demand services, such as “sophisticated algorithms, user-interface controls, and other computer technology that allow users to communicate their preferences to the service, and the service to customize and curate programming tailored to the individual user.” Kooker at 15-16. But we do not use these technologies when we simulcast our terrestrial radio broadcasts and, in particular, we do not “customize and curate programming tailored to the individual user.” Essentially, we do the opposite of “tailoring”; we attempt to make the *same* broadcast/stream desirable to as wide a group as possible.

7. Nor do our simulcasts use feedback or two-way communication mechanisms such as “thumbs up” or “thumbs down” that automatically adjust future programming, as Mr. Kooker claims that statutory services do. If simulcast users dislike a particular on-air personality or a particular song that our programmers have selected, their only choices (as with the broadcast) are to keep listening, turn off the stream, or change the station; users cannot skip to another track. Nor can we avoid sending the same disfavored artist or track to that user again, whenever the artist or track happens to come up again on the playlist. In this regard, as others, our streams are just like terrestrial radio.

8. If one clicks on the “Listen Live” button on one of our stations’ webpages (*e.g.*, kygo.com – the website for our Denver country music station), there is a “play” button and a “stop” button; if one “stops” and subsequently presses “play” again, the stream will be rejoined

in progress (“stop” actually disconnects the user from the stream), and the listener will have missed whatever part of the song or other programming took place before “play” was resumed. The “mute” button cuts off the sound while the stream continues to be received. This functionality is consistent with the fact that a simulcast listener is just joining a public stream, not receiving a private stream tailored to him or her.

9. As noted in my Written Direct Testimony, in addition to the station websites and apps, our stations’ streams are also available at tunein.com, a large aggregator. But this aggregation does not affect the functionality of our simulcast streams that I have described above. While the Tunein player has a “pause” button, pausing causes the listener to miss content on our stream, the same as our “stop” button, and there is no way to skip ahead to a new track on our stream. Nor is there a way to determine from Tunein what songs are forthcoming on our simulcasts. While Tunein may provide additional features with respect to custom or genre stations, our streams are still simulcasts, even if accessed through Tunein.

10. Of course, the lack of feedback loops and the other technologies referenced by Mr. Kooker does not mean that our stations are uninterested in listener feedback. The ideas of calling in and requesting a song, or voting for the most popular song of the night, go back far beyond my 35 years of experience in radio broadcasting. As a result of technological innovations, feedback is not limited to call-ins; we receive song suggestions and other feedback from listeners via email, text messages, Facebook, Twitter, and every other available means. Unlike what Mr. Kooker describes, however, when we take user feedback into account, our programming decisions affect both the radio broadcast and the stream for every listener, not just the individual who provided the feedback. Thus, when we make adjustments based on user feedback, including feedback received through new technologies, we are trying to appeal to all of

our listeners; we do not use technology to customize a product for a particular listener. This reflects the fundamental fact that we are a “one-to-many” broadcaster, not a “one-to-one” streamer.

11. In an additional attempt to justify higher rates for statutory services, Mr. Kooker asserts that users are deterred from “switching from free statutory services to paid subscription offerings” because they are unable to transfer to subscription services “[t]he inputs that users of statutory services provide to fine tune their customized offerings, their channels, and other recorded preferences.” Kooker WDT at 17. For all of the reasons that I have explained above, this consideration is not applicable to simulcast, whatever validity it may or may not have in other contexts. Our simulcasts are not customizable through user inputs; therefore, listeners cannot lose their “investments” in them.

12. I discuss the promotional benefits provided to record companies and performing artists by radio broadcast and simulcast streams in my Written Direct Testimony and will not repeat that discussion here. I note, however, that Mr. Kooker claims that the increasing customization of statutory services “provides significant disincentives for users to pay for music access. If a consumer is increasingly confident that the next song they hear or the next playlist they select will be closely in synch with their musical preferences, it becomes increasingly difficult to persuade that consumer that they should buy tracks or albums.” Kooker WDT at 19. Again, to the extent that Mr. Kooker is including simulcasting with other “statutory services,” his statement is inaccurate. Just as with our broadcast radio stations, there is no way that a listener to our simulcasts can be “increasingly confident that the next song they hear or the next playlist they select will be closely in synch with their musical preferences,” as Mr. Kooker claims. We do not allow user selection of playlists, and one can be no more confident of hearing a particular

song on our simulcast than on a traditional broadcast radio station. Thus, the supposed disincentive that Mr. Kooker discusses, to the extent that it exists as to any statutory service, plainly does not exist with respect to our simulcasts.

13. Mr. Harrison's public testimony with respect to these subjects in large part mirrors that of Mr. Kooker, and therefore I will not repeat all of the points made above. In general, Mr. Harrison's comments about the capabilities of "customized webcasting services" (Harrison WDT ¶ 10) are not applicable to simulcast for all of the reasons I have detailed.

14. Mr. Harrison does claim that "we have found that streaming services cannot generate sufficient ARPU [Average Revenue Per User] through advertising alone. This is in part because streaming services are reticent to play advertisements at the same frequency as terrestrial radio." Harrison WDT ¶ 13. As stated in my Written Direct Testimony, I agree that it is very difficult to make money through advertising-supported streaming. To the extent that Mr. Harrison is attributing this difficulty to reticence "to play advertising at the same frequency as terrestrial radio," and including simulcast services with other "streaming services," his statement is incorrect. In connection with our Total Line Reporting, LFMC is currently running the same ads on the stream as are on the over-the-air broadcast. Even before that change, however, ad breaks were available on the stream at the same time and with the same frequency as our over-the-air broadcast. Given that the breaks were already built into the programming, we would not and did not intentionally limit or curtail the amount of advertising on the stream, for purposes of building audience or otherwise. Rather, to the extent that we sometimes ran public service announcements or other unpaid content during the built-in ad breaks on the stream, it simply reflected a lack of purchasers for the available ad inventory.

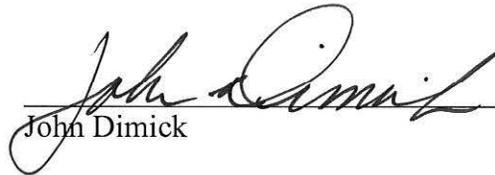
**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:)	
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)	
Determination of Royalty Rates)	14-CRB-0001-WR (2016-2020)
for Digital Performance in Sound)	
Recordings and Ephemeral)	
Recordings (Web IV))	
)	

DECLARATION OF JOHN DIMICK

I, John Dimick, declare under penalty of perjury that the matters set forth in my Written Rebuttal Testimony in the above-captioned proceeding are true and correct.

Executed this 20th day of February 2015.


John Dimick

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)

DOCKET NO. 14-CRB-0001-WR
(2016-2020)

WRITTEN REBUTTAL TESTIMONY OF
MICHAEL L. KATZ
(On behalf of the National Association of Broadcasters)

February 23, 2015

E. DR. RUBINFELD FAILS TO TAKE STREAMING SERVICES’ COSTS INTO ACCOUNT AND INAPPROPRIATELY FOCUSES ON REVENUES RATHER THAN PROFITS.49

F. DR. RUBINFELD FAILS TO ACCOUNT FOR DIFFERENCES IN THE OPPORTUNITY COSTS OF LICENSING TO INTERACTIVE AND NON-INTERACTIVE SERVICES.....53

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I. QUALIFICATIONS, STATEMENT OF WORK, AND OVERVIEW OF THIS REPORT

1. My name is Michael L. Katz, and I hold the Sarin Chair in Strategy and Leadership at the University of California at Berkeley. I hold a joint appointment in the Haas School of Business Administration and in the Department of Economics. I have also served on the faculties of the Department of Economics at Princeton University and the Stern School of Business at New York University. I received my A.B. from Harvard University *summa cum laude* and my doctorate from Oxford University. Both degrees are in Economics. A more detailed description of my qualifications is provided in my written direct testimony and my curriculum vitae, attached to that testimony.¹

2. As discussed in my written direct testimony, at the request of counsel for the National Association of Broadcasters (“NAB”), I conducted an economic analysis of what rates for the public performance and ephemeral recording of sound recordings meet the statutory standard as I understand that standard as an economist.² I also examined the implications of this standard for the validity of certain benchmarks. Briefly, my findings were the following:

- *From the perspective of economics, the willing-buyer/willing-seller standard is most appropriately interpreted as asking what would happen in an effectively competitive market in the absence of the statutory licensing regime.*

¹ Written Direct Testimony of Michael L. Katz, October 7, 2014 (hereinafter *Katz WDT*).

² As I explained in my written direct testimony, previous rate proceedings have consistently considered royalties for the public performance and ephemeral recording rights in combination because there is no sound basis for attributing an independent economic value to the latter, and I therefore consider the two rates together in my analysis that follows. (*Katz WDT*, ¶ 2).

The creation of a rate-determination process and its willing-buyer/willing-seller standard can best be reconciled with economic principles and common sense by interpreting willing buyers as those who have meaningful choices among competing sellers, rather than facing a single, all-or-nothing offer from a monopolist.

- *Competition pushes prices towards suppliers' marginal costs.* In the case of an idealized, perfectly competitive market, prices fall all the way to marginal cost. In workably competitive or effectively competitive markets, prices do not fall all of the way to marginal cost, but they strongly tend in that direction and are near marginal cost in equilibrium.
- *Effectively competitive prices will reflect any other benefits that the buyer provides to the seller.* To the extent that a buyer provides benefits to a seller in addition to the price paid for the good or service, the competitive price will reflect those benefits. In particular, to the extent that a licensee provides valuable promotional benefits to the seller, a competitive seller will be willing to accept a lower—and, in some cases, even negative—price in recognition of the fact that those promotional benefits are a form of compensation to the seller.
- *A market cannot be effectively competitive in the absence of buyer choice.* Competition arises *only* when buyers have the ability to substitute the offerings of one seller for those of another. It is this possibility of substitution that drives each seller to offer higher quality and lower prices in order to

attract buyers to itself rather than its rivals. Producers of complementary products do not compete with one another.

- *The statutory rates adopted in the second webcasting proceeding (“Web II”) were based on a severely flawed benchmark analysis conducted by Dr. Pelcovits that led to rates well in excess of those that would have been negotiated by a willing buyer and willing seller.*³ Two of the major flaws were the failure to account for the lack of competition among the record companies in licensing to on-demand services and the failure to account for differences in revenues earned by advertising-supported and subscriber-supported streaming services. Consequently, there is a need to break with the past by taking a close look at new benchmarks that are meaningfully similar to the licenses at issue, that do not reflect undue licensor market power, and that account for the different business models of advertiser- and subscriber-supported services.⁴

³ Moreover, the rates set in Web II created significant upward pressure on rates in the Webcaster Settlement Act (“WSA”) agreements that were subsequently negotiated and, thus, rendered those agreements inappropriate for use as benchmarks.

⁴ I observe in passing that SoundExchange witnesses in the present proceeding assert that advertising-supported services can never earn revenue per play as high as subscription services. For example, Mr. Kooker testified that “The limited revenue from advertising on streaming services’ free-listening tiers translates into ARPU [average revenue per user] that is significantly lower than ARPU from directly licensed services’ subscription tiers.” (Testimony of Dennis Kooker, October 6, 2014 (hereinafter, *Kooker WDT*), at 14); Mr. Harrison testified that “In particular, we have found that streaming services cannot generate sufficient ARPU through advertising alone....Subscription offerings, in contrast, can generate a higher ARPU.” (Testimony of Aaron Harrison, October 6, 2014 (hereinafter, *Harrison WDT*), ¶¶ 13-16) This assertion is a contradiction of the assumption used to justify the Web II statutory rates: the decision in Web II found that “ad-supported revenues may not yet have equalized subscription revenues on a per-

- *An analysis based on record company behavior demonstrates that the lower bound of the zone of reasonableness for statutory license fees to be paid by webcasters that simulcast terrestrial radio broadcasts (“simulcasters”) is near zero. Indeed, because of the promotional value associated with simulcasts, an effectively competitive license fee for simulcasting could well be negative for many recordings and simulcasters.*
- *Analysis of the findings in the most recent Satellite Digital Audio Radio Services proceeding (“SDARS II”) demonstrates that statutory license fees equivalent to 13 percent or more of a music-formatted simulcaster’s revenues from simulcasting would be unreasonable and that the upper bound on reasonable rates is lower. In SDARS II, the judges found that 13 percent constitutes a sensible upper bound on the zone of reasonableness before adjusting to account for Section 801(b) factors. Empirical evidence indicates that copyrighted music is no more important to music-formatted simulcasters than to Sirius XM. Moreover, the SDARS II rate reflects SDARS I analysis that was based on an interactive-services benchmark and that failed to adjust the benchmark rates downward to reflect the lack of competition and, thus, resulted in a rate higher than that which would be reached in an effectively competitive market. Therefore, a royalty rate of 13 percent or higher of the*

listener hour basis but are expected to grow.” (Digital Performance Right in Sound Recordings and Ephemeral Recordings, Final Rule, 72 FR 24084 (May 1, 2007) (hereinafter, *Web II Decision*) at 24094. SoundExchange’s current statements further confirm the errors of Web II and reinforce the need to set rates that break with the past.

simulcast revenues of music-formatted radio stations would be unreasonably high, as would be rates lower than, but near 13 percent.

3. In this rebuttal testimony, I address several issues, arguments, and pieces of evidence raised in the written direct testimony submitted by SoundExchange, particularly the written direct testimony of Dr. Daniel Rubinfeld.⁵ Drawing on my training and experience as an economist, my review of the record in this case, and my analysis of the relevant industries, I continue to reach all of the conclusions summarized above, as well as others stated in greater depth in my written direct testimony. Moreover, I have reached the following conclusions with respect to the written direct testimony of Dr. Rubinfeld:⁶

- *Dr. Rubinfeld proposes a two-pronged statutory rate structure (i.e., the greater of a per-play royalty and a percentage-of-revenue royalty) that would not satisfy the statutory requirements for reasonable rates and, thus, should be rejected. As described below, his proposed royalty structure—particularly the inclusion of a percentage-of-revenue prong—is unsound, and the specific royalty rates that Dr. Rubinfeld proposes for each prong are unreasonably high.*

⁵ Corrected Testimony of Daniel L. Rubinfeld, October 6, 2014 (corrected version filed November 4, 2014) (hereinafter, *Rubinfeld WDT*).

⁶ In this rebuttal report, I have attempted to address the major arguments presented by Dr. Rubinfeld and the major supporting evidence or examples referenced. Any silence with respect to a particular fact or opinion stated should not be interpreted as agreement with Dr. Rubinfeld or other SoundExchange witnesses unless I specifically state such an agreement. I reserve the right to provide further detail and examples supporting my major rebuttal points at deposition or trial, as appropriate.

- *The per-play minimum prong of Dr. Rubinfeld’s interactive-services benchmark analysis is fatally flawed and results in proposed license fees that are unreasonably high.* There are several errors that render his analysis unreliable and biased toward finding an unreasonably high rate. These shortcomings in Dr. Rubinfeld’s interactive-services benchmark analysis include the following:
 - The interactive-service license fees on which Dr. Rubinfeld bases his analysis are distorted by record company market power and do not reflect effective competition among the record company licensors. Consequently, Dr. Rubinfeld bases his benchmark analysis on rates that are above any reasonable interpretation of effectively competitive levels, and he fails to make any adjustments or corrections for the lack of competition and the existence of record company market power.
 - He uses inappropriate weights to aggregate data on royalty rates found in individual label-service contracts. This factor alone incorrectly inflates his recommended rates by 14 percent.
 - Dr. Rubinfeld’s analysis critically relies on an assumption regarding the relationship of license fees to output prices which he fails to justify and which is contrary to fundamental economic principles;
 - His analysis fails to account for revenues associated with advertising-supported services, which is the predominant business model used by streaming services. This factor alone incorrectly inflates his recommended rates by approximately 100 percent.

- His analysis fails to account for differences between interactive services and simulcasting in terms of the contribution made by licensed music content. In the particular case of simulcasting, this factor alone incorrectly inflates his recommended rates by 100 percent.
- He fails to take into account webcasters’ non-licensing costs in the determination of their willingness to pay for licenses. Together with Dr. Rubinfeld’s miscalculation of revenues, these two factors inflate his recommended rates by approximately 300 percent.
- Dr. Rubinfeld’s analysis fails to account for differences between interactive services and non-interactive services (including simulcasting) in terms of their effects on promoting or substituting for other revenue-producing services (*e.g.*, paid music downloads). Instead of relying on evidence of the record companies’ own conduct or on studies of promotion and substitution conducted by consultants for the recording industry in the ordinary course of business, he presents an unsupported and largely irrelevant series of claims regarding the alleged convergence of interactive and non-interactive services, claims that he acknowledges do not apply to simulcasting.
- He makes an adjustment to account for differences in the treatment of short-duration performances between his interactive-services benchmark contracts and SoundExchange’s proposed statutory license that is inconsistent with actual market data.

Even correcting only those biases that are readily quantifiable demonstrates that Dr. Rubinfeld's recommend rates are more than four times what his own analytical logic should compel him to recommend. For example, Dr. Rubinfeld recommends a minimum per-play royalty rate of \$0.00250 in the first year the Web IV rates will be applicable. My partial corrections summarized above and discussed in detail below yield a benchmark minimum per-play royalty rate of \$0.00059. The presence of other biases in his analysis imply that the rate that would emerge from a more fully corrected version would be even lower.

- *Dr. Rubinfeld's recommended use of a statutory fee levied as a percentage of revenue would be distortionary and contrary to statutory standards.* There are several severe flaws with this approach:
 - Under a percentage-of-revenue royalty scheme, the greater a streaming service's contribution to value, the more it pays. However, the greater a streaming service's contribution to value, the lower the relative contribution of sound recordings. Thus, use of a percentage-of-revenue royalty is counter to the statutory objective of having the license fees reflect relative contributions to value.
 - A percentage-of-revenue royalty amounts to discrimination among buyers based on their ability to generate benefits from the use of licenses, which will inefficiently suppress innovation and investment incentives.
 - A percentage-of-revenue royalty would be extremely difficult to administer for web simulcasting.

- *The percentage-of-revenue prong of Dr. Rubinfeld's interactive-services benchmark analysis is fatally flawed and results in proposed license fees that are unreasonably high.* Many of the same errors that bias his recommended per-play royalty rate upward also bias his recommended percentage-of-revenue royalty rate upward, including the failure to account for either the lack of competition among record companies or the many significant differences between on-demand and non-interactive services.
- *A greater-of structure is inappropriate for statutory fee setting.* The fundamental flaw of the greater-of structure is that it includes a percentage-of-revenue prong. As summarized above, and discussed in detail below, there are numerous problems associated with the use of revenue-based statutory royalties, whether used alone or in conjunction with a per-play minimum. Indeed, Dr. Rubinfeld's rationales for a two-prong scheme generally consist of reasons that a per-play prong is needed to correct for problems with the percentage-of-revenue prong. These problems can be avoided entirely simply by continuing to have a single, per-play royalty prong in statutory licenses.
- *Dr. Rubinfeld's claim that the presence of statutory rate only pulls negotiated rates downward is incorrect for several reasons.* These reasons include:
 - The precedential value of license negotiations on future statutory royalty determinations can lead to an upward distortion in negotiated rates.
 - A statutory rate can act as what economists call a *focal point* that allows record companies to maintain a price at that level when, absent the

statutory rate, they would break ranks and negotiate lower rates (if they were competitors).

— Under mainstream economic theories of bargaining, a party’s bargaining position is closely related to its *disagreement point* (*i.e.*, its economic welfare in the event that an agreement is not reached). Dr. Rubinfeld fails to recognize that the presence of a statutory license option could improve the disagreement point of a record company, as well as a webcaster.

4. The remainder of my written rebuttal testimony explains these conclusions in greater depth and provides details of the facts and analysis that led me to reach them.

II. THE PER-PLAY PRONG OF DR. RUBINFELD’S INTERACTIVE-SERVICES BENCHMARK ANALYSIS IS FATALLY FLAWED.

5. Dr. Rubinfeld proposes a two-pronged statutory rate structure (*i.e.*, the greater of a per-play royalty and a percentage-of-revenue royalty) based on an interactive-services benchmark.⁷ As I will discuss in this rebuttal testimony, the rates that Dr. Rubinfeld proposes for each prong of his proposal are seriously overstated and unreasonably high. As I also discuss, the two-prong, “greater of” rate structure—in particular the revenue prong—would not satisfy the statutory requirements for reasonable rates and should be rejected. I begin, in the present section, by discussing the flaws in Dr. Rubinfeld’s analysis in support of the royalty rate for the per-play prong of his proposal. I examine Dr. Rubinfeld’s analysis in support of his recommended rate for the percentage-of-

⁷ For a description of the per-play royalty, *see, Rubinfeld WDT*, ¶¶ 19-20 and 205; for a description of the percentage of revenue royalty, *see, Rubinfeld WDT*, ¶ 206; Dr. Rubinfeld’s calculations are shown in *Rubinfeld WDT*, Appendix 1.

revenue prong of his proposal in Section III. I then discuss the flaws in his proposed rate structure in Section IV.

6. Dr. Rubinfeld’s methodology for using an interactive services benchmark as the basis for a recommended per-play royalty can be broken down into two steps. First, he calculates an average per-play royalty rate paid by interactive, or on-demand, streaming services. Second, he makes adjustments to this royalty rate in an attempt to make it applicable to non-interactive streaming services, or webcasters.

7. In the first step, Dr. Rubinfeld calculates the weighted average of the minimum per-play royalty rate found in 26 contracts in effect between June 2013 and May 2014 between the four largest record companies and various interactive streaming services.⁸ Dr. Rubinfeld then adds the effective per-play value of selected additional compensation paid by Spotify to the record companies in the form of non-recoupable lump-sum payments or free advertising.⁹ He aggregates the minimum per-play royalty calculated

⁸ Dr. Rubinfeld is unable to use 19 of the major label contracts he examines because there is no per-play royalty rate in the contract. (*See, Rubinfeld WDT*, Exhibit 16a.) Of the 26 contracts that he uses, he does not have data on royalty payments in every month for all contracts, and not all products of the streaming firms have a minimum per-play royalty rate. (*See*, 14 11 05 Rubinfeld Drafts of Exhibits and Appendices in Native Format SNDEX0051684_RESTRICTED 1222.xlsx.)

⁹ Dr. Rubinfeld claims that “it is reasonable to allocate these considerations linearly, i.e., evenly on a monthly basis throughout the terms of the agreements, and then for each month, evenly on a per-play basis using the monthly performance statements. (*Rubinfeld WDT*, n. 90.) For a growing service, however, where the number of plays each month are increasing, Dr. Rubinfeld’s methodology biases his calculation of compensation per play upwards in the earlier months of the contractual payments and biases it downwards in the later months of the contractual payments. Because all of the Spotify contractual payments that he includes begin during the time period of his data and continue past the end date of his data, Dr. Rubinfeld’s methodology for allocating the payments leads to upward bias. (For a list of the payments’ beginning and ending dates, *see, Rubinfeld WDT*, Appendix 1d.)

for different product-service-label combinations in different months by applying weights based on the revenues for each product-service-label combination in each month over the time period June 2013 – May 2014.¹⁰

8. In the second step, Dr. Rubinfeld makes two adjustments to the rates in these directly negotiated, interactive-services contracts to arrive at his recommended rate.¹¹ First, he adjusts for differences in the numbers of royalty-eligible plays for interactive services and non-interactive services stemming from the different treatment of “skips” for royalty purposes by statutory and non-statutory services. Second, Dr. Rubinfeld makes an “interactivity adjustment” by assuming that the ratio of the statutory per-play royalty to the non-interactive, per-month subscription service price should be approximately equal to the ratio of the interactive per-play royalty to the interactive, per-month

¹⁰ Dr. Rubinfeld also calculates an average effective per-play royalty rate based on 45 contracts between the four largest record companies and various interactive streaming services. As with the minimum per-play calculation, Dr. Rubinfeld includes both royalties paid and the value of non-recoupable lump-sum payments or free advertising, and he aggregates across the service-label combinations using service revenues as weights. Dr. Rubinfeld’s calculation of an average effective per-play royalty appears to play no role in the benchmark analyses he offers in support of his recommended royalty rates. (See, 14 11 05 Rubinfeld Drafts of Exhibits and Appendices in Native Format SNDEX0051684_RESTRICTED 1222.xlsx; and *Rubinfeld WDT*, Exhibit 16.a.)

¹¹ In addition to the adjustments discussed here, Dr. Rubinfeld also makes an adjustment for the fact that all of the contracts he uses are with major labels, although he estimates that nearly one quarter of plays on interactive services are of recordings of independent labels (“indies”). (*Rubinfeld WDT*, ¶ 225.) His adjustment involves assuming that the indies and the majors receive the same royalty rates but the indies do not receive any advertising or non-recoupable cash payments. This adjustment reduces his benchmark per-play royalty by \$0.00005. That is, his benchmark royalty based on majors and indies is just two percent lower than his benchmark based only on majors. Given the very significant problems that cause him to generate a rate proposal that is more than four times higher than even a partially corrected analysis, I ignore his indie adjustment and simply analyze his benchmark based on interactive services contracts with major record labels.

subscription service price.¹² Based on this assumption, he divides the interactive, per-play royalty for each interactive-service/label combination by the ratio of monthly subscription prices to arrive at an equivalent per-play royalty for a non-interactive service.¹³

9. As I will now discuss, both Dr. Rubinfeld's methodology and his application of it are deeply flawed in ways that render his findings unreliable and substantially bias his benchmark rates upwards. The first two subsections below discuss serious flaws in Dr. Rubinfeld's calculation of the interactive per-play royalty rate that is the starting point of his analysis, *i.e.*, before he makes any adjustments. The next five subsections then discuss serious flaws in Dr. Rubinfeld's royalty-bearing-plays adjustment and interactivity adjustment. As a result of flaws in his analysis, Dr. Rubinfeld generates a rate proposal that is more than four times higher than would be indicated by analysis that even partially corrects for the upward biases in his approach.

A. **DR. RUBINFELD'S INTERACTIVE-SERVICES BENCHMARK IS CONTAMINATED BY A LACK OF EFFECTIVE COMPETITION.**

10. A first problem with Dr. Rubinfeld's per-play royalty is that it fails to account for the fact that the privately negotiated license fees paid by interactive services are significantly higher than those that would be paid in an effectively competitive market.

¹² *Rubinfeld WDT*, ¶ 169. Later in his testimony, Dr. Rubinfeld also cites estimates of consumers' willingness to pay in support of his chosen interactivity adjustment. (*Rubinfeld WDT*, ¶¶ 209-10.)

¹³ More intuitively, his adjustment imposes the same relationship between royalty rates as exists between monthly subscription prices. If the non-interactive subscription price is one half of the interactive subscription price, then he sets the non-interactive (statutory) royalty rate as one half of the interactive royalty rate.

Because the rates that would emerge in an effectively competitive market are the appropriate basis for the statutory rate, a downward adjustment to account for record-company market power resulting from the lack of competition must be made in order to derive a reasonable royalty. Dr. Rubinfeld, however, makes no attempt to correct for the presence of recording industry market power and the lack of effective competition. This is a serious omission.

1. **[[REDACTED]], the statutory standard is most appropriately interpreted as asking what would happen in a competitive market.**

11. In deposition, Dr. Rubinfeld described his understanding that [[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]¹⁴ His deposition testimony in this regard is [[REDACTED]]
[[REDACTED]]¹⁵

12. Although Dr. Rubinfeld admits that [[REDACTED]]
[[REDACTED]]
[[REDACTED]], his benchmark analysis does not consider the degree of competition among record companies in the licensing of sound recordings for streaming by his benchmark interactive services. Dr. Rubinfeld's written direct testimony provided no analysis of—nor even any mention of—effective competition or record company

¹⁴ Deposition of Daniel L. Rubinfeld, December 11, 2014 (hereinafter, *Rubinfeld Deposition Tr.*), at 74 [emphasis added].

¹⁵ *Katz WDT*, ¶ 17; Determination of Royalty Rates for Digital Performance Right in Sound Recordings and Ephemeral Recordings, Final Rule and Order, 79 FR 23102 (April 25, 2014) (hereinafter, *Web III Remand Decision*) at 23114, n. 37 and sources cited therein.

market power. Although in deposition, [[REDACTED]]
[[REDACTED]],¹⁶ his written direct testimony discusses only his view of the bargaining power of certain buyers (such as iHeart and YouTube, whose licensing arrangements he dismisses as benchmarks)¹⁷ and he presented no written or deposition testimony indicating how he took into account the market power of sellers (*i.e.*, the major record companies) and the lack of competition among them in licensing to his benchmark interactive services.

13. Dr. Rubinfeld's failure to address the issue of record company market power in his testimony in this proceeding is a very serious shortcoming because, as I will next discuss, the evidence clearly demonstrates that the market for sound recording performance rights licenses to on-demand services is not effectively competitive. Indeed, [[REDACTED]]
[[REDACTED]]
[[REDACTED]] This lack of effective competition means that the royalty rates charged by the record companies to on-demand services do not constitute not an appropriate benchmark.

¹⁶ Dr. Rubinfeld testified in deposition: [[REDACTED]]
[[REDACTED]]
[[REDACTED]] (Rubinfeld Deposition Tr. at 38; see, also, Rubinfeld Deposition Tr. at 37-41.)

¹⁷ Dr. Rubinfeld opines on the bargaining power of iHeart, Apple, Google, Spotify, and YouTube. (Rubinfeld WDT, ¶¶ 24, 146-52 and 193-95.)

2. [REDACTED]

14. As I explained in my written direct testimony, a market can be competitive only if buyers have the ability to substitute the offerings of one seller for those of another.¹⁸ It is this possibility of substitution that drives each seller to offer higher quality and lower prices in order to attract buyers to itself rather than its rivals. And it is this possibility of substitution (that is, the presence of competition) that ensures that no seller has inordinate market power. In his *Microeconomics* textbook, Dr. Rubinfeld expresses similar ideas. He characterizes “highly competitive” markets as those in which “firms face highly elastic demand and relatively easy entry and exit.”¹⁹ Elsewhere in his textbook, he describes how the possibility of consumer substitution is what gives rise to highly elastic demand:²⁰

In general, the price elasticity of demand for a good depends on the availability of other goods that can be substituted for it. When there are close substitutes, a price increase will cause the consumer to buy less of the good and more of the substitute. Demand will then be highly price elastic. When there are no close substitutes, demand will tend to be price inelastic.

In summary, Dr. Rubinfeld’s textbook states that, in a market with no close substitutes, demand will tend to be price inelastic and, thus, the market will *not* be highly

¹⁸ Katz *WDT*, § IV.D.1.

¹⁹ Robert S. Pindyck and Daniel L. Rubinfeld (2001), *Microeconomics*, Upper Saddle River, NJ: Prentice Hall, at 253.

²⁰ Robert S. Pindyck and Daniel L. Rubinfeld (2001), *Microeconomics*, Upper Saddle River, NJ: Prentice Hall, at 31.

[REDACTED]]²³ A situation in which a seller holds almost all of the bargaining power and the buyer holds little or none clearly is not one of effective competition.

3. Other evidence clearly establishes that the market for recording performance rights licenses sold to interactive services is not effectively competitive.

17. Extensive evidence clearly demonstrate that the market for recording performance rights licenses sold to interactive services is not effectively competitive because on-demand services have little or no ability to engage in substitution.²⁴

(a) *On-demand services cannot drop the catalogs of any of the majors.*

18. One reason that interactive services have little or no ability to engage in substitution is that they cannot drop the catalogs of any of the majors. Dr. Rubinfeld testified in deposition that [[REDACTED]

23

[[REDACTED]]

24

In contrast to an on-demand service, non-interactive services such as iHeart and Pandora can engage in significant steering and non-interactive services may even be able to drop a record company from their custom radio services and still be successful webcasters. [[REDACTED]

[REDACTED]

For these reasons, the rates contained in direct licensing deals between either iHeart or Pandora and record companies are more likely to reflect rates obtained by a willing buyer and willing seller in an effectively competitive market than are deals negotiated between on-demand services and record companies.

[REDACTED]

19. [REDACTED]

25

Specifically,

[REDACTED]

(*Rubinfeld Deposition Tr.* at 41-42.)

26

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

20. The FTC agreed. In his statement announcing that the FTC was closing its investigation of the merger (attached as NAB Ex. 34), the Commission’s Bureau of Competition stated: “Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive.”³⁰

27

[REDACTED]

28

[REDACTED]

29

[REDACTED]

30

Statement of Bureau of Competition Director Richard A. Feinstein *In the Matter of Vivendi, S.A. and EMI Recorded Music* September 21, 2012, available at http://www.ftc.gov/sites/default/files/documents/closing_letters/proposed-acquisition-vivendi-s.a.emi-recorded-music/120921emifeinsteinstatement.pdf, site visited August 5, 2014.

21. When access to each major's catalog is essential for the commercial survival of a streaming service, each major has monopoly power. [[REDACTED]

[REDACTED]

[REDACTED]

22. [[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]³²

(b) Licenses to the Majors' Catalogs are Complements not Substitutes

23. Rather than being substitutes from the perspective of on-demand services, the rights to stream majors' catalogs are complements. As I explained in my written direct testimony, the result is a market structure that gives rise to even higher prices than would

31 [[REDACTED]

[REDACTED]]

32 [[REDACTED]

[REDACTED]

monopoly.³³ In other words, oligopolists selling complementary products set prices that are even more far removed from competitive prices than are the prices set by a monopolist or a perfect cartel. Therefore, the prices that emerge in such a market manifestly are not those that would arise in an effectively competitive market.

24. Dr. Rubinfeld acknowledged in deposition that [[REDACTED]
[[REDACTED]]³⁴ Moreover, [[REDACTED]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]³⁵

25. [[REDACTED]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]

³³ *Katz WDT*, ¶¶ 41-43.

³⁴ *Rubinfeld Deposition Tr.* at 49.

³⁵ [[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]

³⁶ [[REDACTED]]
[[REDACTED]]

[REDACTED]

[REDACTED]³⁷

26. [[[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]]

27. The FTC agreed with the conclusion that the majors’ catalogs are complements not substitutes, and it also concluded that such complementarity limits competition:

“Because each Major currently controls recorded music necessary for these streaming services, the music is more complementary than substitutable in this context, leading to limited direct competition between Universal and EMI.”³⁹

28. [[[REDACTED]

[REDACTED]

[REDACTED]

³⁷ *Id.*, § 3.2.1.

³⁸ [[[REDACTED]

³⁹ Statement of Bureau of Competition Director Richard A. Feinstein *In the Matter of Vivendi, S.A. and EMI Recorded Music* September 21, 2012, available at http://www.ftc.gov/sites/default/files/documents/closing_letters/proposed-acquisition-vivendi-s.a.emi-recorded-music/120921emifeinsteinstatement.pdf, site visited August 5, 2014.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

29. [[REDACTED]

[REDACTED]

[REDACTED]

(c) *Executives of two of the three majors testified* [REDACTED]

30. Mr. Harrison, Senior Vice President, Business & Legal Affairs, Global Digital Business, UMG Recordings, Inc., testified that, [[REDACTED]

[REDACTED]

[REDACTED]

⁴⁰ *Rubinfeld Deposition Tr.* at 103.

⁴¹ [[REDACTED]

[REDACTED]

[REDACTED]]⁴² Mr. Harrison testified:⁴³

[[[REDACTED]
[REDACTED]
[REDACTED]]

31. Similarly, Mr. Kooker, President, Global Digital Business and U.S. Sales, Sony Music Entertainment, testified that, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]]⁴⁴ This last point is not surprising—in

⁴² Deposition of Aaron Harrison, December 5, 2014 (hereinafter *Harrison Deposition Tr.*), at 216-217.

⁴³ *Id.* at 217. Mr. Harrison’s statement is consistent with [[[REDACTED]
[REDACTED]
[REDACTED]]

⁴⁴ Mr. Kooker testified as follows:

[[[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]

addition to being unable to drop a major record company, on-demand services have little ability to shift play share among record companies.

(d) *On-demand services have little or no ability to engage in steering.*

32. Because their customers choose the recordings to which to listen, on-demand services have limited possibilities to steer their listeners toward the recordings of particular record companies.⁴⁵ This inability of on-demand services to engage in significant steering severely limits their ability to engage in substitution and, thus, contributes to the lack of competition to sell licenses to them. This inability is also yet another source of difference between statutory services and the interactive services that Dr. Rubinfeld uses as his benchmark. Because statutory services, by definition, choose the music that is webcast, they have the ability to engage in steering. This difference is another reason that Dr. Rubinfeld's statutory rate recommendation is unreliable.

33. Dr. Rubinfeld [[REDACTED]]
[[REDACTED]] Specifically, he testified that, [[REDACTED]]
[[REDACTED]]
[[REDACTED]]

(Deposition of Dennis Kooker, December 18, 2014 (hereinafter *Kooker Deposition Tr.*) at 63-64.)

⁴⁵ As Dr. Rubinfeld testified, [[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]
[[REDACTED]]

⁴⁶ *Rubinfeld Deposition Tr.* at 52-53.

[REDACTED]

Dr. Rubinfeld’s statement that [[REDACTED]]
[[REDACTED]]] A statutory service could well use the possibility of steering to negotiate lower license fees with multiple majors—each major would agree to lower fees in order to ensure that its share of plays on that service was not reduced relative to the shares of other record companies. Unless the record companies were acting a cartel, each record company would agree to lower rate in order to avoid losing out to its rivals.

34. It is important to recognize, that even if statutory, non-interactive services did not have the ability to engage in significant steering, Dr. Rubinfeld’s interactive services benchmark would still fail to reflect the outcome of an effectively competitive market and, thus, his analysis leads to recommended royalty rates that are unreasonably high.

(e) *Dr. Rubinfeld’s claim that Spotify possessed offsetting market power that led to competitive rates is without merit and [[REDACTED]]*

35. Dr. Rubinfeld claims that “some major direct licensees (e.g. Spotify) may have unusual bargaining power in negotiations with labels.”⁴⁷ He identifies three reasons that he says Spotify may have greater bargaining power than otherwise: (a) the major record companies each have small equity stakes in Spotify; (b) Spotify’s revenue per user is

⁴⁷ *Rubinfeld WDT*, ¶ 146.

high, exceeding annual per-capita music expenditure in the U.S.; and (c) Spotify is “the preeminent international music service,” offering service in over 100 countries.⁴⁸

36. Dr. Rubinfeld offers no evidence that the record companies’ individual equity stakes are large enough to have a significant influence on the royalties paid by Spotify.⁴⁹ Moreover, Dr. Rubinfeld could just as well as have argued that the record companies’ ownership interests put them in a position to induce Spotify to pay higher prices than it otherwise would have. In short, there is no reason to believe any influence coming through these small equity stakes would be sufficient to overcome the lack of competition discussed above.

37. Turning to Dr. Rubinfeld’s second reason, under the leading economic theories of bargaining, if Spotify’s revenue (and profits) per user were high, then a record company with significant market power would tend to charge Spotify higher prices, not lower. Hence, any such profitability would not be a source of offsetting bargaining power.

38. Lastly, consider Spotify’s size. In my written direct testimony, I explained why buyer power cannot offset seller market power in this market. In short, the reason is that, in order to put competitive pressure on a seller, a buyer must have other suppliers to which it could credibly threaten to shift purchases today or in the near future (say, by

⁴⁸ *Rubinfeld WDT*, ¶ 147.

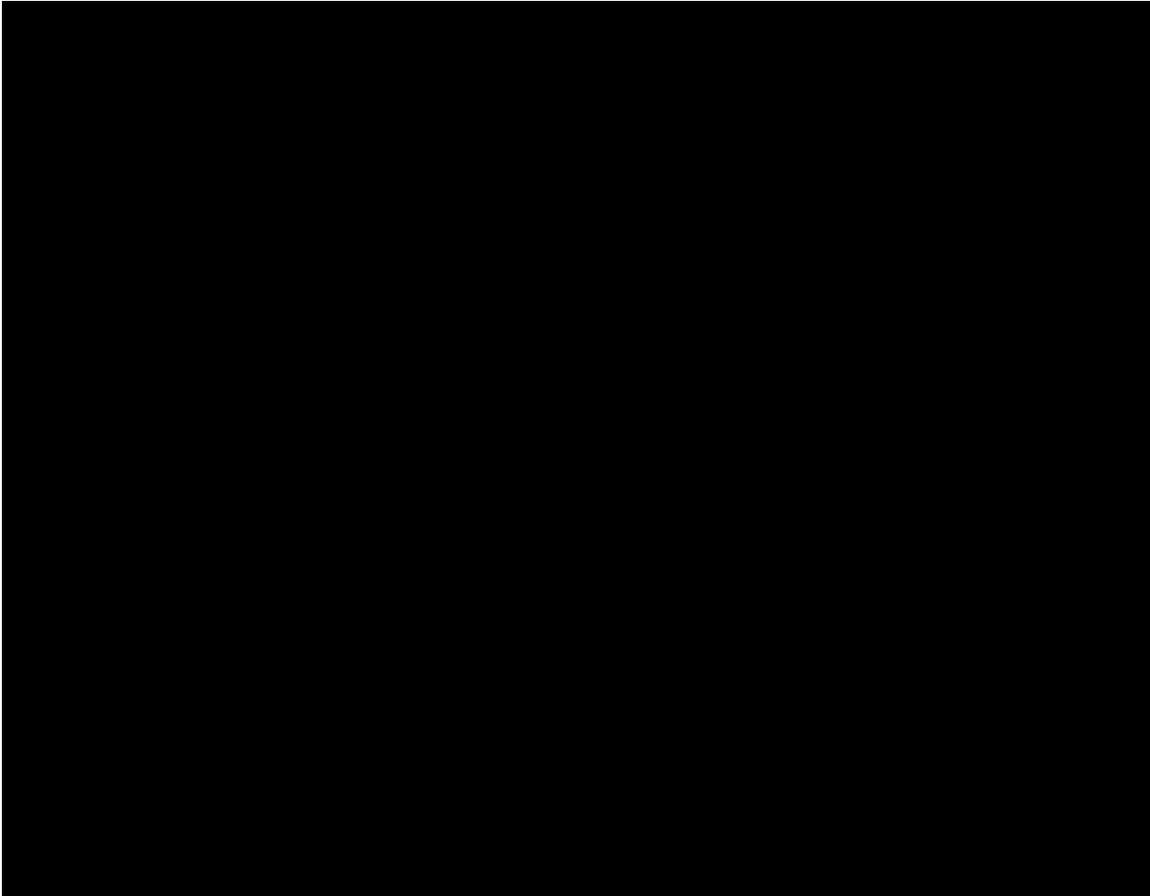
⁴⁹ According to a source cited by Dr. Rubinfeld, the major record companies collectively own about 20 percent of Spotify. (*Rubinfeld WDT*, note 98, citing Paul Resnikoff, The Major Labels Are Trying to Sell Spotify for \$10 Billion, Sources Say, Digital Music News, June 11, 2014, available at <http://www.digitalmusicnews.com/permalink/2014/06/11/major-labels-trying-sell-spotify-10-billion-sources-say>, site visited February 18, 2015.)

sponsoring entry). Without such choice, a buyer—no matter how large and sophisticated—cannot force a seller to reduce price.⁵⁰ Because a license to each major record company’s catalog is essential to the commercial viability of an on-demand service, such a service has no choice but purchase a license from each major and, therefore, the service lacks a means of exerting competitive pressure on the major record companies. In contrast, a major record company has many other outlets for its music.

39. [[[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]]⁵¹

⁵⁰ *Katz WDT*, § IV.D.1.

⁵¹ [[[REDACTED]
[REDACTED]]



40. It is informative to observe the powerful asymmetry in the positions of the record company and on-demand streaming service identified by Dr. Rubinfeld. The streaming service is dependent on a license from each major in order to survive, while the record company has several alternatives. Although it is the largest on-demand service, Spotify accounts for only a very small fraction of the revenues the recording industry earns from its music.⁵²

⁵² RIAA estimated that U.S. music industry revenues (including physical sales, digital sales, performance rights, and synchronization rights) totaled nearly \$7 billion in 2013. (Joshua P. Friedlander, News and Notes on 2013 RIAA Music Industry Shipment and Revenue

41. [REDACTED]
[REDACTED]
[REDACTED]

B. DR. RUBINFELD USED INAPPROPRIATE WEIGHTS THAT BIAS HIS ROYALTY RATE CALCULATION UPWARD.

42. To calculate his minimum per-play royalty rate, Dr. Rubinfeld weighted the observed per-play royalty in each month for each product-service-label combination by the pro-rata service revenue associated with the product-service-label combination in each month.⁵⁴

43. The flaw in Dr. Rubinfeld’s use of service revenue as weights can be seen by considering a hypothetical example. Suppose there are 1,000 plays in total, and half of these plays are by services earning \$0.0030 per play and paying a royalty of \$0.0020 per play, and half by services earning nothing per play and paying a royalty of \$0.0010 per play. Dr. Rubinfeld’s weighting scheme would determine that the average royalty rate is \$0.0020 per play, but clearly, \$0.0015 (which is the weighted average using plays as weights: $(500 \times \$0.0020 + 500 \times \$0.0010) / 1000 = \$0.0015$) is a more meaningful

Statistics,” available at <http://riaa.com/media/2463566A-FF96-E0CA-2766-72779A364D01.pdf>, site visited February 21, 2015.) Using Dr. Rubinfeld’s data and his assumptions about the share of plays that are of indie labels and the royalty paid on those plays, I estimate that Spotify paid approximately \$170 million in performance rights in the twelve-month period June 2013-May 2014. This implies that Spotify’s performance rights payments represent about 2.5 percent of U.S. music industry revenues.

⁵³ [REDACTED]

⁵⁴ For Dr. Rubinfeld’s calculations, see, 14 11 05 Rubinfeld Drafts of Exhibits and Appendices in Native Format SNDEX0051684_RESTRICTED 1222.xlsx.

measure of the average royalty rate paid by the two services. Dr. Rubinfeld’s approach systematically over-weights those services that are paying higher royalty rates.⁵⁵

44. Table 1 below shows the impact on Dr. Rubinfeld’s royalty benchmarks of correcting the weights.⁵⁶ Correcting the choice of weights alone would reduce Dr. Rubinfeld’s minimum per-play royalty rate (before adjustments) by over ten percent, from \$0.005337 per play to \$0.004697 per play.

Table 1: Correcting Dr. Rubinfeld’s Weighting Scheme

	Average Minimum Per-Play Rate	
	Using Dr. Rubinfeld's Weights	Using Corrected, Play Weights
Average Minimum Per-Play Royalty Rate	\$0.005337	\$0.004697

Notes: Dr. Rubinfeld's weighted average minimum per-play royalty rate is given in *Rubinfeld WDT*, Exhibit 16a.
Corrected, play-weighted average calculated using Dr. Rubinfeld's data for his Category A services. The play-weighted average uses only on-demand products that have a minimum per-play rate.

⁵⁵ Section IV.D below provides an illustration of this problem with Dr. Rubinfeld’s weighting scheme in the context of calculating an average effective per-play royalty rate.

⁵⁶ I note that Dr. Rubinfeld calculated a weighted average across products for each service-label using only products for which there was a minimum per-play rate and weighting by product revenue. He then calculated a weighted average across all service-label combinations using as weights revenue for all interactive products for that service-label, whether or not the product had a minimum per play rate. In my calculations, in addition to using label-play weights rather than service-revenue weights, I also calculate the weighted average across product-service-label combinations, using only products for which there was a minimum per-play rate.

C. **DR. RUBINFELD’S INTERACTIVE-BENCHMARK ANALYSIS CRITICALLY DEPENDS ON AN ASSUMPTION FOR WHICH HE OFFERS NO JUSTIFICATION AND WHICH IS CONTRARY TO FUNDAMENTAL ECONOMIC PRINCIPLES.**

45. Even assuming the interactive license agreements were reached in a competitive market, Dr. Rubinfeld’s methodology for calculating a benchmark applicable to non-interactive services is unsound and renders his analysis and recommended royalty rates unreliable. In his written testimony, he states “I have assumed that the ratio of the average retail subscription price to the per-subscriber royalty paid by the licensee to the record label is approximately the same in both interactive and non-interactive markets.”⁵⁷ He offers no sound basis for his assumption that the ratio of the monthly subscription price to the royalty rate would be the same for both types of services and, indeed, economic principles indicate that the ratio generally would not be the same. Even when calculating his recommended per-play rate, Dr. Rubinfeld effectively assumes that the royalty should be the same, constant percentage of revenue across licenses for both interactive and non-interactive services.⁵⁸

1. **Dr. Rubinfeld offers no support or justification for his assumption that royalty rates would be proportional to prices (and revenues) in effectively competitive markets.**

46. Dr. Rubinfeld’s sole justification for the assumption that royalties would be a constant percentage of revenues in an effectively competitive market is that the

⁵⁷ *Rubinfeld WDT*, ¶ 169.

⁵⁸ Dr. Rubinfeld makes this clear in *Rubinfeld WDT*, ¶ 211.

assumption was made in the past.⁵⁹ The Web II and Web III decisions that adopted this assumption did so on the basis of an analysis provided by Dr. Michael Pelcovits.⁶⁰ In deposition, [[REDACTED]

[REDACTED]

[REDACTED]

47. As explained by Dr. Pelcovits, his analysis was based on the assumption that the elasticities of demand for interactive and non-interactive services were similar. Dr. Rubinfeld testified that [[REDACTED]

[REDACTED]]⁶² He therefore cannot rely on Dr. Pelcovits's (flawed) analysis to justify the interactive benchmark offered in Web IV.⁶³

⁵⁹ “In dividing interactive rates by the interactivity adjustment factor to remove the value of interactivity, I follow past practices.” (*Rubinfeld WDT*, note 124.) Asked about the reasoning behind his adjustment, Dr. Rubinfeld testified:

[[REDACTED]

(*Rubinfeld Deposition Tr.* at 194)

⁶⁰ *Web II Decision* at 24092; *Web III Remand Decision* at 23115-119.

⁶¹ *Rubinfeld Deposition Tr.* at 193-94.

⁶² Dr. Rubinfeld testified, [REDACTED]

48. Because Dr. Rubinfeld relied only on “past practice” and [REDACTED] [REDACTED] Dr. Rubinfeld has nothing left to support his theory.⁶⁴

2. Dr. Rubinfeld’s assumption that royalty rates would be proportional to prices in effectively competitive markets is contrary to fundamental economic principles.

49. First, it should be observed that, in a perfectly competitive market, a buyer’s valuation of the good or service would have no effect on the price paid;⁶⁵ instead, price would be driven by the seller’s cost. In imperfectly competitive markets, the buyer’s valuation could come into play to a limited degree.⁶⁶ Even in this case, that valuation would depend on the profits the buyer would earn from using the input, not on the revenues he would earn. Even when prices reflect buyers’ average valuations (*i.e.*, when the seller charges higher prices knowing that many consumers are willing to pay those prices) it does not follow that the seller will engage in price discrimination. For example, a popular restaurant may raise its prices above its costs to reflect consumers’ high willingness to pay to eat its cuisine but typically will do so by charging all diners the same prices for its food.

[REDACTED]

⁶³ For my discussion of the central flaws in Dr. Pelcovits’s analysis, see, *Katz WDT*, § 5.

⁶⁴ *Rubinfeld Deposition Tr.* at 192-94.

⁶⁵ The buyer’s valuation (compared to the price) would determine whether he made the purchase, but not what the purchase price was.

⁶⁶ If buyers’ valuations play too large a role in determining prices, then that role would be indicative that sellers have substantial market power or even monopoly power.

50. Fundamental economic principles—as well as common sense—indicate that the price reached between a willing seller and a willing buyer in an imperfectly competitive market will reflect: (a) the seller’s costs of providing the good or service, and (b) the buyer’s benefits of obtaining and using the good or service. The seller’s costs include its opportunity costs. In the case of a buyer that is a business enterprise purchasing an input used in its operations, the buyer’s benefits are *profits* that it can earn from use of the input gross of the costs of obtaining the input. Stated another way, the buyer’s derived demand for the input will depend on the gross profits that it can earn from utilizing the input. These gross profits equal the revenue that the firm earns from use of the input combined with other inputs minus the costs of those other inputs. Specifically, in the case of a non-interactive service, the relevant measure of revenue for determining a per-play license fee is the revenue per play attributable to the licensed content.

51. As I will discuss in subsequent parts of this section, Dr. Rubinfeld:

- uses an inappropriate measure of buyer (*i.e.*, service) revenues;
- fails to account for buyer costs; and
- ignores important differences in record companies’ opportunity costs of licensing to interactive and non-interactive services.

All of these omissions bias his recommended statutory rate upwards.

D. DR. RUBINFELD USES AN INAPPROPRIATE MEASURE OF REVENUES IN COMPARING INTERACTIVE AND NON-INTERACTIVE SERVICES.

52. Dr. Rubinfeld makes two errors in his calculation of the revenues that he implicitly uses to construct his interactivity adjustment. I discuss each, in turn.

1. Dr. Rubinfeld inappropriately excludes advertising revenues from much of his benchmark analysis.

53. Although Dr. Rubinfeld admits the importance of the advertising-supported business model for streaming services, he bases his benchmark analysis largely on subscription services.⁶⁷ Dr. Rubinfeld states that his “analysis does not explicitly account for ‘free’ ad-supported services.”⁶⁸ He takes this approach despite the fact that SoundExchange witnesses admit that the subscription business model is largely unsuccessful for non-interactive services and even many on-demand users choose not to take subscriptions.⁶⁹ Indeed, Dr. Rubinfeld admits that [REDACTED]

⁶⁷ Although Dr. Rubinfeld’s interactivity adjustment is based solely on subscription services, some of the firms whose products Dr. Rubinfeld includes in his benchmark calculations offer both advertising-supported and subscription on-demand products. I have classified the on-demand services in his data as being either ad-supported or subscription based on the product name provided in Dr. Rubinfeld’s data or information on the website of the provider; products that appear to be free trials are included with the subscription services. Dr. Rubinfeld includes interactive products with positive service revenue in his analysis; 9 percent of the included service revenue is from on-demand products that appear to be ad-supported and 91 percent is from products that appear to be subscription.

⁶⁸ *Rubinfeld WDT*, ¶ 170.

⁶⁹ For example, Dr. Rubinfeld discussed the success of ad-supported versus subscription services:

[A]bout 96% of Pandora listeners and 75% of Spotify listeners have chosen their ad-supported versions over the paid but ad-free subscription versions. As a case in point, even though it was the first subscription-based digital music service, Rhapsody did not offer free ad-supported services. *Not surprisingly*, Rhapsody has seen less growth than Pandora or Spotify.... [F]ree [ad-supported] services account for 78% of all music streaming listeners.

(*Rubinfeld WDT*, ¶¶ 70 and 73.) Dr. Blackburn testified that “Few of Pandora’s customers are paid subscribers; only about 15 percent of its revenue between 2011 and 2013 came from premium subscription service – most comes from ad revenues from its free offering...” (Report of David Blackburn, Ph.D., October 6, 2014 (hereinafter, *Blackburn WDT*), ¶ 102.)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]⁷¹

54. Dr. Rubinfeld asserts that [[REDACTED]

[REDACTED]

[REDACTED]] the relevant data for assessing the services' demands for licenses concern advertising revenues, not the notional values what consumers might have been willing to pay for various services had they been asked to do so.

55. Dr. Rubinfeld's omission of the dominant business model for non-interactive services is troubling because there are important differences between advertising-supported and subscription business models in terms of their implications for a service's derived demand for licensed music. In addition to having very different levels of revenues per play, the advertising-supported and subscription models attract different consumers. Specifically, consumers who choose to pay for subscription services are an unrepresentative minority of all consumers who stream music. Subscribers to non-interactive services apparently are less price sensitive than the majority of consumers. Non-interactive, ad-supported appears to be a high-volume, low-margin business, appealing to consumers with a lower willingness to pay for access to music.

⁷⁰ *Rubinfeld Deposition Tr.* at 167.

⁷¹ *Id.* at 170-71.

⁷² *Id.* at 173.

56. As described above, Dr. Rubinfeld makes adjustments to the interactive-services average royalty to convert it to what he believes is an appropriate benchmark royalty for non-interactive services. A critical adjustment is his “interactivity adjustment,” in which the interactive per-play royalty rate is scaled down by the ratio of the average non-interactive subscription price to the average interactive subscription price to arrive at his benchmark royalty.^{73, 74}

57. The only sound economic rationale for looking at how much consumers pay for subscriptions to interactive and non-interactive services is if they are good measures of the relative amounts of revenue that services earn; this is because revenues will affect buyer’s derived demand for a license to recordings.⁷⁵ However, a two-sided platform—of which advertising-supported streaming services are examples (they bring together listeners on one side of the platform with advertisers on the other)—may earn revenues

⁷³ *Rubinfeld WDT*, ¶ 207.

⁷⁴ Dr. Rubinfeld also examines estimates of consumer willingness to pay for interactive and non-interactive services as an alternative to using their average prices. He asserts that Dr. McFadden’s analysis indicates that the willingness-to-pay ratio is 1.9, and he concludes that his own assumption of a ratio of 2.0 is conservative. (*Rubinfeld WDT*, ¶ 209-210.)

Estimates of consumer willingness to pay were provided by Dr. McFadden in his testimony for SoundExchange in this proceeding. (Testimony of Daniel L. McFadden, October 6, 2014 (hereinafter, *McFadden WDT*)).

⁷⁵ Dr. Rubinfeld makes claims regarding consumer behavior to justify looking at subscription services rather than advertiser-supported services. (*Rubinfeld WDT*, ¶ 170.) I am unable to discern any economic logic to his claims.

Dr. Rubinfeld also misapplies the results of the survey presented by Dr. McFadden by confusing marginal consumers (whose valuations are relevant for price setting and a service’s willingness to pay for a license) with average consumers (whose values are reported by Dr. McFadden). (*See, e.g., McFadden WDT*, ¶¶ 60 and 62.)

from users on either or both sides of the platform.⁷⁶ In terms of its effects on a service’s demand for a music license, it makes no difference whether the service derives its revenues from advertising or from subscriptions. The relevant measure of revenues for these services thus should include both subscription and advertising revenues.

58. Because the relevant measure of revenues includes both advertising and subscription revenues, Dr. Rubinfeld’s interactivity adjustment should have used the ratio of total revenues per play for interactive and non-interactive services rather than the ratio of their subscription prices or the ratio of consumer’s estimated willingness to pay. The interactive services royalty data used by Dr. Rubinfeld include both ad-supported and subscription products and, thus, can be used to calculate the total revenue (advertising plus subscriptions) per play for the interactive services included in this analysis. Dr. Rubinfeld’s data also includes some non-interactive products offered by the interactive-services firms from which one can calculate total revenue (advertising plus subscription) per play for non-interactive services. Table 2 below shows these calculations including comparable data for Pandora, as it is a large, non-interactive service not found in Dr.

⁷⁶ A two-sided market is one in which an intermediary provides a platform that is used by two distinct sets of customers. The two sets of customers may interact through the platform, and the platform provider may charge positive—or negative—prices to the customers on each side. Examples include payment card networks such as Visa and MasterCard (card-accepting merchants and card-carrying consumers are the two sets of customers) and newspapers (advertisers and readers are the two sets of customers). See, for example, Mark Armstrong (2006), “Competition in two-sided markets,” *RAND Journal of Economics*, **37**(3): 668-691; Jean-Charles Rochet and Jean Tirole (2003) “Platform Competition in Two-Sided Markets,” *Journal of the European Economic Association*, **1**(4): 990–1029; Jean-Charles Rochet and Jean Tirole (2006), “Two-Sided Markets: A Progress Report,” *RAND Journal of Economics*, **37**(3): 645-667.

Rubinfeld's data.⁷⁷ Finally, the table shows the two methods Dr. Rubinfeld used to arrive at his interactivity adjustment, based on unweighted average monthly prices and consumer willingness-to-pay. As can be seen in Table 2, Dr. Rubinfeld's choice to base his interactivity adjustment on only subscription prices greatly understates the proper adjustment. If the adjustment were based on both subscription and advertising revenues, then the adjustment factor would nearly double from 2.0 to 3.96.

Table 2: Comparison of Rubinfeld's Interactivity Adjustment to an Interactivity Adjustment based on Revenue per Play

			Unweighted Average Monthly Price	"Interactivity Adjustment" (Interactive / Non-interactive)
<i>Dr. Rubinfeld's interactivity adjustment using unweighted average monthly subscription prices</i>				
Interactive services			\$9.86	
Non-interactive services			\$4.84 - \$5.27	2.04 - 1.87
	Service Revenue (incl. advertising and subscription)	Plays	Revenue per Play	"Interactivity Adjustment" (Interactive / Non-interactive)
<i>Interactivity adjustment using revenue per play</i>				
Interactive services	\$403,358,313	36,389,232,297	\$0.01108	
Non-interactive services	\$783,809,583	280,202,898,569	\$0.00280	3.96

Notes: Service revenue and label plays for Non-interactive services and for non-Pandora Interactive services are from the data collected by Dr. Rubinfeld from various royalty reports for June 2013 - May 2014. (See, 'All Data' tab in 14 11 05 Rubinfeld Drafts of Exhibits and Appendices in Native Format SNDEX0051684_RESTRICTED.xlsx.)

The classification of products as interactive or non-interactive follows Dr. Rubinfeld's classification in his reported data.

Rubinfeld interactivity adjustment using unweighted average monthly prices is given in *Rubinfeld WDT*, Ex.5.

Pandora data are from Pandora Annual Report for the year ended 12/31/2014, and *Shapiro WDT*, Appendix D.

Pandora data for 2013 and 2014 are used to estimate data for the same time period as Dr. Rubinfeld's data, June 2013 - May 2014.

⁷⁷

Dr. Rubinfeld used Pandora's subscription price (for the non-interactive Pandora One product) as an input in his interactivity adjustment based on interactive and non-interactive prices. (See, *Rubinfeld WDT*, Exhibit 5.)

59. Table 3 below shows the impact on the minimum per-play royalty rate of correcting Dr. Rubinfeld’s interactivity adjustments. Dr. Rubinfeld’s interactivity adjustment amounts to recommending a statutory per-play royalty rate equal to 50 percent of the interactive per-play royalty rate. An interactivity adjustment more properly based on both advertising and subscription revenues would set the benchmark royalty rate equal to 25.2 percent of the interactive royalty rate.⁷⁸ Hence, this correction alone reduces the recommended non-interactive per-play royalty by half, to \$0.001347 per play. Of course, even this partially corrected rate calculation yields a benchmark that is too high because it makes no correction for record company market power and the other factors discussed in the remainder of this section.

Table 3: Correcting Dr. Rubinfeld’s Interactivity Adjustment Using All Revenues

	Average Minimum Per-Play Rate	
	Adjustment based on Subscription Prices	Adjustment based on All Revenues
Dr. Rubinfeld’s Average Minimum Per-Play Royalty Rate	\$0.005337	\$0.005337
Interactivity Adjustment Factor	2.00	3.96
Adjusted Average Minimum Per-Play Royalty Rate	\$0.002668	\$0.001347

⁷⁸ Dr. Rubinfeld divides the interactive rate by 2.0, which is equivalent to multiplying it by 50 percent. An adjustment that used both advertising and subscription revenues would divide the interactive rate by 3.96, which is equivalent to multiplying the rate by 25.2 percent ((1/3.96 = 0.252).

2. Dr. Rubinfeld fails to account for differences in the relative contributions of music to non-interactive and on-demand services.

60. As explained above, the relevant measure of revenue for determining a per-play license fee is the revenue per play *attributable* to the licensed content.⁷⁹

61. There are important differences in the role that licensed music content plays in the success of the on-demand services in Dr. Rubinfeld’s benchmark calculation and the success of statutory, non-interactive services. In contrast to on-demand services, non-interactive services have to engage in music selection. For example, Pandora expends considerable effort and investment dollars on developing and refining its song-selection algorithm. iHeart also invests in creating stations and selecting music. As I discussed in my written direct testimony, simulcasting presents a particularly stark contrast in terms of how much value is derived from licensed music.⁸⁰ Simulcasting transmits both music and considerable non-music content (*e.g.*, news as well as talk by on-air personalities).

62. Given these differences, it is necessary to make an adjustment to any interactive-services benchmark in order to account for the fact that licensed music content plays a lesser role in generating value for statutory webcasters than for interactive services.⁸¹

⁷⁹ This principle was recognized in the rate proceedings for satellite digital radio. “[T]he Judges [in SDARS I] plainly stated that it was their intention to unambiguously relate the fee charged for a service that an SDARS provided to the value of the sound recording performance rights covered by the statutory licenses. *SDARS–I*, 73 FR at 4087.” (*Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, Final Rule, 78 FR 23054 (hereinafter, *SDARS II Decision*) at 23072.)

⁸⁰ *Katz WDT*, VIII.B.

⁸¹ As will become evident, the need for an adjustment arises even when the royalty is levied on a per-play basis. The reasons for this are twofold. First, the number of plays may not

63. In my written direct testimony, I made this adjustment utilizing Sirius XM as a benchmark and accounting for potential differences between Sirius XM and web simulcasters in terms of the importance of licensed music content.⁸² My analysis indicated that the adjustment factor to account for the importance of music content in generating service revenues should be the same for simulcasting as for Sirius XM.⁸³ Based on what had been done in setting the statutory rates for Sirius XM, this approach suggests an adjustment factor for the importance of licensed music content to web simulcasting of approximately 50 percent.⁸⁴

64. Several pieces of additional evidence support an adjustment factor in this range. As I explained in my written direct testimony, non-music content (*e.g.*, news and on-air personalities) and the ability to make music *selections* that their listeners value is what differentiates simulcasters from one another and allows them to be commercially successful—they all have access to the same music.⁸⁵ As Mr. Kocak testified, “... the

vary in strict proportion with the relative value contributed by licensed content. Second, if the per-play royalty is based, in part, on a measure of revenue per play (say, through the application of a revenue-based interactivity adjustment), then the estimated revenue per play and resulting royalty will be too high when all of the revenue is attributed to the licensed content in making this calculation.

⁸² *Katz WDT*, VIII.B.

⁸³ *Id.*

⁸⁴ In SDARS I, Professor Ordover testified that music accounted for 55 percent of the value of all content distributed by the SDARS. (Testimony of Janusz Ordover, *Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services*, October 30, 2006 (hereinafter, *Ordover WDT SDARS I*), at 41); and in SDARS II, he testified that music accounted for half of the value of Sirius XM. (*SDARS II Decision* at 23063.)

⁸⁵ *Katz WDT*, ¶¶ 85-93. Dr. Rubinfeld agrees that statutory services incur costs to provide “features that differentiate themselves from their competitors.” (*Rubinfeld WDT*, ¶ 88.)

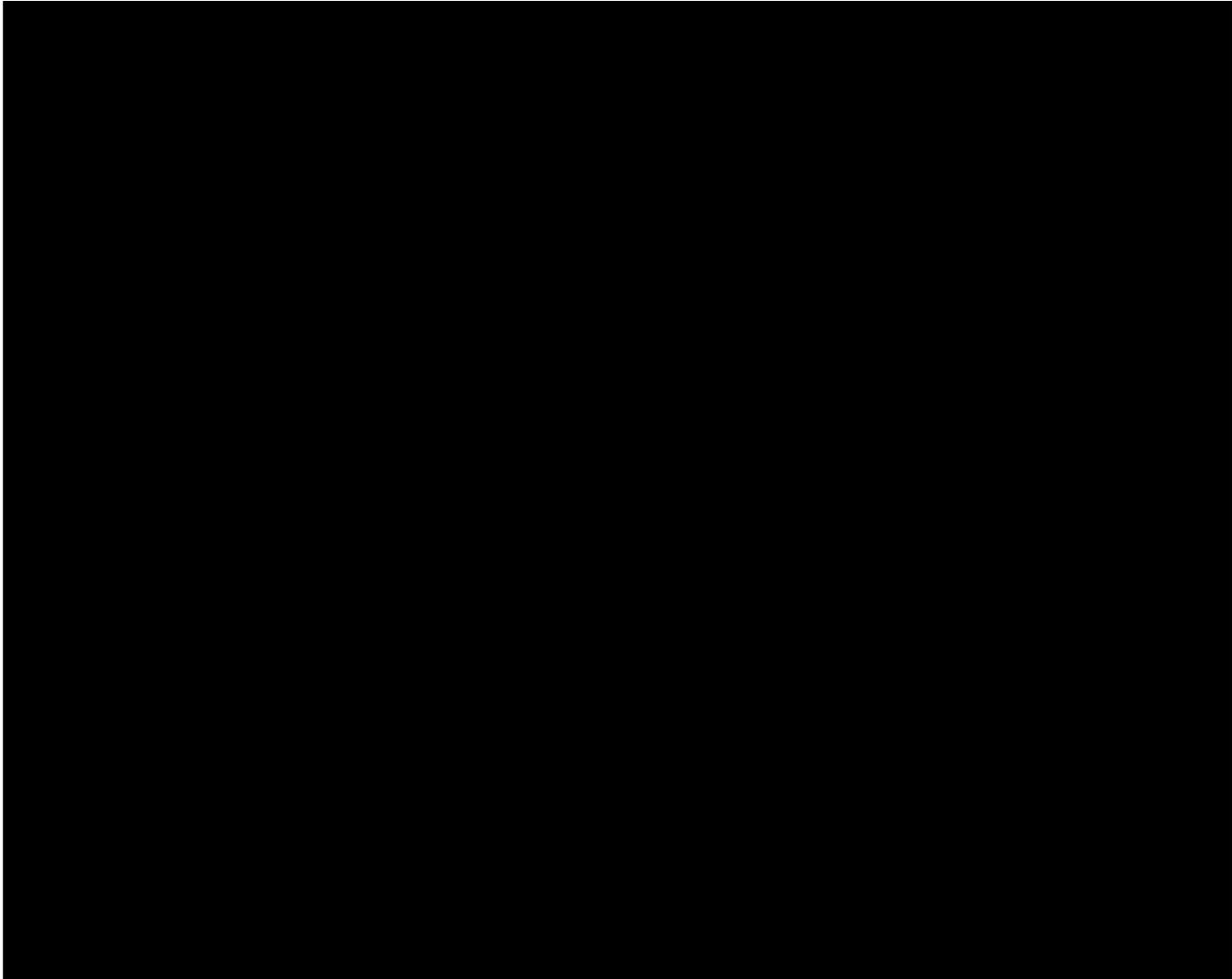
music that a radio station plays is not exclusive to that station, and any musical niche that is developed can be readily copied by competitors. Thus, in order to succeed at a high level, our stations must do much more than play music.”⁸⁶ It thus would not be surprising for music to generate half of the value of terrestrial radio while accounting for more than half of the listening time.

65. The following survey results support this conclusion. As can be seen from Table 4, non-music factors play a large role in people’s decision to listen to AM/FM radio. Another industrywide study reports similar results.⁸⁷

⁸⁶ Written Direct Testimony of Robert Frances Kocak (Buzz Knight) (hereinafter, *Kocak WDT*), ¶ 2. See, also, *Kocak WDT*, ¶¶ 14-26. In addition, see Written Direct Testimony of John Dimick (hereinafter, *Dimick WDT*), ¶¶ 3 and 30-32; Written Direct Testimony of Ben Downs, Bryan Broadcasting, (hereinafter *Downs WDT*), ¶¶ 26-31.

⁸⁷ Jacobs Media, “Car Wars,” NAB00006329-71 at NAB00006332-34.

Table 4: Jacobs Techsurvey 10 Total Results⁸⁸



66. [REDACTED] below, reports the results of a survey done for a single station and tells a similar story: factors and content other than licensed music play a very large role in listeners' decision making. The results of this study, as well as the two conducted for

⁸⁸ Jacobs Media, "Jacobs Techsurvey 10 Total Results," NAB00006453-503 at NAB00006454.

broader ranges of stations, are consistent with the conclusion that an adjustment factor for the importance of licensed music content of approximately 50 percent is appropriate.

[REDACTED]

[REDACTED]

67. A recent study, conducted specifically for web simulcasting provides even more direct support for this conclusion. Dr. Dominique Hanssens conducted a consumer survey designed to measure the relative value assigned to music versus other programming features (*e.g.*, news, on-air personalities, or contests) by listeners to

⁸⁹ Lenawee Broadcasting Company, “WLEN Survey Results,” NAB0008670-82 at NAB0008671.

webcasts of commercial AM/FM radio stations that play music.⁹⁰ One of the questions, Question Five, asked the respondents to assign to each element of programming a percentage representing their relative value of that element such that the individual percentages summed to 100. The following table reproduces Appendix 8 of Dr. Hanssens’s written rebuttal testimony, which describes the survey’s methodology and results in detail.

**Table 5: Hanssens Appendix 8
Summary of Responses to Question Five**

	quantile Estimate 0% Min	quantile Estimate 10%	Percentiles					quantile Estimate 100% Max	basic cValue1 Mean	basic cValue1 Std Deviatio Standard	95% Confidence Interval	
			quantile Estimate 25% Q1	quantile Estimate 50% Mediar	quantile Estimate 75% Q3	quantile Estimate 90%	confidence LowerCL Mean				confidence UpperCL Mean	
	Minimum	10th	25th	50th	75th	90th	Maximum	Mean	Deviation	Lower-bound	Upper-bound	
Music	0	16	30	60	80	100	100	57.2	30.8	54.3	60.1	
News/traffic/weather/sports information	0	0	0	10	20	30	100	12.5	15.5	11.0	14.0	
Hosts, DJs, and other on-air personalities	0	0	0	10	20	30	100	12.2	17.0	10.6	13.9	
Local events information	0	0	0	5	10	20	60	7.2	9.2	6.3	8.0	
Contests	0	0	0	0	10	17	100	5.0	9.4	4.1	5.9	
Advertisements	0	0	0	0	10	20	40	5.6	7.8	4.9	6.4	
Other	0	0	0	0	0	0	100	0.3	4.9	0.0	0.7	
All non-music categories combined	0	0	20	40	70	84	100	42.8	30.8	39.9	45.7	

Note: The data represent responses from 433 respondents. Thirty-five respondents answered "Don't know/not sure" to question five.

68. The results reported in Table 5 echo the findings of the three terrestrial radio studies summarized above in that music plays an important role but so do many other factors, including news and local events information, as well as on-air personalities. The table also presents a more explicit measure of the relative contribution of music. The mean score is 57.2, which is somewhat above the 50 percent factor identified from benchmarking against Sirius XM and corroborated by the terrestrial radio studies. This mean score is, however, well below the contribution provided by music programming to on-demand services. It is important to recognize, moreover, that “music” itself includes

⁹⁰ Written Rebuttal Testimony of Dominique M. Hanssens, Ph.D., February 23, 2015.

multiple contributions, including the musical work and the selection of the music by the station, in addition to the sound recording. As discussed above, the selection of songs that listeners will enjoy—including songs of which they might not otherwise have been aware—is an important means by which radio stations create value for their listeners. That value is reflected in consumers’ assessments of how much they value music programming on the stations’ to whose simulcasts they listen. In short, the figures reported by Dr. Hannsens are also consistent with a relative-contribution adjustment factor of 50 percent for simulcasting.

69. Clearly, correcting Dr. Rubinfeld’s analysis to account for differences in the relative contributions of music to non-interactive and on-demand services could lead to a large downward adjustment in his recommended per-play royalty rate. His failure to take this factor into account further reduces the reliability of his recommended statutory royalties.

E. DR. RUBINFELD FAILS TO TAKE STREAMING SERVICES’ COSTS INTO ACCOUNT AND INAPPROPRIATELY FOCUSES ON REVENUES RATHER THAN PROFITS.

70. Dr. Rubinfeld admits that [REDACTED]
[REDACTED]]⁹¹ Moreover, [REDACTED]
[REDACTED]
[REDACTED]

⁹¹ *Rubinfeld Deposition Tr.* at 196-97.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]⁹³ As a matter of basic economics, profit is equal to revenue *minus cost*.

71. Although Dr. Rubinfeld has concluded that [[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]⁹⁴ As I will now discuss, properly accounting for streaming services' costs results in a very significant downward adjustment in the recommended per-play royalty rate.

72. In order to take these costs into account, it is necessary to have an estimate of their level. In Web II, Dr. Pelcovits, an economic expert retained by SoundExchange, testified that he had no reason to believe that—holding license fees aside—non-interactive services would have lower costs than would interactive services.⁹⁵ In fact,

92 [REDACTED]

93 [REDACTED]

94 *Rubinfeld Deposition Tr.* at 196.

95 In the Web II hearing, Dr. Pelcovits testified:

Q. And you don't have any reason to believe that the production costs, plus a reasonable profit margin for non-interactive digital music services are any less than the production costs and a reasonable profit margin for interactive music services. Do you?

A. I do not.

(Web II Hearing Transcript, May 16, 2006, at 185.)

there is reason to believe that non-interactive services have higher non-licensing costs than do on-demand services. These additional costs are those associated with the algorithms or personnel used to construct playlists for the services' users. For example, in its financial reports, Pandora identified "Product Development costs" of approximately \$103 million over the last three years, which is about 5.1 percent of its total costs and 9.4 percent of its non-licensing costs over the same time period.⁹⁶

73. Even if non-interactive and on-demand services had the same non-licensing costs per play, on-demand services would have a much greater profit per play due to their higher revenue per play. The following hypothetical example illustrates the general principle that, when different services have the same costs, their profits will vary by a greater proportion than will their revenues. Suppose that interactive revenues are \$0.0100 per play and non-interactive revenues are \$0.0050 per play. Moreover, suppose that costs for either type of service are \$0.0025 per play. Then the ratio of interactive revenues to non-interactive is 2 to 1 (*i.e.*, \$0.0100/\$0.0050), while the ratio of interactive profits to non-interactive profits per play is 3 to 1 (*i.e.*, $(\$0.0100 - \$0.0025) / (\$0.0050 - \$0.0025)$).

74. Because he fails to take the streaming services' costs into account, Dr. Rubinfeld fails to make a large enough downward adjustment in his interactive-services benchmark. Although the available cost data are limited, these data are sufficient to demonstrate the high degree to which Dr. Rubinfeld's recommended statutory rates are inflated above

⁹⁶ Pandora Media, Inc., Form 10-K for the fiscal year ended December 31, 2014, at 65. The data reported by Pandora cover 35 months, February 2012-December 2014.

reasonable levels. Table 6 below uses Pandora's publicly reported financial data to calculate costs per play for a non-interactive service. Over the 12 months that correspond to the time period used in Dr. Rubinfeld's analysis, Pandora's average non-performance-licensing cost (*i.e.*, its average costs excluding the royalties paid for performance rights) was \$0.00160 per play.⁹⁷ I use this estimated cost per play along with the revenue and play data to calculate estimated profit per play for interactive services and non-interactive services.

Table 6: Interactivity Adjustment based on Estimated Profit per Play

75. As shown in Table 6, the estimated profit is \$0.00948 per play for interactive services and \$0.00120 per play for non-interactive services. Thus the ratio of interactive profit per play to non-interactive profit per play is nearly 8 to 1 ($\$0.00948 / \$0.00120 =$

⁹⁷ This estimate is calculated using Pandora's financial data reported in Pandora Media, Inc. Form 10-K for the fiscal year ended December 31, 2014 and Pandora's estimated plays per hour provided in Testimony of Carl Shapiro, October 6, 2014 (hereinafter, *Shapiro WDT*), Appendix D. For the eleven months ended December 31, 2013 Pandora's non-licensing costs per play were \$0.0015 and for the twelve months ended December 31, 2014, they were \$0.0018.

7.9). This calculation implies that a corrected interactivity adjustment based on the profit ratio would be 7.9, which is nearly four times as large as Dr. Rubinfeld’s interactivity adjustment of 2.0.

76. Table 7 below shows the impact on Dr. Rubinfeld’s recommended statutory minimum per-play royalty rate of using this corrected interactivity adjustment. This correction alone reduces the recommended non-interactive per-play statutory royalty calculated by Dr. Rubinfeld’s method by approximately three quarters. As I mentioned above, even these partially corrected rate calculations yield a recommended rate this is unreasonably high because they make no correction for the lack of effective competition and several other factors discussed in this section.

Table 7: Correcting Dr. Rubinfeld’s Interactivity Adjustment Using Estimated Profits

	Average Minimum Per-Play Rate	
	Adjustment based on Subscription Prices	Adjustment based on Profits
Dr. Rubinfeld’s Average Minimum Per-Play Royalty Rate	\$0.005337	\$0.005337
Interactivity Adjustment Factor	2.0	7.9
Adjusted Average Minimum Per-Play Royalty Rate	\$0.002668	\$0.000673

F. DR. RUBINFELD FAILS TO ACCOUNT FOR DIFFERENCES IN THE OPPORTUNITY COSTS OF LICENSING TO INTERACTIVE AND NON-INTERACTIVE SERVICES.

77. An effectively competitive price will reflect the seller’s opportunity cost. When licensing to a particular streaming service, a record company can face opportunity costs both in terms of forgone recording sales and foregone revenues from licensing to other streaming services. Conversely, when a streaming service has promotional benefits, those can be viewed as either a form of payment in kind or a *negative* opportunity cost.

78. Economic principles clearly indicate that the differences between services in terms of substitution and promotion would be reflected in their license fees under conditions of effective competition. These principles are also consistent with record company behavior. Mr. Harrison testified:⁹⁸

[REDACTED]

1. **Dr. Rubinfeld’s discussion of convergence fails to address relevant issues and ignores substantial evidence contradicting his claims.**

79. Dr. Rubinfeld uses a discussion of alleged convergence of interactive and statutory services to justify his use of an interactive benchmark and his choice of

⁹⁸ *Harrison Deposition Tr.* at 193:10-194:20.

Mr. Kooker of Sony testified:

[REDACTED]

(Kooker Deposition Tr. at 84-85.)

interactivity adjustment. His discussion of convergence is largely irrelevant because it fails to address important questions such as: do on-demand and non-interactive services differ in terms of the promotion and substitution effects? Does the alleged convergence provide useful guidance for adjusting on-demand royalty rates to serve as a statutory benchmark?

80. Dr. Rubinfeld’s observation that both interactive and non-interactive services are ubiquitous⁹⁹ sheds no useful light on the central issues such as these. Mobile phone apps for Internet search and maps are also ubiquitous, but it hardly follows that these apps have converged with non-interactive streaming services. Similarly, Dr. Rubinfeld’s claim that subscription prices for on-demand and non-interactive services have converged (*i.e.*, the prices of on-demand services have generally fallen) due to competition between on-demand and non-interactive services¹⁰⁰ ignores changes in the degree of competition among on-demand services, as well as the effects of piracy on the subscription prices of on-demand services. [REDACTED]

⁹⁹ *Rubinfeld WDT*, ¶¶ 64-65.

¹⁰⁰ *Rubinfeld WDT*, ¶¶ 66-67.

¹⁰¹ [REDACTED]

[REDACTED]

This price change has nothing to do with the alleged convergence of interactive and non-interactive services per se.

81. Dr. Rubinfeld’s discussion of advertising-supported and subscription models fails to fully acknowledge the significant differences in the relative use of the two business models by interactive and non-interactive services.¹⁰² As discussed in Section II.D.1 above, the subscription model is much more prevalent for on-demand services than for non-interactive services.

82. Dr. Rubinfeld observes that some firms now offer both on-demand and interactive streaming products, and he asserts that this development constitutes convergence.¹⁰³ In making this assertion, Dr. Rubinfeld confuses the existence of multiproduct firms with product-level convergence. An example from another industry illustrates the confusion. A large Mercedes sedan has not converged to competing with a Fiat 500 just because Mercedes now makes small cars. Indeed, another SoundExchange witness, Dr. Blackburn, expressly draws the distinction between multi-product firms and service-level

[REDACTED]

¹⁰² *Rubinfeld WDT*, ¶¶ 66-67.

¹⁰³ *Rubinfeld WDT*, ¶¶ 54-63.

convergence.¹⁰⁴ The latter is what would drive consumer substitution among services, not the former.

83. I also note in passing that Dr. Rubinfeld justifies the use of an interactive benchmark, in part, by claiming that interactive services have been forced to become more like non-interactive services.¹⁰⁵ However, if true, these changes would be evidence that the interactive-service model on which he relies is unstable and out of equilibrium, and, thus, is an unreliable benchmark.

84. As I will now discuss, evidence indicates that, in fact, there may be significant differences between on-demand and non-interactive services—especially web simulcasting services—in terms of substitutional and promotional effects and their implications for the resulting levels of record company opportunity costs.

2. Several types of evidence indicate that record companies’ opportunity costs may be significantly lower when licensing to non-interactive services—especially web simulcasting—than to interactive services.

85. Dr. Rubinfeld fails to examine the effects of convergence, if any, on the degrees to which on-demand and interactive services cannibalize or promote other sources of record company revenues. The fact that he failed to conduct this examination itself

¹⁰⁴ He testified:

However, because some (generally) interactive services may provide some non-interactive or semi-interactive streams to their customers, the distinction between non-interactive and interactive services has become less clear at the *firm-level* [sic]. Some services license certain offerings as non-interactive, as Spotify has done, even though their primary offering is interactive on-demand.

Blackburn WDT, ¶ 49 [emphasis added; footnote omitted].

¹⁰⁵ *Rubinfeld WDT*, ¶¶ 55-57, 60, 160.

87. Mr. Aaron Harrison of Universal Music Group testified [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]¹¹² Mr. Harrison also testified that “over the past few years, we have grown to understand that neither on-demand nor customized streaming services promote the sale of recorded music.”¹¹³ [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]¹¹⁴ Mr. Harrison, similarly, explained that his view that customized webcasting would diminish the need to own a particular recording¹¹⁵ [REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]¹¹² *Rubinfeld Deposition Tr.* at 128, 132.

¹¹² *Harrison Deposition Tr.* at 13:12-13:17.

¹¹³ *Harrison WDT*, ¶ 11.

¹¹⁴ *Harrison Deposition Tr.* at 9-10. [REDACTED]
[REDACTED]

¹¹⁵ *Harrison WDT*, ¶ 10.

¹¹⁶ *Harrison Deposition Tr.* at 191:8-192:17.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]

(b) *Industry Studies*

88. Several industry studies have concluded that [[REDACTED]

[REDACTED]

¹¹⁷ *Harrison Deposition Tr.* at 206:19-22.

¹¹⁸ *Harrison Deposition Tr.* At 193:10-194:20. In addition, Mr. Harrison testified

[[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].]]

Harrison Deposition Tr. at 209:24-210:22.

[REDACTED]

[REDACTED]

[REDACTED]]]¹²⁴ A Bain & Company

document for Universal¹²⁵ reported [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]]]¹²⁸

Similarly, a Warner Music Group strategy document [[REDACTED]

[REDACTED]

[REDACTED]]]¹²⁹ When non-interactive services take

traffic away from terrestrial radio, the incremental revenues are entirely net gains for the

¹²⁴ *Id.* at SNDEX0214802.

¹²⁵ [[REDACTED]]] (*Harrison Deposition Tr.* at 156-157.)

¹²⁶ Bain & Company, “UMG Global Forecast,” October, 2014, SNDEX0099057-103, at SNDEX0099066 (slide 10).

¹²⁷ Bain & Company, “UMG Global Forecast,” October, 2014, SNDEX0099057-103, at SNDEX0099100 (slide 44).

¹²⁸ Bain & Company, “UMG Global Forecast,” October, 2014, SNDEX0099057-103, at SNDEX0099068 (slide 12).

¹²⁹ Warner Music Group, “WMG Digital Strategy,” October 22, 2013, SNDEX0119485-517, at SNDEX0119494. Another WMG document, (Warner Music Group, “Digital Strategy and Business Development,” November 3, 2014, SNDEX 0126367-84 at SNDEX 0126371) discusses [REDACTED]

record companies. Stated another way, there is no opportunity cost in terms of foregone sales.

(c) *Due to its similarities with terrestrial radio, web simulcasting has particularly low expected opportunity costs and particularly high promotional value for record companies.*

90. It is well established that terrestrial radio is a very important source of promotion for record companies. Industry studies show that radio is important as a source of music discovery for consumers. For example, a Nielsen consumer survey conducted in 2013 found that radio was the most important source of music discovery, with [REDACTED]

[REDACTED]

[REDACTED]¹³⁰ The study's authors concluded that [REDACTED]

[REDACTED]

[REDACTED]¹³²

Other studies have reached similar findings. One found that [REDACTED]

[REDACTED]¹³³ Another study asked a very similar question and found that

[REDACTED]

¹³⁰ Nielsen Music 360 US, October 2013, NAB00006637-745 at NAB00006642 (slide 6).

¹³¹ Nielsen Music 360 US, October 2013, NAB00006637-745 at NAB00006680 (slide 44).

¹³² Nielsen Music 360 US, October 2013, NAB00006637-745 at NAB00006682 (slide 46).

¹³³ Jacobs Media, "Car Wars," NAB00006329-71, at NAB00006360.

[REDACTED]]]¹³⁴ The next highest source was [REDACTED]
[REDACTED]]]¹³⁵

91. Of course, a record company is interested in whether new music discovery has a positive impact on the company's revenues. A Nielsen study found that [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]]]¹³⁶

92. Mr. Charles Walk, Executive Vice President of Universal Music Group's Republic Records, testified that [REDACTED]

[REDACTED]
[REDACTED]]]¹³⁷

93. Given these promotional benefits, one would expect record companies to seek terrestrial airplay for their songs. Dr. Rubinfeld asserts that:¹³⁸

[REDACTED]
[REDACTED]]]

¹³⁴ Jacobs Media, "Jacobs Techsurvey 10 Total Results," NAB00006453-503 at NAB00006488.

¹³⁵ *Id.*

¹³⁶ Nielsen Music 360 US, October 2013, NAB00006637-745 at NAB00006685 (slide 49).

¹³⁷ Deposition of Charles Walk, February 20, 2015 (hereinafter, *Walk Deposition Tr.*), at 26:3-6. *See, also*, 41:14-42:14.

¹³⁸ *Rubinfeld WDT*, ¶ 200.

In fact, there is considerable market evidence regarding terrestrial radio that sheds light on the appropriate statutory royalty rate for webcasting.

94. As I explained in my written direct testimony, even though record companies receive no cash compensation for terrestrial broadcasts of their recordings, they receive valuable compensation in the form of promotion, and the size of record company expenditures suggests that, if there were not laws prohibiting payments by record companies to obtain favorable airplay for their recordings, in many instances the license fee for terrestrial broadcasting of a musical recording could be *negative*.¹³⁹ Moreover, the available evidence indicates that promotional benefits also arise from web simulcasts of terrestrial broadcasts.¹⁴⁰

95. There is now additional evidence available to me that record companies expend considerable resources to cause radio broadcasters to play their recordings. Executives from each of the three major record companies submitted sworn statements that their company has multiple promotions departments with hundreds of employees.¹⁴¹ The goal of a promotion department is to attain greater radio airplay because of the promotional

¹³⁹ *Katz WDT*, § VIII.A.

¹⁴⁰ *Id.*

¹⁴¹ Declaration of Rand Levin, November 20, 2014 (hereinafter *Levin Declaration*), ¶ 8 (attached as NAB Ex. 37) (“There are hundreds of employees from 2009 to present in promotion-related positions at UMG’s U.S. labels.”); Declaration of Julie Swidler, November 20, 2014 (hereinafter *Swidler Declaration*), ¶ 8 (attached as NAB Ex. 38) (“There are currently well over a hundred employees in the radio promotion departments at Sony Music’s major U.S. labels.”); Declaration of Paul M. Robinson, November 20, 2014 (hereinafter *Robinson Declaration*), ¶ 14 (attached as NAB Ex. 39) (“In their respective promotion departments, Atlantic currently has approximately 60 employees, WBR currently has approximately 31 employees, and WMN currently has approximately 19 employees.”).

benefits for their artists.¹⁴² For example, Rand Levin, a senior executive at Universal Music Group stated:¹⁴³

People who work in promotion departments try to get their label’s artists played on terrestrial radio, in the hope that increased plays could help lead to increased record sales. In other words, almost everything these employees do “relates” in some sense to the possibility that terrestrial radio could positively affect record sales.

96. SoundExchange provided breakdowns of the costs incurred by five of the major record companies’ operating record labels in promoting their recordings to terrestrial radio.¹⁴⁴ The documents provided by SoundExchange containing these breakdowns are

142

[REDACTED]

143

Levin Declaration, ¶ 7. Similarly, Julie Swidler, a senior executive at Sony Music Entertainment, stated:

Generally speaking, the people in a promotion department focus on promoting releases by that label’s artists through terrestrial radio, so virtually everything they do “relates to” the possibility that such plays may have a positive effect on recorded music revenue.

(*Swidler Declaration*, ¶ 7.)

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SoundExchange provided the agreed information for Universal labels Interscope/Geffen/A&M and Republic Records and for Sony labels RCA Records, Columbia Records, and Sony Music Nashville. *See* NAB Ex. 40.

SoundExchange agreed to provide breakdowns for each year showing the following categories of promotional costs and expenditures directed to terrestrial radio: all costs, including personnel costs, out of pocket expenditures, and overhead associated with the

included in NAB Ex. 40. These five labels alone spend [REDACTED] dollars per year on promotion targeted at radio. Given that these labels represent only about [REDACTED],¹⁴⁵ this suggests that the industry as a whole is spending [REDACTED] of dollars per year on promotion targeted at radio with the overall objective of promoting increased airplay and recognition of their artists.

97. For the reasons described above and in my written direct testimony, the fact that record companies are willing to spend tens and even hundreds of millions of dollars per year on radio promotion to get their songs played on terrestrial radio suggests that, if not for legal prohibitions, the license fee for terrestrial broadcasting of a musical recording could be *negative* in many cases.¹⁴⁶ The similarities between web simulcasting and the terrestrial programming for which it is a simulcast indicate that the effectively competitive royalty rate for web simulcasting might also be negative.

98. There are several reasons to expect simulcasting to give rise to promotional benefits similar to those of terrestrial radio: web simulcasts have the same content as the over-the-air broadcasts that they replicate and have the same relationship between the source and the listener (*i.e.*, they are non-interactive services in which the

record labels' in-house promotions departments described in the sworn executive statements in NAB Ex. 37 – NAB Ex. 39 and out-of-pocket expenditures for (i) third party/independent promotion; (ii) artist visits to radio stations; (iii) contests and other giveaways provided to radio stations; and (iv) advertising and promotion in industry publications directed to radio broadcasters. (Email exchange between Rose Ehler and Bruce Joseph (December 6, 2014) (confirming SoundExchange's agreement to produce specified "cost and expenditure breakdowns related to terrestrial radio").)

¹⁴⁵ Soundscan, "Marketing Report: Label Share," SNDEX0282314-18 at SNDEX0282314 and SNDEX0282315.

¹⁴⁶ *Katz WDT*, § VIII.A.

broadcaster/webcaster chooses the recordings to play and thus serves as an expert recommender to the listener). Mr. Dimick testified that the web simulcasts of terrestrial radio broadcasts give rise to promotional benefits similar to those of the terrestrial broadcasts.¹⁴⁷ Mr. Walk of Universal Music Group testified [REDACTED]

¹⁴⁷ *Dimick WDT*, ¶ 51. See, also, *Kocak WDT*, ¶ 29.

Although Mr. Harrison testified that [REDACTED] [REDACTED] (*Harrison Deposition Tr.* at 193-94.) Moreover, as web simulcasting is increasingly listened to in automobiles, the force of his assertion becomes even weaker.

¹⁴⁸ *Walk Deposition Tr.*, at 127:11 -128:6.

[REDACTED]

[REDACTED]¹⁴⁹

99. Survey research supports this testimony. Specifically, the 2013 Nielsen consumer survey discussed above found that [REDACTED]

[REDACTED]

[REDACTED]¹⁵⁰

3. Because it fails to account for the difference between interactive and non-interactive services in terms of promotion and substitution effects, Dr. Rubinfeld’s interactive-services benchmark analysis is unreliable.

100. Even though economics indicates that differences matter, and the evidence demonstrates that differences exist, Dr. Rubinfeld testified that he is “agnostic” about differences between on-demand and non-interactive services in terms of their substitution effects.¹⁵¹ In particular, [REDACTED]

[REDACTED]

[REDACTED]¹⁵² Dr. Rubinfeld

¹⁴⁹ *Walk Deposition Tr.*, at 128-129.

¹⁵⁰ Nielsen Music 360 US, October 2013, NAB00006637-745 at NAB00006682 (slide 46).

¹⁵¹ *Rubinfeld Deposition Tr.* at 54:15 -56:5.

¹⁵² Dr. Rubinfeld testified:

[REDACTED]

[REDACTED]

opines that promotional benefits will narrow in the future as physical and digital music sales decline, and that non-interactive services won't lead to increased use of interactive services because the two types of services are "converg[ing] over time."¹⁵³ However, he offers no meaningful evidence to support his claim, and—as discussed above—his analysis of convergence is highly flawed.

G. DR. RUBINFELD'S NUMBER-OF-PLAYS ADJUSTMENT IS INACCURATE.

101. Dr. Rubinfeld recognizes that it is necessary to adjust the minimum per-play royalty to account for interactive services downward to account for differences in the way skips and partial plays typically are treated in the interactive services licenses used in his benchmark and the way skips are treated under SoundExchange's proposal for statutory licenses.¹⁵⁴ Statutory services pay royalties on skips and other short-duration performances, while the interactive services on which he relies as a benchmark typically do not pay royalties on plays that are of limited duration; contractual provisions define the minimum amount of time a user must listen to a play before the play triggers a royalty


(*Rubinfeld Deposition Tr.* at 53-54.)

¹⁵³ *Rubinfeld WDT*, ¶ 161.

¹⁵⁴ SoundExchange proposes charging a per-performance fee on each "performance," which it proposes to define as "each instance in which any portion of a sound recording is publicly performed to a listener by means of a digital audio transmission." (Proposed Regulations, attachment to Proposed Rates and Terms of SoundExchange, Inc., § 380.2 (definition of performance).)

obligation.¹⁵⁵ Failure to adjust for this difference between Dr. Rubinfeld’s benchmark licenses and the statutory license would bias his recommended statutory rate upward.

102. Based on financial data for Pandora, Dr. Rubinfeld estimates Pandora’s number of royalty-bearing plays per hour to be 16.62. He estimates the maximum number of royalty-bearing plays per hour on a statutory service under certain assumptions about the number of skips allowed, the average length of a skip, and the amount of time devoted to advertising to be 15. He then takes the ratio of these two estimates and uses it to adjust downward his calculated per-play royalty rate.

103. As I described in my written direct testimony, according to Pandora, its actual number of royalty-bearing plays per hour is [REDACTED]. Because Pandora’s actual number of plays per hour—which includes both full-length songs and skips—is equal to Dr. Rubinfeld’s estimate of the maximum number of full-length songs per hour alone, the

¹⁵⁵ I reviewed the three major record companies’ agreements with the two largest interactive services, Spotify and Rhapsody:

[REDACTED]

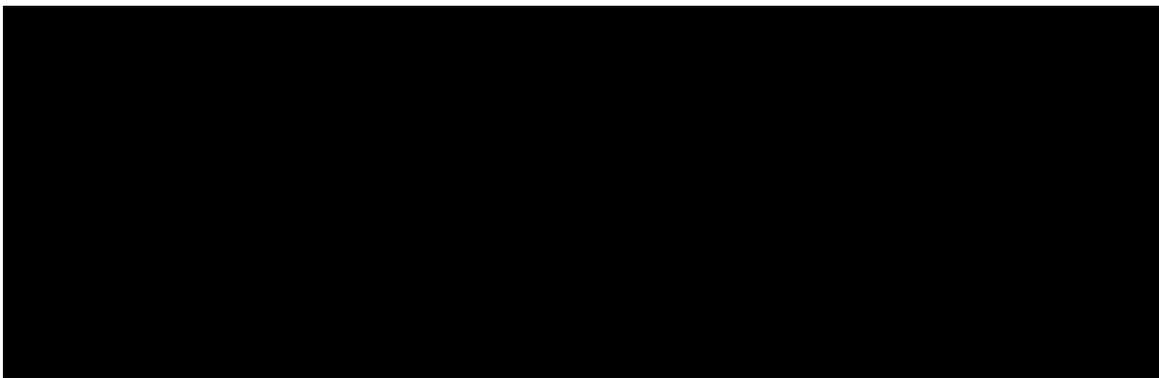
[REDACTED]

[REDACTED]

assumptions used by Dr. Rubinfeld to estimate the maximum number of full-length songs per hour cannot be correct.

104. I now describe an alternative basis for calculating the proper value of this adjustment factor. As just noted, Pandora averages [REDACTED] royalty-bearing plays per hour. If N of these plays are skips, then Pandora would have paid royalties on only $([REDACTED] - N)$ of these plays had it been an interactive service. Hence, Dr. Rubinfeld's adjustment for differences in the treatment of skips should be to multiply his estimate of the average interactive services' per-play royalty by $([REDACTED] - N)/[REDACTED]$. For example, Pandora has provided an estimate of the percentage of plays that are skips for a three-month period.¹⁵⁶ These data show that about [REDACTED] are skips, so that the appropriate adjustment is to multiply the interactive services' per-play royalty number by $[REDACTED]$. This is equivalent to dividing the interactive services' per-play royalty number by $[REDACTED]$. Table 8 shows the results.

Table 8: Correcting Dr. Rubinfeld's Adjustment for the Differential Treatment of Skips



¹⁵⁶ See, *Shapiro WDT*, Appendix D, *esp.* Table D.1. The data give separate estimates for the share of skips for ad-supported and subscriber-supported services. I calculate and use a weighted average from these data.

105. The duration minima contained in Dr. Rubinfeld’s benchmark interactive-services agreements make both economic and common sense: if a full play of a recording is valued at a given price, then the play of a small fraction of the recording is likely not worth the same price, all else equal. Consider simulcasting. A consumer tuning in and hearing the last few seconds of a song may derive little enjoyment from that play, and hearing those few seconds may contribute little to his or her willingness to listen to the simulcast and be exposed to advertising. Indeed, one can identify situations in which a fractional play actually has a negative value for the listener and—consequently—the service. For example, if a user turns on a service, hears a recording that he or she doesn’t like, and turns off the service, then all else equal that play will have a negative value for the service.¹⁵⁷

106. It should also be noted that fractional plays may have a lower opportunity cost for a record company. Intuitively, a song to which a consumer chooses to stop listening or is forced to listen to only a small piece is less likely to lead to any substitution away from other forms paid listening than would a song to which the consumer had both the ability and desire to listen in its entirety.

107. For these reasons, a better approach than adjusting for differences between the treatment of short-duration performances in interactive-services licenses and statutory licenses would be to harmonize the terms by exempting short-duration performances

¹⁵⁷ For an on-demand service, a consumer may choose to listen to new songs as a form of search and terminate plays of songs he or she finds undesirable. Thus, for an on-demand service, partial plays may be part of the value proposition of the service. This is another difference between Dr. Rubinfeld’s on-demand benchmark services and statutory services.

from having to pay statutory royalties. In what follows, I derive corrected versions of Dr. Rubinfeld's recommended statutory per-play royalty rate based on the assumption that the statutory license has a treatment of short-duration performances similar to those of interactive services' licenses. If, instead, SoundExchange's proposal is adopted, it would be necessary to adjust Dr. Rubinfeld's numbers further to account for the less favorable treatment of short-duration performances under the statutory license.

H. EVEN PARTIALLY CORRECTING DR. RUBINFELD'S ANALYSIS LEADS TO A MUCH LOWER RECOMMENDED PER-PLAY ROYALTY RATE.

108. Although I have been unable to correct Dr. Rubinfeld's interactive-services benchmark analysis fully, a revised interactivity adjustment applied to properly weighted non-subscription interactive services can serve as a ceiling on a reasonable statutory rate.

1. Errors in Dr. Rubinfeld's interactive-services benchmark systematically bias his recommended per-play rate upward.

109. As explained above, Dr. Rubinfeld's analysis results in a recommended per-play royalty rate that is too high for many reasons. Several of Dr. Rubinfeld errors that give rise to upward biases can be quantified. Table 9 summarizes the effects of making two overall corrections:

- Dr. Rubinfeld calculates an average minimum per-play rate for interactive services in which he weights data for different interactive services by

revenues rather than play. As shown in the first row of numbers in Table 9, doing leads to an inappropriately high calculated average.¹⁵⁸

- Dr. Rubinfeld bases his interactivity adjustment factor on subscription prices rather than the more appropriate basis of streaming services' profits.¹⁵⁹ The necessary corrections include making the proper calculation of the streaming services' revenues attributable to the licensed content (including both subscription and advertising revenues)¹⁶⁰ and costs.¹⁶¹

As shown in the table, the resulting recommended statutory minimum per-play rate is \$0.000592.

¹⁵⁸ Section II.B above provides an explanation of why such weighting is inappropriate. Table 1 of that section reports the results also shown in the first row of numbers in Table 9. Section IV.D below provides an illustration of the problem with Dr. Rubinfeld's weighting scheme in a slightly different context.

¹⁵⁹ See Section II.C.2 above.

¹⁶⁰ See Section II.D above. Table 2 of that section presents the derivation of a partially corrected interactivity adjustment factor, where the correction accounts for revenues but not costs. Table 3 of that section then applies to this partial correction to Dr. Rubinfeld's recommend minimum per-play royalty rate to provide an illustration of the importance of his error with respect the treatment of revenues.

¹⁶¹ See Section II.E above. Table 6 of that section presents the derivation of the interactivity corrected adjustment factor reported in the second line of numbers in Table 9.

Table 9: Corrections to Dr. Rubinfeld’s Recommended Per-Play Royalty Rate

	Average Minimum Per-Play Rate	
	Dr. Rubinfeld's Methodology	Partially Corrected Methodology
Average Minimum Per-Play Royalty Rate	\$0.005337	\$0.004697
Interactivity Adjustment Factor	2.0	7.9
Adjusted Average Minimum Per-Play Royalty Rate	\$0.002668	\$0.000592

Notes: The rates shown in the table assume the statutory license treats short-duration performances the same way as they are treated in benchmark contracts. There are two steps to the interactivity adjustment correction. First, correcting for Dr. Rubinfeld's treatment of revenues yields a royalty of \$0.001185. Second, accounting for costs leads to the royalty shown in the table, \$0.000592.

110. Other errors in Dr. Rubinfeld’s analysis are more difficult to quantify. In some cases they clearly bias his recommendation upward and in other cases they very likely do so. These errors include:

- Dr. Rubinfeld did not adjust his benchmark to account for the fact that record companies do not compete on price to serve on-demand services and, thus, his benchmark rates are too high. I have been unable to determine a precise amount by which his benchmark is inflated. It could, however, be large (*e.g.*, the benchmark rates could be double what they would be in the presence of effective competition).
- Dr. Rubinfeld did not account for potential differences in the record companies’ opportunity costs of licensing to on-demand and non-interactive services. Record industry executives and studies suggest that non-interactive services are poorer substitutes for music sales than are on-demand services

and many non-interactive services, notably simulcasting are likely to provide greater net promotional benefits than on-demand services.

- Dr. Rubinfeld fails to account for differences in the relative contributions of music to non-interactive and on-demand services. In the particular case of simulcasting, correcting this error alone could cut Dr. Rubinfeld’s recommended per-play royalty rate in half.

2. Dr. Rubinfeld provides no basis for his proposal to increase the minimum per-play rate over time.

111. Dr. Rubinfeld proposes to increase the statutory minimum per-play rate over time.¹⁶² He cites an increasing rate in a single, non-interactive service contract, and admits that interactive service rates, which are his primary benchmark, have fallen over time.¹⁶³ Although Dr. Rubinfeld attributes this decline to convergence with non-interactive services,¹⁶⁴ [[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁶² *Rubinfeld WDT*, § IV.B.3.

¹⁶³ *Id.*, ¶¶ 139 and 140.

¹⁶⁴ *Id.*, ¶ 140.

¹⁶⁵ [[REDACTED]

¹⁶⁶ *Id.*, ¶ 138.

112. Even if one accepted Dr. Rubinfeld's claim, there is an error in his approach. Although he describes his proposal as raising the per-play rate by \$0.00008 per year, in fact, he proposes raising it by \$0.00010 per year: in the four between 2016 and 2020, he proposes to raise the rates by \$0.0004, which is greater than $\$0.0003 = 4 \times \0.00008 .

III. THE PERCENTAGE-OF-REVENUE PRONG OF DR. RUBINFELD'S INTERACTIVE-SERVICES BENCHMARK ANALYSIS IS FATALLY FLAWED.

113. For his percentage-of-revenue royalty benchmark, Dr. Rubinfeld calculates the effective percentage of revenue paid in royalties (including selected additional non-royalty compensation) for each label-service combination, and then, for his benchmark, he picks a percentage-of-revenue royalty rate that he believes is consistent with those individual effective percentages.¹⁶⁷ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁶⁸

114. In the first part of this section, I show that *any* revenue-based statutory royalty would be problematical. In the remaining parts of this section, I then examine the specific revenue-royalty rate proposal derived by Dr. Rubinfeld, and I demonstrate that it is far higher than reasonable for several reasons.

¹⁶⁷ *Rubinfeld WDT*, ¶ 206. Dr. Rubinfeld uses 45 service-label contracts for his percentage-of-revenue royalty benchmark. He adjusts the royalty percentage by adding selected additional valuable compensation paid to the record company (in the form of non-recoupable lump-sum payments or free advertising) but he does not adjust the royalty percentage for either the value of interactivity or differences in the number of plays per hour.

¹⁶⁸ Dr., Rubinfeld testified that [REDACTED]
[REDACTED] (*Rubinfeld Deposition Tr.* at 114.)

**A. A STATUTORY ROYALTY LEVIED AS A PERCENTAGE OF REVENUE
WOULD BE DISTORTIONARY**

115. Dr. Rubinfeld recommends the use of a revenue-based based prong. The Web IV Commencement Notice asks:¹⁶⁹

3. What are the potential disadvantages of establishing a statutory royalty rate not based on a per performance royalty rate?

As I now discuss, Dr. Rubinfeld’s proposed use of a statutory royalty rate based on service revenues has severe disadvantages and is problematical.

1. It Conflicts with the Statutory Standard

116. The Web IV Commencement Notice asks:¹⁷⁰

c. Would a royalty rate calculated as a percentage of webcasters’ revenue be “disproportionate” to webcasters’ use of sound recordings?

For reasons that I will now explain, the short answer is: yes.

117. When revenues are the basis of a music performance royalty fee (as under Dr. Rubinfeld’s proposal), those firms that create more value using inputs other than sound recordings pay more for the use of the sound recordings. This relationship runs counter to the statutory objective of having the license fees reflect relative contributions to value. Under a percentage-of-revenue royalty, the greater the service’s contribution, the more it pays relative to the contribution of sound recordings.

¹⁶⁹ Determination of Royalty Rates for Digital Performance in Sound Recordings and Ephemeral Recordings (Web IV) (hereinafter, *Web IV Commencement*), 79 FR 412, 414 (January 3, 2014).

¹⁷⁰ *Web IV Commencement*, 79 FR 412, 414.

118. A percentage-of-revenue royalty is particularly inappropriate for web simulcasting given the contribution of other programming elements of value.¹⁷¹

119. The fact that a percentage-of-revenue prong is inappropriate for a statutory royalty is consistent with the fact that individual streaming services may nevertheless agree to privately negotiated rate structures of this form. The reason is that the individual negotiation can set a percentage that reflects the parties' relative contributions. For example, if the service's contributions are large, it will negotiate a low revenue percentage so that it is not making excessive payments when its revenues rise.

2. It Distorts the Incentives to Innovate and Improve Service Quality

120. A percentage royalty amounts to discrimination among buyers based on their ability to generate benefits (as measured by revenues) from the use of licenses. Such discrimination will inefficiently suppress innovation and investment incentives.

121. Several authors in the academic economics literature have shown that, when an input seller charges higher prices to those buyers that generate greater value from the input (due to having either lower costs or the ability to generate greater benefits from a given amount of the input), this pattern of input pricing dampens the buyers' incentives to invest in lowering their costs or improving their goods and services.¹⁷²

¹⁷¹ See Section II.D.2 above.

¹⁷² DeGraba (1990) examines an input producer, Haucap and Wey (2004) consider a labor union, and Choi (1995) examines tariff setting, where the government can be interpreted as a monopoly seller of sales licenses. (DeGraba, P. (1990) "Input Market Price Discrimination and the Choice of Technology," *American Economic Review*, **80**(5): 1246–1253; Haucap, J. and Wey, C. (2004) "Unionisation Structures and Innovation

122. Intuitively, the higher prices charged to buyers better able to generate value from the input serves as a tax on innovation and investment, and a tax on an activity discourages it.¹⁷³

3. It would be Difficult to Administer.

123. The Web IV Commencement Notice asks:¹⁷⁴

a. Is it prohibitively difficult to identify webcaster revenues for the purpose of calculating a percentage-of-revenue based royalty rate?

124. Although administering royalties calculated as a percentage of the licensee’s revenues apparently is tenable for some statutory services (*e.g.*, services that do nothing other than engage in webcasting and for which the content is virtually entirely music), there would be serious practical obstacles for simulcasting. In particular, determining the revenues to allocate to licensed music would be difficult if not untenable for simulcasters.

125. As discussed in Section II.D.2 above, there are many programming elements that contribute value and would necessitate revenue allocations. Dr. Rubinfeld acknowledged

[[REDACTED]]¹⁷⁵ Dr.

Rubinfeld testified.¹⁷⁶

Incentives,” *Economic Journal*, **114**: C149–C165; Choi, J.P. (1995) “Optimal Tariffs and the Choice of Technology Discriminatory Tariffs vs. the ‘Most Favored Nation,’ ” *Journal of International Economics*, **38**(1-2): 143–160.

¹⁷³ The magnitude of such effects depends, of course, on the size of the percentage royalty rate. If the statutory royalty rate is only a fraction of a percent, then the investment problem would be unlikely to be significant.

¹⁷⁴ *Web IV Commencement*, 79 FR 412, 414.

¹⁷⁵ *Rubinfeld Deposition Tr.* at 185:5-186:13.

¹⁷⁶ *Rubinfeld Deposition Tr.* at 237:20-238:3.



Moreover, terrestrial broadcasters may sell advertising in bundles that include both terrestrial radio and web simulcasts. The presence of such bundles makes the determination of the advertising revenues of web simulcasting difficult,¹⁷⁷ and any proposed allocation is likely to be contentious.¹⁷⁸

4. Summary

126. For the reasons discussed in the previous part of this section, any revenue-based statutory royalty would be problematical. In the remaining parts of this section, I demonstrate that the specific percentage-of-revenue-royalty rate proposed by Dr. Rubinfeld is far higher than is reasonable.

B. DR. RUBINFELD’S INTERACTIVE-SERVICES BENCHMARK IS CONTAMINATED BY RECORD COMPANY MARKET POWER.

127. The lack of effect competition among record companies to license to on-demand services infects the percentage-of-revenue royalty terms as well as the minimum per-play

¹⁷⁷ In his written rebuttal testimony, Dr. Roman Weil states “My understanding is that bundled sales are prevalent in the radio industry. Advertisers desire to be part of all of the advertising outlets a broadcaster can offer and broadcasters and advertisers do not necessarily allocate the revenue to the various outlets.” (Roman L. Weil Written Rebuttal Testimony, February 23, 2015, at 6.)

¹⁷⁸ Above, I offer a means of providing a broad correction to Dr. Rubinfeld’s benchmark calculation, but that is very different that engaging in specific accounting calculations on licensee-specific basis. Moreover, I am unaware of a practical means of allocating otherwise-bundled advertising revenues.

royalty terms. Hence, for all of the reasons discussed in Section II.A above, the percentage-of-revenue royalty rates collected from interactive services are higher than those that would obtain in an effectively competitive market. This is one of the reasons that Dr. Rubinfeld's recommended percentage-of-revenue royalty rate is unreasonably high.

C. BECAUSE DR. RUBINFELD FAILS TO TAKE STREAMING SERVICES' COSTS INTO ACCOUNT AND DOES NOT APPROPRIATELY FOCUS STREAMING SERVICES' PROFITS, HE FAILS TO APPLY ANY INTERACTIVITY ADJUSTMENT.

128. As described in Section II.E above, Dr. Rubinfeld fails to take streaming services' costs into account, and he inappropriately focuses on revenues rather than profits. In the case of his per-play minimum royalty rate analysis, this error results in Dr. Rubinfeld's computing an interactivity adjustment of 2.0 rather than the more appropriate 7.9. In the case of his percentage-of-revenue royalty rate analysis, this error results in Dr. Rubinfeld's applying no interactivity adjustment at all.

129. Dr. Rubinfeld rationalizes his decision not to apply an interactivity adjustment as follows:¹⁷⁹

Applying it to the percentage of revenue branch would constitute a form of double counting, since "non-interactive" revenues are already discounted by the differences in market prices between interactive and non-interactive subscription services.

Dr. Rubinfeld's assertion that lowering the revenue percentage would constitute "double counting" is incorrect. In the remainder of this subsection, I will describe the appropriate

¹⁷⁹ *Rubinfeld WDT*, ¶ 211.

interactivity adjustment based on economic principles, and I will explain why Dr. Rubinfeld's failure to consider non-licensing costs led him to reach an incorrect conclusion regarding the need to apply an interactivity adjustment factor to the percentage-of-revenue branch of his proposal.

130. As explained in Sections II.C.2 and II.E above, a service's demand and willingness to pay for a music license will depend on the profits that it can earn from that license gross of the licensing costs. Thus, to the extent that one would expect to see a constant royalty percentage across licenses for interactive and non-interactive services, it would be expressed as a percentage of the services' profits. Stated algebraically, the relationship would be $\ell_j = \lambda_0 \pi_j$, for $j = N$ and I , where ℓ_j is the total royalty paid, λ_0 is the common royalty rate, π_j denotes the profits per play earned by service type j , and the service type is either $j = N$ for non-interactive services or $j = I$ for interactive services.

131. This common royalty rate on profits can be used to derive the relationship between the royalty rates expressed as percentages of revenues for different types of services. Expressed as a percentage of revenues, rather than profits, $\ell_j = \lambda_j R_j$, where λ_j is the service-type-specific royalty rate expressed as percentage of revenues per play, R_j .

This revenue-based percentage is equivalent to the rate of λ_0 levied on profits when

$\lambda_j R_j = \ell_j = \lambda_0 \pi_j$. Rearranging the terms of this equation yields

$$\lambda_j = \frac{\pi_j}{R_j} \lambda_0 .$$

It follows that

$$\frac{\lambda_N}{\lambda_I} = \frac{R_I}{R_N} \times \frac{\pi_N}{\pi_I} .$$

132. By ignoring non-licensing costs, Dr. Rubinfeld implicitly assumes that they are equal to zero. Under this (unrealistic) assumption, $R_j = \pi_j$ for both types of streaming service and the formula above indicates that the ratio of the non-interactive royalty rate to the interactive royalty rate would be 1.0 (*i.e.*, no interactivity adjustment is needed). In reality, of course, streaming services do have other costs.

133. Using the values reported in Table 6 above, the resulting royalty rate ratio is

$$\frac{\lambda_N}{\lambda_I} = \frac{\$0.01108}{\$0.00280} \times \frac{\$0.00120}{\$0.00948} = 0.50 .$$

This formula states that the non-interactive royalty rate should be only 50 percent of the interactive royalty rate (not accounting for additional adjustments that should be made).

In other words, this factor alone cuts the appropriate percentage royalty rate in half.

D. DR. RUBINFELD FAILS TO ACCOUNT FOR DIFFERENCES IN THE RELATIVE CONTRIBUTIONS OF MUSIC TO NON-INTERACTIVE AND ON-DEMAND SERVICES.

134. As discussed in Section II.D.2, above, there are important differences in the role that licensed music content plays in the commercial success of the on-demand services in Dr. Rubinfeld's benchmark calculation and in the success of statutory, non-interactive services. Thus, an adjustment is necessary, which would have to be applied either to the percentage-of-revenue royalty rate itself or to the definition of the revenues to which the rate applies.

135. In deposition, Dr. Rubinfeld admitted that [[REDACTED]]
[[REDACTED]]¹⁸⁰

136. As I explained in my written direct testimony and Section II.D.2 above, several pieces of evidence indicate that an adjustment factor of 50 percent would be appropriate to account for differences in the relative contributions of music to on-demand services and web simulcasting services. Applying this adjustment cuts Dr. Rubinfeld's recommended royalty rate in half (*i.e.*, from 55 percent to 27.5 percent) even without taking into account the other necessary downward adjustments. Alternatively, if a percentage-of-revenue royalty is determined through a version of Dr. Rubinfeld's analysis that corrects for all of the errors other than differences in the relative contribution of music content, that royalty rate should be applied against only half of simulcast revenues.

E. DR. RUBINFELD FAILS TO ACCOUNT FOR DIFFERENCE IN THE OPPORTUNITY COSTS OF LICENSING TO INTERACTIVE AND NON-INTERACTIVE SERVICES.

137. As discussed in Section II.F above, an effectively competitive price will reflect the seller's opportunity cost, and record companies' opportunity costs may be significantly lower when licensing to non-interactive services than to interactive services. Hence, in order for it to serve as a reliable basis for a reasonable royalty, Dr. Rubinfeld's recommended percentage of revenue would have to adjusted downward to reflect these differences.

¹⁸⁰ *Rubinfeld Deposition Tr.* at 185:5-186:13 and 237:20-238:3.

F. **DR. RUBINFELD’S RECOMMEND PERCENTAGE-OF-REVENUE ROYALTY IS UNREASONABLY HIGH.**

138. As the analysis of this section makes clear, even a partial correction of Dr. Rubinfeld’s errors would reduce his recommended percentage royalty rate dramatically. Several of the individual corrections, including accounting for profitability differences, different relative contributions by licensed content, and the lack of effective competition among record companies licensing to on-demand services each alone could reduce the royalty rate downward by half.

IV. **DR. RUBINFELD’S PROPOSAL FOR A TWO-PRONGED ROYALTY STRUCTURE IS UNSOUND**

139. Dr. Rubinfeld proposes that the royalty rate paid by a statutory service be the greater of a per-play royalty and a percentage-of-revenue royalty.¹⁸¹ In present section, I describe why this structure is not an appropriate one for a statutory license.

A. **A GREATER-OF ROYALTY STRUCTURE IS INAPPROPRIATE FOR STATUTORY RATES**

140. As discussed in the previous section, there are numerous problems associated with the use of revenue-based statutory royalties, whether used alone or in conjunction with a per-play minimum. Moreover, a “greater of” royalty structure misallocates risk in a way that distorts innovation and investment incentives. It does so by creating a structure in which the streaming service bears almost all of the risk and the record company is largely insulated from downside risk while sharing in upside benefits for which it has little responsibility.

¹⁸¹ *Rubinfeld WDT*, ¶ 32.

1. Dr. Rubinfeld’s misinterprets “revealed preference.”

141. Dr. Rubinfeld attempts to justify his recommended two-prong royalty structure by pointing out that private parties have, in several instances, entered into licensing contracts that contain multiple prongs. He asserts that these contracts imply that parties have a “revealed preference” for this structure and that it therefore serves the joint interests of licensors and licensees.¹⁸² There are several weaknesses with his argument.

142. First, the “greater of” formulation may largely be an artifact of the lack of competition among the record companies in Dr. Rubinfeld’s benchmark market. As just noted, the structure insulates the record companies from any downside risk but provides a significant upside benefit and, as discussed below, it constitutes a form of price discrimination.

143. Second, it should be recognized that many privately negotiated contracts do not contain both per-play and percentage-of-revenue prongs. Specifically, 19 of 45 major-label contracts examined by Dr. Rubinfeld have no per-play royalty prong.¹⁸³

144. Third, there is a very significant difference between a two-party contract and a statutory license regime. Over the life of a two-to-four-year contract, a streaming service and record company typically will know which prong will be the binding one. However, when the same structure is applied to many different streaming services, different prongs may apply to different firms at different times, potentially creating uncertainty and distorting the allocation of risk.

¹⁸² *Rubinfeld WDT*, § III.C.1.

¹⁸³ *Rubinfeld WDT*, Exhibit 16a.

2. Dr. Rubinfeld’s “asymmetric risk” argument is incorrect.

145. Dr. Rubinfeld makes claims regarding the implications of record companies’ inability to refuse to license.¹⁸⁴ Specifically, he raises the possibility that a webcaster might earn very low revenues and record companies would have no choice but to enter statutory licenses with very low royalty rates. As I will now explain, even if such cases were to arise, they would not justify a two-prong structure. Rather, they would be a reason not to adopt a revenue prong.

146. This issue is closely related to a question posed by the Web IV Commencement Notice, which asks:¹⁸⁵

b. Is there an “intrinsic” value to a performance of a sound recording that is omitted if a percentage of revenue royalty rate were to be adopted?

In addition, “The Judges also seek evidence, testimony and argument on whether this risk [of licensor harm due to licensees potentially maximizing share rather than profit] could be mitigated by combining a percentage-of-revenue based royalty rate with a significant minimum fee.”¹⁸⁶

147. If the statutory regime consisted of solely a percentage-of-revenue prong, then a record company might be forced to license its product for very little money (*i.e.*, when the licensee has very low revenues per play). However, rather than adopt a two-prong structure to correct for the weakness of a percentage-of-revenue prong, it is preferable to avoid the problems of the revenue prong entirely by maintaining a statutory royalty

¹⁸⁴ *Rubinfeld WDT*, § III.C.2.

¹⁸⁵ *Web IV Commencement*, 79 FR 412, 414.

¹⁸⁶ *Web IV Commencement*, 79 FR 412, 414.

structure that includes only a per-play prong.¹⁸⁷ A statutory license with solely a per-play royalty isolates the record company from risk—it gets paid whenever its intellectual property is used and bears no risk associated with the webcaster’s rate of monetization.¹⁸⁸

3. Dr. Rubinfeld’s claims regarding risk sharing are faulty.

148. Dr. Rubinfeld implies that licensees benefit from reduced risk under the two-prong structure.¹⁸⁹ He also asserts—without foundation—that record companies should “share in the potentially substantial returns that may be generated by services that offer incremental value to listeners.”¹⁹⁰ There is no economic justification for rewarding record companies for the incremental value created by webcasters given that, by definition, the incremental value is that created by the webcaster above and beyond that created directly by the music itself.

149. A webcaster’s revenues per play will reflect its success or failure in competing with other webcasters and terrestrial radio. That success or failure will not be driven the music available to the webcaster; the same music is available to all webcasters and broadcasters. Hence, the variation in the webcaster’s revenues per play is almost

¹⁸⁷ A similar logic applies to the argument that, if the statutory rate were expressed as a percentage of relevant revenues, then a per-play floor might be necessary to deal with webcasters that were deferring the realization of revenues to invest in building a user base. To the extent that a greater-off structure were needed to address this issue, it would fix a problem associated with the use of a revenue-based royalty. The more direct and sensible solution is not to use a percentage-revenue basis in the first place.

¹⁸⁸ Of course, the record company would receive lower total royalty payments if the webcaster is unsuccessful at attracting listeners, but in that case the service would be making little use of the record companies’ output and there is no reason that the record company should be getting paid a large amount.

¹⁸⁹ *Rubinfeld WDT*, ¶ 95.

¹⁹⁰ *Rubinfeld WDT*, ¶ 96.

completely unrelated to any particular record label's recordings. The risk all stems from the webcaster's ability to execute its chosen business model. That risk is borne by the webcaster. Moreover, even if the webcaster's performance were to affect the record company (which has a wide variety of outlets for its recordings), any such effects would be small compared to the threat of going out of business entirely, which is faced by the webcaster.

150. Moreover, Dr. Rubinfeld's claim that the licensee's risk is necessarily reduced is incorrect. True risk sharing would share the risks associated with variability in *profits*, not revenues. Although profits and revenues often move together, they need not. Under Dr. Rubinfeld's proposal, a webcaster that undertook costly investment that turned out to succeed in raising its revenues but not by as much as the cost of the investment, would simultaneously see its profits fall and its royalty payment rise. This manifestly is not risk reduction from the licensing service's perspective.

B. DR. RUBINFELD MAKES MISTAKEN CLAIMS REGARDING THE IMPLICATIONS OF ECONOMIC VARIATIONS AMONG BUYERS AND SELLERS.

151. The Web IV Commencement Notice asked:¹⁹¹

1. What is the importance, if any, of the presence of economic variations among buyers and sellers?

152. Dr. Rubinfeld asserts that his proposed "greater of" formula "is designed to generate appropriate economic incentives for commercial services and the record

¹⁹¹ *Web IV Commencement*, 79 FR 412, 413.

companies.”¹⁹² As explained in Section III.A.2 above, this assertion is incorrect; the percentage-of-royalty component of his proposed two-prong structure would distort webcasters’ investment and innovation incentives by acting as a tax on innovation.

153. Dr. Rubinfeld quotes the Web IV Commencement Order:¹⁹³ “To impose a rate that is economically appropriate for one such willing buyer upon any or all other willing buyers might not necessarily satisfy the statutory requirement of replicating the marketplace, but rather might be inconsistent with the rate structure of an actual market for sound recordings.” However, Dr. Rubinfeld fails to observe that the marketplace to be replicated is an effectively competitive one. Prices in an effectively competitive market would potentially reflect differences in record companies’ costs of licensing to different non-interactive services (including differences in opportunity costs due to differences in the promotion of –or substitution for—other revenue-bearing products).¹⁹⁴ A statutory royalty based on a webcaster’s revenues per play has no direct or—as far as I am aware—even indirect link to the record companies’ costs of licensing to that webcaster.

154. In summary, Dr. Rubinfeld’s proposed revenue prong has little or nothing to do with differences in sellers’ costs, which might otherwise be relevant to pricing in an

¹⁹² *Rubinfeld WDT*, ¶ 108.

¹⁹³ *Rubinfeld WDT*, ¶ 107; *Web IV Commencement*, 79 FR 412, 413.

¹⁹⁴ Effectively competitive prices “potentially” reflect cost differences because the costs of administering a multi-price system or the seller’s inability to identify the costs associated with specific customers may make such pricing infeasible or commercially unattractive even when there is some heterogeneity in the costs of serving different customers.

effectively competitive market. Thus, his proposal fails to capture the differences that might be important. Instead, he is proposing a form of price discrimination.

C. DR. RUBINFELD’S CLAIM THAT HIS TWO-PRONG RECOMMENDATION CREATES BENEFICIAL PRICE DISCRIMINATION IS UNJUSTIFIED AND INCORRECT.

155. The Web IV Commencement Notice asked:¹⁹⁵

2. Should royalty rates embody any form of economic “price discrimination” in order to reflect the statutory hypothetical marketplace?

156. Dr. Rubinfeld asserts that his proposed “greater of” formula “creates a form of potentially beneficial price discrimination: all else being equal, services facing relatively low price elasticities will charge higher prices and generate greater revenues.”¹⁹⁶ There are two fundamental flaws in Dr. Rubinfeld’s assertion.

157. First, Dr. Rubinfeld provides no basis for the claim that this type of price discrimination is “beneficial.” Although he is correct that, as a matter of economic theory, there are situations in which profitable price discrimination is economically efficient, it is also well established that profitable price discrimination can be economically inefficient and harmful to consumer welfare.¹⁹⁷ Moreover, in the specific case of record companies licensing to webcasters, there are adverse investment-incentive effects (described in Section III.A.2 above) that Dr. Rubinfeld simply ignores. As a

¹⁹⁵ *Web IV Commencement*, 79 FR 412, 413.

¹⁹⁶ *Rubinfeld WDT*, ¶ 112.

¹⁹⁷ See, for example, Hal R. Varian, “Price Discrimination,” in *The Handbook of Industrial Organization*, R. Schmalensee and R.D. Willig (eds.), Amsterdam: North Holland Publishing (1989), particularly § 2.4.

general matter, it is likely that streaming services with higher revenues are also likely to have incurred higher costs in order to create the value that allows them to earn higher revenues. Dr. Rubinfeld's proposed price discrimination scheme thus discriminates against firms that have made greater expenditures to create consumer value, which is not a desirable feature of a statutory royalty proposal.

158. Second, as a technical matter, Dr. Rubinfeld appears to be confusing: (a) the elasticities of demand that webcasters face as sellers of streaming services with (b) the elasticities of demand that the webcasters have for the rights to webcast a specific record company's catalog. Due to steering, there could be large divergence between the two. A webcaster facing less elastic consumer demand for its services might nevertheless have a greater ability to steer and, thus, have a more elastic demand for a given record company's license than other webcasters. In an effectively competitive market, a licensee facing less elastic consumer demand for its services will tend to earn greater revenues per play but might well pay a lower royalty than other webcasters, depending on the different services' steering abilities, net promotion values, and possibly their non-licensing costs.¹⁹⁸ Dr. Rubinfeld's confusion of the two elasticity concepts and his failure

¹⁹⁸ It is important to recognize that, the more competitive was the market, the greater would be the influence on license fees of the record companies' costs and the less would be the influence of various measures of the streaming services' values. Moreover, the prices paid by the services with the greatest ability to steer would, all else equal, be the prices most reflective of competition.

to consider relevant elements of both the record companies' costs and the non-interactive services' costs render his argument meaningless.¹⁹⁹

D. THE PER-PLAY MINIMUM IS APPROPRIATE FOR THE PER-PLAY PRONG.

159. Many, but not all, of the contracts the underlie Dr. Rubinfeld's interactive services benchmark have two prongs: a per-play minimum and a percentage-of-revenue royalty. As I have explained above, such a two-prong structure—specifically the percentage-of-revenues royalty prong—is inappropriate for the statutory royalty. Instead, the statutory royalty should have only a per-play component. However, it is arguable that considering only the per-play minimum royalty in interactive services' licensing contracts that serve as the benchmark would understate the negotiated royalty rates in those instances in which the percentage-of-revenue royalty was the binding prong.

160. However, considerations of record company market power and the lack of effective competition militate in the opposite direction. Use of the per-play minimum can be taken as a market-power adjustment: the per-play minimum amounts have been revealed through market behavior as royalty rates at which the record companies are willing to sell licenses. There is no reason to believe that these rates are below effectively competitive levels, while there are many reasons to believe that the percentage-of-revenues royalty rates negotiated between record companies and on-demand services are far higher than the effectively competitive level due to the lack of

¹⁹⁹ The errors identified in the text also underlie the claims regarding his interactivity adjustments that Dr. Rubinfeld makes in *Rubinfeld WDT*, ¶ 110, and these errors similarly render those claims invalid.

competition among record companies and the consequent high degree of record company market power. In summary, the adjusted per-play minimum of \$0.000592 reported in Table 9 above is a useful upper bound on the zone of reasonableness (it is an upper bound because this figure has not been adjusted downward to reflect factors such as greater net promotional value of non-interactive services in comparison with on-demand services).

161. An alternative approach is to use the average Effective Per-Play Rate, which reflects the actual royalty payments made under both prongs of the interactive services license contracts in Dr. Rubinfeld's sample. Note, however, that the resulting number would be unreasonably high due to record company market power: it does not reflect any correction for the lack of competition among record companies licensing to on-demand services.

162. Recall that, as discussed in Section II.B above, Dr. Rubinfeld uses an inappropriate weighting scheme to calculate the average rates for contracts in his sample. He does so for the calculations of both the Minimum Per-Play Rate and the Effective Per-Play Rate.²⁰⁰ The fact that Dr. Rubinfeld's approach leads to misleading conclusions with respect to the average Effective Per-Play Rate is easily seen by examining his data. Using his inappropriate revenue weights, Dr. Rubinfeld calculates an average Effective Per-Play Rate (including advertising and non-recoupable cash payments) of \$0.010330

²⁰⁰ Dr. Rubinfeld's weighting scheme for his calculation of the average Effective Per-Play Rate is more complicated than that for his calculation of the average Minimum Per-Play Rate. He uses plays as weights in his calculation of an average effective royalty rate for each service-label combination but uses service revenues as weights in his calculation of an average effective royalty rate across all service-label combinations.

for the 36.4 billion total plays in his data.²⁰¹ Multiplying these two numbers implies that the total compensation collected would be approximately \$375.9 million. In fact, the total compensation collected was only \$263.7 million.²⁰² The fact that Dr. Rubinfeld's calculation of the effective per-play rate grossly overestimates the amount of compensation paid indicates that his effective rate calculation is erroneous and the particular average Effective Per-Play Rate that he has calculated is far too high.

163. Table 10 presents a more appropriately calculated average Effective Per-Play Rate using the numbers of plays as weights. As shown in the table, the resulting average Effective Per-Play Rate is \$0.007245. Applying a corrected interactivity adjustment based on profits results in a royalty rate of \$0.000914. It bears repeating that this number is higher than is reasonable for several reasons, including the fact that it does not correct for the lack of competition among record companies licensing to on-demand services.

²⁰¹ See, *Rubinfeld WDT*, Appendix 1a.

²⁰² See, *Rubinfeld WDT*, Appendix 1a.

Table 10: Corrections to Dr. Rubinfeld’s Effective Per-Play Royalty Rate

	Average Effective Per-Play Rate	
	Dr. Rubinfeld's Methodology	Partially Corrected Methodology
Average Effective Per-Play Royalty Rate	\$0.010330	\$0.007245
Interactivity Adjustment Factor	2.0	7.9
Adjusted Average Effective Per-Play Royalty Rate	\$0.005165	\$0.000914

Notes: Dr. Rubinfeld’s weighted average effective per-play royalty rate is given in *Rubinfeld WDT*, Ex.16a. The rates shown in the table assume the statutory license treats short-duration performances the same way as they are treated in benchmark contracts. There are two steps to the interactivity adjustment correction. First, correcting for Dr. Rubinfeld’s treatment of revenues yields a royalty of \$0.00183. Second, accounting for costs leads to the royalty shown in the table, \$0.000914.

V. DR. RUBINFELD’S CLAIM THAT THE STATUTORY RATE ONLY PULLS NEGOTIATED RATES DOWNWARD IS INCORRECT

164. Dr. Rubinfeld incorrectly argues that the statutory rate serves only as a ceiling on licensing fees and cannot have the effect of raising the royalty rates paid by non-interactive services.²⁰³ Similarly, Dr. Rubinfeld incorrectly claims that, [[REDACTED]
 [REDACTED]
 [REDACTED]]²⁰⁴

165. As I will now explain, Dr. Rubinfeld’s claims are erroneous because there are at least three economic mechanisms through which an overly high statutory license fee can distort privately negotiated deals upwards.

²⁰³ *Rubinfeld WDT*, ¶ 90.

²⁰⁴ *Rubinfeld Deposition Tr.* at 141:22-142:15.

A. IF DR. RUBINFELD’S CLAIMS ARE ACCEPTED AT FACE VALUE, THEN HIS BENCHMARK ANALYSIS IS CIRCULAR AND DEVOID OF CONTENT.

166. I begin by noting a fundamental logical problem with Dr. Rubinfeld’s approach. Dr. Rubinfeld testified that the directly negotiated rates paid by on-demand services are equal to the statutory rate plus an adjustment factor that accounts for the value of interactivity. Specifically, he testified that:^{205, 206}

Any service – including currently “on-demand” services – has the option of electing the statutory license (albeit by possibly reconfiguring service offerings) and emulating services such as Pandora by streaming playlists customized to individual listeners’ tastes. Given the shadow of the statutory license, it follows that statutory rates affect directly negotiated agreements for services which plan to offer more or different functionality than that which is provided by the statutory license. The extent to which the existing statutory rates directly affect the rates of directly-negotiated services falls on a spectrum, depending upon the degree and extent of differences in service functionality at issue, i.e., the less difference in functionality between the directly negotiated service and statutory service, the more affected the negotiated rates will be by the statutory license (and/or the pureplay settlement rates). I note in this regard that interactive rates also have been affected to a certain degree by the statutory and pureplay settlement rates, particularly given that such services compete with non-interactive services subject to such rates that offer increasingly similar services to the interactive services. [Internal footnote omitted, emphasis added.]

²⁰⁵ *Rubinfeld WDT*, ¶ 91.

²⁰⁶ I should note that Dr. Rubinfeld does not appear to be entirely consistent on this point. In *Rubinfeld WDT*, ¶ 18, he makes the following claim in reference to on-demand services:

These agreements – representing the majority of directly licensed services – were all struck between willing licensees and licensors. Moreover, because they specify functionality that is not DMCA-compliant, direct licensing was required; this minimized the effect of the statutory shadow because the service could not immediately fall back to the statutory license if an agreement was not reached. As a result, the agreements in Category A are not directly influenced by the existing statutory license rates. [Emphasis added.]

Similarly, in testimony regarding Universal Music Group’s negotiations with streaming services, Mr. Harrison asserted that:²⁰⁷

In addition, parties with whom Universal negotiates can and do use the threat of transforming their operations to fall within the statutory license as grounds for seeking reductions in the rates or other forms of consideration provided to Universal.

He cited the example of Slacker Radio’s use of such a threat in seeking lower royalty rates for its interactive services.²⁰⁸

167. Dr. Rubinfeld summed up his theory as follows: “Seen from this perspective, the directly licensed service’s total willingness to pay will be (approximately) equal to the price of the statutory license, plus the value in the marketplace of the contracted-for incremental functionality.²⁰⁹ A footnote explains that the relationship is approximate in his view because of the complexities of bargaining and entry.²¹⁰

168. Dr. Rubinfeld’s testimony on this point can be expressed algebraically. Let m denote the market rate for on-demand service licenses, let s denote the statutory rate for non-interactive service licenses expected to prevail over the life of the private license contract under negotiation, and let Δ denote the adjustment factor or value of interactivity. According to Dr. Rubinfeld: $m = s + \Delta + \varepsilon$, where ε is a random error term reflecting the complexities referenced above.

²⁰⁷ *Harrison WDT*, ¶ 20.

²⁰⁸ *Id.*

²⁰⁹ *Rubinfeld WDT*, ¶ 92 [footnote omitted].

²¹⁰ *Rubinfeld WDT*, footnote 74.

169. Dr. Rubinfeld interactive service benchmark is predicated on the idea that the new statutory rate to be determined by this proceeding, n , should be set equal to the on-demand market rate, m , adjusted downward by the value of interactivity, or $n = m - \Delta$.²¹¹

170. Combining Dr. Rubinfeld's two arguments, we have $n = m - \Delta = s + \varepsilon$. In words, his arguments—if accepted—lead to the conclusion that the new statutory rate should equal the old one plus a random error term *without regard for how the initial statutory rate was set*. In other words, his theory is entirely circular (except for a random error term) and, if accepted at face value, cannot provide any basis for statutory rate determination.

171. It is my conclusion that Dr. Rubinfeld has underestimated the difficulties in making a successful commercial transition between being an interactive service and a non-interactive one. For example, it might well be the case that an interactive service would shut down in response to high licensing costs before it would convert itself to a non-interactive service. In such a case, the level of the statutory rate would be irrelevant to the interactive service's willingness to pay for a license. In sum, I believe that Dr. Rubinfeld overstates the degree to which statutory rate determines the privately negotiated license fees paid by interactive services (*i.e.*, the linkage between m and s is not as tight as he claims). Nevertheless, there is the potential for a troubling degree of circularity in his benchmark. More important, however, are the extensive errors inherent in the calculation of how a recommended statutory rate should relate to the privately

²¹¹ Dr. Rubinfeld expresses his adjustment in the form $\Delta = \lambda m$ (in particular, using $\lambda = 1/2$), but the effect is the same.

negotiated rates paid by interactive services (*i.e.*, as described extensively in Sections II and III above, there are serious problems with calculation of the adjustment factor, Δ , in the relationship $n = m - \Delta$).

B. PRECEDENT

172. As an economically rational decision maker, a record company will consider the precedential value when negotiating private settlements that are eligible to serve as benchmarks for statutory rates.²¹² The record company has incentives to seek particularly high prices for an agreement that it knows can be precedential because the higher prices obtained for the initial agreement may result in higher statutory rates and, thus, higher payments from webcasters not party to the present negotiations. The possibility of influencing statutory rates upward thus creates an incentive for record companies to bargain even harder for higher rates than it otherwise would.²¹³ Dr. Rubinfeld admits that

[[REDACTED]]²¹⁴

²¹² For additional discussion of these effects in the context of WSA negotiations, see *Katz WDT*, § VI.C.

²¹³ [[REDACTED]]

²¹⁴ Dr. Rubinfeld testified [[REDACTED]]

[[REDACTED]]

173. An individual licensee negotiating a direct agreement does not have countervailing incentives: to the extent that a webcaster's negotiated agreement to pay higher rates over a given period raises the statutory license rates likely to be paid by its rivals over some or all of that period, the precedential value of the higher rates may actually be a benefit for the licensee. Hence, the existence of statutory licensing regime can, in some circumstances, pull privately negotiated royalties upward and lead to higher prices than would have been negotiated in the absence of the statutory regime.

C. FOCAL POINT EFFECTS

174. In the case of multiple sellers, the statutory rate could serve as a focal point facilitating tacit collusion.²¹⁵ A focal point is an outcome that has some distinctive feature that allows two or more parties to coordinate on it without needing to communicate with one another. For oligopolists, the issue is how to coordinate on a price without explicitly communicating with one another and, thus violating the antitrust laws. In their leading industrial organization textbook, Scherer and Ross cite examples in

[REDACTED]

(*Rubinfeld Deposition Tr.* at 78.)

²¹⁵ For seminal discussion of the importance of focal points, see Thomas Schelling (1960) *The Strategy of Conflict*, Cambridge, Harvard University Press.

which government-imposed price *ceilings* served as focal points that allowed suppliers to set higher prices than they might otherwise have done.²¹⁶

175. Intuitively, no record company will want to “break ranks” when a focal point would make such an action highly visible.

D. BARGAINING EFFECTS

176. Dr. Rubinfeld makes claims about the effects of a statutory rate on bargaining conducted in its shadow that are in conflict with the leading economic theories of bargaining. Although he claims that the presence of a statutory license can only push negotiated rates lower, bargaining theory indicates that the statutory option could actually weaken a buyer’s position when negotiating with a seller and, thus lead to higher negotiated rates.

177. Leading economic theories of bargaining demonstrate that disagreement points (*i.e.*, the economic payoffs that the bargaining parties will earn if they fail to reach agreement) play a key role in determining the bargaining outcome.²¹⁷ The reason is that

²¹⁶ Frederick Scherer and David Ross, *Industrial Market Structure and Economic Performance*, Third Edition, Boston, Houghton Mifflin Company, at 266-267 citing John Sheahan (1961), “Problems and Possibilities of Price Control: Postwar French Experience,” *American Economic Review* **51**(3): 345-359 and “Steel Price War Rages in Britain,” *New York Times*, April 7, 1966.

²¹⁷ John F. Nash (1950), “The Bargaining Problem,” *Econometrica* **18**(2): 155-162; Ariel Rubinstein (1982), “Perfect Equilibrium in a Bargaining Model,” *Econometrica* **50**(1): 97-109; Ken Binmore, Ariel Rubinstein, and Asher Wolinsky (1986), “The Nash Bargaining Solution in Economic Modelling,” *The RAND Journal of Economics* **17**(2): 176-188; John Sutton (1986), “Non-Cooperative Bargaining Theory: An Introduction,” *The Review of Economic Studies* **53**(5): 709-724.

These theories include the Nash bargaining model, which (as noted above) [REDACTED]

the disagreement points provide a baseline from which each party can assess its gains from reaching a particular agreement. All else equal, the less favorable is a party's disagreement point, the weaker is its bargaining position. Conversely, all else equal, the more favorable is a party's disagreement point, the stronger is its bargaining position.

178. Dr. Rubinfeld (implicitly) emphasizes that a statutory service may have a more favorable disagreement point in the presence of a statutory backstop royalty rate. He fails to recognize, however, that the presence of a statutory rate as backstop can also *raise a record company's disagreement profits* and, thus, strengthen the record company's bargaining position. To see why, consider a hypothetical example in which a non-interactive service draws its listeners entirely from terrestrial radio. In the absence of any form of license between the service and a record company, the record company would earn no revenue from those listeners—the service would shut down and the listeners would remain with terrestrial radio, which generally pays no license fees for recording performance rights. However, when failure to reach a directly negotiated agreement results in the service's taking a statutory license, the record company's profits in the event that it cannot agree to a directly negotiated license rise from zero to the amount due under the statutory license. The net result can be to raise the negotiated rate to a level *above* the competitive rate.

179. Lastly it should be noted that the presence of bargaining does not indicate the existence of effective competition. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]²¹⁸

VI. CONCLUSION

180. Drawing on my training and experience as an economist, my examination of the public records of earlier proceedings, my analysis of the relevant industries, and my examination of the evidence produced in the present proceeding, I continue to reach the conclusions stated in my written direct testimony. I also find that Dr. Rubinfeld’s benchmark analyses are fatally flawed. Despite Dr. Rubinfeld’s claim that his proposed rates are conservative,²¹⁹ they are in fact far above reasonable levels. His recommendations are especially inappropriate for simulcasting, which is to be expected given his failure to take many central characteristics of simulcasting into account in conducting his analysis.

218

[REDACTED]

219

Rubinfeld WDT, § VII.B.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)

DOCKET NO. 14-CRB-0001-WR
(2016-2020)

DECLARATION OF MICHAEL L. KATZ

I, Michael L. Katz, declare under penalty of perjury that the matters set forth in my
Written Rebuttal Testimony in the above-captioned proceeding are true and correct.

Executed this 23 day of February 2015.



Michael L. Katz, Ph.D.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

**DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)**

**DOCKET NO. 14-CRB-0001-WR
(2016-2020)**

Written Rebuttal Testimony of

ROMAN L. WEIL

(On behalf of the National Association of Broadcasters)

V. Duane Rath Professor Emeritus of Accounting, Booth School of Business, University of Chicago, Visiting Professor, Rady School of Management, University of California, San Diego, Visiting Professor, McDonough School of Business, Georgetown University, and Visiting Professor of Economics, Princeton University

February 23, 2015

1 **QUALIFICATIONS**

2
3 I am the V. Duane Rath Professor Emeritus of Accounting at the Chicago Booth School of Busi-
4 ness of the University of Chicago. During the academic year 2014-15, I am visiting professor at
5 the Rady School of the University of California, San Diego, at the McDonough School of Busi-
6 ness of Georgetown University, and at the Economics Department of Princeton University. I am
7 a Program Fellow at Stanford University Law School.
8

9 I received a BA in Economics and Mathematics from Yale University in 1962. I received an MS
10 in Industrial Administration in 1965 and a Ph.D. in Economics in 1966, both from Carnegie-
11 Mellon University. I joined the faculty at the University of Chicago in 1965, where I have held
12 positions in Mathematical Economics, Management and Information Sciences, Accounting, and
13 in the Law School.
14

15 I have been a CPA in Illinois since 1973. I have served on the faculties of the Georgia Institute
16 of Technology, New York University Law School, at Stanford University in its Graduate School
17 of Business, Economics Department and Law School, at Johns Hopkins University, and at the
18 Harvard University Law School.
19

20 I have co-edited four professional reference books on topics for McGraw-Hill, Simon & Schus-
21 ter, Prentice Hall, and John Wiley & Sons. I have co-authored over a dozen textbooks for Holt,
22 Rinehart and Winston; The Dryden Press; Harcourt Brace Jovanovich; Thomson Learning; and
23 Cengage Learning. I am the senior editor of, and contributor to, the *Litigation Services Hand-*
24 *book*, now in its fifth edition. My articles have appeared in *Barron's* and *The Wall Street Jour-*
25 *nal*. I have published over 80 articles in academic and professional journals. I have served as
26 the principal investigator on various research projects of the National Science Foundation.
27

28 I have written about the allocation of costs and revenues since 1968, most recently in the *Hand-*
29 *book of Cost Management* (2005). I have testified about these matters in litigation involving
30 matters as diverse as allocating damage awards to Enron claimants and allocating costs and bene-
31 fits to Amazon's domestic and international operations.
32

33 I have served on the Financial Accounting Standards Advisory Council. I have testified to a
34 Congressional Committee about the setting of accounting principles. I have served on the Stand-
35 ing Advisory Group of the Public Company Accounting Oversight Board. I have consulted with
36 government agencies, including the U.S. Treasury Department and the Securities and Exchange
37 Commission, and a variety of other clients. I serve on the Board of Directors of mutual funds
38 affiliated with New York Life Insurance Company and have chaired its Audit Committee. I cur-
39 rently chair the Risk and Compliance Committee.
40

41 I have attached to this testimony my academic curriculum vitae as **Appendix A**, which contains
42 a list of all my publications, and a list of my sworn testimony since 2004 as **Appendix B**.

43 **ASSIGNMENT**

44
45 Counsel for the National Association of Broadcasters (NAB) has asked me to comment on
46 SoundExchange’s proposed regime for implementing royalty payments for AM/FM program-
47 ming that is simulcast over the Internet by radio broadcasters.

48
49 Specifically, Counsel has posed the following questions.

- 50
- 51 1. What are the implications to radio broadcast simulcasters of SoundExchange’s proposal
 - 52 for a percentage of “Attributable Revenue” to be included in the rate structure to be es-
 - 53 tablished in this matter?
 - 54
 - 55 2. What are the implications of SoundExchange’s proposed changes to the audit provisions
 - 56 contained in 37 C.F.R. § Part 380 Subpart B in light of the rate structures proposed by
 - 57 SoundExchange and the National Association of Broadcasters?
 - 58

59 **ANSWERS AND ANALYSIS**

60
61 **I. SoundExchange’s Proposal for a Percentage of Revenue Fee Would Create Uncer-**
62 **tainty and Controversy and Would Be Unjustifiably Difficult and Expensive for**
63 **Broadcasters To Implement.**

64
65 A. Background

66
67 In contrast to the rate structures historically implemented by the Copyright Royalty Judges and
68 the proposal for the 2016-2020 term submitted by NAB, both of which are based on a per-
69 performance rate, the rate proposal submitted by SoundExchange incorporates a “greater of”
70 formula that requires monthly calculation of both a per-performance fee and a percentage of rev-
71 enue fee and payment based on whichever is greater. SoundExchange Proposed Rates and
72 Terms (SPRT) § 380.3(a)(1). The discussion below focuses on the percentage of revenue com-
73 ponent of the proposed fee and, in particular, the reasons that it should not be applied to simul-
74 casters at this time.

75
76 SoundExchange’s proposal calls for “55% of Attributable Revenue from activities in the United
77 States” to be paid by commercial webcasters, including radio station simulcasters, for all “digital
78 audio transmissions, including simultaneous digital audio transmission of over-the-air broad-
79 casts.” SPRT § 380.3(a)(1). Attributable Revenue, as proposed by SoundExchange, is deter-
80 mined through a subtractive process that begins with establishing all “Gross Revenue.”
81 SoundExchange proposes to define Gross Revenue as:

82
83 *means all amounts paid, payable, credited, or creditable to Licensee, received or receiv-*
84 *able by or on behalf of Licensee, or recognized by Licensee as revenue under United*
85 *States Generally Accepted Accounting Principles (U.S. GAAP) or Licensee’s past prac-*
86 *tices, from all sources in connection with the provision of a Service in the United States*

87 *(as defined in 17 U.S.C. § 101), not reduced by bad debt, and including, without limita-*
 88 *tion, any and all”*
 89

90 SPRT § 380.3(d)(1)(ii). After establishing “Gross Revenue,” “Adjusted Revenue” is derived by
 91 removing specified revenues and expenses, such as certain taxes and sales of sound recording
 92 products. SPRT § 380.3(d)(1)(iii). SoundExchange then proposes to compute “Attributable Rev-
 93 enue” by taking “Adjusted Revenue” and reducing it by “Non-Attributable Revenue.” Im-
 94 portantly, SoundExchange’s proposed definition of Non-Attributable Revenue is:
 95

96 *(A) Where the Service is Bundled¹ with other products or services that do not involve the*
 97 *Service, Non-Attributable Revenue shall mean the portion of Adjusted Revenue attributa-*
 98 *ble to such other products or services that do not involve the Service. Such revenues shall*
 99 *be calculated through a Fair Method of Allocation.*

100
 101 *(B) For Licensees that offer terrestrial radio broadcasts, Non-Attributable Revenue shall*
 102 *include the portion of Adjusted Revenue from sales of advertising, sponsorships, promo-*
 103 *tions, product placements, referrals, and the like that is attributable to terrestrial radio*
 104 *broadcasts. Such revenue shall be calculated through a Fair Method of Allocation.*
 105

106 SPRT § 380.3(d)(v). The proposed definition for “Fair Method of Allocation” is “a reasonable
 107 method, employed in good faith and in accordance with U.S. GAAP, to allocate revenues: (A) to
 108 the products or services that are Bundled with the Service but that do not involve the Service; or
 109 (B) to terrestrial radio broadcasts.” SPRT § 380.3(d)(vii).
 110

111 In considering the application of SoundExchange’s proposed regulations to simulcasters, the
 112 context of the industry is relevant. My understanding is that there are hundreds of radio broad-
 113 casters that simulcast their over-the-air broadcasts, and their sizes range from single station
 114 broadcasters to those that operate nationwide. The simulcasts have content that is generally the
 115 same as the over-the-air broadcasts. *See, e.g.*, Written Direct Testimony of John Dimick
 116 (Dimick WDT) at ¶ 11 (Public Version).
 117

118 I understand that the major source of revenue for broadcasters is advertising. I am aware that
 119 advertising revenue can come from many sources for broadcasters, which need not involve what
 120 SoundExchange refers to as the “Service,” including traditional over-the-air advertising spots,
 121 advertising spots inserted into a simulcast stream, “pre-roll” advertisements that play prior to the
 122 initiation of the stream, website advertising (banner ads and the like), e-commerce revenue from
 123 sales of products, and other revenue. I understand that most broadcaster revenue continues to
 124 come from over-the-air advertising.
 125

¹ SoundExchange proposes to define “Bundled” as “[a] product or service is Bundled with another product or service where, by contractual terms, technical design, or other mechanism, one product or service is offered or provided to a person only on the condition that the person purchase, receive, accept, or has access to the other product or service.” SPRT § 380.3(d)(1)(vi).

126 I understand also that, excluding a contractual requirement to do so and any revenue recognition
 127 issues, a broadcaster has no present obligation to allocate its revenue among its over-the-air op-
 128 erations, its streaming operations, and any other activities.² Generally Accepted Accounting
 129 Principles (GAAP) do not require a company to allocate revenue in all instances, nor do they
 130 provide a unique way, or even a preferred way, to do it. A broadcaster might try to allocate rev-
 131 enues between over-the-air and streaming operations for business planning or assessment pur-
 132 poses. In my experience, such efforts will not likely lead to better decisions. In those circum-
 133 stances, of course, management could make whatever simplifying assumptions they chose in or-
 134 der to streamline the analysis. Other broadcasters may not be in a position to indulge their curi-
 135 osity in attempting such allocations.

136
 137 B. Analysis

138
 139 (i) Allocation of Revenue – Generally

140
 141 SoundExchange’s proposed implementation of a rate structure that mandates calculation of a
 142 percentage of certain revenues raises concerns regarding the allocation of revenue as a general
 143 matter.

144
 145 In simplest words: there is no uniquely correct way to allocate revenues among business activi-
 146 ties. Nor are there necessarily fair ways. Nor are there principles of economic or accounting
 147 logic that point toward a particular choice among competing methods for allocating revenues.
 148 Nor is there, to my understanding, any generally accepted allocation practice in the industry. If
 149 the Copyright Royalty Judges require calculation of royalties based in whole or in part on per-
 150 centages of revenues in situations where not all revenues of the business are subject to the fee
 151 (for example, as here, because they are not all tied to the limited activity that is subject to a roy-
 152 alty obligation), they will surely cause inevitable disputes (and potentially litigation) over alloca-
 153 tion methods and resulting royalties.

154
 155 SoundExchange’s proposed revenue allocation language adduces the concept of fairness when it
 156 invokes a “Fair Method of Allocation.” Fairness comes from the philosophy department, not
 157 from the economics department. Fairness comes from the law school, not from the business
 158 school, nor from the professional accounting program. You cannot get from a regulation that
 159 requires us to “be fair” to a unique or preferred allocation method.

160
 161 Winston Churchill once said the equivalent of “Don’t ever say I told you so unless you wrote it
 162 down.” My message here, now, is not new. In the Handbook of Cost Management,³ I authored
 163 the chapter on “Allocating Costs and Revenue.” The following excerpt is relevant to this pro-
 164 ceeding.

² Experts in U.S. GAAP will know of the requirements it imposes to allocate revenues in some multiple attrib-
 ute/arrangement transactions. These requirements began with EITF 00-21, in the year 2000 and continue through
 new FASB/IASB revenue recognition requirements issued in May 2014. These requirements have no bearing on
 these royalty issues for reasons discussed later in this report.

165
166 **16.8 Allocation of Revenue.** Companies often bundle into a single sale An example pertinent for this writer is the bundling of students’ textbooks with accompanying study guides....

168
169 **(a) Theory Provides No Right Answer.** Which of these methods enjoys the strongest theoretical support? That question has no answer. Neither allocation will, better than the other, enable management to make wealth-enhancing decisions.

170
171
172
173 *If management needs an allocation, and facts do not provide guidance,⁴ that need likely results from some contractual provision, such as the need to pay royalties Still, theory provides no uniquely right answer. To get a uniquely right answer, one needs to look to the contract which the authors have with the publisher which will likely not specify a method. In that case, economic theory also does not provide a unique answer.*

174
175
176
177
178
179 *When the difference matters because the situation involves large dollar amounts, and when the contract does not address the allocation method, the issue likely ends up in litigation. I advise the courts to do what seems equitable to them because neither economics nor accounting offers a single, correct, answer.*

180
181
182
183
184 Therefore, there is no right answer to the question: how do you allocate revenue? It is better not even to go down that road at this time when the cost of doing so may be significant. Indeed, the calculations themselves and the inevitable audits that follow are expensive, and regardless of the allocation method chosen, one party or the other will have an incentive to say another method is fairer, by which they mean it will result in a payment more favorable to its pocketbook. These allocation issues can be avoided by staying with the current per-play royalty.

185
186
187
188
189
190
191
192 (ii) Allocation of Revenue – Impact on Broadcasters of SoundExchange’s Proposal

193
194
195 SoundExchange’s proposed deductions to “Adjusted Revenue” raise several specific concerns. The first proposed deduction for non-attributable revenue requires Broadcasters to allocate revenue that is received with respect to more than one product or service in such a way as to determine what portion of that revenue does “not involve” the “Service” (i.e., the broadcaster’s streaming service):

196
197
198
199
200
201 *(A) Where the Service is Bundled with other products or services that do not involve the Service, Non-Attributable Revenue shall mean the portion of Adjusted Revenue attributable*

³ Handbook of Cost Management, Roman L. Weil and Michael W. Maher, Second Edition (2005).

⁴ Footnote added in current context, not in original. An example of this discussed a bit later is the so-called pre-roll ad placed before a specific song on a streamed broadcast.

203 *ble to such other products or services that do not involve the Service. Such revenues shall*
 204 *be calculated through a Fair Method of Allocation.*

205
 206 SPRT § 380.3(d)(v)(A). In my consideration of the business models of the broadcast industry, I
 207 have encountered several examples of joint business activities that, while simple in themselves,
 208 present complex allocation issues.

209
 210 As an example, suppose that a broadcaster can make several offerings to a prospective advertis-
 211 er: over-the-air radio, streaming radio, a web site, and sponsorship of music concerts. The
 212 broadcaster sells to an advertiser for a single price the rights to place ads in all four outlets (*e.g.*,
 213 advertising spots on the over-the-air, pre-roll advertising for the stream, banner advertising on
 214 the website, and sponsorship of the concert). If required to allocate, we might use Best Estimate
 215 of Selling Price (BESP) data—that is, the cost of each of these items if sold separately.⁵ But that
 216 works only if those pricing data are all available, which is not always the case. Theoretically, we
 217 might count the number of people who attend concerts, who click on web site banner ads, who
 218 listen on-line, and who listen over the air. But I understand that one cannot directly count over-
 219 the-air listeners (or minutes of listening) and, in any event, there would be the issue of compara-
 220 tive pricing of web clicks, concert-goers, over the air ads, and stream ads. We might count lis-
 221 tener minutes and allocate that way, but we would still have the difficulty of counting clicks, de-
 222 termining over the over-the-air listening minutes, and applying appropriate unit valuations. Each
 223 of these methods has complications, and none of these methods is uniquely compelling.⁶

224
 225 There are many possibilities that would require allocation. What if an advertiser purchases a
 226 package of digital advertising that provides both streaming advertising and website advertising
 227 for one price? Or purchases for a single price advertising to be streamed across all of a broad-
 228 casters' stations (some of which are music formatted and some of which are not)? My under-
 229 standing is that bundled sales are prevalent in the radio industry. Advertisers desire to be part of
 230 all of the advertising outlets a broadcaster can offer, and broadcasters and advertisers do not nec-
 231 essarily allocate the revenue to the various outlets. As mentioned above, absent special circum-
 232 stances, there is no accounting requirement that a broadcaster do so.

233
 234 SoundExchange's proposed regulations would require an allocation, and to make that allocation,
 235 SoundExchange has proposed that the revenue be allocated pursuant to a "Fair Method of Allo-

⁵ As I mentioned above, GAAP imposes a requirement to allocate revenues in certain multiple attribute/arrangement transactions. This requirement does not apply to our circumstances for two reasons. First, the data required to allocate the revenue do not exist for all broadcasters in all transactions, so a regulation requiring allocation "according to GAAP" would need to treat the many exceptions and provide for exceptions not yet thought of. The second reason has to do with timing of the recognition of the revenue. In broadcasting, as I understand it, the revenues for over the air and streaming and concerts and web banner ads typically come in the same period, so there would be no effect on the income statement of separating the advertising revenue into separate streams. The revenue is in the same period independent of whether the broadcaster calls it terrestrial revenue or streaming revenue or concert revenue or web banner revenue. In that circumstance, broadcasters have not applied EITF 00-21, nor will they likely have to apply the newer FASB/IASB revenue recognition standards.

⁶ There are likely other defensible allocation methods.

236 cation,” defined as “a reasonable method, employed in good faith and in accordance with U.S.
237 GAAP, to allocate revenues” to the other products and services that “do not involve” the stream-
238 ing service, including terrestrial radio broadcasts. Because there are many “reasonable” ways to
239 allocate revenue—but no uniquely right way—there would be unending disputes about the rea-
240 sonableness of the broadcaster approaches to this allocation problem.

241
242 Moreover, while I agree that all bundled advertising should not be allocated to the broadcaster’s
243 streaming activity, SoundExchange’s proposed “do not involve” language is itself a vague term
244 that lacks clear meaning. When do other products or services involve the Service? Does an
245 event at which admission is charged involve the Service because the station may be broadcasting
246 the event over the air and streaming it on its simulcast? If a website contains a wide variety of
247 content, including information about disc jockeys, contests, playlist information, information
248 about community events, news and weather, and also includes a link to the stream, does the web-
249 site involve the Service? There is no way to objectively define what business activities “do not
250 involve” the streaming activity, let alone to objectively allocate revenues to those activities.
251 Some business activity is not streaming: we all agree. Which portion? No one has an algorithm
252 to split the pieces.

253
254 SoundExchange’s second proposed reduction for non-attributable revenue is for revenue related
255 to the broadcaster’s terrestrial radio revenue line of business:

256
257 *(B) For Licensees that offer terrestrial radio broadcasts, Non-Attributable Revenue shall*
258 *include the portion of Adjusted Revenue from sales of advertising, sponsorships, promo-*
259 *tions, product placements, referrals, and the like that is attributable to terrestrial radio*
260 *broadcasts. Such revenue shall be calculated through a Fair Method of Allocation.*

261
262 SPRT § 380.3(d)(v)(B). This proposal is similarly unworkable, and not implementable, without
263 litigation.

264
265 Advertising specifically inserted by a broadcaster into its simulcast might be directly attributable
266 to the broadcaster’s streaming service, as long as the broadcaster sold it separately for a clearly
267 stated price. No allocation issue arises in this instance because the advertising is for a separate
268 offering for one service.

269
270 Many scenarios of advertising sales may involve a broadcaster’s terrestrial operations in addition
271 to its simulcasting and other operations and would, therefore, require allocation in order to carve
272 out the revenue “attributable to terrestrial radio operations.” For example, if advertising is sold
273 for the over-the-air broadcast and the stream, allocation of the revenue between the two might be
274 required under SoundExchange’s proposal. But, if the advertiser did not specifically contem-
275 plate receiving the benefit of the streaming audience, or the advertiser assigned a zero value to
276 that audience, then allocation of any amount of the over-the-air advertising revenue to the

277 streaming business line has no economic basis.⁷

278

279 Any basis for allocating advertising revenue between over-the-air and the simulcast would be
280 arbitrary. One might consider a ratings basis, but note: John Dimick, COO of Lincoln Financial
281 Media, reported that while there is some streaming audience for his company's music stations, he
282 found no real consistent and measurable change in the ratings of the music stations as a result of
283 adding the streaming audience to the ratings. Dimick WDT ¶¶ 19-21. Even if ratings were
284 available for over-the-air and streaming audiences, allocation based on ratings would not neces-
285 sarily reflect the value of a streaming listener versus an over-the-air listener.

286

287 Other examples of allocation issues arise with respect to the broadcaster's terrestrial service.
288 Let's assume that a sponsor purchases an allotment of advertising time from a broadcaster with
289 multiple stations or multiple formats or both. The advertiser might place certain parameters on
290 the advertising (such as demographics and time), but might be agnostic on other variables. Some
291 of the advertisements appear on music formatted stations, and some do not. How do we allocate
292 the lump-sum advertising revenue among the different stations, and particularly among the dif-
293 ferently formatted stations, and then between the terrestrial broadcast and the simulcast?

294

295 Given that there are hundreds of broadcasters that simulcast their over-the-air broadcasts, and
296 their particular business models and level of accounting sophistication vary, the interpretations of
297 how to allocate revenue will vary. There is no uniquely right way to allocate revenue between
298 the over-the-air listening audience and the streaming audience. I know of no industry standard
299 for making such an allocation. This further supports simply sticking with the current per-play
300 royalty structure for simulcasters.

301

302 (iii) Non-Music Programming

303

304 I note that SoundExchange's definition of "Attributable Revenue" does not appear to account for
305 the fact that not all of the programming on music-formatted stations, and their simulcasts, is mu-
306 sic. In my opinion, it would be logical to account for the fact that non-music programming may
307 draw listeners and result in advertising revenue and, therefore, revenue attributable to the per-
308 centage of revenue analysis should exclude revenue attributable to non-music programming. I
309 reviewed certain portions of the testimony of Daniel Rubinfeld, Ph.D, SoundExchange's expert
310 economist, and he [[REDACTED]].⁸

311

⁷ John Dimick noted in his Written Direct Testimony that some advertisers expect to receive the streaming portion of an advertising bundle for free. Dimick WDT ¶ 18. Ben Downs, Vice President and General Manager of Bryan Broadcasting, Inc., also testified that this was his experience. Downs WDT ¶ 14.

⁸ Deposition of Daniel Rubinfeld, December 11, 2014, at 235-38. During questioning, Dr. Rubinfeld [[REDACTED]]

[[REDACTED]]].

312 This issue is perhaps best understood through an example. When I was a graduate student in
313 Pittsburgh during the early 1960s, I and a large portion (85%) of the morning radio audience lis-
314 tened to KDKA and Regis (Rege) Cordic.⁹
315

316 Now, imagine that during any one hour of his show, Rege played 30 minutes of recorded music.
317 The other 30 minutes he called Cordic & Company, including the entertainment he provided and
318 the commercials, which were themselves entertaining—particularly the ones for Olde Froth-
319 ingslosh pale stale ale. Imagine that surveys of the listening audience invariably revealed that
320 the primary reason listeners chose KDKA for their morning drive-time listening was the Cordic
321 & Company parts, not much for the music parts.
322

323 Now, let us face the task of allocating the considerable advertising revenue to the music and to
324 Cordic & Company. One accountant or auditor says the revenue should be 50% to the music
325 (based on an allocation of time: 30 minutes of music/60 minutes) and 50% to Cordic & Compa-
326 ny. Another accountant or auditor says 80% for Cordic & Company and 20% for the music,
327 based on survey data showing that the non-music pulls the audience to this show and the music is
328 primarily filler. Indeed, other shows with the same music draw a fraction of the audience. Both
329 approaches are arguably logical and meet the GAAP tests of being systematic and reasonable.
330 But neither of these two allocation methods is uniquely right. Accounting provides no basis to
331 choose between these two. While economics might provide an answer, an accounting rule that
332 requires invoking the judgment of an economist is not a good rule. Accounting provides a
333 unique allocation—a bright line, with which economists agree, only when a causal relation be-
334 tween the expenditure and the outcome exists. An example in the current context is a so-called
335 pre-roll streaming advertisement that is separately sold and priced. In this context, one might say
336 there is no allocation needed, only an assignment of revenue (from the advertisement) to the
337 played song(s).
338

339 A percentage of revenue-based royalty might cause few difficulties for a business where all or
340 essentially all revenue is subject to the fee. Or, if the percentage at issue were low, neither side
341 would have incentives to contest the issues and disputes might be avoided or minimal. Where
342 significant allocation is required, however, as would be the case with SoundExchange’s proposed
343 55% of “Attributable Revenue” royalty for broadcasters, it is my opinion that significant uncer-
344 tainty as to the proper royalty fee would be inevitable and that this would invariably lead to dis-
345 putes that would be expensive to resolve. In addition, broadcasters that do not now attempt to
346 ascertain how much of their revenue is attributable to streaming would incur potentially substan-
347 tial additional expense in attempting to calculate the attributable percentage of revenue. That
348 could include expenses for new or modified accounting systems and the implementation of new
349 accounting and sales procedures. These broadcasters would also likely incur costs on a monthly
350 basis for manpower and management oversight, and, because of the “greater-of” royalty struc-

⁹ Read the Wikipedia entry about Regis Cordic for confirmation. It will not convey how funny he was to blue collar worker and aspiring intellectuals alike. http://en.wikipedia.org/wiki/Regis_Cordic.

351 ture, they would incur those costs *even if* a royalty ended up being paid based on a per-
 352 performance basis.

353
 354 (iv) Additional Issues

355
 356 In my review and consideration of SoundExchange’s proposed regulations, I noted some other
 357 issues.

- 358
- 359 • SoundExchange proposes to reduce the time for payment of royalties due from 45
 360 days to 30 days. SPRT § 380.4(c). My understanding is that the broadcasters op-
 361 pose such a change. In addition, to the extent that the regulations adopt a percent-
 362 age-of-revenue fee structure, computations will require more, not less, time, to
 363 deal with the accounting issues I have discussed.
 - 364
 - 365 • SoundExchange’s proposed definition of “Gross Revenue”—the starting point for
 366 calculating “Attributable Revenue,” upon which the royalty fee is paid—includes
 367 all amounts “received or receivable,” meaning SoundExchange desires to collect a
 368 percentage fee of amounts not yet collected (and perhaps never collected) by the
 369 Broadcasters. SPRT § 380.3(d)(1)(ii). If the judges adopt a rule that requires
 370 payment based on a percentage of revenue (which I do not advise for the reasons
 371 set forth above), I cannot think what logic would compel a broadcaster to pay
 372 cash royalties as a fraction of cash it might never receive in the future. One pays
 373 royalties with cash, not with accounts receivable. I urge the Judges to make clear
 374 that the time clock starts when the broadcaster receives cash from the advertiser,
 375 not when the broadcaster earns revenue in the accounting sense, which is when
 376 the broadcaster can record an account receivable in his accounting records.

377

378 **II. Preserving the Requirement that a Certified Public Accountant Perform Au-**
 379 **dit s Permitted by the Regulations Maintains the Integrity of the Audit Pro-**
 380 **cess**

381

382 A. Background

383

384 The current audit provisions contained in the regulations allow SoundExchange to audit a
 385 Service after filing a Notice of Intent to Audit with the Copyright Royalty Judges.
 386 37 C.F.R. § 380.15(c). The provisions require that audits performed by SoundExchange
 387 be performed by an independent and Qualified Auditor, which is presently defined as “a
 388 Certified Public Accountant.” 37 C.F.R. § 380.11. SoundExchange has proposed to
 389 modify the definition of “Qualified Auditor” in the regulations as follows:

390

391 *Qualified Auditor* is a Certified Public Accountant, **or a person, who by virtue of**
 392 **education or experience, is appropriately qualified to perform an audit to verify**
 393 **royalty payments related to performances of sound recordings.**

394
 395 SPRT § 380.2 (underlining/bold indicates proposed additions).
 396

397 B. Analysis
 398

399 SoundExchange’s proposal for modifying the definition of Qualified Auditor effectively removes
 400 the current CPA requirement,¹⁰ making it an option. This proposed change has the negative ef-
 401 fects I discuss below. Moreover, qualifying an auditor based upon “appropriate” education or
 402 experience invites future disputes. This provision offers no objective standard for the parties, nor
 403 any third party, to rely upon in evaluating a proposed auditor’s qualifications.
 404

405 While not every CPA will have specific experience with broadcast or streaming services, having
 406 a non-CPA perform audits results in the loss of the professional standards and ethics that bind
 407 Certified Public Accountants. A CPA has also passed examinations involving more than tech-
 408 nical skills.¹¹ The “Qualified Auditor” definition proposed by SoundExchange removes the pro-
 409 fessional standards and examination requirements imposed by the current regulations.
 410

411 CPAs are governed by the principles, rules, and requirements promulgated by their applicable
 412 state accountancy boards and the professional organizations with which they affiliate, including
 413 state CPA organizations and the national trade association, American Institute of Certified Public
 414 Accounts (AICPA). The AICPA has adopted a Code of Professional Conduct that provides rules
 415 and guidance for members on how to conduct themselves professionally.¹² At the state level, the
 416 California Society of CPAs (CalCPA) has adopted a Code of Professional Conduct (CalCPA

¹⁰ Ron Wilcox, Executive Counsel for Warner Music Group, suggests that a qualified auditor need only have experi-
 ence that would be useful in the audit of music streaming services, regardless of whether the auditor is a Certified
 Public Accountant. *See* Wilcox WDT at 14-15.

¹¹ SoundExchange might argue that one need not take an examination in ethics and independence to be ethical and
 objective. Yes, one can argue that, just as one can argue that one need not pass the bar exam to be as ethical as a
 lawyer. One can argue that a person can have the skills of a physician and understand the implications of the Hip-
 pocratic Oath without passing medical boards, but that person is not allowed to practice the profession without hav-
 ing fulfilled the requirements to join the profession. We have decided that these standards provide the stakeholders
 in these professions with the comfort that the professionals that practice in these professions meet certain minimum
 ethical and skills requirements.

Why should the professional auditor be held to a lesser standard than professionals in other areas such as law or
 medicine or dentistry or architecture or engineering or the many others I could cite from a list of regulated profes-
 sionals?

¹² The Code of Professional Conduct (the code) was originally adopted on January 12, 1988, and was periodically
 revised through June 1, 2014. On June 1, 2014, the AICPA issued a codification of the code’s principles, rules, in-
 terpretations, and rulings (revised code). The revised code went into effect on December 15, 2014.

<http://www.aicpa.org/Research/Standards/CodeofConduct/DownloadableDocuments/2014December15CodeOfProfessionalConduct.pdf>

417 Code). The CalCPA Code provides that the principles and rules set forth in the CalCPA Code
418 conform to the principles and rules set forth in the AICPA Code of Professional Conduct.¹³
419
420 CPAs have an obligation to the public. They should “act in a way that will serve the public inter-
421 est, honor the public trust, and demonstrate a commitment to professionalism.” AICPA Rule
422 0.300.030.01; *see also* CalCPA Code of Professional Conduct, Articles I, II.¹⁴ The accounting
423 professions’ “public” consists of “clients, credit grantors, governments, employers, investors, the
424 business and financial community, and others who rely on the objectivity and integrity of mem-
425 bers to maintain the orderly functioning of commerce.” AICPA Rule 0.300.030.02 (emphasis
426 added). This duty seems particularly relevant to the circumstances at hand. The AICPA Code
427 acknowledges that those who rely upon CPAs expect them to “discharge their responsibilities
428 with integrity, objectivity, due professional care, and a genuine interest in serving the public.”
429 AICPA Rule 0.300.030.04; CalCPA Code, Article II.
430
431 CPAs “should perform all professional responsibilities with the highest sense of integrity.”
432 AICPA Rule 0.300.040.01; CalCPA Code, Article III. “Integrity requires a member to be,
433 among other things, honest and candid within the constraints of client confidentiality.” AICPA
434 Rule 0.300.040.03; CalCPA Code, Article III. CPA’s are also guided by objectivity and inde-
435 pendence. “A member should maintain objectivity and be free of conflicts of interest in dis-
436 charging professional responsibilities.”¹⁵ AICPA Rule 0.300.050.01; CalCPA Code, Article IV.
437 “Objectivity is a state of mind, a quality that lends value to a member’s services. It is a distin-
438 guishing feature of the profession. The principle of objectivity imposes the obligation to be im-
439 partial, intellectually honest, and free of conflicts of interest.” AICPA Rule 0.300.050.02;
440 CalCPA Code, Article IV.
441
442 The AICPA also imposes a standard of “due care.” AICPA Rule 0.300.060; CalCPA Code, Ar-
443 ticle V. Due care requires “competence and diligence.” AICPA Rule 0.300.060.02; CalCPA
444 Code, Article V. “Competence represents the attainment and maintenance of a level of under-
445 standing and knowledge that enables a member to render services with facility and acumen. It
446 also establishes the limitations of a member’s capabilities by dictating that consultation or refer-
447 ral may be required when a professional engagement exceeds the personal competence of a
448 member or a member’s firm.” AICPA Rule 0.300.060.04; CalCPA Code, Article V.
449
450 In my opinion, a CPA may not perform a royalty audit if he or she lacks the requisite industry
451 knowledge. A CPA who undertakes a royalty audit for which he is not qualified, because of lack

¹³ The California Society of CPAs Code of Professional Conduct can be found at <http://www.calepa.org/Content/conduct.aspx>. Last Revised June 2010.

¹⁴ I cite to the CalCPA Code of Professional Conduct as an example. CalCPA is the largest state association of professional accountants.

¹⁵ A member in public practice should be “independent in fact and appearance when providing auditing and other attestation services.” AICPA Rule 0.300.050.01.

452 of industry experience, could face professional consequences.¹⁶ The non-CPA Qualified Auditor
453 proposed by SoundExchange does not face such professional censure.

454
455 The codes of professional conduct applicable to CPAs impose a number of standards and re-
456 quirements that are relevant to the audit process and this regulatory regime. These professional
457 standards will help ensure a level of integrity and objectivity that may be lost under
458 SoundExchange’s proposed definition of “Qualified Auditor.” The standards further require
459 competence and diligence, and a commitment to the public. All of these requirements and obli-
460 gations will benefit not only SoundExchange and the broadcasters, but also the copyright owners
461 and the Copyright Royalty Judges.

462
463 While all CPAs must follow the standards described above, not all CPAs will have the specific
464 industry expertise to perform these audits. I do not opine that any CPA can do the audits re-
465 quired to implement the regulations. I do, however, opine that those doing the audits, in addition
466 to having requisite industry knowledge, should be CPAs. I also opine that the CPA’s duty of
467 competence provides an added check that helps ensure that a CPA who agrees to undertake an
468 audit will have the requisite industry expertise.

469
470 In the event that the Judges decide to adopt a “percentage of revenue” royalty model, which I
471 believe would be inadvisable for the reasons stated above, the need for an objective CPA to per-
472 form audits is stronger. I cannot imagine a circumstance in which I would recommend that a
473 non-CPA be engaged in complex allocations of revenue, where there are no uniquely right an-
474 swers and one party or the other can provide logic to support several different methods. I can
475 imagine the parties’ lawyers filing briefs with the auditors demanding to be heard before the au-
476 ditor rules.

477
478 Further, to the extent that a percentage-of-revenue royalty model is adopted, I recommend that
479 SoundExchange and the target of the audit (the royalty-paying service) come to a set of agreed-
480 upon audit procedures prior to the initiation of the audit – in accounting and auditing, we use the
481 term Agreed Upon Procedure (AUP). Under an AUP, the parties mutually agree, among other
482 things, on the degree of thoroughness of the audit—the margin for error of the final result (i.e.,
483 the standard of materiality). Shall, for example, the final number be accurate within \$100,
484 \$10,000 or \$100,000 with 90% probability? 95% probability? This affects the level of effort and
485 scrutiny that the auditor must exercise. Other important variables upon which agreement should
486 be reached include the time period for the audit, the data and documentation that will be made
487 available to the auditor, any restrictions on the use and disclosures of the data and documenta-
488 tion, and the acceptable sampling and extrapolation procedures as well as whether those will be
489 used. Likely the parties will identify other variables to delimit in the AUP. SoundExchange has
490 not, however, proposed a set of rules for a percentage of revenue audit, and the failure to imple-

¹⁶ In addition to sanctions that may be imposed by the AICPA and state professional societies, state accountancy boards may also take action with respect to the CPA’s license.

491 ment rules or require an agreement between the parties on those rules will certainly lead to ex-
492 pensive disputes.

493

494 I recommend that the final regulations require SoundExchange and the service to agree in ad-
495 vance of an audit regarding the specifics of the Agreed Upon Procedures for the audit engage-
496 ment.

497

498 The parties may not agree, but having the disagreement before retention is better than having it
499 after the retention when the audit work is complete and the counterparties have incurred both the
500 time and out-of-pocket costs of the audit. Without Agreed Upon Procedures, there may be dis-
501 putes regarding the result as well as the AUP itself. It is better that the inevitable disputes about
502 the audit be worked out before the audit begins and better that the audit be done by an independ-
503 ent auditor who has a rule book to follow to implement the terms of engagement. The CPA
504 working under rules of the AICPA provides both the independence and the rule book. The
505 Judges should invoke this and require the parties to fight about the AUP before the audit, not af-
506 terwards.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

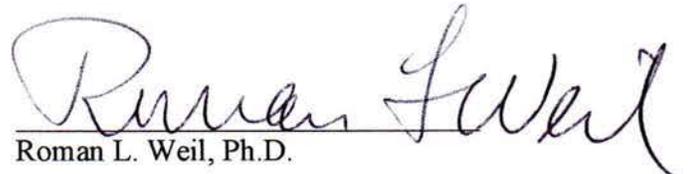
DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)

DOCKET NO. 14-CRB-0001-WR
(2016-2020)

DECLARATION OF ROMAN L. WEIL

I, Roman L. Weil, declare under penalty of perjury that the matters set forth in my Written Rebuttal Testimony in the above-captioned proceeding are true and correct.

Executed this 22nd day of February 2015.


Roman L. Weil, Ph.D.

APPENDIX A

Roman L. Weil

February 2015

Professor Emeritus
Booth School of Business
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DEGREES AND CERTIFICATES

B.A., Yale University, 1962; Economics and Mathematics.
M.S., Carnegie Mellon University, 1965; Industrial Administration.
Ph.D., Carnegie Mellon University, 1966; Economics.
CPA, State of Illinois, 1973; #239.002457
CMA, 1974-2007

ACADEMIC AFFILIATIONS

1965– Instructor and Assistant Professor of Mathematical Economics (1965–70); Associate Professor of Management and Information Sciences (1970–76); Professor of Accounting and Sigmund E. Edelstone Professor of Accounting (1976–97); V. Duane Rath Professor [Emeritus since 2008] of Accounting (1997–); Director of The Institute of Professional Accounting (1978–89); Lecturer in Law (1988–89, 2000–01, 2008); Director of Directors’ College (1998–2002) and Director of The Directors’ Consortium (2002–);
at The University of Chicago

2015 Visiting Professor, McDonough School of Business, Georgetown University

2013 Professor, Carey Business School, Johns Hopkins University

2012-15 Visiting Professor, Rady School, University of California, San Diego

2005-2013 Visiting Professor, Visiting Scholar, University of Washington, Seattle

2008 Visiting Professor, Haas School of Business, University of California, Berkeley

2008- Program Fellow, Stanford University Law School.

- 2009 Visiting Professor, Harvard Law School
- 2009 Visiting Professor, Tepper School of Business, Carnegie Mellon University
- 2009 Visiting Professor, King Fahd University of Petroleum and Minerals
- 2010, 2015 Visiting Professor, Princeton University, Department of Economics
- 2010-11 Visiting Professor of Accounting, Taxation, and Law, Stern School of Business, New York University
- 2011 Adjunct Professor, Cox School of Business, Southern Methodist University
- 1990–95 Visiting Professor of Law, Stanford University Law School. (Edwin A. Heafey, Jr. Visiting Professor in 1991 and 1992)
- 1985 George R. Olincy Visiting Professor of Accounting and Law, New York University School of Law
- 1984, 1985, 2004 Visiting Professor of Accounting, Visiting Professor of Economics, Stanford University, Economics Department and Graduate School of Business
- 1974–76 Mills B. Lane Professor of Industrial Management, College of Industrial Management, Georgia Institute of Technology
- 1963–65, 1971–72 Instructor of Mathematics and Economics, Visiting Associate Professor of Industrial Administration, Carnegie-Mellon University

PROFESSIONAL SOCIETIES AND SERVICE

American Accounting Association (Associate Editor of *The Accounting Review*, 1975–79; Committee to Nominate Outstanding Contributions to the Accounting Literature, 1975–76; Resource Allocation Committee, 1976–77; Outstanding Educator Committee, 1982–83; 1983–84)

American Economic Association

American Institute of Certified Public Accountants

Association of Computing Machinery (Department Editor of *Communications of ACM*, 1971–73)

The Institute of Management Sciences (Associate Editor of *Management Science*, 1970–76, Insurance Liaison Designate, 1972–)

National Association of Accountants

Illinois Society of CPAs (Committee on Accounting Principles, 1976–77)

Securities and Exchange Commission, Advisory Committee on Replacement Cost Implementation, 1976–77

Editorial Board of *Journal of Accounting and Economics*, 1979–81

Editorial Board of *Financial Analysts Journal*, 1980–88

American Assembly of Collegiate Schools of Business Accounting Accreditation Committee, 1987–88

Financial Accounting Standards Board: Task Force on Consolidations, 1985–89; Task Force on the Role of Discounting in Accounting, 1989–

Financial Accounting Standards Advisory Council, 1989–93

Task Force on Financial Instruments, 1994–97

Steering Committee of the American Assembly’s Program on the Future of the Accounting Profession, 2001–

Investment Company Institute, Director Services Committee, 2002–2004

Independent Directors’ Council, 2004–

Mutual Fund Directors’ Forum, 2003

CORPORATE GOVERNANCE

Public Company Accounting Oversight Board, Standing Advisory Group, 2012-2013.

MainStay Group of Funds—advised by New York Life Investments LLC.

MainStay VP Series Fund, 1994-2007.

Chairman of Audit Committee, 1995-2007.

MainStay Group of Funds (consolidated Board of five registered fund companies, including MainStay VP Series Fund Inc.) 2007-

Member, Consolidated Audit Committee

Audit Committee Financial Expert

Stanford University Directors’ College

Organizer, Chair, Panelist of Sessions on Audit Committee, Backdating Stock Options: 1994–2014, continuing.

University of Chicago

Organizer and Director of Directors' College, 1998–2002.

Organizer and Director of Directors' Consortium, 2002– .

Investment Company Institute, Independent Directors' Council, 2004–2008.

Ygomi, LLC

Board member and chairman of Audit Committee, 2006–2008.

GRANTS

NDEA (TITLE IV) Pre-Doctoral Fellowship, 1962–1965.

Principal Investigator for National Science Foundation Grants on “Economic Programming” and “Inflation Accounting.” July 1967 – March 1982.

Discounting in Accounting. Coopers & Lybrand, 1987–90.

BOOKS

Sidney Davidson, Leon J. Hanouille, Clyde P. Stickney, Co-authors. *Intermediate Accounting: Concepts, Methods and Uses*, Hinsdale, IL: The Dryden Press, 1980, 1981, 1982, 1985; Canadian edition (with C. L. Mitchell), 1982.

Sidney Davidson and Clyde P. Stickney, Co-Authors. *Inflation Accounting: General Price Level Adjusted Accounting for the Accountant and the Financial Analyst*, New York: McGraw-Hill Book Co., 1976; Spanish edition 1978; Japanese edition 1978.

Sidney Davidson and James S. Schindler, Co-authors. *Fundamentals of Accounting*, Hinsdale, IL: The Dryden Press, 5th ed., 1975; Spanish edition, 1977.

Sidney Davidson, David O. Green, Walter Hellerstein and Albert Madansky, Co-authors. *Financial Reporting by State and Local Government Units*, Chicago, IL: University of Chicago Press, 1977.

Michael W. Maher, Clyde P. Stickney and Sidney Davidson, Co-authors. *Managerial Accounting: An Introduction to Concepts, Methods, and Uses*, Hinsdale, IL: The Dryden Press, 1978, 2nd ed., 1985; 3rd ed., 1988; San Diego: Harcourt, Brace, Jovanovich, 4th ed., 1991; Ft. Worth, TX: The Dryden Press, 5th ed., 1994.; 6th ed., 1997; 7th ed., 2000; 8th ed., 2003; 9th ed., 2006; 10th ed., 2009; 11th ed., 2012.

Patricia O'Brien, Michael Maher, Clyde P. Stickney and Sidney Davidson, Co-authors. *Accounting: The Language of Business*, Glen Ridge, New Jersey: Thomas Horton & Daughters, Inc. 1974. 2nd ed., 1975; 3rd ed., 1978; 4th ed., 1979; 5th ed., 1982; 6th ed., 1984; 7th ed., 1987; 8th ed., 1990; 9th ed., 1994; 10th ed., 1998; 11th ed., 2005.

Clyde P. Stickney, Katherine Schipper, Jennifer Francis, and Sidney Davidson, Co-authors. *Financial Accounting: An Introduction to Concepts, Methods and Uses*, Hinsdale IL: The Dryden Press, 1976; 2nd ed. 1979; 3rd ed. 1982; 4th ed. 1985; 5th ed. 1988; San Diego: Harcourt, Brace, Jovanovich, 6th ed., 1991; Ft. Worth, TX: The Dryden Press, 7th ed., 1994; 8th ed., 1997; 9th ed, 2000. Thomson-SouthWestern, 10th ed., 2003; 11th ed., 2006; 12th ed., 2007; 13th ed., 2010; 14th ed., 2013. Canadian edition (with C. L. Mitchell), 1979, 1982, 1986.

EDITED VENTURES

Michael W. Maher, Co-editor. *Handbook of Cost Management*, 2nd ed., New York: John Wiley & Sons, 2005.

Jack P. Friedman, Co-editor. *Litigation Support Report Writing: Accounting, Finance, and Economic Issues*, New York: John Wiley & Sons, 2003.

Peter B. Frank, David Hoffman, Christian W. Hughes, Daniel Lentz, and Michael J. Wagner, Co-editors. *Litigation Services Handbook: The Role of the Accountant as Expert*, New York: John Wiley & Sons, 1990, with annual supplements; 2nd ed., 1995; 3rd ed., 2001; 4th ed., 2006, 5th ed. 2013. [Other editors did not work on all editions.]

Sidney Davidson, Co-editor. *Handbook of Modern Accounting*, New York: McGraw-Hill Book Co., 2nd ed., 1977, 3rd ed., 1983; Spanish edition, 1990.

Sidney Davidson, Clyde P. Stickney, Co-editors. *CPA Examination Multiple Choice Questions from Intermediate Accounting*, Hinsdale, IL: The Dryden Press, 1980; 2nd ed., 1984.

Sidney Davidson, Co-editor. *Handbook of Cost Accounting*, New York: McGraw-Hill Book Co., 1978; Spanish edition, 1983.

Richard F. Vancil, Co-editor. *Replacement Cost Accounting: Readings on Concepts, Uses, and Methods*, Glen Ridge, New Jersey: Thomas Horton & Daughters, 1976.

25th Anniversary Issue of the *Communications of the Association for Computing Machinery*, 15, 7 (July, 1972), 518–702.

NEWSPAPER NOTES AND ARTICLES

- “As an Investment, Wine Is No Corker,” *Business Week*, October 2, 1989.
- “The FASB’s Healthy Proposal,” *The Wall Street Journal*, March 1, 1989.
- “Whom to Soak When Utilities Take a Bath,” *The Wall Street Journal*, Claudia Rosett, co-author, October 9, 1984.
- “De- or Misfeasance,” *Barron’s*, December 5, 1983.
- “Inflation Accounting,” *Chicago Tribune*, January 29, 1979.
- “Inflation Brings Recognition to ‘LIFO’,” *Atlanta Constitution*, May 4, 1975.

ARTICLES, CHAPTERS, NOTES, AND REVIEWS

- J. Milliron, co-author, “The Financial Illiteracy Defense,” in 2013 Supplement for the Handbook of Litigation Services, New York: John Wiley & Sons, 2013.
- “Convolving Assumptions in Measuring Damages,” in 2013 Supplement for the Handbook of Litigation Services, New York: John Wiley & Sons, 2013.
- S. Buffo and D. Hoffman, co-authors, “Serving as a Financial Expert in Litigation,” Handbook of Litigation Services, New York: John Wiley & Sons, 2013.
- P.B. Frank, C.W. Hughes, and M.J. Wagner, co-authors. “The Role of the Financial Expert as Witness” *Handbook of Litigation Services*, New York: John Wiley & Sons, 2007.
- M.K. Dunbar, E. Evans, and M.J. Wagner, co-authors. “Ex Post versus Ex Ante Calculations,” *Handbook of Litigation Services*, New York: John Wiley & Sons, 2007, revised 2012.
- M.W. Maher, M.L. Marais, and W.E. Wecker, co-authors, “Statistical Estimation of Incremental Cost from Accounting Data,” *Handbook of Litigation Services*, New York: John Wiley & Sons, 2007, revised 2012.
- “Debunking Critics’ Wine Words: Can Economists Distinguish the Smell of Asphalt from the Taste of Cherries?” *Journal of Wine Economics*, 2, 2, 2007, 136-44.
- D.J. Coates and M.L. Marais, Co-authors. “Audit Committee Financial Literacy: A Work in Progress,” *Journal of Accounting Auditing and Finance*, March 2007.
- “Capital Budgeting: Concepts and Methods,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.

- “Capital Budgeting: Implementation,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- “Compound Interest: Concepts and Methods,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- “Cost Management Concepts,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- “Accounting Magic,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- Kathleen Fitzgerald, co-author. “Accounting Underpinnings of Corporate Scandals,” *Litigation Services Handbook*, 2005, New York: John Wiley & Sons.
- Gordon Shillinglaw, co-author, “Economic Concepts of Cost in Managerial Accounting,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- Russell A. Taussig, co-author, “Different Costs for Different Purposes,” *Handbook of Cost Management*, New York: John Wiley and Sons, 2005.
- Analysis of Reserve and Regular. *Chance*, 18, 3 (Summer 2005), 9–15.
- Roderick M. Hills, co-author. “Nuts and Bolts Guidance for Audit Committees,” *The Corporate Board*, Sept./Oct. 2004, 1–6.
- Give Financial Literacy a Chance: Leave No Audit Committee Behind, *Harvard Business Review*, May 2004, 21–24, Reprint No. F0405D.
- “Convolving Assumptions in Measuring Damages,” *Litigation Support Report Writing*, Jack Friedman, ed.; New York: John Wiley & Sons, 2003.
- M.J. Wagner and M.K. Dunbar, Co-authors. “*Ex Ante* versus *Ex Post* Damages Calculations,” *Litigation Services Handbook*, New York: John Wiley & Sons, 2003.
- “Compensating Plaintiff for Asynchronous Payments,” *Litigation Services Handbook*, New York: John Wiley & Sons, 2003.
- “Fundamental Causes of Accounting Debacles: Show Me Where It Says I Can’t,” *Institutional Investor Advocate*, 4, 3 (Fall 2002), 1–6.
- “Parker v. Prial: The Death of the Vintage Chart,” *Chance*, 14, 4 (Fall 2001), 27–31.
- “Diary of a Rug Virgin,” *Hali*, 117 (July–Aug 2001), 19–21.

- Roberts, Harry V., co-author. "Starting Research Early," in Eric Rasmusen, ed., *Readings in Games and Information*, Oxford: Blackwell Publishers, Ltd., 2001, 134–141.
- "The Role Of The Financial Expert In Litigation Services," in *Litigation Services Handbook*, 3rd ed., New York: John Wiley & Sons, 2001.
- "Analyzing the Issues: A Report on the Accounting Methods of the Cott Corporation," in J.H. Amernic, *Financial Accounting: Expanding Horizons*, Toronto: McGraw-Hill Ryerson, 1998, 221-24.
- "Practical Application of Accounting Issues in Legal Cases," in D. S. Williams, *Accounting for Lawyers*, New York: Practising Law Institute, 1997, 391-440.
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- "Compensation for the Passage of Time," *Litigation Services Handbook*, 2/e, New York: John Wiley & Sons, 1995.
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- "Damages to the Start-Up Business: Contrasting the Economic and Accounting Views," Frank et al., ed., *Litigation Services Handbook*, New York: John Wiley & Sons, Inc., 1991, 64–69.
- "Role of the Time Value of Money in Financial Reporting," *Accounting Horizons*, 4, 4 (December 1990), 47–67.
- William E. Wecker, Co-author. "Statistical Estimation of Incremental Cost from Accounting Data," in P. Frank et al., ed., *Litigation Services Handbook*, New York: John Wiley & Sons, Inc., 1990; revised in 2nd ed., 1995.
- Frank, Peter and Michael Wagner, Co-authors. "Role of the CPA in Litigation Services," *Litigation Services Handbook*, John Wiley & Sons, Inc., 1990; revised in 2nd ed., 1995.
- Kormendi, Roger and others, Co-authors. *Crisis Resolution in the Thrift Industry: Beyond the December Deals*, Report of the Mid American Institute Task Force on the Thrift Crisis, March 1989, a report to the Banking Committee of the U.S. Senate.
- Lindahl, Frederick W., Co-author. "Empirical Research in Choice of Inventory Accounting Method," *The Economics of Inventory Management*, M. C. Lovell editor, Amsterdam: Elsevier Science Publishers, 1988, 225–247.

- Katherine Schipper and Rex Thompson, Co-authors. “Disentangling Interrelated Effects of Regulatory Changes on Shareholder Wealth: The Case of Motor Carrier Deregulation,” *Journal of Law and Economics*, 30 (April 1987), 67–100.
- “De- or Misfeasance? A Look at the New FASB Ruling,” in Paul B. W. Miller and Rodney J. Redding, *The FASB: The People, the Process, and the Politics*, 2nd ed.; Richard D. Irwin, 1988.
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- Sidney Davidson, and Steven F. Rasch, Co-authors. “Behavior of the Deferred Tax Credit Account, 1973–82,” *Journal of Accountancy*, 158, 4 (October 1984), 138–42.
- Sandra Myers, Co-author. “Policies for a Successful Doctoral Program,” T. Burns, ed. *Doctoral Programs in Accounting*, Columbus: Ohio State University Press, 1984, 297–313.
- “Compound Interest--Concepts and Applications,” Chapter 9, *Handbook of Modern Accounting*, 3rd ed., ed. by S. Davidson and R. Weil, New York: McGraw-Hill Book Co., 1983.
- Clyde P. Stickney and Mark A. Wolfson, Co-authors. “Income Taxes and Tax-Transfer Leases: General Electric’s Accounting for a Molotov Cocktail,” *The Accounting Review*, 58, 2, (April 1983), 439–459.
- Katherine Schipper, Co-author. “Alternative Accounting Treatments for Pensions,” *The Accounting Review*, 57, 4 (October, 1982), 806–824.
- J. Leslie Livingstone, Co-author. “Accounting for Changing Prices in the U.S.: An Explication and Evaluation of SFAS No. 33,” R. R. Sterling and K.W. Lemke, eds., *Maintenance of Capital--Financial Versus Physical*, Houston: Scholars Book Company, 1982, 225–257.
- James M. Patell and Mark A. Wolfson, Co-authors. “Accumulating Damages in Litigation: The Roles of Uncertainty and Interest Rates,” *The Journal of Legal Studies*, 11, 3 (June 1982), 341–364.
- “Accounting for Changing Prices in Regulated Industries,” *Public Utility Valuation and the Rate Make Process*, H.A. Cowles, ed., Ames, Iowa: Iowa State University, 1981, 571–74.
- “Adjusting Debt-Equity Ratios,” *Financial Analysts Journal*, 37, 1 (January/February 1981), 10ff.
- “Meaning of ‘Cost’ in Context of ‘Below Cost’ Pricing,” *Antitrust Economics*, Lexecon Inc.: Chicago, IL, 1980, 181–9.

- “Managing Earnings Using an Insurance Subsidiary: A Case of Restraint by Sears/Allstate,” *The Accounting Review*, 55, 4 (October 1980), 680–684.
- William S. Easman, Angela Falkenstein, Co-authors. “Changes in Sustainable Income (Computed from Current Cost Data) Correlate Better with Annualized Returns Than Do Changes In Conventionally Reported (GAAP) Income,” *Financial Analysts Journal*, 35, 5 (September/October, 1979), 44–48. Won 1979 Graham and Dodd Scroll from the Financial Analysts Federation.
- Sidney Davidson, Lisa B. Skelton, Co-authors. “Financial Reporting and Changing Prices Estimated Results of Applying the FASB Proposal,” *Financial Analysts Journal*, 35, 3 (May/June, 1979), 41–54.
- Daniel A. Lasman, Co-author. “Adjusting the Debt-Equity Ratio,” *Financial Analysts Journal*, 34, 5 (September/October, 1978), 49–58. Reprinted in *CFA Readings in Financial Statement Analysis*, G. White and A. Sondhi, eds., Charlottesville: The Institute of Chartered Financial Analysts, 1985, 106–115.
- Jonathan E. Ingersoll, Jr. and Jeffery Skelton, Co-authors. “Duration Forty Years Later,” *Journal of Financial Quantitative Analysis*, November 1978, 627–650.
- Sidney Davidson, Co-author. “Income Tax Implications of Various Methods of Accounting for Changing Prices,” *Journal of Accounting Research*, 16, Supplement 1978.
- Richard F. Vancil, Co-author. “Current Replacement Cost Accounting, Deferred Taxes, and Distributable Income,” *The Accounting Forum*, 48, 2 (December 1978), 50–70.
- Sidney Davidson, Co-author. “Definitions and Measures of Income in Times of Changing Prices,” *Realizing Knowledge as a Resource: Proceedings of the Second Symposium on Research Applied National Needs*, Washington D.C.: National Science Foundation, RANN 2, Volume VI, Regulation, 1977, 29–32. (Adapted from Brookings piece, 1976; see below.)
- “Capital Budgeting,” Chapter 20 in Sidney Davidson and R.L. Weil, eds., *The Handbook of Cost Accounting*, New York: McGraw-Hill Book Co., 1978.
- Angela Falkenstein, Co-author. “Replacement Cost Accounting: What Will Income Statements Based on the SEC Disclosures Show? – Part I,” *Financial Analysts Journal*, 33, 1 (January/February, 1977), 46–57. “Replacement Cost Accounting: Estimating the SEC Disclosures for Cost of Goods Sold and Depreciation – Part II,” *Financial Analysts Journal*, 33, 2 (March/April, 1977), 48–57. Won 1977 Graham and Dodd Scroll from the Financial Analysts Federation.

- James A. Largay III, Co-author. “Compound Interest: Concepts and Applications,” Chapter 8, *Handbook of Modern Accounting*, edited by Sidney Davidson and Roman L. Weil, New York: McGraw-Hill Book Co., 1977.
- Selwyn W. Becker, Co-Author. “Determination of Risk Preference to Facilitate Customer-Portfolio Manager Interactions,” R. Henry and O. Moeschlin, eds., *Mathematical Economics and Game Theory*, Berlin: Springer Verlag, 1977, 553–563.
- David F. Shanno, Co-author. “The Separate Phases Method of Accounting for Leveraged Leases: Properties of the Allocating Rate and an Algorithm for Finding It,” *Journal of Accounting Research*, 14, 2 (Autumn, 1976), 348–356.
- Sidney Davidson, Co-author. “Inflation Accounting: Some Income Tax Implications of the FASB Proposal,” Chapter 3, *Inflation and the Income Tax*, H. Aaron, ed., Washington D.C.: The Brookings Institution, 1976. Appendix of this article is reprinted in William S. Easman, Jr., ed., *Inflation Accounting/Indexing and Stock Behavior*, New York: Faulkner, Dawkins & Sullivan, July 1976.
- Richard F. Vancil, Co-author. “Current Replacement Cost Accounting: Depreciable Assets, and Distributable Income,” *Financial Analysts Journal*, 32, 4 (July/August, 1976), 38–45. Reprinted in R. F. Vancil and R. L. Weil, eds., *Replacement Cost Accounting: Readings on Concepts, Uses, and Methods*, Glen Ridge, New Jersey: Thomas Horton & Daughters, 1976.
- “Implementation of Replacement Cost Accounting: The Theory and Use of Functional Pricing,” R. F. Vancil and R. L. Weil, eds., *Replacement Cost Accounting: Readings on Concepts, Uses and Methods*, Glen Ridge, New Jersey: Thomas Horton & Daughters, 1976.
- Sidney Davidson, Co-author. “Inflation Accounting: The SEC Proposal for Replacement Cost Disclosures,” *Financial Analysts Journal*, 32, 2 (March/April, 1976), 57–66. Reprinted in R. F. Vancil and R. L. Weil, eds., *Replacement Cost Accounting: Readings on Concepts, Uses, and Methods*, Glen Ridge, New Jersey: Thomas Horton & Daughters, 1976.
- Sidney Davidson and Samy Sidky, Co-authors. “Inflation Accounting: How Well Do General Price Level Adjustments Reflect Current Costs of Inventory?” *Proceedings of the Conference on Topical Research in Accounting*, Michael Schiff and George Sorter, eds., Ross Institute of Accounting Research, The Schools of Business of New York University, 1976.
- Sidney Davidson, Co-author. “A Shortcut in Computing Earnings per Share,” *Journal of Accountancy*, 140, 6 (December, 1975) 45–47.
- Sidney Davidson, Co-author. “Lease Capitalization and Inflation Accounting.” *Financial Analysts Journal*, 31, 6 (November/December, 1975), 22–29, 57.

- Sidney Davidson and Lisa Skelton, Co-authors. "On the Behavior of Deferred Tax Credits," *Journal of Accountancy*, 143, 4 (April, 1977), 53–59.
- Sidney Davidson, Co-author. "Comments on 'Are You Ready for Inflation Accounting?'" *Journal of Accountancy*, 140, 3 (September, 1975), 109–110.
- Robert S. Kaplan, Co-author. "Actuarial Economists: A Reply," *The Actuary*, (September, 1975), 3, 8.
- Sidney Davidson, Co-author. "Impact of Inflation Accounting on 1974 Earnings," *Financial Analysts Journal*, 31, 5 (September/October, 1975), 42–54.
- Sidney Davidson and James Kelly, Co-authors. "How Inflation-adjusted Accounting Would Pare Banks' Net," *Banking*, 57, 7 (July, 1975), 31–32, 90, 94.
- Sidney Davidson, Co-author. "Inflation Accounting: Public Utilities," *Financial Analysts Journal*, 31, 3 (May/June, 1975), 30–34, 62.
- Sidney Davidson, Co-author. "Inflation Accounting: What Will General Price Level Adjusted Income Statements Show?" *Financial Analysts Journal*, 31, 1 (January/February, 1975), 27–31, 70–84. Reprinted in Largay and Livingstone's *Accounting for Changing Prices*, New York, John Wiley & Sons, 1976, 91–110, 288–294. Won 1975 Graham and Dodd Scroll from the Financial Analysts Federation.
- Hugo Nurnberg and Clyde P. Stickney, Co-authors. "Combining Stockholders' Equity Accounts Under Poolings of Interests," *The Accounting Review*, 50 (January, 1975), 179–183.
- Robert S. Kaplan, Co-author. "An Actuarial Audit of the Social Security System," U.S. Treasury Department Report, December 1974.
- Richard Dietrich, Co-author. "Partial-Rank Linear Management Information Systems," *The Accounting Review*, 49, 4 (October, 1974), 846–850.
- Katherine Schipper and John R. Twombly, Co-authors. "Evaluating Leases Under Uncertainty," *The Accounting Review*, 49, 4 (October, 1974), 796–801.
- Review of *L.S.E. Essays on Cost* (Buchanan and Thirlby), *Journal of Business*, 47, 4 (October, 1974), 585–586.
- Sidney Davidson, Co-author. "On Holding Gains and Losses and the Evaluation of Management," *The Accounting Review*, 49 (July, 1974), 524–527.
- John P. Gould, Co-author. "The Rule of 69," *Journal of Business*, 47, 3 (July, 1974), 397–398.

- Lawrence Fisher, Co-author. "TIAA/CREF: Who Gets What?" *Journal of Business*, 47, 1 (January, 1974), 67–87.
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- L. Warwick Copleston, Co-author. "Are All Those Lab Tests Really Worth the Cost?" *Prism* (American Medical Association), 4 (July, 1973), 42–45.
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- Joel E. Segall and David O. Green, Co-authors. "Premiums on Convertible Bonds: Reply," *Journal of Finance*, 27, 5 (December, 1972), 1163–1170.
- David F. Shanno, Co-author. "Management Science: A View from Nonlinear Programming," *Communications of the Association for Computing Machinery*, 15 (July, 1972), 542–549.
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- Gerald L. Thompson, Co-author. "Matrix Pencils ($Ay = \square By$): Existence, Calculations, and Relations to Game Theory," *Linear Algebra and Its Applications*, 5 (1972), 207–226.
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- David F. Shanno, Co-author. “‘Linear’ Programming with Absolute Value Functionals,” *Journal of the Operations Research Society of America*, 19 (January/February, 1971), 120–124.
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APPENDIX B

Roman L. Weil

CHRONOLOGICAL LISTING OF SWORN TESTIMONY- 2004 TO PRESENT

Amnon Landan v. Hewlett Packard Company as Successor to Mercury Interactive, LLC., 2014, Ref No. 1100073858, Deposition (JAMS Arbitration)

Amazon.com, Inc. and Subsidiaries v Commissioner of the Internal Revenue, 2014, Docket 31197-12, Deposition (U.S. Tax Court)

Lehman Brothers Holdings Inc., and Official Committee of Unsecured Creditors of Lehman Brothers Holdings Inc., et al. vs. JPMorgan Chase Bank, N.A., Chapter 11 Case No. 08-13555 (JMP) Adversary Proceeding No. 10-03266 (JMP), 2014 (Southern District of New York)

In Re: Oil Spill by the Oil Rig “Deepwater Horizon” in the Gulf of Mexico, MDL No. 2179, 2013, Declaration (U.S. District Court for the Eastern District of Louisiana)

SEC v. Mercury Interactive, LLC, et al., 3-07-cv-02822, 2012, Deposition (U.S. District Court Northern District of California)

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SEC v. Lisa C. Berry, C-07-04431 RMW, (U.S. District Court Northern District of California)

Securities and Exchange Commission v Don Watson, CV 09-443-PHX-GMS, 2011, Report (U.S. District Court of Arizona)

In Re: Alstom SA Securities Litigation, Master File No. 03-CV—6595(VM), 2010, Report and Deposition (U.S. District Court, Southern District of New York)

Potash Corporation of Saskatchewan, Inc., Civil Action No. 1:10-CV-06024, 2010, Report and Deposition (U.S. District Court for Northern District of Illinois, Eastern Division)

Hanesbrands, Inc. vs. Sara Lee Corporation, 2010, Report and Testimony

In re: Francisco Partners, et al. v. Alan Perkins, Case No. 74-148-Y—00432-09 02 GLO; 2010, Report and Testimony (American Arbitration Association)

Teachers Retirement Systems of Louisiana v. Maurice R. Greenberg, Edward E. Matthews, Howard I. Smith and C.V. Starr & Co, Inc., 20106-VCS, 2008, Deposition (Court of Chancery, State of Delaware)

Lawrence E. Jaffe Pension Plan, et al. v Household International, Inc., et al., 02C-5893, 2008, Deposition (Northern District of Illinois, Eastern Division)

Genesco Inc. v. The Finish Line, Inc., and Headwind, Inc., UBS Securities LLC and UBS Loan Finance LLC, No. 07-2137-Ii(Iii), 2007, Deposition and Trial testimony (Chancery Court, State of Tennessee)

Consolidated Edison Company of New York, Inc. & Subsidiaries v. United States, 2007, Deposition and Trial Testimony

Patrick E. Phillips, Jr. et al. v G &H Seed Co., Inc. et al., Testimony (27th Judicial District Court, Parish of St. Landry, Louisiana)

Fifth Third Bancorp and Subsidiaries v. United States, 2006-Deposition, 2008-Trial Testimony

Advo v. Valassis, 2006, Deposition (Court of Chancery, State of Delaware)

BB&T Corporation v. United States, 2006, Deposition (U.S. District Court, Middle District of North Carolina)

Cisco Systems Inc., Securities Litigation, 2006, Deposition (U.S. District Court, Northern District of California)

3dfx Interactive Inc., Debtor, William A. Brandt, Jr., Trustee vs. NVIDIA Corporation and NVIDIA U.S. Investment Company, 2005-Deposition, 2007-Trial Testimony

U.S. v. Walter A. Forbes, E. Kirk Shelton, 2004, Testimony (U.S. District Court, Connecticut)

Securities and Exchange Commission v. Dean L. Buntrock, et al, 2004-Deposition, 2007-Trial Testimony (U.S. District Court, Northern District of Illinois)

VSI Holdings, Inc. et al. v. SPX Corporation, 2004, Deposition (U.S. District Court, Eastern District of Michigan)

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re

DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)

DOCKET NO. 14-CRB-0001-WR
(2016-2020)

WRITTEN REBUTTAL TESTIMONY OF
DOMINIQUE M. HANSENS, PH.D.

(On behalf of the National Association of Broadcasters)

February 23, 2015

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I. Qualifications

1. I am the Bud Knapp Distinguished Professor of Marketing at the UCLA Anderson School of Management in Los Angeles, California, where I have served on the faculty since 1977. I received my Licentiate from the University of Antwerp in Applied Economics and received my M.S. and Ph.D. degrees in Management from Purdue University. At UCLA, I have taught a variety of marketing courses including Elements of Marketing, Marketing Strategy & Planning, and Customer Information Strategy. I have received awards for distinguished teaching in the MBA and Executive MBA programs, including the UCLA Anderson School's Neidorf "Decade" teaching award.

2. My research focuses on strategic marketing problems, to which I apply expertise in data-analytic methods such as econometrics and time-series analysis. I am the co-author of *Market Response Models: Econometric and Time Series Analysis* and various monographs and book chapters. I have served as an area editor for *Marketing Science* and an associate editor for *Management Science* and the *Journal of Marketing Research*. My papers have appeared in the leading academic and professional journals in marketing, economics, and statistics. Five of these articles have won Best Paper awards, in *Marketing Science* (1995, 2001, 2002), *Journal of Marketing Research* (1999, 2007) and *Journal of Marketing* (2010), and an additional eight were award finalists.

3. From July 2005 to June 2007, I served as the Executive Director of the Marketing Science Institute in Cambridge, Massachusetts. In 2007, I was the recipient of the Churchill Lifetime Achievement Award of the American Marketing Association (AMA), and in 2010, I was elected as a

Fellow of the INFORMS Society for Marketing Science. In 2013, I received the AMA Mahajan Award for Career Contributions to Marketing Strategy Research.

4. I have frequently consulted on marketing issues for companies in a variety of industries such as consumer products, software, entertainment, technology, information services, and retailing. Several of my research, teaching, and consulting engagements have involved the design of consumer surveys and/or the use of survey data. I am also a founding partner of MarketShare, a global marketing analytics firm headquartered in Los Angeles. My CV is attached as Appendix A.

5. I have been assisted in this matter by staff of Cornerstone Research, who worked under my direction.

6. A list of my prior testimony is attached as Appendix B.

II. Assignment

7. I understand that SoundExchange has proposed a set of royalty rates for the years 2016 to 2020 for sound recordings transmitted online, including a rate equal to a percentage of the total streaming-related revenue of the transmitting service.¹ I understand that this rate was calculated largely considering online music streaming services, from which all or essentially all of the value is derived from listening to sound recordings. Because SoundExchange proposed a common rate for all commercial webcasters, however, the proposed rate would also apply to AM/FM radio stations across the U.S. that stream their content over the internet. These AM/FM

¹ The proposed rate is 55% of revenue. See Testimony of Daniel L. Rubinfeld, 10/6/14, ¶32, submitted by SoundExchange.

stations differ from other webcasters in that they include many non-music elements of programming that listeners may value.

8. I was asked by counsel for the National Association of Broadcasters (“NAB”), which represents AM/FM radio stations across the U.S., to design and conduct a survey to estimate the relative value assigned, by listeners of U.S.-based commercial AM/FM music-formatted radio stations over the internet, to the music played by the stations they listen to in relation to the other programmatic elements of those stations, such as news, weather updates, traffic updates, on-air personalities, and local events information.

9. I reserve the right to modify my opinions if new information and data become available.

III. Summary of Conclusions

10. I designed and conducted an online survey in accordance with standard survey procedures to estimate the relative value assigned by listeners to music as opposed to non-music programmatic elements, as described in Section II above.

11. My analysis of the survey results shows that online listeners, on average, assign to “music” about 57% of the total value they derive from the programmatic content of U.S.-based AM/FM music-formatted radio stations. Non-music programmatic content, including news, weather updates, traffic updates, on-air personalities, and contests, among other elements, collectively accounts for about 43% of the total value to listeners, according to the survey results.

12. The remainder of this written testimony, including its accompanying appendices, provides background information as well as the full details of the survey design, implementation, and results.

IV. Background

13. I understand that the Copyright Royalty Judges are conducting a proceeding to set royalty rates applicable to certain digital audio transmissions of sound recordings streamed over the internet (“webcasting”), including transmissions that are internet “simulcasts” of terrestrial AM/FM radio broadcasts, for the years 2016 through 2020. I further understand that this simulcast content is essentially identical whether listened to via a traditional AM/FM receiver or via the internet and that the webcasting royalty rates determined in this proceeding will apply only to simulcast transmissions of that programming, not the broadcast transmissions of the same programming. Online listening to these simulcast radio stations is the focus of my survey and this written testimony.²

14. The transmitted sound recordings may encompass a wide range of musical styles, including pop, country, rock, urban, Christian, classical, jazz, and folk, among many others, but any one radio station typically (but not always) focuses on a particular style of music. These radio stations very commonly have several other types of content apart from music. For example, many stations provide updates on the latest news, weather, traffic, and sports scores, as well as local event information. In addition, hosts, DJs,

² I note that online music streaming services such as Pandora and Spotify are not included in the scope of my assignment, as they do not provide simulcast content from commercial terrestrial AM/FM radio stations.

and other on-air personalities provide entertainment and host call-in shows wherein listeners ask questions or provide their own opinions. Call-in contests for prizes are another type of non-music content. For commercial stations, advertisements are also a significant non-music component, as I understand advertisements can constitute a substantial portion of total broadcasting time. This is not meant to be an exhaustive list of the types of non-music programming content, but rather a list of some of the prominent examples.³

15. To prepare myself for this assignment, I reviewed certain documents produced in this proceeding as well as other documents. These documents include the written testimony of four radio broadcasters submitted on behalf of NAB in this matter,⁴ surveys of online listeners, demographic and usage statistics, and general industry information. I also personally spent time listening to AM/FM simulcasts to familiarize myself with them. This preparation, along with discussions with counsel, helped to inform me of the non-music features of AM/FM music-formatted radio stations that listeners (including online listeners) potentially value.

16. Some radio stations, for example all-talk and all-news radio stations, do not broadcast music as part of their regular programming. These radio

³ I understand that online-only streaming services typically do not have the non-music programming elements I have described, with the exception of advertisements. Consistent with this, Daniel Rubinfeld notes in his testimony that AM/FM broadcasters have relatively fewer music “plays” per hour compared to online-only services. Testimony of Daniel L. Rubinfeld, 10/6/14, footnote 78.

⁴ Written Direct Testimony of John Dimick, 10/7/14; Written Direct Testimony of Ben Downs, 10/6/14; Written Direct Testimony of Robert Francis Kocak, 10/3/14; Written Direct Testimony of Julie Koehn, 10/6/14. This written direct testimony was submitted by NAB.

stations are not relevant to my assignment and I have taken steps to ensure that respondents in my survey are providing answers relating to music-formatted stations, as the inclusion of non-music formatted stations would artificially lower the average value assigned to music by respondents.⁵ Similarly, non-commercial radio stations are not relevant to my assignment and I designed my survey accordingly to ensure that respondents provided responses only for commercial AM/FM music-formatted radio stations.

V. Survey Design

17. I worked with Target Research Group⁶ (“TRG”) and Cornerstone Research to design and conduct an online survey to estimate the relative value assigned, by listeners of U.S.-based commercial AM/FM music-formatted radio stations over the internet, to the music played by the stations they listen to in relation to the other programmatic elements of those stations. TRG specializes in conducting consumer surveys and has extensive experience conducting them in the U.S. and abroad. I have conducted online surveys using TRG and Cornerstone Research previously, and I am confident that I can rely on their experience, technical capabilities, and data integrity processes.

18. In designing and implementing my survey, I followed standard scientific methods to ensure the reliability of the survey results. Some of the

⁵ Presumably, a respondent providing answers regarding an all-news station, for example, would assign a much lower value to “music” because the all-news station does not play music as part of its regular programming.

⁶ <http://www.targetresearchgroup.com/>

key considerations in conducting a rigorous consumer survey are as follows⁷:

- The design must be driven by the survey’s stated objectives.
- The design must ensure an accurate representation of the underlying population of interest so that extrapolation of the survey results to the target population is reliable and valid.
- The sampling plan must be consistent with statistical principles and market research best practices.
- Attempts should be made to minimize or eliminate bias – for example, bias stemming from respondent selection, question wording, and/or ordering of answer choices.
- The survey questions should be designed to ensure high-quality answers – for example, by avoiding confusion or guessing by respondents.
- The investigator should verify that the survey responses are from valid respondents and should use standard statistical tools to analyze the data.

19. I addressed all of these considerations in the design of my survey. In the following sections, I describe in detail the different components of the design of the survey I conducted.

⁷ For a detailed discussion of scientific guidelines for surveys, see, e.g., Shari Seidman Diamond, “Reference Guide on Survey Research,” in *Reference Manual on Scientific Evidence*, 3rd ed., 2011 (“Diamond 2011”), pp. 359-423.

A. Blinded, Unbiased Design

20. The survey instrument should be designed to ensure unbiased answers from respondents, and the same principle applies to the administration of the survey. A so-called double-blinded design is one way to ensure this. As discussed in Diamond (2011), such double-blinded character is common in standard survey designs (emphasis in the original):

To ensure objectivity in the administration of the survey, it is standard interview practice in surveys conducted for litigation to do double-blind research whenever possible: Both the interviewer and the respondent are blind to the sponsor of the survey and its purpose. Thus, the survey instrument should provide no explicit or implicit clues about the sponsorship of the survey or the expected responses. Explicit clues could include a sponsor's letterhead appearing on the survey; implicit clues could include reversing the usual order of the *yes* and *no* response boxes on the interviewer's form next to a crucial question, thereby potentially increasing the likelihood that *no* will be checked.⁸

21. Consistent with this principle, my survey was implemented in a double-blinded fashion. The questions and answer choices in my survey were composed so as not to disclose the sponsor of the survey or any other extraneous information that could potentially bias responses to the survey. For example, nowhere in the survey questionnaire was there a mention of NAB or the webcasting royalty rate-setting proceeding for which this survey was being conducted. Also, as discussed later in this testimony, the survey questions were neutrally worded, and the order of answer choices was randomized where appropriate to avoid any bias in the results. The online

⁸ Diamond 2011, pp. 410-411.

nature of my survey has the additional benefit of avoiding any bias introduced by the opinions or emotions of a human interviewer. Together, these steps helped to ensure that my survey produced reliable results.

B. Screening Questions

22. When designing a survey, it is standard practice to start with a group of questions that “screen potential respondents to determine if they are members of the target population of the survey.... [S]creening questions must be drafted so that they do not ... convey information that will influence the respondent’s answers on the main survey.”⁹

23. The screening questions, answer choices, and termination criteria for my survey are detailed in Appendix 1. The screening questions were designed to identify members of the target population and to determine whether respondents qualify for inclusion in the survey. For this survey, I included screening questions to identify residents of the United States 1) who have no affiliation with an advertising, public relations, or marketing agency or the advertising department of a company, with a market research firm or a marketing research department of a company, with a radio broadcasting or webcasting/internet streaming company, or with a record company or label,¹⁰ 2) who, in a typical week, listen for at least one hour to U.S.-based AM/FM commercial music-formatted radio stations over the internet, and 3) who are at least 16 years of age.

⁹ Diamond 2011, pp. 386-387.

¹⁰ It is standard practice to use these types of exclusion criteria to ensure that potential respondents who may have conflicts of interest in answering the survey do not bias the results.

24. The inclusion of unrelated answer options in screening questions avoids drawing attention to the item(s) of specific interest to the investigator and avoids disclosing the sponsor and purpose of the survey in a way that could bias the answers to the main questions.¹¹ I used such unrelated answer options in my screening questions when appropriate. For example, in screening question S8, instead of simply asking respondents if they listen to AM/FM radio over the internet in a typical week, the survey asks which of several different activities they do in a typical week, including watching video over the internet, shopping at a warehouse club, listening to an online-only music streaming service like Pandora, accessing an online bank account, and the item of interest, listening to AM/FM radio over the internet.¹²

25. Respondents who answered any of the screening questions in a way that identified them as *not* being part of the target population were terminated from the study immediately upon answering the relevant question. For example, if a respondent answered that he or she does not listen to AM/FM radio over the internet in a typical week, then that respondent would be terminated.

26. In addition, to ensure that the survey was easy to read and respond to, respondents were only allowed to participate in the survey through a traditional desktop computer, laptop/notebook computer, or tablet computer (and not, for example, through a smartphone). Although metadata were collected identifying each respondent's device type, a screening question was also included asking survey respondents their device type. If a

¹¹ Diamond 2011, pp. 386-387, 410.

¹² See Appendix 1, question S8.

respondent answered that he or she was using, for example, a smartphone to complete the survey, that respondent was terminated because the smaller screen sizes of smartphones can make it more difficult for respondents to read and answer questions. Similarly, as discussed in Section V.E, if a respondent answered that he or she was using a permitted device but the metadata revealed otherwise, that respondent was excluded from the final analysis set.

27. The screening part of the survey also includes questions relating to gender, race, and household income. These questions were used, along with age information, to draw a sample of respondents representative of the target population. More detail on the sample and target population is presented in Section V.C below.

28. Overall, the screening questions in my survey helped ensure that my sample population was valid and representative and allowed me to reliably estimate the relative value assigned, by listeners of U.S.-based commercial AM/FM music-formatted radio stations over the internet, to the music and other programmatic elements of those stations.

C. Online Sample

29. The online sample provider for my survey was the Toluna Group (“Toluna”), one of the world’s leading online panel and survey-technology providers.¹³ Toluna maintains a community of about 1.7 million potential U.S. survey respondents and incorporates several processes to ensure data

¹³ For more information, see <http://www.toluna-group.com/> and “Esomar 28: 28 Questions to Help Research Buyers of Online Samples,” available at http://www.toluna-group.com/docs/default-source/White-Paper_Docs/esomar-2823E770C5D97FFE23C334F723.pdf.

integrity, some of which are described in Section V.E.¹⁴ Toluna incentivizes respondents to participate in surveys through a system where panelists earn points for completing surveys. These points are automatically redeemed as vouchers (for example, Amazon gift cards).¹⁵

30. To draw valid inferences from a survey, one must use a sample of respondents that is representative of the underlying target population that one seeks to study. My best estimate of the gender, age, race, and income distribution of the target population is based on surveys of iHeartRadio listeners conducted in 2013 and 2014.¹⁶ iHeartRadio is an online music streaming service that aggregates more than 1,500 AM/FM radio stations across the country.¹⁷ To my knowledge, it is one of the largest online aggregators of AM/FM radio stations, and it has a large online listening audience.¹⁸ iHeartRadio does not exclusively stream music-formatted AM/FM radio stations, and it also offers online-only stations (*i.e.*, not AM/FM stations), but nevertheless I judge it to be the best source of demographic information available for my purposes at this time.

31. The data from the surveys of iHeartRadio listeners provided approximate targets for the demographic makeup of my survey sample.

¹⁴ See <http://www.toluna-group.com/about-toluna/about/data-quality-approach>.

¹⁵ See <https://us.toluna.com/rewards>.

¹⁶ SNDEX0112116-37 at 16, SNDEX0096777-820 at 797.

¹⁷ <http://news.iheart.com/articles/about-iheartradio-390884/welcome-to-iheartradio-6906244/>

¹⁸ According to a press release issued by iHeartMedia, Inc. on 2/19/2015, iHeartRadio has over 60 million registered users. See [http://www.iheartmedia.com/Pages/iHeartMedia,-Inc--Reports-Results-for-2014-Fourth-Quarter-and-Full-Year_copy\(1\).aspx](http://www.iheartmedia.com/Pages/iHeartMedia,-Inc--Reports-Results-for-2014-Fourth-Quarter-and-Full-Year_copy(1).aspx).

These approximate targets are detailed in Appendix 2 under the “iHeartRadio Users” heading.

32. To approximate the distribution of the target population in the sample, survey invitations were sent appropriately, and Toluna took steps to ensure that the demographic makeup of the respondents approximately followed the target proportions.¹⁹ A description of the observed demographic makeup of the survey sample, along with other survey results, appears in Section VII.

D. Survey Questions

33. As mentioned above, my survey was designed to measure the relative value assigned, by listeners of U.S.-based commercial AM/FM radio stations over the internet, to the music played by the stations relative to other programmatic features (e.g., news, on-air personalities, or contests) of the stations. In addition to asking the primary question of interest, I wanted to ask questions and gather data about the listening habits of the respondents to the survey. Asking these questions allows me to characterize the listeners who respond to my survey and to check for answers that show that a respondent is not answering the survey questions in good faith (e.g., providing nonresponsive text in the write-in boxes).

34. Appendix 3 lists all of the questions and answer choices in the main part of the survey. Appendix 4 contains screen shots of the survey questions exactly as they appeared to respondents.

¹⁹ For example, near the end of the sample recruitment, Toluna might terminate a high income participant in the screening section if the respondent population was lacking an adequate number of low income respondents.

35. The first question in the main part of the survey asked respondents how many hours they spend listening over the internet to U.S.-based commercial AM/FM music-formatted radio stations in a typical week. The answer choices for question 1 ranged from less than 1 hour to over 50 hours, with 1 hour increments in between. Respondents who reported listening for less than an hour in a typical week were terminated because their listening time was so short. Also, respondents who responded that they did not know or were unsure of the answer were terminated to ensure that only regular listeners were included.

36. Questions 2 and 3 in the main part of the survey asked respondents about the times of day and week and the location of their listening to AM/FM music-formatted radio stations over the internet. The answer format for these questions is described as a constant-sum method. Survey questions involving constant-sum answers are common and considered robust in marketing research, with the benefit that they are simple and easy to understand.²⁰ In such questions, survey respondents are typically asked to distribute a fixed number of points – say 100 – among a well-defined set of alternatives. Constant-sum questions are seen as a way of effectively standardizing otherwise individual-specific scales.²¹

37. Question 2 asked respondents how their time spent listening was distributed across different times of day and week, whereas question 3 asked respondents how their time spent listening was distributed across different locations – at home, at work or school, in the car, at the gym, or in other

²⁰ See Scott M. Smith and Gerald S. Albaum, *Fundamentals of Marketing Research*, (Thousand Oaks: SAGE Publications, Inc., 2005), Chapter 10 (“Smith 2005”), pp. 371-412 at 386-387.

²¹ Smith 2005, pp. 386-387.

locations. Following standard practice in using constant-sum questions, the answer options were designed so as to be non-overlapping and easy to understand. For both questions, respondents were asked to assign a percentage to each answer choice such that the sum of the entries was 100.²²

38. Question 4 in the main part of the survey asked respondents to estimate what percentage of their time listening over the internet to AM/FM music-formatted radio stations was spent on the one station they listen to most. The answer choices for question 4 ranged from 5% to 100% in increments of 5%. Because question 5 (described below) asked respondents about the one station they listen to most, question 4 was included so that I would have data on approximately how much time each respondent spent listening to that one station, as opposed to how much time each respondent spent listening to all stations.

39. The key question in the survey was question 5, as it was designed to measure each respondent's relative value of the music component of radio programming as well as the non-music components of programming I have described previously. As in questions 2 and 3, I used a constant-sum method for the answer format in question 5. Question 5 asked respondents to assign to each element of radio station programming a percentage representing its relative value such that the individual percentages summed to 100.

40. The music programming component was represented in question 5 with an answer choice labeled simply "Music." The non-music programming components were labeled as follows:

²² For all of the constant-sum questions, respondents were not required to enter a number in each box. If a respondent did not enter a number in a particular box, it was treated as a zero, and the respondent could continue to the next question as long as the sum of the entries was 100.

“News/traffic/weather/sports information,” “Hosts, DJs, and other on-air personalities,” “Local events information,” “Contests,” “Advertisements,” and “Other.”²³ The set of labels for the non-music components of programming were considered carefully to ensure high-quality responses. First, they were designed to represent the most prominent types of non-music programming, in part based on my review of documents.²⁴ Second, they were designed to be easily distinguishable from the music component of programming. Third, they were designed to be easily distinguishable from one another so that respondents would not be confused as to how to allocate value to one component of non-music programming versus another. Finally, the non-music components of programming listed in the answer choices for question 5 were limited to five in number (in addition to the “Other” answer choice) so as not to cause respondents to artificially dilute the value attributed to the music component. For example, I combined news, traffic, weather, and sports information into one category to avoid having too many answer choices over which respondents were required to allocate 100 percentage points.

41. To ensure a precise measurement of the value of music relative to non-music elements of radio station programming, question 5 focused on the one AM/FM music-formatted station that each respondent listened to the most over the internet. This was done to avoid difficulty on the part of respondents in attempting to assess the relative value they derive from several different components of programming across potentially multiple

²³ See Appendix 4.

²⁴ Written Direct Testimony of John Dimick, 10/7/14; Written Direct Testimony of Ben Downs, 10/6/14; Written Direct Testimony of Robert Francis Kocak, 10/3/14; Written Direct Testimony of Julie Koehn, 10/6/14; NAB00006329-71 at 32-34; NAB00008670-82 at 71.

radio stations that may have substantially different types of programming and that they may listen to for different lengths of time. Even considering two stations with similar types of programming, a listener may much prefer, for example, the on-air personalities of one station relative to the other. Respondents answering about just one station do not need to perform this mental weighting and averaging across several stations. For this reason, I concluded that asking respondents about one station, the station they listen to most, was the most reliable way to measure the relative value of the different components of programming.

42. Several other steps were taken during the design of the main survey questions to minimize bias and ensure data quality, thus enabling me to reliably answer the primary question of the relative value assigned to music and non-music components of programming.

43. First, to avoid potential bias resulting from the order in which answer options appeared in multiple choice questions, I randomly assigned the order of the answer options for each respondent where applicable. For example, in question 3, which inquires about the locations at which respondents listen to U.S.-based commercial AM/FM music-formatted radio stations over the internet, the order of the answer options apart from “Other” and “Don’t know/not sure” was randomized to control, for example, for any tendency of respondents to enter a higher number on the first answer option they view. This type of randomization of answer choices is standard practice in consumer surveys.²⁵

44. Second, to prevent respondents from guessing when they did not know the answer, I included “Don’t know/not sure” as an answer choice for

²⁵ Diamond 2011, pp. 395-396.

every one of the main survey questions. This practice is accepted under the premise that “[b]y signaling to the respondent that it is appropriate not to have an opinion, the question reduces the demand for an answer and, as a result, the inclination to hazard a guess just to comply.”²⁶ As an example of the use of such an answer option, question 2 in my survey allowed respondents to answer “Don’t know/not sure” instead of guessing as to how their listening time over the course of a week breaks out into the different times of day and week.

45. Third, I crafted my survey questions and answer choices so that they did not include any industry jargon, complex terminology, or high-level vocabulary words that could cause confusion among respondents attempting to answer. For example, I never used the phrase “music-formatted radio station” in the survey, although I use the term freely in this written testimony. Such a phrase may not be clear to many respondents, so I instead used the following phrase in every one of the main survey questions: “radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.” In my opinion, this is a precise definition of a music-formatted station using words that will not confuse respondents.

46. Fourth, and relatedly, the survey questions are clear about the radio stations and listening medium of interest. Every question in the main part of the survey makes clear that it is asking about listening “over the internet (not over the air)” to “U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.” This was done to avoid respondents

²⁶ Diamond 2011, p. 390.

accidentally answering the questions with regard to, for example, their listening to terrestrial broadcasts of AM/FM stations or to non-commercial music-formatted radio stations such as NPR or college stations.

47. Finally, the survey questions were pretested to verify that they were well understood and did not cause any confusion among respondents. Using this process, I refined the survey questions to ensure that my survey instrument would provide reliable results.

E. Verification Procedures

48. Toluna incorporates several processes to ensure data integrity. To ensure that respondents are real people, Toluna validates the location of respondents via their IP address and a reliable postal address verification source (Melissa data).²⁷ In addition, Toluna compares respondents' names and addresses with data available from third-party sources. Standard methods are used to block computer-generated responses, including a CAPTCHA confirmation process. Toluna also uses a proprietary algorithm to investigate similarities among panelists upon enrollment to ensure that each respondent is allowed to participate in each survey only once.²⁸

49. In addition to the checks conducted by Toluna, TRG further validates the responses to completed surveys, for example by checking the raw response data for obviously fake names and phone numbers and excluding respondents providing such information.

²⁷ Melissa Data is a leading provider of global address, phone, email, and name, identify verification solutions. See <http://www.melissadata.com>.

²⁸ For more details, see <http://www.toluna-group.com/about-toluna/about/data-quality-approach>.

50. Finally, to ensure data integrity, I excluded respondents who took the survey on mobile devices,²⁹ who provided nonresponsive information in write-in answers, or who took too much time or too little time to complete the survey. I made the determination of the fastest and slowest reasonable survey response times based on the overall distribution of the length of time taken by each respondent to complete the survey as well as my and my team's assessment of the fastest reasonable length of time to complete the survey while paying attention to the questions. As I note below in Section VI, I decided to exclude respondents who took less than 3 minutes or more than 30 minutes to complete the survey.³⁰

VI. Survey Implementation

51. The survey was conducted from February 5th to February 11th, 2015. Invitations to participate in the survey were sent to 33,523 online sample members, and a total of 5,156 sample members began the survey. Of these, 3,577 were disqualified as a result of their answers to the screening questions or question 1 in the main part of the survey,³¹ and 973 respondents self-terminated during either the screening questions or the main questions.

52. To ensure reliability of the survey results, several respondents were excluded based on the criteria described in Section V.E. First, 9 respondents

²⁹ These are respondents who respond in the screening section that they are *not* using a disallowed device, but for whom the metadata reveal otherwise.

³⁰ I note that my results for question 5 are not significantly different if I instead exclude respondents who took under 2 minutes or over 40 minutes to complete the survey.

³¹ For question 1, respondents answering that they listened to less than one hour of U.S.-based commercial AM/FM music-formatted radio stations over the internet in a typical week were disqualified. See Appendix 3.

were excluded who completed the survey using a disallowed device.³² Second, 12 respondents were excluded who entered an obviously fake name or phone number in the screening section. Third, I excluded 3 respondents who gave nonresponsive write-in answers to questions 3 and 5 in the main part of the survey.³³ Finally, I excluded 114 respondents for taking less than three minutes or more than thirty minutes to complete the survey. Based on these exclusion criteria, 138 respondents who had completed the survey were disqualified and thus excluded from the final analysis. As I explain in Section VII, these respondents did not differ significantly from the final set of respondents with regard to the value they assigned to music in question 5. These 138 respondents along with the 3,577 respondents disqualified as a result of their answers to the screening questions or question 1 in the main part of the survey resulted in a total of 3,715 disqualified respondents.

53. In total, 468 participants qualified for and completed the survey. The survey response rate was 15.4%, the completion rate was 81.1%, and the incidence rate was 11.8%.³⁴ The response and completion rates are within the typical ranges for internet surveys. Details on the survey participation rates are provided in Appendix 5.

³² For the most part, respondents using disallowed devices were screened out in question S1, but these are respondents who responded in S1 that they were using an allowed device, but the metadata reveal otherwise.

³³ Respondents with response ID equal to 691, 2310, and 5043.

³⁴ The response rate is defined as the number of respondents who began the survey divided by the number of invitations sent. The completion rate is defined as: (number of respondents who began the survey – number who self-terminated) / number of respondents who began the survey. The incidence rate is the number of respondents who passed the screener and completed the survey (even if they were later excluded) divided by the number of respondents who began the survey.

54. The statistical precision offered by my sample size of 468 allows me to draw reliable conclusions about the underlying population's average valuation of the various components of AM/FM simulcast programming.³⁵

VII. Survey Results

55. Responses to all questions in the screening and main parts of the survey are tabulated in Appendices 6 and 7, respectively.

56. The tabulations of the responses to the screening questions in Appendix 6 allow a comparison of the approximate targets for the demographic makeup of the survey sample from the surveys of iHeartRadio listeners (mentioned above in Section V.C) to the observed demographic makeup of the final set of respondents. Appendix 2 provides this comparison. The sample of respondents for my survey closely represents the demographic makeup of the target population, allowing a valid extrapolation of the results.

57. Appendix 7 contains tabulations of the responses for all of the main survey questions. The results for questions 1 through 4 reveal the listening habits of the survey respondents. About 31.8% of respondents listen to U.S.-based commercial AM/FM music-formatted radio stations over the internet for 1 to 5 hours over the course of a typical week. Another 28.2% of respondents listen for 6 to 10 hours in a typical week, 20.1% listen for 11 to 15 hours in a typical week, and the remainder, 19.9%, listen for more than

³⁵ The margin of error for the average value assigned to music in question 5 is 3 percentage points. This is based on a sample size of 433 (35 respondents answered "don't know/not sure" to question 5) and a standard deviation of 30.8 for the responses.

15 hours in a typical week.³⁶ Approximately 18% of listeners to U.S.-based commercial AM/FM music-formatted radio stations over the internet listen to a single station in a typical week. Approximately 70% of respondents spend at least half of their listening time listening to the one station they listen to most in a typical week.³⁷

58. Respondents' time spent listening to U.S.-based commercial AM/FM music-formatted radio stations over the internet is somewhat evenly split across different times and days of the week. The period during which respondents spend most of their time listening is weekdays between 3:00PM and 7:00PM (on average, this period accounts for 22.6% of listening time), followed by weekdays between 10:00AM and 3:00PM (20.1%) and weekdays between 6:00AM and 10:00AM (18.5%). Survey respondents spend the smallest portion of their listening time, 5.9% on average, on weekdays between 12:00AM and 6:00AM. On average, 17.3% of respondents' listening time occurs on weekends.³⁸

59. The location at which respondents spend most of their time listening to U.S.-based commercial AM/FM music-formatted radio stations over the internet is "home" (on average, this location accounts for 48.3% of listening time), followed by "in the car" (28.3%), at "work or school" (15.4%), and "at the gym" (6.2%).³⁹

60. Question 5 asked respondents about the relative values they assign to the various features of the programming of U.S.-based commercial AM/FM music-formatted radio stations. Appendix 8 tabulates the mean, standard

³⁶ See tabulations for question 1 in Appendix 7.

³⁷ See tabulations for question 4 in Appendix 7.

³⁸ See tabulations for question 2 in Appendix 7.

³⁹ See tabulations for question 3 in Appendix 7.

deviation, minimum, maximum, and several percentiles of the distribution of the responses for each of the programming components in question 5, as well as the 95% confidence interval for each of the means.

61. On average, respondents assigned the component labeled “music” a relative value of 57.2%. The 95% confidence interval for the average value of “music” spans from 54.3% to 60.1%. Out of the 433 respondents who provided a response to question 5, 68 respondents (15.7%) assigned “Music” a relative value of 100% and 16 respondents (3.7%) assigned “Music” a relative value of 0%.

62. Among the non-music features, “News/traffic/weather/sports information” is the one to which, on average, respondents assigned the highest relative value (12.5%), immediately followed by “Hosts, DJs, and other on-air personalities” (12.2%), “Local events information” (7.2%), “Advertisements” (5.6%), and “Contests” (5.0%). Respondents assigned on average a value of 0.3% for the “Other” category. Taken together, the non-music features have, on average, a relative value of 42.8% with a corresponding 95% confidence interval spanning from 39.9% to 45.7%.

63. I note that, when respondents allocated a certain portion of their total value to the “music” programming component, they may actually have been including more than just the playing of sound recordings. For example, respondents may have been including the value they derive from radio stations’ selection and programming of musical pieces as well as the value they derive from the musical compositions themselves (separate and apart from the performance of those compositions). I did not parse these potential components of “music” programming in my survey out of concern that 1) it would be difficult to unambiguously and succinctly describe the separate

components, and 2) it would be potentially difficult for respondents to accurately separate the value they derive from the different components (for example, distinguishing the value derived from a particular recorded performance of a musical piece from the value derived from the composition of the musical piece). If some or all respondents were indeed ascribing value to these other sources of value in the numbers they assigned to the “music” component in my survey, then the average value attributed to just the playing of sound recordings would be lower than the 57.2% estimate from my survey.

64. The average relative value for music given in question 5 by the 138 respondents who were excluded from the analysis set (as described in Section VI⁴⁰) was 51.8%. While this average is lower than the average for respondents who were included in the final analysis, the average for these 138 excluded respondents was not statistically different from that of the final set of respondents.

65. These survey results provide a reliable estimate of the relative value assigned to music by the population of listeners of U.S.-based commercial AM/FM music-formatted radio stations over the internet. The extrapolation of the results to this population is justified by the rigorous survey design and implementation described in detail in Sections V and VI.

⁴⁰ These respondents were excluded for using a disallowed device, providing a fake name or phone number, providing non-responsive answers, or for taking less than 3 minutes or more than 30 minutes to complete the survey.

VIII. Conclusion

66. Overall, even for music-formatted radio stations, music is not the only type of programming providing value to listeners. While there is substantial variability in the stated relative value of music for listeners, the average value is around 57%. The remaining 43% of the value comes from programming components that generally would not be present in an all-music service.

Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
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Washington, D.C.

In re

DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (*WEB IV*)

DOCKET NO. 14-CRB-0001-WR
(2016-2020)

DECLARATION OF DOMINIQUE M. HANSENS

I, Dominique M. Hanssens, declare under penalty of perjury that the matters set forth in my Written Rebuttal Testimony in the above-captioned proceeding are true and correct.

Executed this 22nd day of February 2015.



Dominique M. Hanssens, Ph.D.

Appendix A

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H. S. Shin, D.M. Hanssens & K.I.Kim, "The Role of Online Buzz for Leader vs. Challenger Brands: The Case of the MP3 Player Market," October 2013.

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H. S. Shin, M. Sakakibara & D. M. Hanssens, "Marketing and R&D Investment of Leader vs. Follower," July 2010.

Articles for Executives

D.M. Hanssens, "The Long-Term Impact of Advertising," *GfK Marketing Intelligence Review*, 2015, forthcoming.

D.Kehrer (interview with D.M. Hanssens), "Why ROI is Often Wrong for Measuring Marketing Impact," *Forbes Insights*, July 2013.

D.M. Hanssens and M.G. Dekimpe, "The Flow Story," *Marketing Management*, Summer 2012.

D. M. Hanssens, "What is Known about the Long-Term Impact of Advertising," *Marketing Accountability Standards Board Practitioner Paper*, No. 2011-01, February 2011.

D.M. Hanssens, "Stability, Growth, Decline: Beating Recession Fatigue Requires Right Diagnosis," *IESE Insight*, 5, Second Quarter 2010 (in Spanish and English).

D.M. Hanssens, D. Thorpe & C. Finkbeiner, "Marketing When Customer Equity Matters," *Harvard Business Review*, May 2008.

D.M. Hanssens and E. Taylor, "The Village Voice: communities of customers and prospects are creating new challenges and opportunities," *Marketing Management*, March-April 2007.

D.M. Hanssens and B. Lewis, "Divvyng up the Marketing Pie," *BAI Banking Strategies*, September/October 2005.

S. Srinivasan, K. Pauwels, D.M. Hanssens & M. Dekimpe, "Who Benefits from Price Promotions?," *Harvard Business Review*, September 2002.

D. M. Hanssens, "Information Driven Marketing Strategy," *International Journal of Medical Marketing*, Summer 2002.

D.M. Hanssens, "Comment on Hysteresis in Marketing," *Sloan Management Review*, Summer 1997

R. Birt and D.M. Hanssens, "Customer-Focused Database Marketing," *Case-in-Point Report*, 1996.

D.M. Hanssens, "Customer Information: The New Strategic Asset," *Chief Executive*, 1996.

D.M. Hanssens, "Managementopleiding voor de 21ste Eeuw," *Economisch & Sociaal Tijdschrift*, June 1994 (in Dutch).

D.M. Hanssens and P. Loewe, "Taking the Mystery out of Marketing," *Management Review*, August 1994.

Proceedings

H. Gatignon and D.M. Hanssens, "Modeling Seasonality in Sales Response to the Marketing Variables," *Proceedings*, Second ORSA/TIMS Conference on Market Measurement, Austin, March 1980.

D.M. Hanssens, "Strategy in Marketing Model Building: Econometrics and Box-Jenkins," *1978 Educators' Proceedings*, American Marketing Association, Presented at the Annual Meeting, Chicago, August 1978.

D.M. Hanssens, "Evaluating Media Effectiveness in the Marketing of Arts Organizations," *Proceedings*, 1978 UCLA Conference of Professional Arts Managers. Presented at the Conference, Los Angeles, March 1978.

D.M. Hanssens, "Building Complete Models of Competition with Multiple Time-Series Analysis," *Proceedings*, Business and Economic Statistics Section, American Statistical Association, 1977. Presented at the Annual Meeting, Chicago, August 1977.

Book Reviews

"A Comparative Review of Econometrics Books," in *Journal of Marketing Research*, February 1992.

"Time Series and Forecasting with IDA," by H. Roberts, in *Journal of the American Statistical Association*, June 1985.

"Innovation Diffusion: Models and Applications," by V. Mahajan and R. Peterson, in *Journal of Marketing Research*, November 1985.

Research Reports

H.E. Freeman, W.A.V. Clark and D.M. Hanssens, "Electrical Appliance Innovation and Diffusion in the U.S.," for Information Resource Systems, February 1982.

D.M. Hanssens and H.A. Levien, "An Econometric Study of the Effectiveness of U.S. Navy Recruiting," for U.S. Department of Defense, August 1980.

S.I. Ornstein and D.M. Hanssens, "An Economic Analysis of the Relationship of Alcohol Control Laws to the Consumption of Alcoholic Beverages," for UCLA Alcohol Research Center, June 1980.

TEACHING

Courses Taught at UCLA

Elements of Marketing (MBA)
 Mathematical Models in Marketing (MBA/PhD)
 International Marketing (MBA)
 Quantitative Research in Marketing (PhD)
 Time Series Analysis (PhD/MBA)
 Special Research Topics in Marketing (PhD)
 Management Field Studies Advisorship (MBA)
 Directed Readings in Applied Econometrics and International Marketing (PhD/MBA)
 Workshop in Marketing (PhD)
 Data Analysis and Decisions under Uncertainty (Executive MBA)
 Research in Marketing Management (Ph.D.)
 Marketing Strategy and Policy (Executive MBA)
 Marketing Strategy and Planning (MBA)
 Action Research Project (Executive MBA)
 Customer Information Strategy (Executive MBA)
 Managerial Problem Solving (MBA)
 Marketing Management II (MBA)
 Marketing Strategy and Planning: Focus on Central & Eastern Europe (MBA)

Doctoral Committees

As chair or co-chair:

Bonita J. Campbell, PhD Management, 1979. Professor of Engineering, California State University, Northridge.
 Yoshi Sugita, PhD Management, 1985. Professor of Economics, Gakushuin Univ. Tokyo.
 Abhik Roy, PhD Management, 1989. Professor of Marketing, Quinnipiac University.
 Keiko Powers, PhD Psychology, 1990. Senior Marketing Scientist, MarketShare.
 Maria Cison, PhD Economics, 1990. Economist, General Motors Corporation, Detroit.
 Marnik Dekimpe, PhD Management, 1992. Research Professor, Tilburg University
 Koen Pauwels, PhD Management, 2001. Associate Professor, Dartmouth College.
 Professor, Ozyegin University, Istanbul, 2010-.
 Julian Villanueva, PhD Management, 2003. Professor, IESE, Madrid.
 Shijin Yoo, PhD Management, 2004. Associate Professor, Korea University
 Amit Joshi, PhD Management, 2005. Associate Professor, University of Central Florida
 Hyun Shin, PhD Management, 2008. Assistant Professor, Ewha Woman's Univ., Korea
 Rafael Becerril, PhD Management, 2013. Assistant Professor, Univ. of South Carolina
 Ho Kim, PhD Management, 2013. Assistant Professor, Azusa Pacific University.

As member:

Luiz Caleffe, PhD Education, 1980
Hubert Gatignon, PhD Management, 1981
Douglas Nigh, PhD Management, 1981
Marjorie Chan, PhD Management, 1981
Daniel Wunsch, PhD Education, 1981
Mary Kreik, Dr. Public Health, 1982
Ngina Lythcott, Dr. Public Health, 1982
Harish Sujjan, PhD Management, 1983
Sharon Garrett, PhD Public Health, 1983
Jan Ouren, PhD Public Health, 1983
Robert Curtis, PhD Management, 1985
Melvyn Menezes, PhD Management, 1985
Benoit Boyer, PhD Management, 1987
Kannan Srinivasan, PhD Management, 1986
Harold Stanislaw, PhD Psychology, 1987
Leon Crabbe, PhD Economics, 1988
Joao Assuncao, PhD Management, 1990
Parvish Nourjah, PhD Epidemiology, 1991
Ronald Rivas, PhD Management, 1997
Ronald Dietel, EdD Education, 1997
Reza Sadri, PhD Computer Science, 2001
Catarina Sismeiro, PhD Management, 2002
Yan-Nei Law, PhD Computer Science, 2005.

As external member:

Katrijn Gielens, Doctor in Applied Economics, Catholic University of Leuven, 1999
Vincent Nijs, Doctor in Applied Economics, Catholic University of Leuven, 2001
Marcel Kornelis, Doctor in Economics, University of Groningen, 2002
Isaac Dinner, PhD, Columbia University, 2011
Ofer Mintz, PhD, University of California, Irvine, 2011

Executive Seminars

Topics: marketing strategy, marketing productivity, sales forecasting,
customer information strategy, customer equity, marketing research

IBM Visitors Program, UCLA, 1978, 1981
Japan Productivity Center, UCLA, 1978
Hochschule St. Gallen, UCLA, 1979
West Entertainment, UCLA, 1979
UCLA Executive Program, 1979--

UCLA Marketing Management Program, 1979-82
 UCLA Medical Marketing Program, 1980--
 Eli Lilly International, Los Angeles, 1980
 Engineering Management Program, UCLA Extension, 1980
 Sommer Allibert, UCLA Extension, 1980
 UCLA New Product Development and Marketing Program, 1981-83
 Continental Airlines, Los Angeles, 1981
 National Taiwan University Program, UCLA, 1981
 UCLA Mexican Executive Program, Monterrey, 1981
 European Institute for Advanced Studies in Management, 1984
 UCLA Pricing Program, 1989-1999
 UCLA Law Institute Program, 1991-92
 UCLA Advanced Executive Program, 1993--
 Hewlett-Packard Corporate Education, 1993--
 UCLA Hughes Marketing Program, 1993--1998
 UCLA Johnson & Johnson Program, 1993
 UCLA-London Business School Medical Marketing Program, 1994
 Beiersdorf, 1994-1999
 UCLA Northrop-Grumman Marketing program, 1996--1999
 Wells Fargo Bank, 1995--
 President Enterprises, Taiwan, 1997
 Instituto Argentino de Ejecutivos de Finanzas, 1997
 Unilever, 1998
 PriceWaterhouseCoopers, 2000
 Columbia University Executive Program, 2001
 Marketing Strategy in the Information Age, 2000-02
 Faculty Director, 2000-02
 UCLA Strategic Leadership Institute, 2000-2003
 Ambrosetti, Italy, 2002, 2004, 2005, 2006
 Credit Suisse, 2002-03
 University of California San Diego, Executive Program, 2003
 Auchan, France, 2004
 Gen-Probe, San Diego, 2004
 Numico, Singapore, 2006
 Greater Paris Investment Agency, 2007
 SAS Forum, Madrid, 2007
 Marketing Roundtable, Georgia State University, 2008
 Amgen, 2008
 Baptie CMO Community, 2008
 Korea Productivity Center, 2009
 Coca-Cola Latin America, 2010
 Adobe, 2012
 Teradata, 2013
 American Bar Association, 2013-

ADMINISTRATION

Executive Director, Marketing Science Institute, Cambridge, Massachusetts, 2005-2007

MSI is a not-for-profit institute founded in 1961 with the mission of bringing together the leading academics and practitioners in marketing to create knowledge that improves business performance. The Executive Director serves a two-year term, overseeing the research priorities, research grants, conference content, publications, collaborative research and other programs of the Institute. He or she also serves as key liaison between the MSI member companies and academic researchers.

Executive Positions at UCLA, Anderson Graduate School of Management

Chairman, 1988-1990

Chief academic officer for the 150 full-time and part-time faculty of the sole department in the school. Key responsibilities include hiring, promotion, salary negotiations, course assignments, summer research funding, departmental organization and budgeting. Position involves extensive contacts with the dean of the school and the university administration.

Associate Dean, Academic Affairs & Strategic Planning, 1991-1993

Responsible for all degree programs, interdisciplinary research centers, and information technology services of the school. Also charged with developing a strategic plan for the school. Position involves extensive contacts with the external constituencies. Acts as dean of the school in his absence.

Vice-President, Management Education Associates, 1991-1993

Faculty Director, Global Executive MBA Program for the Americas, 2010-2013

Other Administrative Functions

UCLA Anderson School of Management

Marketing Area Chair, 1984-87, 1993-96, 1999-00, 2004-05, 2007-09, 2012-14.

Elected Member of Staffing Committee, 1982-83, 1984-86, 2000-02.

Chairman, Research Committee, 1986-88

Research Committee, 1990-1998, 2008-2013

Chairman, Executive Education Committee, 1993--95

Advisory Board member, Center for Corporate Renewal, 1995-1998

Elected Member of Faculty Executive Committee, 1997-2000, 2010-2013.

Board of Visitors Marketing Task Force, 1997-98, 2002-03

Teaching Improvement Committee, 1998-01
 Advisory Board member, Center for Management in the Information Economy, 2000-02
 Chairman, Faculty Advisory Board, Entertainment Research Center, 2002-2004
 Faculty Director, Entertainment & Media Management Institute, 2004-05.
 Compensation Task Force, 2011
 Co-chair, UCLA Anderson Task Force on Branding, 2011-2012

University of California

Review Committee, UC Irvine Graduate School of Management, 1988
 Chairman, UCLA Task Force on Economic Reconstruction and Development, 1992
 Task Force on UCLA Faculty Workload, 1993--94
 Task Force on Part-Time Masters Programs, 1993--94
 Clinical Scholars Program Committee, UCLA School of Medicine, 1997-2002
 Dean Search Committee, UCLA School of Education, 1999
 Chairman, Dean Review Committee, UCLA School of Letters and Sciences, 2001-02
 Dean Review Committee, UCLA Extension, 2011
 Faculty Welfare Committee, UCLA Academic Senate, 2011-
 Dean Search Committee, UCLA Extension, 2013

Other

Advisory Council, Los Angeles County Transportation Commission, 1991-93
 Faculty Advisory Board, Gemini Consulting, San Francisco, 1988 – 97
 Marketing Advisory Board, KeraVision, San Jose, 1995 –1999
 Board of Directors, i-Mind Education Systems, 1998 –2001
 Academic Trustee, Marketing Science Institute, Boston, 2002-2005
 Executive Committee, Marketing Science Institute, Boston, 2005-2011.
 External Review Committee, Wharton School Marketing Department, 2003
 Member, UCLA Committee on Research, 2003-2005.
 Founding Director, Marketing Accountability Standards Board (MASB), 2006-
 External Review Committee, New York University Marketing Department, 2008
 Selection Committee, AMA Irwin Distinguished Marketing Educator Award, 2006-2009
 Chairman, 2008-2009
 Board of Directors, MarketShare, Los Angeles, 2006-
 International Advisory Board, HEC School of Management, Paris, 2009-
 External Review Committee, Erasmus Research Institute of Management, Rotterdam, 2010
 Academic Advisory Board, Unilever Marketing Science Unit, London, 2012-
 Supervisory Board, Erasmus University Research Institute of Management, 2012-
 President-Elect, INFORMS Society for Marketing Science, 2014-15.

PROFESSIONAL SERVICE

Grants

UCLA Alcohol Research Center, \$39,000, for a study of regulation effect on alcohol consumption, 1979-80 (with S.I. Ornstein)

Director, Robert Anderson Research Endowment in Management, \$250,000, 1988-93, 1997-99

Columbia Charitable Foundation, \$230,000, Information Technology Planning Grant, 1991-1992

Director, William Leonhard Research Endowment in Management, \$200,000, 1993-97

Various Marketing Science Institute research grants, 1996-present

Editorial Boards

Marketing Science, 1983-94

Marketing Science, Area Editor, 1988-91

Marketing Science, Editor's Advisory Board, 2010-

Marketing Science, Special Issue Co-Editor, 2013-

Management Science, Associate Editor, 1978-88

Journal of Marketing Research, 1984-88 and 2003-05

Journal of Marketing Research, Associate Editor, 2007-10

Journal of Marketing Research, Editor's Advisory Board, 2010-

Journal of Marketing, Associate Editor, 2014-

Recherche et Applications en Marketing, 1987-99

International Journal of Research in Marketing, 1993—2003

International Journal of Research in Marketing, Associate Editor, 2009-

Applied Marketing Analytics, Editorial Board, 2014-

Ad Hoc Reviewing

Marketing Science, 1981-82

Journal of Forecasting, 1981--

Management Science, 1981--

Journal of Marketing Research, 1981-83

Journal of Consumer Research, 1982--

Interfaces, 1992--

Decision Sciences, 1982--

International Journal of Research in Marketing, 1983-92

Computers & Industrial Engineering, 1983--

Journal of Business & Economic Statistics, 1984--

Journal of Product Innovation Management, 1984--
 Psychometrika, 1985--
 National Science Foundation, 1984--
 Communications in Statistics, 1987--
 Journal of Time Series Analysis, 1988--
 Journal of Marketing, 1987--
 International Journal of Forecasting, 1992--
 Journal of Econometrics, 1996-
 Marketing Letters, 1996-
 Research Council of the United Kingdom, 1997

Invited Research Seminars

Stanford University (1981)
 Harvard University (1981)
 University of Texas at Dallas (1982)
 University of Washington (1982)
 UCLA Economics Department (1983)
 Washington State University (1984)
 HEC Paris (1984)
 Universidad de Zaragoza (1984)
 Universiteit Antwerpen (1984)
 Universite de Mons (1984)
 Universiteit Gent (1984)
 Universitat Bielefeld (1984)
 Carnegie-Mellon University (1985)
 University of Houston (1986)
 Columbia University (1987)
 Georgetown University (1989)
 Columbia University Marketing Camp (1989)
 Catholic University of Leuven (1990)
 Washington University, St. Louis (1990)
 University of Florida, AMA Doctoral Consortium (1990)
 INSEAD (1991)
 Catholic University of Leuven, Law School (1991)
 Catholic University of Leuven (1994)
 University of Iowa (1994)
 Hong Kong University of Science & Technology (1994)
 University of Texas, Austin (1995)
 University of California, Irvine (1995)
 Universitat Mainz (1995)
 University of California, Berkeley (1996)
 University of Budapest, EMAC Doctoral Consortium (1996)
 Marketing Science Institute (1996, 2001, 2002, 2003, 2004)
 University of Cambridge (1997)

University of Washington Marketing Camp (1997)
Humboldt University, Berlin (1998)
Northwestern University Marketing Camp (1998)
University of California, Riverside (1999)
UCI-UCLA-UCR-USC Marketing Colloquium (1999, 2004, 2009)
University of Southern California, AMA Doctoral Consortium (1999)
Georgetown University (1999)
UCLA, Anderson Faculty Lecture Series (1999)
AMA Advanced Research Forum, Monterey (2000)
University of Western Ontario, AMA Doctoral Consortium (2000)
University of Texas at Dallas (2001)
Simon Fraser University (2001)
Tilburg University (2001)
University of Texas, Austin (2002)
Erasmus University, Rotterdam (2002)
University of Groningen (2002)
Tulane University (2003)
Dartmouth College (2003)
McGill University (2003)
Tilburg University (2003)
Duke University (2003)
UCLA Marschak Interdisciplinary Colloquium (2004)
University of California, San Diego (2004)
UCLA Finance Seminar Series (2004)
Koc University, Istanbul (2004)
Washington University, St. Louis (2005)
Ohio State University (2005)
Singapore Management University (2005)
University of Connecticut, AMA Doctoral Consortium (2005)
Yale University (2005)
MIT Data Center (2005)
Groningen University (2006)*
Harvard Business School (2006)
Emory University (2006)
Texas A&M University (2006)
University of Maryland, AMA Doctoral Consortium (2006)
Massachusetts Institute of Technology (2006)
Dartmouth College (2006)
Boston University (2007)
Columbia University (2007)
Arizona State University, AMA Doctoral Consortium (2007)
UCLA Anderson Faculty Lecture Series (2008)
University of Minnesota (2008)
Tilburg University (2008)*
University of Missouri, AMA Doctoral Consortium (2008)

Georgia State University (2008)
 Korea University (2009)*
 Georgia State University, AMA Doctoral Consortium (2009)*
 University of Arizona (2009)
 University of California, Davis (2010)
 University of North Carolina (2010)
 Texas Christian University, AMA Doctoral Consortium (2010)
 Erasmus University, Rotterdam (2010)*
 BI Norwegian School of Management (2010)*
 Boston University (2011)*
 University of Utah (2011)
 University of Texas, Austin (2012)
 University of Central Florida, Titen Visiting Scholar (2012)
 University of Florida Marketing Camp (2012)
 Fudan University, Shanghai (2012)
 University of Washington, AMA Doctoral Consortium (2012)
 University of Michigan, AMA Doctoral Consortium (2013)
 University of Maryland (2014)
 Northwestern University, AMA Doctoral Consortium (2014)
 Universität zu Köln (2014)
 Tohoku University (2014)

* denote plenary lectures at conferences hosted by or at the university

Consulting

airlines: Air France
 automotive: Ford, Mercedes, Lexus
 consumer products: General Mills, Mars, Mattel Toys, Nestle, Coca-Cola
 entertainment: Sony, Electronic Arts, Xbox, Disney, NBC, Vivendi
 financial services: First Nationwide Bank, Home Savings, Wells Fargo, Wachovia, Schwab, CitiCorp, Fidelity, Vanguard
 health care: Amgen, Johnson & Johnson, Safeguard Health, GlaxoSmithKline, Kaiser Permanente, KeraVision
 information services: Catalina Marketing, TRW, TNS
 insurance: Progressive, Zurich
 internet: Earthlink, GoZing, MSN, Google, eBay, Intuit, Adobe
 law firms: expert witness list available upon request
 public sector: Federal Trade Commission, US Navy Recruiting Command
 retailing: Ralphs, Wickes, Gelson's, Build-a-Bear, Albertsons
 technology: Hewlett Packard, Hughes, Xerox, Dell, Microsoft, CDW, Motorola, Intel
 telecommunications: British Columbia Telecom, British Telecom, General Telephone, Pacific Telesis, OneComm, Stentor

As of 2006, my consulting services are delivered through MarketShare, LLC, Los Angeles.

Honors and Awards

V. Mahajan Award for Career Contributions to Marketing Strategy Research, AMA, 2013
 Fellow, INFORMS Society for Marketing Science, 2010
 MSI/H. Paul Root Best Paper Award, *Journal of Marketing*, 2010
 Gilbert A. Churchill Lifetime Achievement Award, AMA, 2007
 William O'Dell Best Paper Award, *Journal of Marketing Research*, 2007
 Robert D. Buzzell Best Paper Award, *Marketing Science Institute*, 2006
 Neidorf "Decade" Teaching Award, UCLA, 2003
 Frank M. Bass Outstanding Dissertation Award, *Marketing Science*, 2002
 John D.C. Little Best Paper Award, *Marketing Science*, 2001
 European Marketing Academy Best Paper Award, 2001
 Paul E. Green Best Paper Award, *Journal of Marketing Research*, 1999-2000
 John D.C. Little Best Paper Award, *Marketing Science*, 1995
 Teaching Excellence Awards, UCLA Executive MBA Program, 1988, 1997, 2003
 EMAC Doctoral Consortium Faculty Member, 1996
 AMA Doctoral Consortium Faculty member, 1990, 1999, 2000, 2005-2014
 Outstanding Reviewer Award, *Marketing Science*, 1983
 George Robbins Distinguished Teaching Award, UCLA, 1981
 Career Development Award, UCLA, 1981
 Fellow, C.I.M., Brussels, Belgium (dissertation fellowship), 1976-77
 Member Beta Gamma Sigma (National Business Honor Society), 1977--
 Purdue University representative, Albert Haring Annual Symposium, 1977
 Outstanding Teacher's Award, Purdue University, 1975

Media

Various interviews on management topics for Wall Street Journal, New York Times, Los Angeles Times, Fortune, Los Angeles Business Journal, ABC World News, NPR and other media.

Rev. November 2014

Appendix B

Dominique M. Hanssens, Ph.D.

November 2014

Bud Knapp Distinguished Professor of Marketing
UCLA Anderson School of Management

TESTIMONY HISTORY¹

1. ConAgra Foods, Inc.* Case No. CV 11-05379-MMM (AGRx), United States District Court, Central District of California, Western Division. Deposition taken on June 19, 2014.
Brooks Gresham, with McGuireWoods, Los Angeles
Area: consumer purchase decision factors and consumer survey in class certification
2. Clorox* Consumer Litigation, 12 CV-00280-SC, United States District Court, Northern District of California. Deposition taken on May 14, 2014.
Dean Panos and Kenneth Lee, with Jenner & Block LLP, Chicago and Los Angeles
Area: impact of product superiority claim on consumers and on business performance
3. Altamura et al. v. L'Oreal USA, Inc.*, United States District Court, Central District of California. Deposition taken on April 4, 2014.
Dennis Ellis and Katherine Murray, with Paul Hastings LLP, Los Angeles
Area: impact of hazard warning on consumer purchase decisions and product prices
4. Basic Your Best Buy, Inc. v. DIRECTV, Inc.*, Superior Court for the State of California, County of Los Angeles. Deposition taken on March 14, 2014.
Justin Griffin and Valerie Lozano, with Quinn Emanuel LLP, Los Angeles
Area: importance of brand equity and brand protection
5. Oakley, Inc.* v. Nike, Inc. et al., United States District Court, Central District of California. Deposition taken on November 22, 2013.
David Feher, Joseph DiBenedetto and Matthew Walsh, with Winston & Strawn LLP, NY
Area: impact of athlete endorsement on business performance and damages assessment
6. Alexander et al. v. L'Oreal USA, Inc.*, Superior Court of the State of California, County of Los Angeles. Deposition taken on November 1, 2013.
Dennis Ellis and Katherine Murray, with Paul Hastings LLP, Los Angeles
Area: impact of packaging, advertising on consumer purchase decisions and brand sales

¹ The client represented by the law firm requesting my service is denoted by *

7. L-3 National Security Solutions, Inc. vs. Innovative Wireless Technologies*, United States District Court, Eastern District of Virginia. Deposition taken on September 19, 2012.
Beth Bergin and Josh Long, with Woods Rogers PLC, Roanoke, VA
Area: market projections of competing technologies and damages assessment
8. Tria Beauty Inc. v. Radiancy Inc.*, United States District Court, Northern District of California. Deposition taken on June 28, 2012.
Brendan O'Rourke and Alexander Kaplan, with Proskauer Rose, New York.
Area: impact of competitive advertising on business performance.
9. Chase Bank USA*, N.A. 'Check Loan' Contract Litigation, United States District Court, Northern District of California. Deposition taken on March 29, 2012.
Julia Strickland and Stephen Newman, with Stroock&Stroock&Lavan LLP, Los Angeles
Area: consumer financial decision making and marketing impact
10. Skip Fordyce Harley-Davidson v. Harley-Davidson Motor Company*, State of California, New Motor Vehicle Board. Deposition taken on February 8, 2012. Court testimony given on March 12, 2012.
Robert Ebe and Scott McLeod, with Cooper, White & Cooper LLP, San Francisco
Area: evaluation of branding and distribution strategy
11. Laidlaw's Harley-Davidson v. Harley-Davidson Motor Company*, State of California, New Motor Vehicle Board. Deposition taken on October 20, 2011. Court testimony given on December 7, 2011.
Robert Ebe and Brett Waxdeck, with Cooper, White & Cooper LLP, San Francisco
Area: evaluation of branding and distribution strategy
12. Starcrest Products of California v. Lexington Insurance Company*, Superior Court of the State of California, County of Riverside. Depositions taken on August 8 and 16, 2011.
Celia Moutes-Lee and Kristin Meredith, with Lewis Brisbois Bisgaard & Smith, Los Angeles
Area: impact of direct marketing on business performance
13. Online DVD Rental Antitrust Litigation, U.S. District Court, Northern District of California. Deposition taken on March 31, 2011.
Dylan Liddiard, with Wilson Sonsini Goodrich & Rosati, Palo Alto
Area: evaluation of marketing strategy, market exit decision, impact on prices
14. Hersch & Company vs. Mattel, Inc.*, Superior Court of the State of California, County of Los Angeles, Central District. Deposition taken on September 8, 2010. Court testimony given on June 15, 2011.
Lawrence Iser, with Kinsella Weitzman Iser Kump & Aldisert, Santa Monica
Area: evaluation of marketing strategy

15. Autodesk, Inc.* vs. Dassault Systemes Solidworks Corp., U.S. District Court, Northern District of California. Deposition taken on October 27, 2009.
Michael Jacobs, with Morrison & Foerster, San Francisco
Area: branding and marketing strategy
16. Franklin Mint*, et al. v. Lord Simon Cairns, et al., U.S. District Court, Central District of California. Deposition taken on October 26, 2004. Court testimony given on December 19, 2005.
Lawrence Gutcho, with Loeb & Loeb, Los Angeles
Area: impact of negative information on business outcomes
17. Vidal Sassoon* v. Procter & Gamble, U.S. District Court, Central District of California. Deposition taken on August 25, 2004.
Ann Marie Mortimer, with O'Donnell, Shaeffer & Mortimer, Los Angeles
Area: impact of marketing resource allocations on business outcomes
18. Colgate-Palmolive* v. Procter & Gamble, U.S. District Court, Southern District of New York. Deposition taken on June 16, 2004. Court testimony given on July 20, 2004.
Brendan O'Rourke, with Proskauer Rose, New York
Area: impact of comparative advertising on business outcomes
19. Sears* v. DirecTV, Superior Court of the State of California, County of Los Angeles. Deposition taken on May 8, 2004.
Allan Cohen, with Stroock & Stroock & Lavan, Los Angeles
Area: retail market survey evaluation, cooperative advertising cost allocation
20. 911Notify* v. Verizon, before the American Arbitration Association, Dallas, Texas, September 8-9, 2003.
Donald Gottesman, with Kulik, Gottesman & Mouton, LLP, Los Angeles
Area: new-product marketability ; impact of sales efforts on new-product performance
21. Brown Jordan International, Inc*. v. Dale Boles, before the American Arbitration Association, Los Angeles, April 22, 2003. Deposition taken on April 18, 2003.
Jeffrey Brown and David Petersen, with Morgan, Lewis & Bockius, LLP, Los Angeles
Area: market definition in non-compete agreement
22. Agassi Enterprises Inc. v. Nike Inc.*, before the American Arbitration Association, Portland, Oregon, May 23, 2001.
Amy Pedersen and Frank Weiss, with Tonkon Torp, Portland
Area: impact of product-line additions and advertising on business performance

23. The City and County of San Francisco, et al.* v. United States Tobacco Company, Inc., et al., Superior Court of the State of California, County of San Diego. Deposition taken on November 5, 1999.
Michael Dowd and Frank Janecek, with Milberg Weiss, San Diego
Area: impact of advertising on consumption
24. Suzuki Motor Corporation Japan* v. Consumers Union of the United States, Inc., U.S. District Court, Central District of California. Deposition taken on March 29, 1999.
George Ball, with Law Offices of George F. Ball, Newport Beach
Sawnie McEntire, with Beirne, Maynard & Parsons, Dallas
Area: impact of negative information on business outcomes
25. National Claims Management Corporation* v. Mercedes-Benz of North America, Inc., U.S. District Court, Central District of California. Deposition taken on March 18, 1998.
Judith Anderson, with Stroock & Stroock & Lavan, Los Angeles
Area: financial assessment in class action
26. USA Today v. City of Santa Monica*, before the hearing examiner of the City of Santa Monica, October 21, 1994.
Barry Rosenbaum, Office of the City Attorney, Santa Monica
Area: impact of distribution strategy on business outcomes

Expert-witness reports and declarations on cases that did not involve deposition or trial testimony

1. Discus Dental, LLC and Philips Oral Healthcare Inc.* v. Uluru, Inc. (2014)
William Monahan and Michael Steinberg, with Sullivan & Cromwell LLP, Los Angeles
Area: assessment of new-product marketing strategy
2. Poquito Mas Licensing Corp. v. Taco Bell Corp.* (2014)
Marcia Paul, with Davis Wright Tremaine LLP, New York
Sean Sullivan and Collin Peng-Sue, with Davis Wright Tremaine LLP, Los Angeles
Area: damages assessment of advertising in reverse confusion case
3. Jones et al., v. ConAgra Foods , Inc.* (Hunt's) (2014)
Robert Hawk, with Hogan Lovells US LLP, Menlo Park, CA
Area: consumer purchase decision factors in class certification case
4. Jones et al., v. ConAgra Foods , Inc.* (Swiss Miss) (2014)
Robert Hawk, with Hogan Lovells US LLP, Menlo Park, CA
Area: consumer purchase decision factors in class certification case

5. Matthew Edwards, et al., v. National Milk Producers Federation et al.* (2014)
Kenneth Ewing, with Steptoe & Johnson LLP, Washington DC
Todd Miller, with Baker & Miller PLLC, Washington DC
Area: pricing and marketing strategies of dairy products retailers
6. Sterling Jewelers Inc*. vs. Zale Corporation (2013)
August Horvath, with Kelley Drye & Warren LLP, New York
Area: damages assessment of false advertising
7. Color Me Mine Enterprises* v. Southern States Marketing, Inc. et al. (2013)
Scott Burroughs, with Doniger/Burroughs, APC, Los Angeles
Area: trademark infringement, consumer confusion
8. Richard Reinsdorf v. Skechers USA, Inc.* (2012)
Drew Breuder and Chuck Diamond, with O'Melveny & Myers, Los Angeles
Area: attribution of promotional efforts on brand financial performance
9. ADT Security Services, Inc.* v. Pinnacle Security et al. (2012)
Eric Goldberg and Angelo Stio III, with Pepper Hamilton LLP, Princeton
Area: damages due to contract breach and improper sales practices
10. Colin Fraser* v. ASUS Computer International and ASUSTeK Computer Inc.* (2012)
Justin Lichterman, with Orrick, Herrington & Sutcliffe, San Francisco
Seth Lehrman, with Farmer Jaffee, Ft. Lauderdale
Mark Dearman, with Robbins Geller, Boca Raton
Area: valuation of a capability in a high-technology category
11. Black Ridge Oil & Gas, Inc. v. Peerless Media, Ltd.* (2012)
David Stern, with Hughes Hubbard & Reed LLP, Los Angeles
Area: damages assessment of co-branding and other marketing actions
12. International Accessories Company* v. Francesco Biasia (2010)
Elizabeth Berman, with Sheppard Mullin, Los Angeles
Area: impact of change in advertising and pricing strategy
13. Wilhelm Karmann GmbH v. Chrysler LLC and Chrysler International Corp* (2009)
Brian J. Massengill, with Mayer Brown LLP, Chicago
Area: assessment of new-product marketing strategy
14. Nicolle DiSimone and Janelle Nelson v. DS Waters of America Inc.* (2009)
Noah Graff, with Hughes Hubbard & Reed LLP, Los Angeles
Area: evaluation of class certification

15. BRCP HEF Hotel Tenant, LLC v. Four Seasons Hotels Limited* (2009)
Forrest Hainline III, with Goodwin Procter, San Francisco
Area: impact of negative information on brand image and financial performance
16. Janet Agranoff v. Lenscrafters* (2007)
Joseph DiBenedetto, with Winston & Strawn LLP, New York
Area: evaluation of class certification
17. DirecTV, Inc. v. Lifetime Entertainment Services* (2007)
Sabina Clorfeine, with Milbank Tweed Hadley & McCloy, Los Angeles
Area: impact of promotional offer on lost subscribers and their value
18. David Sams Industries v. Verisign*, et al. (2005)
Brian Condon, with Arnold & Porter, LLP, Los Angeles
Area: evaluation of expert report on damages assessment
19. Kevin J. King et al. v. Ty, Inc.* (2003)
Gregory Scandaglia, with Mulroy Scandaglia Marrinson Ryan, Chicago
Area: impact of marketing and distribution strategy on product life cycle
20. New Line Cinema* v. Little Caesar Enterprises (2002)
Saul Brenner, with Loeb & Loeb LLP, Los Angeles
Area: impact of marketing on motion-picture attendance and revenue
21. Nike, Inc.* v. Champion Products Inc. (1998)
Peter Koehler, Jr., with Tonkon Torp, Portland
Area: impact of advertising with celebrity endorsements on business performance

Appendix 1 Screening Questions

Question Number	Question	Answer Choices	Termination Criteria
S1	Which of the following best describes the device you're using right now to read this survey? ^[2]	A traditional desktop computer A laptop/notebook computer A tablet computer (for example, Apple iPad, Galaxy Tab, Blackberry Tab, or similar) An eBook reading device (for example, Kindle, Nook, Sony Reader or similar) A TV-based browser or video game console (for example, WebTV, Google TV, Microsoft X-Box, Nintendo Wii or similar) A mobile phone (for example, Apple iPhone, HTC Evo, Motorola Droid, Samsung Galaxy or similar) Other (please specify)_____	Terminate if respondent selects "An eBook reading device (for example, Kindle, Nook, Sony Reader or similar)," "A TV-based browser or video game console (for example, WebTV, Google TV, Microsoft X-Box, Nintendo Wii or similar)," "A mobile phone (for example, Apple iPhone, HTC Evo, Motorola Droid, Samsung Galaxy or similar)," or "Other (please specify)."
S2	What is your gender?	Male Female	
S3	Which of the following groups includes your age?	Under 16 16-25 26-35 36-50 51+ Prefer not to answer	Terminate if respondent selects "Under 16," or "Prefer not to answer."
S4	In which of the following states do you live?	Answer choices are all 50 U.S. states plus District of Columbia	

Appendix 1 Screening Questions

Question Number	Question	Answer Choices	Termination Criteria
S5	Which of the following best describes your ethnicity/race?	White or Caucasian (not Hispanic or Latino) Black or African-American (not Hispanic or Latino) Asian/Pacific Islander (not Hispanic or Latino) Native American, Alaska Native, Aleutian (not Hispanic or Latino) Hispanic or Latino (White or Caucasian) Hispanic or Latino (Black or African-American) Hispanic or Latino (all other races/multiple races) Other (PLEASE SPECIFY:)_____	
S6	Which of the following best represents the total annual income of all members of your household?	Under \$25,000 \$25,000 to \$44,999 \$45,000 to \$74,999 \$75,000 to \$99,999 \$100,000 or more Prefer not to answer Don't know	
S7	Do you, or does any member of your household currently work for any of the following? ^{[1][2]}	An advertising, public relations or marketing agency or advertising department of a company A market research firm or a marketing research department of a company An investment management company A radio broadcasting company A webcasting/internet streaming company A college or university A record company or label A packaged foods manufacturer None of these	Terminate if respondent selects "An advertising, public relations or marketing agency or advertising department of a company," "A market research firm or a marketing research department of a company," "A radio broadcasting company," "A webcasting/internet streaming company," or "A record company or label."

Appendix 1 Screening Questions

Question Number	Question	Answer Choices	Termination Criteria
S8	Which of the following do you personally do in a typical week? ^{[1][2]}	Watch video over the internet (for example, through Netflix or HBO GO) Listen to U.S.-based AM/FM radio over the internet (for example, through an AM/FM station's web site or app, or through iHeartRadio) Shop at a warehouse club (for example, Costco Wholesale or Sam's Club) Listen to music through an internet-only streaming service (for example, through Pandora or Spotify) Access an online bank account (for example, through Wells Fargo or Bank of America) None of the above	Terminate if respondent does not select "Listen to U.S.-based AM/FM radio over the internet (for example, through an AM/FM station's web site or app, or through iHeartRadio)," or terminate if respondent selects "None of the above."
S9	What types of U.S.-based AM/FM radio stations do you listen to over the internet in a typical week? ^{[1][2]}	Commercial stations that are all news, talk, sports, or any combination of those Commercial stations that play music, (such as pop, country, rock, urban, and Christian music), either with or without other programming Non-commercial stations such as public radio (like NPR), college radio, and some religious and classical music stations Other: _____	Terminate if respondent does not select "Commercial stations that play music, (such as pop, country, rock, urban, and Christian music), either with or without other programming."

Note:

[1] Respondents were permitted to select multiple answer choices.

[2] The order of the answer choices, except "Other," for questions S1, S7, S8, and S9 was randomized for each respondent.

Appendix 2

iHeartRadio and Hanssens Survey Respondent Demographic Characteristics

	iHeartRadio Users	Hanssens Survey Respondents
Gender		
Male		48%
Female		52%
Age		
16–25		22%
26–35		25%
36–50		32%
Over 50		22%
Race		
Black Non-Hispanic		16%
White Non-Hispanic		57%
Hispanic		23%
Asian Non-Hispanic		4%
Other		1%
Income		
Under \$25,000		21%
\$25,000 to \$44,999		22%
\$45,000 to \$74,999		23%
\$75,000 to \$99,999		16%
\$100,000 or more		15%
Don't Know/Prefer Not to Say		3%

Source: SNDEX0112116–37 at 16, SNDEX0096777–820 at 797

Appendix 3 Main Questions

Question Number	Question	Answer Choices	Question Flow
1	<p>The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>For approximately how many hours do you listen, over the internet, to these stations in a typical week?</p>	Less than 1 1 2 3 4 ... 49 50+ Don't know/not sure	Terminate if respondent selects "Less than 1," or "Don't know/not sure."
2	<p>The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to know what time(s) of day and week you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week during each of the following times of day and week.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.</p>	Weekdays: 6AM-10AM Weekdays: 10AM-3PM Weekdays: 3PM-7PM Weekdays: 7PM-12AM Weekdays: 12AM-6AM Weekend: any time of day Don't know/not sure	Answers are auto tallied and must sum to 100 in order to continue.
3	<p>The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to know where you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week at each of the following locations.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.^[1]</p>	Work or school Home In the car At the gym Other: _____ Don't know/not sure	Answers are auto tallied and must sum to 100 in order to continue.
4	<p>The following question asks about your listening to the one station you listen to most over the internet (not over the air) among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Of the total weekly listening hours from your previous answer [ENTER RESPONSE FROM QUESTION 1], what is the approximate percentage of that time that you spend listening to that one station you listen to most?</p>	5 10 15 20 25 30 ... 95 100 Don't know/not sure	

Appendix 3 Main Questions

Question Number	Question	Answer Choices	Question Flow
5	<p>The following question asks about your listening to the one station you listen to most over the internet (not over the air) among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to ask you about the value you get from the different features of that station's programming when you listen to that one station, over the internet.</p> <p>For each of the features listed below, please assign a percentage that represents the relative value of that feature among all the features listed. The more you value a feature, the higher the percentage you should assign to that feature.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.^[1]</p>	<p>Music</p> <p>News/traffic/weather/sports information</p> <p>Hosts, DJs, and other on-air personalities</p> <p>Local events information</p> <p>Contests</p> <p>Advertisements</p> <p>Other (please specify) _____</p> <p>Don't know/not sure</p>	<p>Answers are auto tallied and must sum to 100 in order to continue.</p>

Note:

[1] The order of the answer choices, except "Other," for questions 3 and 5 was randomized for each respondent.



Thank you for agreeing to participate in this survey. Please take a few moments to complete our questions.

If you usually wear eyeglasses or contacts when reading information on your computer monitor, please put your eyeglasses/contacts on before continuing.

When you are ready to proceed, please **MAXIMIZE** your screen, then click on the  button.





First, there are a few short questions to determine if you qualify for the study.

Which of the following best describes the device you're using right now to read this survey?

(Select one response)

- A mobile phone (for example, Apple iPhone, HTC Evo, Motorola Droid, Samsung Galaxy or similar)
- A TV-based browser or video game console (for example, WebTV, Google TV, Microsoft X-Box, Nintendo Wii or similar)
- A laptop/notebook computer
- A tablet computer (for example, Apple iPad, Galaxy Tab, Blackberry Tab, or similar)
- An eBook reading device (for example, Kindle, Nook, Sony Reader or similar)
- A traditional desktop computer
- Other (please specify)





What is your gender?

(Select one response)

- Male
- Female





Which of the following groups includes your age?

(Select one response)

- Under 16
- 16-25
- 26-35
- 36-50
- 51+
- Prefer not to answer





In which of the following states do you live?

(Select one response)





Which of the following best describes your ethnicity/race?

(Select one response)

- White or Caucasian (not Hispanic or Latino)
- Black or African-American (not Hispanic or Latino)
- Asian/Pacific Islander (not Hispanic or Latino)
- Native American, Alaska Native, Aleutian (not Hispanic or Latino)
- Hispanic or Latino (White or Caucasian)
- Hispanic or Latino (Black or African-American)
- Hispanic or Latino (all other races/multiple races)
- Other (PLEASE SPECIFY:)
- Prefer not to answer





Which of the following best represents the total annual income of all members of your household?

(Select one response)

- Under \$25,000
- \$25,000 to \$44,999
- \$45,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 or more
- Prefer not to answer
- Don't know





Do you, or does any member of your household currently work for any of the following?

(Select all that apply)

- An investment management company
- A record company or label
- A market research firm or a marketing research department of a company
- A radio broadcasting company
- A packaged foods manufacturer
- An advertising, public relations or marketing agency or advertising department of a company
- A college or university
- A webcasting/internet streaming company
- None of these





Which of the following do you personally do in a typical week?

(Select all that apply)

- Listen to U.S.-based AM/FM radio over the internet (for example, through an AM/FM station's web site or app, or through iHeartRadio)
- Listen to music through an internet-only streaming service (for example, through Pandora or Spotify)
- Watch video over the internet (for example, through Netflix or HBO GO)
- Access an online bank account (for example, through Wells Fargo or Bank of America)
- Shop at a warehouse club (for example, Costco Wholesale or Sam's Club)
- None of the above





What types of U.S.-based AM/FM radio stations do you listen to over the internet in a typical week?

(Select all that apply)

- Commercial stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming
- Non-commercial stations such as public radio (like NPR), college radio, and some religious and classical music stations
- Commercial stations that are all news, talk, sports, or any combination of those
- Other:





Thank you, you qualify for this study.

Now, we need you to provide us with your name and phone number so we can call you to verify that you participated in this survey.

Your name and phone number and your responses to this survey will be kept completely confidential. We will not be calling to sell you anything; we will only call to verify your participation.

Please record your name and phone number below:

Name

Phone Number: (for example, 9147595485)





The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.

For approximately how many hours do you listen, over the internet, to these stations in a typical week?

Hours

Don't know/not sure





The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.

Now we would like to know what time(s) of day and week you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week during each of the following times of day and week.

(You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.)

Weekdays: 6AM-10AM	<input type="text"/>
Weekdays: 10AM-3PM	<input type="text"/>
Weekdays: 3PM-7PM	<input type="text"/>
Weekdays: 7PM-12AM	<input type="text"/>
Weekdays: 12AM-6AM	<input type="text"/>
Weekend: any time of day	<input type="text"/>
=	<input type="text" value="0"/>

Don't know/not sure





The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.

Now we would like to know where you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week at each of the following locations.

(You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.)

In the car	<input type="text"/>
At the gym	<input type="text"/>
Home	<input type="text"/>
Work or school	<input type="text"/>
Other:	<input type="text"/>
=	<input type="text" value="0"/>

Don't know/not sure





The following question asks about your listening to the **one station you listen to most over the internet (not over the air)** among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music) either with or without other programming.

Of the total weekly listening hours from your previous answer (8 hours), what is the approximate percentage of that time that you spend listening to that one station you listen to most?

Percentage ▾

Don't know/not sure





The following question asks about your listening to the **one station you listen to most over the internet (not over the air)** among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.

Now we would like to ask you about the value you get from the different features of that station's programming when you listen to that one station, over the internet.

For each of the features listed below, please assign a percentage that represents the relative value of that feature among all the features listed. The more you value a feature, the higher the percentage you should assign to that feature.

(You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.)

Advertisements	<input type="text"/>
Contests	<input type="text"/>
News/traffic/weather/sports information	<input type="text"/>
Hosts, DJs, and other on-air personalities	<input type="text"/>
Local events information	<input type="text"/>
Music	<input type="text"/>
Other (please specify) <input type="text"/>	<input type="text"/>
=	<input type="text" value="0"/>

Don't know/not sure

Toluna
Opinions for all **Beta**

Woohoo, you've made it!

You have just completed a survey and all of your responses have been collected. Thanks so much for taking the time to share your thoughts and opinions with us. This is the type of great consumer information that will help change the future for the better!

Just an FYI – most survey rewards, including points and sweepstakes entries, will be credited to your account within 6 weeks (this is due to many factors including the lifespan of each survey).

If you've got the time, why not try another? Go ahead and click the button below and get straight to the next available survey

Take Another Survey

Update my profile

Be sure to check to see if your profile is up to date on regular basis, this will ensure you have the best chance to get invited to your next survey! Click below to confirm all of that information and fill out some profile surveys, if you haven't already!

Update

Appendix 5

Disposition of Survey Respondents

	Total	
	N	%
[a] Qualified and Completed	468	9.1%
[b] Disqualified in Screening Questions and Question 1	3,577	69.4%
[c] Excluded After Completion of Survey	138	2.7%
[d] Self-terminated, at:	973	18.9%
[e] <i>Screening questions</i>	919	17.8%
[f] <i>Main questions</i>	54	1.0%
[g] Total Survey Participants	5,156	
[h] Total Survey Invitations	33,523	
[g] / [h] Response Rate		15.4%
([a]+[b]+[c]) / [g] Completion Rate		81.1%
([a]+[c]) / [g] Incidence Rate		11.8%

Source: Target Research Group

Appendix 6

Summary of Responses to Screening Questions

Question Number	Survey Question and Answer Choices	Percent of Respondents	Number of Respondents
S1	Which of the following best describes the device you're using right now to read this survey?		
	A traditional desktop computer	35.9%	168
	A laptop/notebook computer	57.9%	271
	A tablet computer (for example, Apple iPad, Galaxy Tab, Blackberry Tab, or similar)	6.2%	29
	An eBook reading device (for example, Kindle, Nook, Sony Reader or similar)	0.0%	0
	A TV-based browser or video game console (for example, WebTV, Google TV, Microsoft X-Box, Nintendo Wii or similar)	0.0%	0
	A mobile phone (for example, Apple iPhone, HTC Evo, Motorola Droid, Samsung Galaxy or similar) Other	0.0%	0
S2	What is your gender?		
	Male	48.1%	225
	Female	51.9%	243
S3	Which of the following groups includes your age?		
	Under 16	0.0%	0
	16-25	21.6%	101
	26-35	24.6%	115
	36-50	32.3%	151
	51+ Prefer not to answer	21.6%	101
		0.0%	0

Appendix 6

Summary of Responses to Screening Questions

Question Number	Survey Question and Answer Choices	Percent of Respondents	Number of Respondents
S4	<p>In which of the following states do you live?^[3]</p> <p style="text-align: center;">Pacific (WA, OR, CA, AK, HI) 15.8% 74</p> <p style="text-align: center;">Mountain (MT, ID, WY, NV, UT, CO, AZ, NM) 5.8% 27</p> <p style="text-align: center;">West North Central (ND, SD, NE, KS, MN, IA, MO) 3.6% 17</p> <p style="text-align: center;">West South Central (TX, OK, AR, LA) 9.6% 45</p> <p style="text-align: center;">East North Central (WI, IL, MI, IN, OH) 13.5% 63</p> <p style="text-align: center;">East South Central (KY, TN, MS, AL) 4.5% 21</p> <p style="text-align: center;">South Atlantic (FL, GA, SC, NC, VA, WV, DC, MD, DE) 25.2% 118</p> <p style="text-align: center;">Middle Atlantic (NY, NJ, PA) 15.0% 70</p> <p style="text-align: center;">New England (ME, NH, VT, MA, RI, CT) 7.1% 33</p>		
S5	<p>Which of the following best describes your ethnicity/race?</p> <p style="text-align: center;">White or Caucasian (not Hispanic or Latino) 57.5% 269</p> <p style="text-align: center;">Black or African-American (not Hispanic or Latino) 15.6% 73</p> <p style="text-align: center;">Asian/Pacific Islander (not Hispanic or Latino) 3.6% 17</p> <p style="text-align: center;">Native American, Alaska Native, Aleutian (not Hispanic or Latino) 0.0% 0</p> <p style="text-align: center;">Hispanic or Latino (White or Caucasian) 19.0% 89</p> <p style="text-align: center;">Hispanic or Latino (Black or African-American) 0.9% 4</p> <p style="text-align: center;">Hispanic or Latino (all other races/multiple races) 2.8% 13</p> <p style="text-align: center;">Other^[2] 0.6% 3</p>		
S6	<p>Which of the following best represents the total annual income of all members of your household?</p> <p style="text-align: center;">Under \$25,000 20.9% 98</p> <p style="text-align: center;">\$25,000 to \$44,999 22.2% 104</p> <p style="text-align: center;">\$45,000 to \$74,999 22.9% 107</p> <p style="text-align: center;">\$75,000 to \$99,999 15.8% 74</p> <p style="text-align: center;">\$100,000 or more 15.0% 70</p> <p style="text-align: center;">Prefer not to answer 1.9% 9</p> <p style="text-align: center;">Don't know 1.3% 6</p>		

Appendix 6

Summary of Responses to Screening Questions

Question Number	Survey Question and Answer Choices	Percent of Respondents	Number of Respondents
S7	Do you, or does any member of your household currently work for any of the following? ^[1]		
	An advertising, public relations or marketing agency or advertising department of a company	0.0%	0
	A market research firm or a marketing research department of a company	0.0%	0
	An investment management company	1.1%	5
	A radio broadcasting company	0.0%	0
	A webcasting/internet streaming company	0.0%	0
	A college or university	3.0%	14
	A record company or label	0.0%	0
	A packaged foods manufacturer	1.5%	7
	None of these	94.9%	444
S8	Which of the following do you personally do in a typical week? ^[1]		
	Watch video over the internet (for example, through Netflix or HBO GO)	75.9%	355
	Listen to U.S.-based AM/FM radio over the internet (for example, through an AM/FM station's web site or app, or through iHeartRadio)	100.0%	468
	Shop at a warehouse club (for example, Costco Wholesale or Sam's Club)	43.2%	202
	Listen to music through an internet-only streaming service (for example, through Pandora or Spotify)	72.6%	340
	Access an online bank account (for example, through Wells Fargo or Bank of America)	78.6%	368
	None of the above	0.0%	0
S9	What types of U.S.-based AM/FM radio stations do you listen to over the internet in a typical week? ^[1]		
	Commercial stations that are all news, talk, sports, or any combination of those	45.3%	212
	Commercial stations that play music, (such as pop, country, rock, urban, and Christian music), either with or without other programming	100.0%	468
	Non-commercial stations such as public radio (like NPR), college radio, and some religious and classical music stations	34.8%	163
	Other ^[2]	0.0%	0

Note: The tabulations of the responses to the screening questions reflect only the responses by the final set of survey respondents.

[1] Respondents are permitted to select multiple answer choices.

[2] The survey asks respondents to specify "Other" when it is chosen.

[3] Answer choices to question S4 are presented as a drop-down list of each of the 50 U.S. states plus District of Columbia.

Appendix 7

Summary of Responses to Main Survey Questions

Question Number	Survey Question	Percent of Respondents	Number of Respondents	Mean	Standard Deviation
1	The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.				
	For approximately how many hours do you listen, over the internet, to these stations in a typical week?				
	1-5 Hours	31.8%	149	-	-
	6-10 Hours	28.2%	132	-	-
	11-15 Hours	20.1%	94	-	-
	16-20 Hours	6.4%	30	-	-
	21-25 Hours	6.2%	29	-	-
	26-30 Hours	1.7%	8	-	-
	31-35 Hours	1.5%	7	-	-
	36-40 Hours	1.3%	6	-	-
	41-45 Hours	1.7%	8	-	-
46-50 Hours	0.0%	0	-	-	
>50 Hours	1.1%	5	-	-	
Don't know/not sure	0.0%	0	-	-	

Appendix 7 Summary of Responses to Main Survey Questions

Question Number	Survey Question	Percent of Respondents	Number of Respondents	Mean	Standard Deviation
2	<p>The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to know what time(s) of day and week you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week during each of the following times of day and week.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.</p>				
	Weekdays: 6AM-10AM	-	-	18.5	22.0
	Weekdays: 10AM-3PM	-	-	20.1	24.4
	Weekdays: 3PM-7PM	-	-	22.6	21.0
	Weekdays: 7PM-12AM	-	-	15.7	20.1
	Weekdays: 12AM-6AM	-	-	5.9	12.0
	Weekend: any time of day	-	-	17.3	22.1
	Don't know/not sure	6.0%	28	-	-
3	<p>The following question asks about your listening, over the internet (not over the air), to U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to know where you typically listen, over the internet, to these stations. Please estimate the percentage of your total listening time over the course of a typical week at each of the following locations.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.</p>				
	Work or school	-	-	15.4	24.6
	Home	-	-	48.3	35.9
	In the car	-	-	28.3	30.3
	At the gym	-	-	6.2	11.7
	Other ^[1]	-	-	1.7	11.2
	Don't know/not sure	5.1%	24	-	-

Appendix 7 Summary of Responses to Main Survey Questions

Question Number	Survey Question	Percent of Respondents	Number of Respondents	Mean	Standard Deviation
4	<p>The following question asks about your listening to the one station you listen to most over the internet (not over the air) among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Of the total weekly listening hours from your previous answer [ENTER RESPONSE FROM QUESTION 1], what is the approximate percentage of that time that you spend listening to that one station you listen to most?</p>	5%	8	-	-
		10%	11	-	-
		15%	10	-	-
		20%	16	-	-
		25%	20	-	-
		30%	10	-	-
		35%	6	-	-
		40%	19	-	-
		45%	10	-	-
		50%	52	-	-
		55%	7	-	-
		60%	29	-	-
		65%	7	-	-
		70%	19	-	-
		75%	24	-	-
		80%	39	-	-
		85%	18	-	-
90%	26	-	-		
95%	21	-	-		
100%	85	-	-		
	Don't know/not sure	6.6%	31	-	-

Appendix 7

Summary of Responses to Main Survey Questions

Question Number	Survey Question	Percent of Respondents	Number of Respondents	Mean	Standard Deviation
5	<p>The following question asks about your listening to the one station you listen to most over the internet (not over the air) among U.S.-based commercial AM/FM radio stations that play music (such as pop, country, rock, urban, and Christian music), either with or without other programming.</p> <p>Now we would like to ask you about the value you get from the different features of that station's programming when you listen to that one station, over the internet.</p> <p>For each of the features listed below, please assign a percentage that represents the relative value of that feature among all the features listed. The more you value a feature, the higher the percentage you should assign to that feature.</p> <p>You can enter any number from 0 to 100 in each box, but your entries must add to 100. You do not need to enter the percent sign or a decimal point.</p>				
	Music	-	-	57.2	30.8
	News/traffic/weather/sports information	-	-	12.5	15.5
	Hosts, DJs, and other on-air personalities	-	-	12.2	17.0
	Local events information	-	-	7.2	9.2
	Contests	-	-	5.0	9.4
	Advertisements	-	-	5.6	7.8
	Other ^[1]	-	-	0.3	4.9
	Don't know/not sure	7.5%	35	-	-

Note: The tabulations of the responses to the main questions reflect only the responses by the final set of survey respondents.

[1] The survey asks respondents to specify "Other" when it is chosen.

Appendix 8

Summary of Responses to Question Five

	Percentiles							Mean	Standard Deviation	95% Confidence Interval	
	Minimum	10th	25th	50th	75th	90th	Maximum			Lower-bound	Upper-bound
Music	0	16	30	60	80	100	100	57.2	30.8	54.3	60.1
News/traffic/weather/sports information	0	0	0	10	20	30	100	12.5	15.5	11.0	14.0
Hosts, DJs, and other on-air personalities	0	0	0	10	20	30	100	12.2	17.0	10.6	13.9
Local events information	0	0	0	5	10	20	60	7.2	9.2	6.3	8.0
Contests	0	0	0	0	10	17	100	5.0	9.4	4.1	5.9
Advertisements	0	0	0	0	10	20	40	5.6	7.8	4.9	6.4
Other	0	0	0	0	0	0	100	0.3	4.9	0.0	0.7
All non-music categories combined	0	0	20	40	70	84	100	42.8	30.8	39.9	45.7

Note: The data represent responses from 433 respondents. Thirty-five respondents answered "Don't know/not sure" to question five.

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In The Matter Of:)	
)	
Determination of Royalty Rates)	14-CRB-0001-WR (2016-2020)
for Ephemeral Recording and)	
Digital Performance of Sound)	
Recordings (<i>Web IV</i>))	

WRITTEN REBUTTAL TESTIMONY OF STEVEN R. PETERSON, PH.D.

(On behalf of the National Association of Broadcasters and Pandora Media, Inc.

February 23, 2015

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Written Rebuttal Testimony of Steven R. Peterson, Ph.D.

I. Introduction

A. Qualifications

1. My name is Steven R. Peterson. I am an Executive Vice President at Compass Lexecon. Compass Lexecon is an economics consulting firm that specializes in the economics of competition, finance, and regulation, among other areas. I received my A.B. in economics from the University of California, Davis, in 1987 and my Ph.D. in economics from Harvard University in 1992. While at Harvard, my areas of specialization were economic theory and industrial organization. Industrial organization is the study of the interactions of firms that are able to strategically influence their environments. Industrial organization includes the study of market power and anticompetitive conduct. I have also served as an adjunct faculty member in the Department of Economics at Northeastern University, teaching courses on government and business and energy economics & policy.
2. During my career, I have consulted on the economics of antitrust and competition, mergers, estimation of damages, and the economics of valuation, and on regulation and public policy. I have also worked in the area of intellectual property and have testified on market power issues arising from the licensing of intellectual property. A copy of my curriculum vitae is attached as Appendix A.
3. Compass Lexecon is being compensated for my time in this matter at the rate of \$725/hour. My compensation does not depend in any way on the outcome of this proceeding.

B. Assignment

4. Counsel for the National Association of Broadcasters and counsel for Pandora Media, Inc., have asked me to analyze certain aspects of the written direct testimony offered by Dr. Blackburn and Dr. McFadden. Specifically, I have been asked to comment on Dr. Blackburn's analysis of the streaming marketplace and to assess the implications of Dr. McFadden's survey analysis for establishing license fees at issue in this proceeding. In particular, I have been asked to evaluate whether Dr. McFadden's results corroborate Dr. Rubinfeld's calculation of the "interactivity adjustment" Dr. Rubinfeld uses to adjust benchmark non-statutory interactive license fees. A list of the materials I and my staff have reviewed and relied upon in the course of preparing this report is attached as Appendix B.

C. Summary of Conclusions

1. Conclusions Regarding Dr. Blackburn's Testimony

5. Dr. Blackburn claims that webcaster entry and survival rates show that the statutory webcasting industry is healthy and that it is unlikely that commercial statutory license

rates are “choking off growth.”¹ Dr. Blackburn’s conclusions are based on unsound economic reasoning and lack evidentiary support. The economic errors in his analysis include the following:

- a. The standard that Dr. Blackburn uses to assess the reasonableness of rates, that rates not “choke off” growth, is economically meaningless. Even if rates were set at monopolistic levels, they would not “choke off” all growth. Thus, Dr. Blackburn’s analysis based on this standard does not provide any economic basis to find that prevailing license rates – or SoundExchange’s proposed rates – are economically reasonable or reflect the workings of an effectively competitive market.
- b. Dr. Blackburn’s webcaster counts and analysis of survival rates cannot support his conclusions regarding commercial statutory rates because they include hundreds of webcasters who pay only the minimum license fees or are subject to rates that are significantly below commercial statutory rates. When Dr. Blackburn’s analysis is limited to types of webcasters generally paying per-performance or usage rates at or near the commercial statutory rates, both webcaster counts and survival rates decrease. When properly analyzed, Dr. Blackburn’s data show that commercial statutory license fees are associated with a higher risk that a webcaster will cease webcasting than the survival rates that Dr. Blackburn presents.
- c. Analysis of the growth of webcasting using SoundExchange’s payment data illustrates that the greatest growth in webcasting has occurred not from webcasters paying commercial statutory rates but from so-called pureplay webcasters, which pay rates that are substantially below those paid by other commercial webcasters. Even there, substantially all of the growth has been attributable to [REDACTED]
[REDACTED]
[REDACTED] II.
- d. Dr. Blackburn’s reliance on a purported increase in webcasters from 1,412 in 2006 to 2,516 in 2013² is economically meaningless. Dr. Blackburn provides no benchmark against which to gauge whether this growth is consistent or inconsistent with the growth that would occur in an effectively competitive market, so no economic conclusion can be drawn from these counts. In any event, Dr. Blackburn’s count of 2,516 webcasters includes over 1,100 webcasters that only rarely pay usage rates at or near the commercial statutory rates because they generally pay minimum license fees or are subject to usage rates below the commercial statutory rates. Thus, the counts of webcasters actually paying rates at or near the commercial statutory rates are far lower than the counts that Dr. Blackburn presents.

¹ Report of David Blackburn, October 6, 2014 (hereinafter “Blackburn”), ¶ 27 and ¶ 55.

² Blackburn, ¶ 26.

- e. Finally, Dr. Blackburn overstates the amount of investment in statutory webcasting.³ Of the \$839 million number he cites, only about half relates to Internet radio as opposed to on-demand and video services, and of this half, approximately 90% relates to a single public offering of Pandora stock. A still higher percentage was raised by firms that are not responsible for paying full commercial statutory performance rates.
6. Dr. Blackburn’s claim that “there is little evidence that statutory webcasting promotes the sales of digital or physical media” is incorrect.⁴ In fact, there is extensive evidence that statutory webcasting, including both simulcasts of AM/FM radio broadcast programming and customized webcasting services like Pandora, is promotional.
- a. The documentary record in this matter shows that streaming and AM/FM radio are important sources of music discovery for listeners.⁵ Moreover, financial records indicate that the record labels for which SoundExchange produced data spend [REDACTED] a year promoting music on AM/FM radio and encouraging AM/FM stations to play their artists’ music.⁶ This level of expenditure indicates industry expenditures of [REDACTED]. The labels would only make these expenditures if they believed they provide a positive return. Moreover, there is no reason to claim that the promotional benefits of AM/FM radio are lost when a listener chooses to listen to the same programming online rather than over the air.
- b. There is also substantial evidence that custom webcasting services, like Pandora, are promotional. This evidence includes both [REDACTED] as well as a well-controlled experiment that Pandora performed that shows that playing songs on Pandora causally leads to increased average music sales. In fact, the study Pandora performed uses an approach Dr. Blackburn endorses.⁸
7. Dr. Blackburn’s analysis purporting to show that statutory webcasting cannibalizes revenue from subscription streaming is flawed. Dr. Blackburn’s analysis rests on the suggestion that if ad-supported statutory webcasters were less attractive, many of the

³ Blackburn, ¶ 21.

⁴ Blackburn, ¶ 89.

⁵ See, e.g., [REDACTED].

⁶ See SNDEX0126178-179, SNDEX0126596-600, SNDEX0126597, SNDEX0126592-595, SNDEX0126601, and SNDEX0126177.

⁷ See, e.g., [REDACTED].

⁸ Blackburn, ¶ 91 (“one should conclude, as an economic matter, that statutory webcasting leads to additional sales of recorded music only if there are sales made ... that would not have otherwise been made, absent the streaming. That is, if the play(s) did not happen, there would have been fewer sales.”).

listeners leaving them would sign up for services with a monthly fee.⁹ His analysis, however, does not account for other sources of competition to both free custom services like Pandora and to subscription streaming services. The presence of these competing services means that those leaving custom webcasting need not subscribe to a service and that there are other services more likely to cannibalize subscription services than custom webcasters. Thus, Dr. Blackburn's analysis is [REDACTED]

[REDACTED] 1.
Dr. Blackburn also fails to account for evidence that many users of custom webcasting could switch to terrestrial radio should custom webcasting disappear or be degraded.¹¹ Finally, Dr. Blackburn does not take into account that many consumers are quite averse to paying monthly subscription fees and have a low willingness to pay for music. These consumers are unlikely to subscribe to a service with a monthly fee.

8. Dr. Blackburn's claims regarding competition between statutory streaming and subscription services are particularly inapplicable to radio broadcasters that simulcast their terrestrial broadcasts – a significant segment of statutory webcasting that Dr. Blackburn all but ignores. Simulcasts are not customized and offer the same or substantially identical programming to the programming offered on the corresponding over-the-air radio broadcast. As such, a simulcast service resembles terrestrial radio much more closely than a subscription on-demand service – or even custom webcasting. Dr. Blackburn himself recognizes this fundamental distinction.¹²
9. Dr. Blackburn suggests Internet startups, such as Pandora, intentionally delay their profitability and could increase profitability if desired. This claim is contrary to basic economic principles and cannot provide economic support for a rate increase. A rational, profit-seeking firm will not “delay” profitability. Dr. Blackburn offers no evidence that Pandora has not acted to maximize its profits or has acted sub-optimally, leaving money on the table. Moreover, cost increases always lead to reduced profitability and lower incentives to invest in the future. Thus, any suggestion that a firm, such as Pandora, could increase its profitability in order to cover increased costs without damaging its

⁹ Blackburn, ¶ 99.

¹⁰ [REDACTED] 1.

¹¹ Written Direct Testimony of Simon Fleming-Wood, ¶ 15 (“our [Pandora’s] closest competitor, and greatest opportunity for converting new listeners, is the broadcast radio industry - including traditional terrestrial (AM/FM) radio, and satellite radio.”).

¹² Blackburn, ¶ 101.

business and future prospects for achieving already uncertain expected profits is economically unfounded.

2. Conclusions Regarding Dr. McFadden's Testimony

10. Dr. McFadden estimates the average willingness to pay for a number of characteristics and features of interactive and non-interactive services based on a survey of 983 individuals. The survey required respondents to perform 15 choice tasks in which they chose among three hypothetical streaming services with different prices and features. Using these responses, Dr. McFadden estimated each respondent's willingness to pay for each feature. From those estimates, he computed an estimate of the weighted average willingness to pay of the respondents. As Dr. McFadden notes, the survey results reveal that a significant portion of respondents to his survey have a low willingness to pay for streaming.¹³ In fact, Dr. McFadden's study shows that many respondents do not just have a low willingness to pay for many features of music streaming, they have a *negative willingness to pay for many features* (i.e., these respondents prefer services without these features). Of course, estimates of the average willingness to pay for features can never describe individual behavior, which is driven by the individual variation around the average. This is particularly the case here. The estimates of the average willingness to pay for features are all positive, which indicates that individuals will be willing to seek out and pay for features. Many of the individual estimates of willingness to pay for features, however, indicate an aversion by some respondents to those features. Thus, the average masks the divergent willingness to pay of consumers.
11. The estimates of average willingness to pay cannot provide insight into market prices or how consumers will respond to market prices. In fact, the estimated average willingness to pay for the features of an on-demand subscription service (as estimated by Dr. McFadden) is lower than the typical \$9.99 price of a subscription service, even accounting for all of the features included in music service. Of course consumers will pay only for the features of a service that they cannot obtain for free in the marketplace. If everyone had the average willingness to pay for the features of a service such as Spotify Premium, nobody would subscribe to such a service at the typical subscription price of \$9.99. Only a relatively small cohort of consumers who value the features of subscription streaming services substantially above the estimated average levels would be willing to pay \$9.99. Thus, the estimates of average willingness to pay for features of streaming services are not a useful guide to consumer behavior or market price levels.

3. Dr. Rubinfeld's "Interactivity Adjustment" Is Not Supported by Dr. McFadden's Results

12. Dr. Rubinfeld calculates an "interactivity adjustment" based on the ratio of the average retail subscription prices of interactive and statutory non-interactive services.¹⁴ Dr. Rubinfeld uses the "interactivity adjustment" to adjust downward the license fees paid by

¹³ McFadden, ¶ 10.

¹⁴ Rubinfeld, ¶ 168.

his benchmark interactive services to the license fees he proposes for statutory non-interactive licensees. Dr. Rubinfeld explains that the purpose of his adjustment is to ensure that per-person license fees are about the same share of retail subscription prices for both interactive and non-interactive licensees.¹⁵ I understand that the flaws with this approach are discussed in detail in the Written Rebuttal Testimony of Michael Katz (among others).

13. Dr. Rubinfeld asserts that Dr. McFadden’s estimates of consumers’ willingness to pay for the characteristics of interactive versus non-interactive services are “generally consistent” with the “interactivity adjustment” he calculates from retail market prices.¹⁶ What he appears to mean by this is that the willingness to pay for the features of an interactive service (as calculated by Dr. McFadden) is roughly double the willingness to pay for the features of a non-interactive service. This result purportedly supports his calculation because it is approximately equal to the retail-price ratio defining his “interactivity adjustment.” Despite the similar numerical results, Dr. McFadden’s estimates of willingness to pay cannot corroborate Dr. Rubinfeld’s calculation for two reasons. First, the arithmetic of Dr. Rubinfeld’s license fee adjustment has solely to do with the relationship between subscription prices and license fees for statutory and interactive services. On its face, it has nothing to do with the average willingness to pay for features of streaming services, which are not economically related to retail subscription prices. Obviously, if estimates of average willingness to pay are unrelated to market prices, there is no reason for the *ratio* of willingness to pay and the *ratio* of prices for interactive and statutory non-interactive services to be the same. Any similarity is fortuitous. In any event, the fact that the two calculations yield a similar numerical result does not imply that Dr. McFadden’s results support Dr. Rubinfeld’s calculation of an “interactivity adjustment” or that Dr. Rubinfeld’s use of the “interactivity adjustment” is economically justified.
14. Second, Dr. Rubinfeld’s two calculations of the “interactivity adjustment” value different bundles of features. Many of the features that form part of the package sold by subscription services – for example large song libraries and mobile service – are available for free in the marketplace. The retail prices of the subscription services that Dr. Rubinfeld uses represent the market value of the features that are *not* available for free in the marketplace – that is, the “extras” that one gets for subscribing that are not included in the free service. What Dr. Rubinfeld’s retail subscription price ratio reveals, therefore, is the ratio of what consumers pay for the “extras” available from a non-interactive subscription service (lack of advertising, for example) to what they pay for the even larger group of extra features available from an interactive subscription service (mobile on-demand song choice, most notably). When calculating the willingness to pay for an interactive service relative to a statutory non-interactive service using estimates of average willingness to pay, Dr. Rubinfeld did not just use the values of the “extras” one gets by subscribing, but the willingness to pay for all of the features embodied in the

¹⁵ Rubinfeld ¶ 169.

¹⁶ Rubinfeld, ¶ 171.

services, whether they are available for free in the market or not.¹⁷ This is a broader and fundamentally different set of features than those reflected in the retail prices Dr. Rubinfeld uses to estimate the “interactivity adjustment.” That the two methods, which value different sets of features, produce roughly the same results is pure happenstance. One calculation cannot support the other.

15. Dr. Rubinfeld uses Dr. McFadden’s analysis solely to support the calculation of the “interactivity adjustment.” Dr. McFadden’s analysis cannot provide the support Dr. Rubinfeld claims, however. As a result, Dr. McFadden’s analysis is not relevant to SoundExchange’s rate proposal.

II. Dr. Blackburn’s Suggestion that High Commercial Statutory License Fees Have Not Impeded Webcaster Growth Is Unfounded

16. Dr. Blackburn asserts that the streaming industry is experiencing entry by new webcasters and has further prospects for growth.¹⁸ He also asserts that once they enter, webcasters have a good probability of survival (*i.e.*, not failing and exiting the industry).¹⁹ Based on his findings, Dr. Blackburn concludes: “[i]f licensing rates were choking off growth, we would not likely see continued growth in the number of firms operating in the industry, or the historical success of firms to survive once they have entered.”²⁰ To the extent Dr. Blackburn means to defend the existing rates – or SoundExchange’s even higher rate proposal – on the grounds that the rates will not “choke off growth” in statutory webcasting, that conclusion is both economically irrelevant and factually baseless.
17. Dr. Blackburn’s standard deems rates to be acceptable if they are not “choking off growth.” Notably, Dr. Blackburn does not claim that the growth in webcasting is unaffected by license rates or that higher license rates do not slow growth relative to lower rates. Instead, he represents only that there is growth in the number of webcasters, but this observation alone is economically meaningless. Moreover, I understand that the purpose of this proceeding is to identify rates that approximate the rates that a willing buyer and willing seller would negotiate in an effectively competitive marketplace – not to set the rate at the highest level possible that will not “choke off” growth or avoid driving services out of business. Of course, rates that do not “choke off growth” need not be effectively competitive or otherwise reasonable. Monopolists raise prices above the competitive level, sometimes materially so, but they do not raise prices to levels that drive all of their customers away. Even a monopolist setting license fees would not raise them high enough to entirely choke off growth in an otherwise growing industry. “Choking off” all growth would effectively kill the geese that lay the golden eggs.

¹⁷ Rubinfeld, Exhibit 14.

¹⁸ Blackburn, ¶ 17.

¹⁹ Blackburn, ¶ 28.

²⁰ Blackburn, ¶ 27.

A. Webcasters Subject to Commercial Statutory Rates Exit the Webcasting Industry at a Greater Rate than Dr. Blackburn’s Analysis Indicates

18. Dr. Blackburn claims that “licensing costs in the industry have not deterred growth,”²¹ and suggests that current rates are reasonable because “over the recent past, survival rates for statutory webcasters have generally been right in line with those of all businesses more generally.”²² In making these claims, however, he incorrectly examines survival rates of *all* webcasters rather than those types that generally pay rates at or near the commercial statutory rates, which is the relevant analysis. An analysis of the relevant set of webcasters reveals survival rates that are much lower than those that Dr. Blackburn presents.
19. As an initial matter, Dr. Blackburn offers no analysis to support his conclusion that webcasters should have survival rates that are in line with businesses generally. There is no reason to believe that statutory webcasters face the same risks of failure as firms generally. Thus, the comparison of webcaster survival rates to the survival rates of businesses generally cannot provide insight into the effects of high commercial statutory rates.
20. Moreover, Dr. Blackburn incorrectly analyzes as a single group different types of webcasters that pay many different types of rates, including hundreds that pay rates that are significantly lower than the commercial statutory rates. For example, Dr. Blackburn incorrectly includes noncommercial webcasters in his survival analysis. The statutory rates for these webcasters permit streaming of no more than 159,140 aggregate tuning hours per month without requiring additional payment beyond a \$500 minimum annual fee,²³ and most noncommercial webcasters stream at levels low enough that this fixed amount is all they pay.²⁴ Above that threshold, the statutory rates require noncommercial webcasters to pay the same commercial usage rates as those that apply to commercial webcasters or broadcasters.²⁵ According to SoundExchange’s payment data, however, while some noncommercial webcasters exceed the stated threshold, [REDACTED] pay commercial usage rates.²⁶ In 2012, for example, [REDACTED] noncommercial [REDACTED] paying usage rates paid the commercial webcaster usage rates. In 2013, [REDACTED] noncommercial [REDACTED] paid statutory rates above the \$500 minimum fee, paying total fees of \$[REDACTED]. Instead, almost all of these somewhat larger noncommercial

²¹ Blackburn, ¶ 25.

²² Blackburn, ¶ 28.

²³ 37 C.F.R. §§ 380.3(a)(2)(i), 380.22(b).

²⁴ See, e.g., Blackburn, ¶ 29.

²⁵ 37 C.F.R. §§ 380.3(a)(2)(ii), 380.22(b).

²⁶ SNDEX0049480 (NAB Ex. 41).

²⁷ SNDEX0049480 (NAB Ex. 41).

webcasters pay usage rates that are available under a Webcaster Settlement Act agreement²⁸ and are a fraction of the commercial usage rates.²⁹

21. In addition to including noncommercial webcasters in the survival rate analysis, Dr. Blackburn also incorrectly includes pureplay and small webcasters, which pay rates that are substantially below the commercial statutory rates.³⁰ Of course, if the goal is to find out whether license fees at or near the commercial statutory rates are leading to low survival rates, it is necessary to focus on webcasters that are paying rates at or near the commercial statutory rates that are at issue here. Thus, by combining all webcasters regardless of the rates they generally pay, Dr. Blackburn has done the wrong analysis.
22. It is also not clear that Dr. Blackburn has used reliable data for his survival analysis. Dr. Blackburn conducts his survival analysis on a highly processed dataset where judgments have been made regarding webcasters' identities and whether they should be considered to still be in operation. Without information on how these judgments were made, there is no way to ascertain the reliability of the data. Notably, the data on the names and types of webcasters present in the survival data match SoundExchange's payment data relatively well for the period 2010-2012. However, a substantial number of firms that appear in the survival data in 2013 do not appear in the payment data, indicating they did not pay license fees in 2013. In addition, for the years 2007-2009, there are many webcaster names in the payment data that do not appear in the survival data and vice versa. Moreover, the license types for webcasters in the survival data are different than those shown for the same webcasters in the payment data, when a match can be found. Dr. Blackburn has provided no information on the methods used to create the dataset used for his survival analysis, particularly for the years 2007-2009 where the survival data are a poor match to payment data. Without information describing how the survival data have been manipulated, it is not possible to validate the survival data prior to 2010 using SoundExchange's payment data.
23. If we use the same data Dr. Blackburn used but correct the analysis so that it includes only types of webcasters generally paying usage rates at or near the commercial statutory webcaster rates, we find that these webcasters are less likely to survive than Dr. Blackburn's analysis shows. This result is shown in Figure 1. The top panel of Figure 1 reproduces Table 3 from Dr. Blackburn's testimony. The panel shows "the survival rates,

²⁸ Federal Register /Vol. 74, No. 40 /Tuesday, March 3, 2009 /Notices at 9293-9307.

²⁹ SNDEX0049480 (NAB Ex. 41). Dr. Rubinfeld suggests, in the absence of benchmark agreements applicable to noncommercial broadcasters to continue the existing rates, a \$500 minimum fee and commercial rates for webcasting beyond the aggregate tuning hour cap (Rubinfeld, ¶ 246). The payment history of the noncommercial webcasters, however, indicates that Dr. Rubinfeld's proposal does not, in fact, continue the status quo.

³⁰ Many webcasters pay SoundExchange under a settlement agreement covering their webcasting activities. Thus, many webcasters have not and do not pay precisely the rates described in the Web II or Web III proceedings. By "rates near commercial statutory rates," I mean rates that are approximately at the statutory level for commercial webcasters established in the Web II and Web III proceedings. These webcasters are broadcasters, small broadcasters, commercial webcasters (CRB), and commercial webcasters (WSA).

by year, for statutory webcasters operating in any given year.”³¹ For example, the top row shows that of the webcasters operating in 2006, 39% were still operating in 2013.

Figure 1
Correction of Dr. Blackburn’s Survival Analysis

Recreation of Dr. Blackburn's Table 3: Webcaster Licensee Rate of Survival until 2013
(2006-2013)

	2006	2007	2008	2009	2010	2011	2012	2013
2006	100%	87%	61%	53%	43%	42%	42%	39%
2007		100%	68%	60%	46%	45%	44%	41%
2008			100%	82%	61%	58%	56%	53%
2009				100%	72%	66%	64%	58%
2010					100%	86%	81%	75%
2011						100%	89%	79%
2012							100%	85%
2013								100%

Recreation of Dr. Blackburn’s Table 3 for Types of Webcasters Paying At or Near the
Commercial Statutory Rate

	2006	2007	2008	2009	2010	2011	2012	2013
2006	100%	85%	57%	44%	30%	27%	27%	25%
2007		100%	66%	53%	34%	32%	31%	28%
2008			100%	77%	49%	45%	43%	40%
2009				100%	63%	57%	54%	48%
2010					100%	85%	79%	70%
2011						100%	87%	75%
2012							100%	82%
2013								100%

Source: Sndex0049482-Restricted.xlsx; Federal Register, Vol. 74, No 40, March 3, 2009; Federal Register, Vol. 74, No. 154, August 12, 2009; Federal Register, Vol. 72, No. 83, May 1, 2007, Federal Register, Vol. 74, No. 136, July 17, 2009

Notes: 1) Webcaster types paying at or near the commercial statutory usage rate include entities under the "BRD", "CW-CRB", "CW-WSA", "SMBRD", and "PPWC"-Subscription license subtypes.

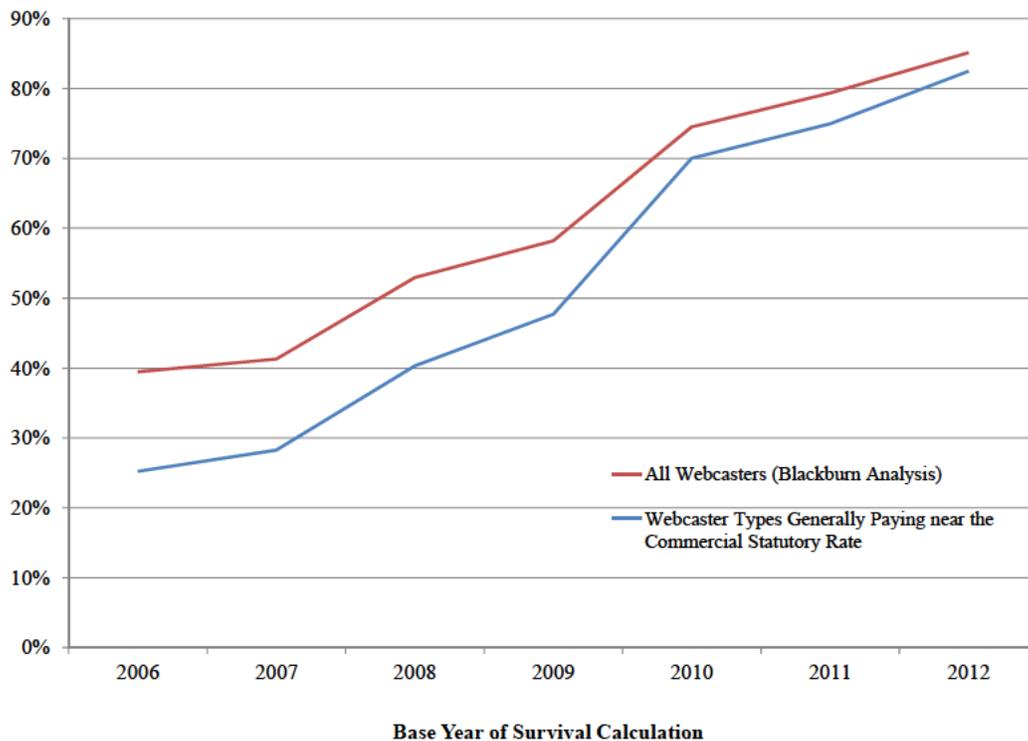
24. The bottom panel of Figure 1 shows Dr. Blackburn’s survival analysis limited to the types of webcasters that pay usage rates at or near the commercial statutory rates.³² Note that with the exception of the first entry in each row, every entry in the middle panel of Figure 1 is lower than the corresponding entry in the top panel showing Dr. Blackburn’s analysis. This indicates that the survival rate for webcasters paying rates at or near the commercial statutory rate survive at lower rates (*i.e.*, fail at higher rates) than webcasters generally.
25. Figure 2 compares the survival rates in 2013 of webcasters paying at or near the commercial statutory rate and of all webcasters as calculated by Dr. Blackburn. The figure shows that types of webcasters paying at or near commercial statutory usage rates

³¹ Blackburn, ¶ 27.

³² Some webcasters of these types pay minimum license fees.

(blue line) survive at a lower rate than Dr. Blackburn reports for all webcasters (red line). The lines are farther apart to the left of the chart where firms have had a longer time to fail, and the higher failure rate has more years to compound before the end of the dataset in 2013. With fewer years for the different failure rates to influence survival, the lines grow closer together as they move to the right.

Figure 2
2013 Survival Rate Comparison: Types of Webcasters Paying At or Near the Commercial Statutory Rate v. Dr. Blackburn's Analysis of All Webcasters
 2006-2012



Source: Sndex0049482-Restricted.xlsx; Federal Register, Vol. 74, No 40, March 3, 2009; Federal Register, Vol. 74, No. 154, August 12, 2009; Federal Register, Vol. 72, No. 83, May 1, 2007; Federal Register, Vol. 74, No. 136, July 17, 2009.

26. Dr. Blackburn's analysis of webcaster survival rates incorrectly combines webcasters paying approximately commercial statutory rates and webcasters paying minimum license fees and usage rates below commercial statutory rates. The survival rates of these two groups are different. However, only the survival of webcasters paying license fees at or near the commercial statutory rates can possibly tell us about the effects of the commercial statutory rates on webcaster survival. Therefore, Dr. Blackburn's analysis of all webcasters blended together is not applicable to commercial broadcasters and webcasters and overstates the survival rates of the relevant types of webcasters.
27. More importantly, however, Dr. Blackburn's analysis is not economically relevant to establishing rates that are effectively competitive. Effectively competitive rates are not

rates that are sufficiently low to not choke off growth. Effective competition would drive rates toward the copyright owners' marginal cost of allowing webcasts to occur.

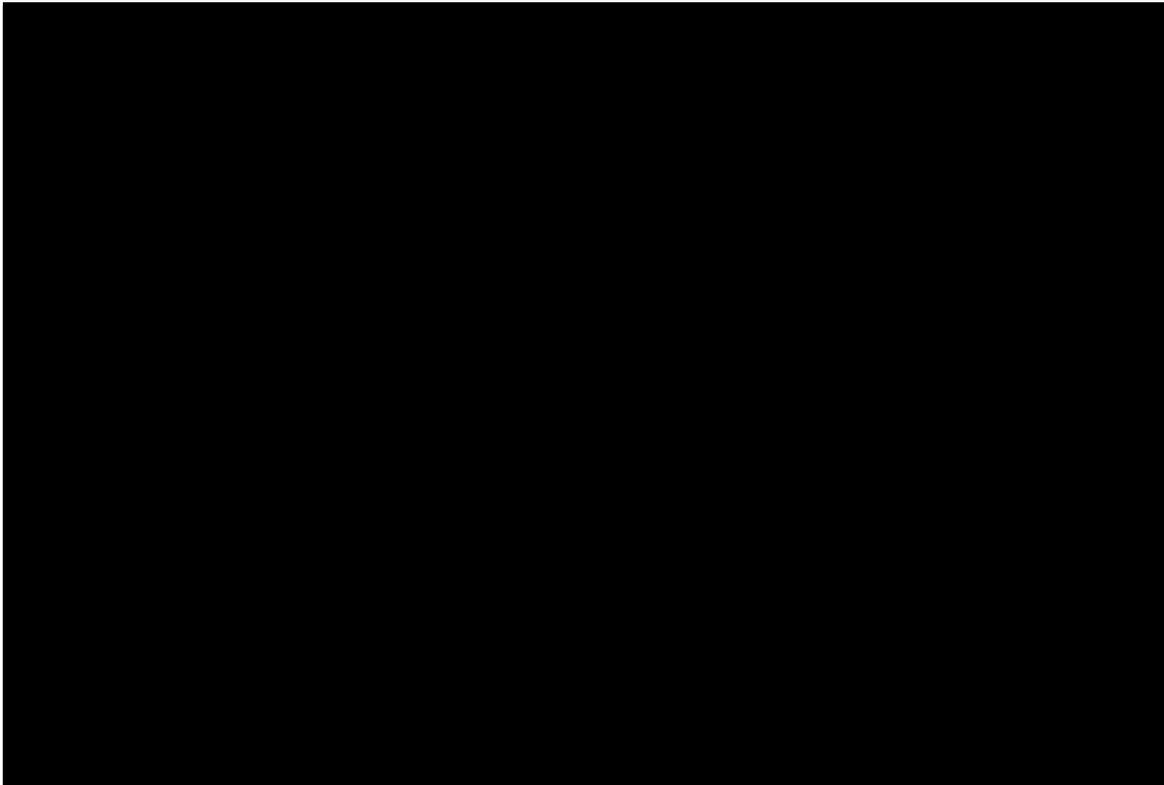
B. Counts of Webcasters Cannot Demonstrate the Health of the Webcasting Industry

28. Dr. Blackburn touts the fact there has been growth in the number of statutory webcasters according to SoundExchange's counts.³³ He suggests that the rate of entry of webcasters and the increasing number of webcasters supports his conclusion that high license fees are not choking off growth in the industry.³⁴ Dr. Blackburn's analysis cannot support his conclusions, however. Statements such as "[a]t the end of 2013, there were 2,516 webcasters operating under statutory license, up from 1,412 in 2006" are meaningless without comparison to some benchmark. Dr. Blackburn's analysis does not tell us whether 2,516 webcasters are a lot of webcasters or a few webcasters relative to the number that would exist if rates were effectively competitive. Thus, 2,516 webcasters may sound like a lot of webcasters, but with no benchmark for comparison, Dr. Blackburn's analysis provides no way to know how many webcasters there should be.
29. Dr. Blackburn's analysis of webcaster counts also fails to account for differences among webcasters. Only an analysis of webcasters paying roughly the commercial statutory usage rate can provide insight into the effects of that rate on webcasters. Limiting the analysis to these types of webcasters reduces Dr. Blackburn's tally of webcasters by more than 1,100.
30. Figure 3 illustrates that different types of webcasters are not equally important in terms of their contribution to SoundExchange's royalty revenue from statutory webcasters. For each type of webcaster, the figure shows the share of license fees paid to SoundExchange and the share of all webcasters that the type represents. If each type of webcaster paid the overall average level of license fees, the bars showing the share of license fees and the share of webcasters would be the same height for each type of webcaster. This is clearly not the case because different types of webcasters pay different usage rates and some types of webcasters have relatively few streams and generally pay only the minimum license fee. The figure shows noncommercial webcasters account for 41% of webcasters by licensee count, but only []% of license fees – not 41% of license fees. Broadcasters account for 37% of all webcasters, and pay about []% of license fees to SoundExchange. By contrast, [] of statutory license fees are paid by non-subscription pureplay webcasters, and [].

³³ These counts rely on the same dataset as Dr. Blackburn's survival analysis and, therefore, are subject to the same issues of data reliability described above.

³⁴ Blackburn, ¶ 26.

Figure 3 (RESTRICTED)
Share of License Fees and Share of Total Webcasters by Type
 2012

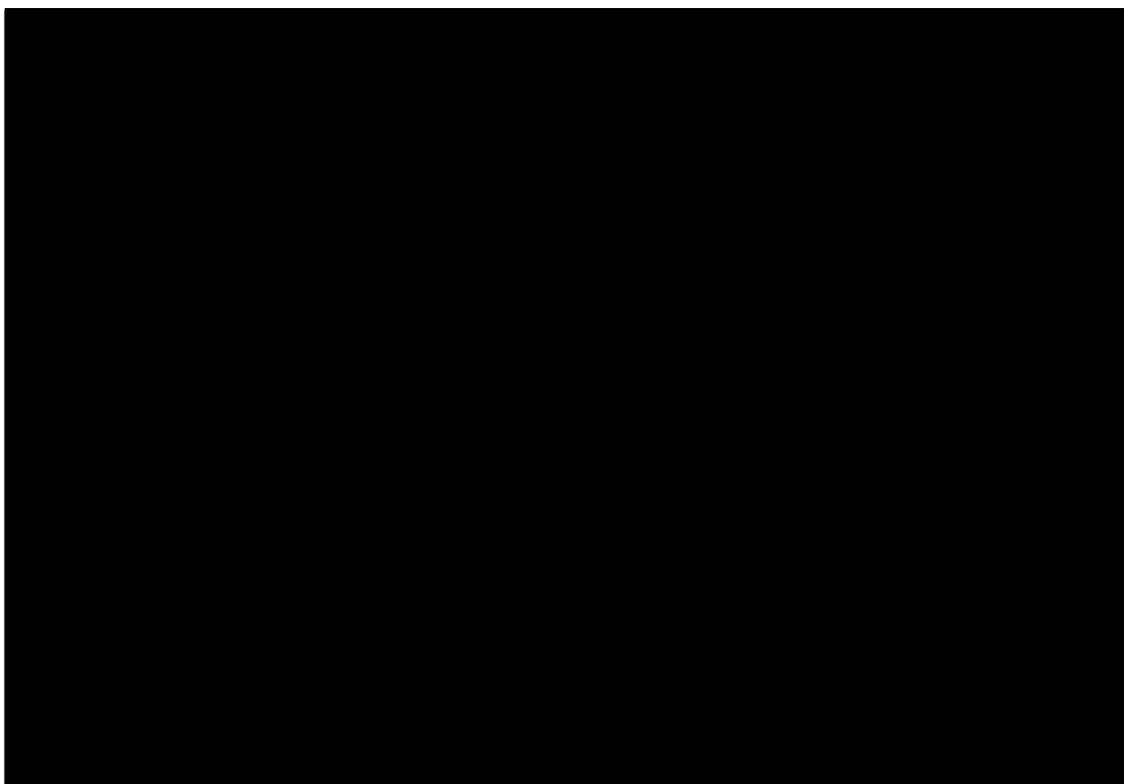


Source: Sndex0049480-Restricted.xlsx (NAB Ex. 41); Sndex0049482-Restricted.xlsx

Note: 1) Broadcasting includes BRD; commercial webcasting includes CW-CRB and CW-WSA; noncommercial webcasting includes NC-MICRO, NCEDW, NC-CRB, NC-WSA, and CPB; subscription pureplay includes PPWC (Sub); non-subscription pureplay includes PPWC (Non-Sub), PPWC (Non-Sub & Sub), and PPWC (Sub and Non-Sub); small webcasting includes SMPPWC, SMW, and SWSA; small broadcasting includes SMBRD license subtypes. Excludes other types of licenses.

31. Figure 3 shows that looking at webcaster counts alone presents a highly misleading picture of the statutory webcasting industry because the bulk of royalties are paid by a small share of webcasters – and primarily by non-subscription pureplay webcasters that pay royalties at rates substantially below commercial statutory rates. In contrast, many of the entrants that Dr. Blackburn describes are noncommercial webcasters, which pay a very small share of total license fees.
32. Figure 4 shows the license fees paid by seven types of webcasters between 2007 and 2013. It is clear that license fees paid by non-subscription pureplay webcasters grew at a much greater rate than did license fees paid by other types of webcasters. This suggests that the increase in webcasting is primarily the result of growth by commercial webcasters paying rates substantially below the commercial statutory rates rather than by those generally paying at or near the commercial statutory rates.

Figure 4 (RESTRICTED)
License Fees Paid by Type of Webcaster
 Millions of Dollars
 2007-2013



Source: Sndex0049480-Restricted.xlsx (NAB Ex. 41); Sndex0126123_Restricted.xlsx (NAB Ex. 42)

Notes: 1) For years 2007-2009, broadcasting includes BRD-I; commercial webcasting includes CW-CRB, CW-II; noncommercial webcasting includes NC MICRO-II, NCW, NCEDW-II, NCW-II, NCW-CRB, and CPB; subscription pureplay includes PPWC-II (SUB); non-subscription pureplay includes PPWC-II (NON-SUB), and PPWC-II (SUB & NONSUB); small webcasting includes SPPWC-II (NON-SUB), SPPWC-II (SUB), SPPWC-II (SUB & NONSUB), and SWSA; small broadcasting includes SMBRD-I. Excludes other types of licenses.

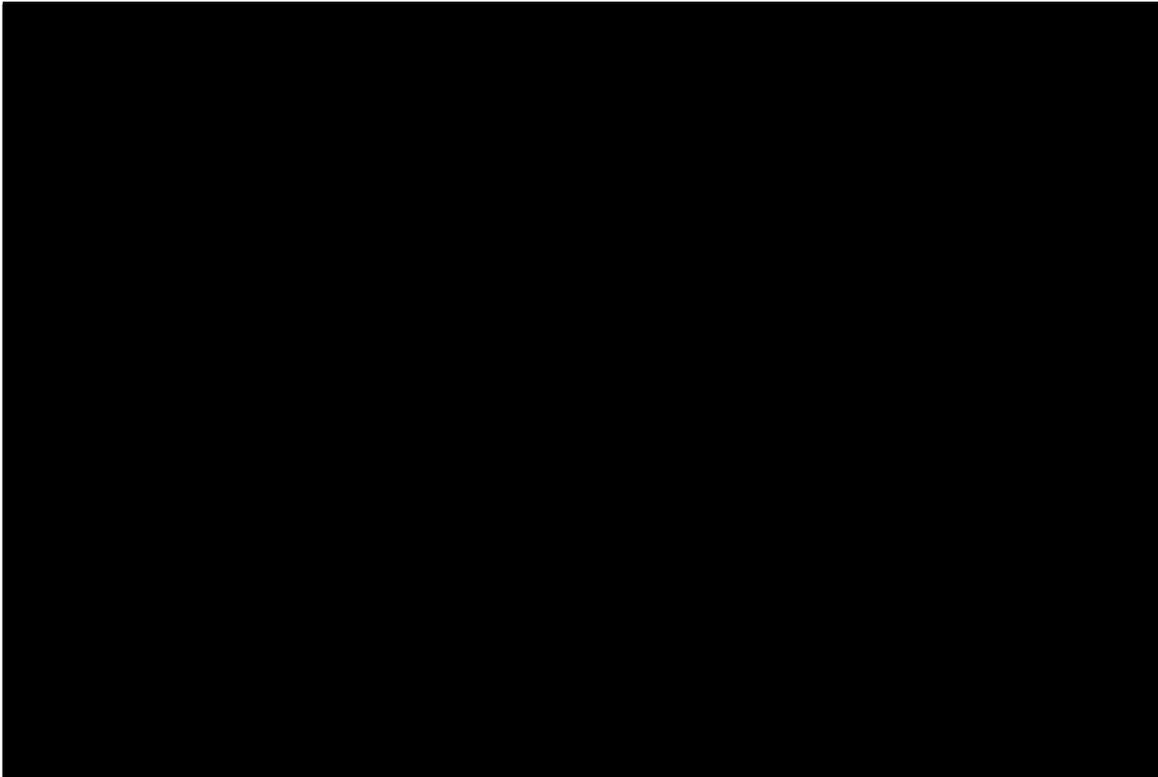
2) For 2010-2013, Broadcasting includes BRD; commercial webcasting includes CW-CRB and CW-WSA; noncommercial webcasting includes NC-MICRO, NCEDW, NC-CRB, NC-WSA, and CPB; subscription pureplay includes PPWC (Sub); non-subscription Pureplay includes PPWC (Non-Sub); small webcasting includes SMPPWC, SMW, and SWSA; small broadcasting includes SMBRD. Excludes other types of licenses.

33. Of course, a substantial portion of the increase in license fees paid between 2007 and 2013 is the result of increased license rates, which generally increased each year for webcasters subject to a usage rate. Thus, the increases in license fees in Figure 4 represent a combination of increased license rates and increased output of webcasting. Figure 5 removes the impact of increasing license rates and shows what license fees would have been for the categories of webcasters making relatively larger license payments had license rates remained at their 2007 levels, all else equal.³⁵ Thus, the

³⁵ Figure 5 shows adjusted fees only for the four largest types of webcasters.

increases shown in the figure are the result of increased streaming rather than the result of increased license rates. Notably, the increases in streaming by the types of webcasters that are subject to the commercial statutory rates had a much smaller increase in webcasting than did pureplay webcasters, which had the greatest increases in the quantity of webcasting.³⁶ Once again, there are a few non-subscription pureplay webcasters, but [REDACTED].

Figure 5 (RESTRICTED)
License Fees by Type of Webcaster at 2007 Rates
 Millions, \$2007
 2007-2013



Source: Sndex0049480-Restricted.xlsx (NAB Ex. 41); Sndex0126123_Restricted.xlsx (NAB Ex. 42); Federal Register, Vol. 74, No 40, March 3, 2009; Federal Register, Vol. 74, No. 154, August 12, 2009; Federal Register, Vol. 72, No. 83, May 1, 2007, Federal Register, Vol. 74, No. 136, July 17, 2009

Notes: 1) For 2007-2009, broadcasting includes BRD-I; commercial webcasting includes CW-CRB and CW-II; subscription pureplay includes PPWC-II (SUB); non-subscription pureplay includes PPWC-II (NON-SUB) PPWC-II (SUB & NONSUB) license subtypes.

2) For 2010-2013, broadcasting includes BRD; commercial webcasting includes CW-CRB and CW-WSA; subscription pureplay includes PPWC (Sub); non-subscription pureplay includes PPWC (Non-Sub) license subtypes.

³⁶

Subscription pureplay webcasting has also grown rapidly from a very low base in 2007. Nevertheless, subscription pureplay webcasting contributes far less in royalty payments to SoundExchange than non-subscription pureplay webcasting. This growth is attributable to [REDACTED]. Blackburn,

¶ 98.

34. When we examine a measure of webcaster output growth that is economically meaningful, the analysis shows that the vast majority of the increase in webcasting occurred in a segment of webcasting with rates substantially below the statutory rates applicable to broadcasters and commercial webcasters. This result is contrary to Dr. Blackburn’s conclusion that high license fees are not choking off webcasting growth.

C. Dr. Blackburn Overstates the Investment in Statutory Webcasting

35. Dr. Blackburn also tries to demonstrate the health of the webcasting industry by discussing the amount of investment in webcasting, but the investment amount he cites is misleading. Based on a trade press article, Dr. Blackburn notes: “[I]ast year, investors placed \$2.4 billion in the music industry with about \$839 million going into ‘Internet Radio’ or ‘On-demand streaming audio and video’ companies, including stock offerings by Pandora and venture capital rounds from other streaming services.”³⁷
36. Of course, the only relevant investment for assessing investor interest in statutory webcasting is the amount invested in statutory webcasters, and according to the article that Dr. Blackburn cites, only \$432 million of the \$839 million he quotes was invested in “Internet Radio,” with the rest going to on-demand audio and video companies. Of the \$432 million, almost all of it – \$393 million – reflected a secondary stock offering in a single company, Pandora. Of course, Pandora pays a royalty rate that is substantially below the current commercial statutory rate.
37. The remaining \$39 million consisted of “smaller venture capital rounds by Tunein (\$25 million), DeliRadio (\$9.4 million) and Songza (\$4.7 million)”. The article notes that TuneIn is an aggregator of Internet radio streams and does not pay any royalties itself.³⁸ Therefore, the investment in TuneIn does not indicate much about investor’s views regarding royalty rates because it does not pay them. In addition, DeliRadio’s website includes a section entitled “Streaming music royalties” that states: “Artists with streaming-enabled music on DeliRadio have given us royalty-free licenses to stream that music, in exchange for the suite of promotional tools we offer to artists for free”.³⁹ Again, investment in a company that does not pay statutory royalties is uninformative regarding investors’ views regarding the impact of statutory royalty rates on a business’ financial performance. Thus, virtually all of the investment amount cited by Dr. Blackburn was in companies that do not pay the statutory rates.
38. It is also relevant to assess whether the investments have paid off. Pandora completed its secondary public offering in September 2013. With Pandora’s secondary offering more than a year behind us, we can investigate how well the investors in that offering have done. Through its secondary public offering, Pandora sold 15,730,000 shares at a price

³⁷ Blackburn, ¶ 21.

³⁸ Glenn Peoples, “Investors Put \$2.4 Billion into Music in 2013, Streaming Tops List,” Billboardbiz, January 31, 2014, available at <http://www.billboard.com/biz/articles/news/5893800/investors-put-24-billion-into-music-in-2013-streaming-tops-list> (accessed February 15, 2015).

³⁹ <http://deliradio101.com/for-artistsbands/streaming-music-royalties> (accessed February 22, 2015).

of \$25 per share. As a result of the offering, Pandora raised net proceeds of \$387.7 million.⁴⁰ Following the secondary offering, Pandora's share price increased up to a peak of \$39.43 on March 5, 2014 (and was at \$36.07 when the article Dr. Blackburn cites was written) and has since decreased to approximately \$15 per share in February 2015.⁴¹ The investors who participated in the secondary offering and have held their Pandora stock have seen their investment decrease by nearly \$10 per share (a 40% decline) since they made their investment. Thus, the largest of the relevant investments that Dr. Blackburn touts has not performed well.

III. Dr. Blackburn's Analyses of Promotion and Purported Cannibalization Are Flawed

39. Dr. Blackburn's analyses of promotion and purported cannibalization are flawed. An important factor in determining rates is the cost to the copyright holder of allowing a digital performance. This cost is driven, in part, by the degree to which a digital performance cannibalizes other revenue streams and by the size of the promotional benefit the performance provides to the copyright holder. Dr. Blackburn ignores the substantial evidence found in the documents, testimony, and record labels' behavior indicating that digital performances by statutory webcasters promote music sales. Dr. Blackburn attempts to use evidence of a negative correlation between streaming and music sales to bolster his claims, but his own testimony concerning economic standards confirms that correlations of the kind he offers are economically meaningless. In addition, Dr. Blackburn's analysis of statutory streaming's purported cannibalization of license fees from subscription services does not account for alternative "free" sources of music – both AM/FM terrestrial radio and pirated sources. These alternatives mean that a customer leaving a webcaster need not choose to subscribe to an interactive music service with a fee. By ignoring these options, Dr. Blackburn's analysis incorrectly suggests that a consumer's choice is between webcasting and an interactive subscription service. Dr. Blackburn also fails to account for consumers' low willingness to pay. A consumer that uses a free service has indicated by his behavior that he is likely to have a low willingness to pay for music. A consumer with a low willingness to pay is unlikely to choose a costly alternative in the event custom webcasting is degraded or eliminated when a host of alternative free sources of music are available.

A. The Opportunity Cost of Licensing a Stream of a Sound Recording Is a Key Factor in Assessing Competitive License Rates

40. I agree with Dr. Katz's view that license rates for the digital performance of sound recordings should reflect the outcome that would "happen in an effectively competitive market in the absence of the statutory licensing regime."⁴² The hallmark of an effectively competitive marketplace is that competition will tend to drive license fees toward marginal cost. A potentially important component of the cost to the copyright owner (record company) of allowing a webcaster to transmit a recording is the degree to which

⁴⁰ Pandora 2014 Annual Report, at 42.

⁴¹ Yahoo! Finance, Pandora Stock Price Chart.

⁴² Written Direct Testimony of Michael L. Katz, October 7, 2014, p 3.

the transmission, or “play,” will tend to increase or decrease the copyright owner’s revenue from other sources of distribution. For example, in a world with only streaming and digital downloads, the reduction in profit from reduced digital sales of a recording resulting from allowing it to be streamed would be included in the competitive license fee for streaming the recording. If, however, streaming the recording promotes sales, the cost to the record company of allowing the song to be streamed is negative, and competition may force the record company to pay webcasters to stream its recording.

41. As described below, Dr. Blackburn’s testimony presents arguments suggesting that statutory webcasting cannibalizes record labels’ other revenue from subscription webcasting services and does not promote music sales. The economic implication is that high license fees are appropriate. Dr. Blackburn’s discussion ignores significant relevant evidence that demonstrates the opposite of his claims.

B. There is Substantial Evidence That Statutory Webcasting Promotes Music Sales

42. Dr. Blackburn claims there is “little evidence that statutory webcasting promotes the sales of digital or physical media.”⁴³ As described below, even this weak claim is incorrect. [REDACTED] provide substantial evidence of promotion by terrestrial radio broadcasts and simulcasts. In addition, Pandora has performed an experiment that demonstrates that its plays promote music sales, and the record labels’ documents show that Pandora promotes physical and digital music sales, confirming Pandora’s analysis. Moreover, Dr. Blackburn himself provides no economic evidence indicating otherwise. Thus, contrary to Dr. Blackburn’s assertion, there is substantial evidence that statutory webcasting is promotional.

1. There Is Substantial Evidence That Record Labels Treat Terrestrial Radio and Simulcasts as Promotional

43. Notably, Dr. Blackburn focuses on custom webcasters such as Pandora, rather than radio simulcasting, when suggesting that webcasting is not promotional. As described below, there is substantial evidence that terrestrial radio broadcasts promote music sales. Moreover, the content of terrestrial broadcasts and simulcasts is typically the same and has the same lack of customizability. Thus, there is no economic basis to assert that the promotional benefit of a broadcast differs depending on whether the consumer listens online or over the air. In either case, the content of the broadcast will generally be the same, indicating the promotional benefit of the broadcast will be the same.
44. There is no doubt that the record labels treat terrestrial radio as promotional. Rand Levin, Senior Vice President, Business and Legal Affairs for Universal Music Group, states: “[p]eople who work in promotion departments try to get their label’s artists played on terrestrial radio, in the hope that increased plays could help lead to increased record sales. In other words, almost everything these employees do ‘relates’ in some sense to the

⁴³ Blackburn, ¶ 89.

possibility that terrestrial radio plays could positively affect record sales.”⁴⁴ Paul M. Robinson, Executive Vice President and General Counsel of Warner Music Group, gives similar information on the work of promotion departments. “Generally speaking, the people in a promotion department focus on promoting releases by that label’s artists through terrestrial radio. Therefore, much of what promotional employees do in their daily work could be said to ‘relate to’ the possibility of terrestrial radio performances having a positive effect on record sales.”⁴⁵ The labels would not engage in such costly activity if it did not generate additional music sales.

45. [REDACTED] terrestrial radio is an important source of promotion for record labels and explain why terrestrial radio promotes sales. Surveys and studies of music users show that AM/FM radio has a high rate of use by music listeners in all age groups. In addition, [REDACTED] AM/FM radio is an important method for listeners to learn about new music. About two-thirds of listeners report that the main or an important reason to listen to AM/FM radio is to discover new music.⁴⁷ Another study finds that [REDACTED]⁴⁸
46. When a record label releases an album, it develops a marketing plan for that album. Marketing plans frequently include a plan to market the album or sound recording using terrestrial radio. The labels’ promotion departments will often encourage stations to play the sound recording and provide a copy of the sound recording or album to stations. Promotions may also involve meeting with the artist and giveaways and contests for prizes such as concert tickets. [REDACTED] the labels seek to promote their artists through terrestrial radio.
47. The record labels have repeatedly recognized the importance of terrestrial radio to the success of their music. In fact, Charles Walk, Executive Vice President of Republic Records, a division of Universal Music Group, described the value of terrestrial radio to the record labels, stating that [REDACTED]

⁴⁴ Declaration of Rand Levin, November 20, 2014, ¶ 7 (NAB Ex. 37).

⁴⁵ Declaration of Paul M. Robinson, November 20, 2014, ¶ 13 (NAB Ex. 39).

⁴⁶ See, e.g., [REDACTED] 1.

⁴⁷ [REDACTED] 11.

⁴⁸ [REDACTED] 11.

⁴⁹ SoundExchange, Inc.’s Responses and Objections to the First Set of Interrogatories from the Licensee Participants, response to Interrogatory 7 at 14 (NAB Ex. 43). For instances of the use of AM/FM radio for promotion of albums, see, e.g., [REDACTED]

[REDACTED] 11.

randomized controlled trial as a method for estimating exactly this kind of causal effect. Randomized controlled trials are recognized as the appropriate way to test the efficacy of drugs and medical devices.⁵⁶ Furthermore, randomized controlled trials are recognized in economics for estimating causal effects.⁵⁷ In a medical randomized controlled trial, patients are randomly assigned to either the treatment group or the control group.⁵⁸ The result of the randomization is that the only systematic difference between the two groups is whether or not the patients received the treatment, so any observed difference in outcome between the treatment and the control group can be attributed to the causal effect of the treatment. By computing the difference in average outcomes between the two groups, the statistician can estimate the average causal effect of the treatment.⁵⁹

51. In Pandora's randomized controlled trial, metropolitan areas were randomly assigned to either one group for which a tested track would be played (the treatment group) or to another group for which the track would not be played (the control group).⁶⁰ Pandora tested whether sales of the new releases and catalog tracks were higher or lower in the metropolitan areas where they were played relative to the areas where they were not played. This experimental framework was repeated for a number of different randomly selected tracks, across a number of different time periods. Moreover, the geographic randomization varied for each selected track. Pandora carefully designed the experiment so that there would be sufficient information from the experiment to reliably and accurately estimate the promotional or diversionary impact from playing songs on Pandora.
52. The results of Pandora's experiment show that sales of the songs used in the experiment were higher, on average, in the areas where the songs were streamed relative to the areas where they were not streamed.⁶¹ These results were statistically significant, meaning that the promotional impacts were unlikely to be due to random chance. This experiment

⁵⁶ Joshua D. Angrist and Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricists Companion*, March 2008.

⁵⁷ James H. Stock and Mark W. Watson, *Introduction to Econometrics*, (Boston: Addison Wesley, 2003), Chapter 11.

⁵⁸ In many economic experiments, it is not possible for the experiment to be "blind," meaning the subjects do not know whether they are assigned to the control or treatment group. In this case, listeners to Pandora did not know whether they were in a treatment or a control group. Thus, the Pandora study has the additional feature of being a blind study, which means the subjects' knowledge of the study cannot influence the results.

⁵⁹ This approach is in fact consistent with Dr. Blackburn's own observation that "one should conclude, as an economic matter, that statutory webcasting leads to additional sales of recorded music only if there are sales made ... that would not have otherwise been made, absent the streaming. That is, if the play(s) did not happen, there would have been fewer sales." Blackburn ¶ 91.

⁶⁰ The randomization was based on geographic regions because the outcome of interest, music sales, is available for geographic regions. Pandora used SoundScan which tracks unit sales (both digital and physical) for most music sold in the US to measure sales. I understand SoundScan is also widely used by the music industry to track sales.

⁶¹ McBride Testimony, Table 3.

provides strong evidence that plays of songs on Pandora promote the sales of digital and physical recordings. Moreover, Pandora's results are consistent with surveys and [REDACTED].

3. Dr. Blackburn's Analysis of Promotion Is Incorrect and Contradicts His Testimony Regarding the Irrelevance of Correlation between Streaming and Sales

53. Dr. Blackburn has provided no economic evidence that counters the substantial evidence of promotion discussed above. While Dr. Blackburn recognizes that mere correlation between streaming and music sales cannot show a meaningful economic relationship,⁶² the evidence that Dr. Blackburn presents on the question of promotion amounts to nothing more than the suggestion of a negative correlation between streaming and music sales. The economic standard he espouses indicates that the evidence he offers is meaningless.
54. Dr. Blackburn dismisses evidence of positive correlation between streaming and music sales with the standard argument that correlation is not evidence of causation. Thus, according to Dr. Blackburn, evidence of music downloads made through links on webcasters sites are not evidence of promotion, only of a correlation between a play and increased overall sales.⁶³ Under Dr. Blackburn's view that correlation does not imply causation, the positive correlation between streaming and digital music sales between 2005 and 2013, as shown by the backup to Dr. Blackburn's Figure 8, is also presumably not evidence that streaming promotes sales.⁶⁴
55. Despite rejecting mere correlation as evidence of promotional impact, however, Dr. Blackburn relies on just such evidence when attempting to argue that streaming is *not* promotional. For example, Dr. Blackburn presents evidence that increased streaming by Pandora is associated with a decline in digital music sales between 2012 and 2013⁶⁵ and evidence of a negative correlation between streaming and digital music sales in the first half of 2013 and the first half of 2014.⁶⁶ Dr. Blackburn's "evidence," however, amounts to nothing more than examples of correlation that are, by his own standard, not evidence of causation.
56. Not only does this evidence fail to demonstrate that increased streaming *caused* reduced music sales, it is evident that Dr. Blackburn had to sift through the data on streaming and music sales to find narrow time windows that would actually show a negative correlation rather than a positive one. Dr. Blackburn's data show that over the longer term, the relationship between streaming and digital music sales has been positive, not negative.

⁶² Blackburn, ¶ 91 and footnote 107.

⁶³ Blackburn, ¶ 91.

⁶⁴ Blackburn, ¶ 91 and footnote 107.

⁶⁵ Blackburn, ¶ 90.

⁶⁶ Blackburn, ¶ 92.

The negative correlation that Dr. Blackburn attempts to use as evidence that streaming cannibalizes music sales is cherry picked from a larger amount of data that shows the opposite relationship. Dr. Blackburn’s purported evidence that streaming cannibalizes digital music sales is meaningless.

57. Dr. Blackburn also quotes a Billboardbiz article to support his assertions regarding promotion.⁶⁷ Dr. Blackburn claims the article “explains that iTunes Radio was disappointing in terms of digital download sales”⁶⁸ and failed to “prevent a decline in sales.”⁶⁹ Statements about disappointing music sales associated with iTunes Radio and the fact that iTunes Radio failed to prevent a decline in music sales are not evidence of a lack of promotion from iTunes Radio specifically or from statutory webcasting more generally. According to Dr. Blackburn, the relevant question is whether exposure to songs through iTunes Radio led to music sales “through referral links or otherwise” that would not have occurred “absent the streaming.”⁷⁰ Dr. Blackburn’s discussion of the introduction of iTunes Radio fails to address what the level of music sales would have been absent the additional plays associated with the introduction of iTunes Radio. Dr. Blackburn’s anecdote regarding iTunes Radio is economically meaningless.
58. Dr. Blackburn’s cherry-picked examples of negative correlation between streaming and music sales cannot support the conclusion that statutory streaming is not promotional. They certainly cannot overcome the evidence described above showing that streaming, including simulcasting, is promotional.

C. Dr. Blackburn’s Analysis of Purported Cannibalization of License Fees from Subscription Services Fails to Account for Alternative “Free” Sources of Music and Consumers’ Low Willingness to Pay for Music Services

59. In addition to Dr. Blackburn’s claim that webcasters cannibalize sales, Dr. Blackburn asserts, without empirical analysis, that statutory webcasters compete directly with subscription streaming services and cannibalize more lucrative record label revenues from those subscription services as a result.⁷¹ Dr. Blackburn concludes that “if Pandora were not available, or if it were less attractive to the user (perhaps because it had more advertising spots per hour, for example) it would stand to reason that users who would otherwise use Pandora would be more likely to use Spotify or purchase digital audio tracks as an alternative.”⁷²
60. Of course, the question is not whether some Pandora listeners would be more likely to use subscription on-demand services if Pandora were not available or were degraded.

⁶⁷ Blackburn, ¶ 93.

⁶⁸ Blackburn, ¶ 93.

⁶⁹ Blackburn, ¶ 89.

⁷⁰ Blackburn, ¶ 91.

⁷¹ See, e.g., Blackburn, ¶ 97.

⁷² Blackburn, ¶ 99.

a significant source of music for most demographic groups.⁸⁰ Pandora directly targets terrestrial radio listeners to become Pandora users.⁸¹ In fact, Simon Fleming-Wood, Pandora's Chief Marketing Officer, notes "our [Pandora's] closest competitor, and greatest opportunity for converting new listeners, is the broadcast radio industry - including traditional terrestrial (AM/FM) radio, and satellite radio."⁸² Pandora's targeting of radio listeners indicates that terrestrial radio is a closer substitute for Pandora than subscription on-demand services and that users of free-to-the-user custom radio would more likely switch to terrestrial radio than to a subscription on-demand service if custom radio were degraded.⁸³

68. Another way to assess whether Pandora is likely to draw subscribers from subscription on-demand services is to evaluate the substitutes for subscription on-demand services. If there are many closer substitutes for subscription on-demand services than Pandora, it is unlikely that Pandora or custom webcasting draws significant users from subscription services relative to the closer substitutes. Consumers seeking to avoid paying a subscription fee would choose one of the closer substitutes for a subscription service rather than choose Pandora. Record labels have supported this view as well. In the course of seeking approval for their merger, UMG and EMI also asserted that [REDACTED] but of course, they are free to the user and do not generate royalties. To the extent these services include on-demand features and other characteristics of on-demand streaming, they

⁸⁰ [REDACTED].

⁸¹ See, also, Blackburn, ¶ 37. ("VentureBeat: Will Pandora ever completely unseat terrestrial radio in the car? Will it ever offer a full slate of music, live and local news, weather, traffic, etc.? Westergren: I think we'll get there, but I don't think we're quite there yet. With consumers today the expectation that you have a lot more control [*sic*]. I think there will always be a place for terrestrial radio. But we think we can get a good share of the time people spend listening in the car. Half of all listening now takes place in the car."). See also Blackburn, ¶ 37. ("Technology has changed the delivery for in-car entertainment once dominated by AM/FM radio," citing SNL Kagan, "The Economics of Internet Music and Radio."). See [REDACTED].

⁸² Written Direct Testimony of Simon Fleming-Wood, ¶ 15.

⁸³ I understand that Pandora is submitting testimony that describes consumers' likely responses to the elimination of the free version of Pandora or the elimination of all free custom webcasting. Written Rebuttal Testimony of Larry Rosin.

⁸⁴ [[Letter from [REDACTED]].

⁸⁵ [[Letter from [REDACTED] (NAB Ex. 30)].

72. Of course, Dr. Blackburn’s description of music users who subscribe to music services implies that many consumers who are casual music listeners are not willing to pay subscription fees. Moreover, the primary competition to subscription services appears to be pirated sources of music or ad-supported on-demand services. Certainly if statutory sources of music exited the market or were substantially degraded these services would be the remaining and virtually limitless source of free music to those unwilling to pay a fee. In fact, UMG and EMI argued [REDACTED]

]]⁹¹

73. The low or even zero willingness to pay for a music-streaming service of many consumers is not controversial. Dr. McFadden has measured the willingness to pay for certain characteristics of streaming services using an approach that allows him to estimate the willingness to pay of each respondent to his survey.⁹² He finds “that consumers of streaming services divide between those who are willing to pay for these services and the extra features they offer and those who are averse to paying for music streaming services and place relatively low values on these extra features.”⁹³ Clearly, consumers such as these are unlikely to view a subscription service and a free-to-the-user custom webcasting service as substitutes. Dr. McFadden’s results indicate that consumers’ preferences make many of them unlikely to switch between subscription and free-to-the-user services.

IV. Dr. Blackburn’s Discussion of Webcasters Delaying Profits to Invest in Market Share Does Not Provide an Economic Justification for a Rate Increase

74. Dr. Blackburn implies that because Internet firms sometimes “intentionally” delay profitability as they build up user bases, the Judges need not take the current lack of profitability in the industry as a sign that the health of the industry is imperiled – or that royalty rates have been the reason for such shortfall. To the contrary, Dr. Blackburn goes so far as to suggest that Pandora’s royalty rates have provided it a competitive advantage over its rivals and *allowed* it to focus on growth.⁹⁴ He also suggests that Pandora in particular could solve its financial problems “by simply selling more ads.”⁹⁵ To the extent Dr. Blackburn intends these arguments as support for increasing royalty rates – whether because Pandora will be profitable down the road, or because Pandora could cover higher license rates by selling more advertising without damage to its long-term prospects – he is mistaken.

75. The fundamental principle economists use to explain firm behavior is that firms seek to maximize their profits. In practice, firms exist indefinitely so this means that they

⁹¹ [REDACTED].

⁹² McFadden, ¶ 52.

⁹³ McFadden, ¶ 10. See also McFadden, ¶ 56. (“The posterior distribution of the values respondents place on a free plan shows a group of consumers who place a high value on no out-of-pocket expenses.”)

⁹⁴ Blackburn, ¶ 78.

⁹⁵ Blackburn, ¶ 88.

maximize the discounted stream of their profits over time, or the net present value of profits, which accounts for the fact that a dollar today is worth more than a dollar in the future. Thus, future profits always are (and rationally should be) a concern for the firm. When actions today affect profitability in the future, firms may not maximize profits in the current period because doing so is too costly in terms of future profits.⁹⁶ Recognizing that taking “profits” early – whether by seeking to drive up short-term revenue, or by investing inadequately in the business – may be costly in terms of future profits is the key to understanding why rational firms do not focus on maximizing profits in a particular quarter or year. The lower future profits resulting from acting to increase profits today (e.g., by increasing prices or ad loads above optimal levels, or by taking other actions that drive away users) are real costs that offset today’s higher profits. In competitive circumstances, firms that do not act optimally may increase current profitability, but will consequently decrease future profits by a greater amount and, therefore, will be less likely to survive than firms that act optimally.

76. Dr. Blackburn appears to agree with these principles, but he incorrectly applies them to Pandora. Dr. Blackburn notes, rightly, that under certain conditions, it is valuable for firms in an industry to invest in establishing a user base because the users are likely to stick with the firm. Of course, where users are less likely to leave a firm once they establish a business relationship with it, the initial competition for users will be quite fierce – and costly – because once a user is lost to a competitor, that user is most likely lost forever. As Mike Herring’s testimony explains, tremendous up-front investment in systems and sales force (among other items) is also required, in addition to user scale, to attract advertisers and “monetize” the growing user base. As Mr. Herring’s testimony also makes clear, Pandora’s ability to make such investments has been constrained by its royalty costs, which dominate Pandora’s cost structure. Pandora’s financial performance is properly understood as a result of the need to compete for users and invest in the future of the business – that is, its financial performance is the result of its maximizing its profits, not the result of its deferring profits. Firms that do not engage in this competition for users and advertising dollars would be failing to act optimally given the benefits (or necessity) of obtaining users and monetizing their listening hours.⁹⁷
77. That Pandora’s current financial performance reflects a decision to invest in future growth and that Pandora anticipates future profitability do not provide any economic justification for raising license rates or for concluding that doing so can be done without cost or consequence. To the contrary, the discussion above makes clear that Pandora’s future growth and profitability – in addition to being uncertain – is dependent on the ability to continue making necessary investments in the future. A dramatic increase in current costs – including a near doubling of royalty rates – necessarily will interfere with Pandora’s ability to continue to invest in its business, negatively affecting future growth and profitability. The same is true of the suggestion that Pandora could simply “sell more ads” if it wanted – and thus cover any royalty increase. While I will defer to Mr. Herring

⁹⁶ See, e.g., Thomas E. Copeland and J. Fred Weston, *Financial Theory and Corporate Policy*, 3rd Ed. (Reading: Addison-Wesley Publishing Company, 1988), at 22-23.

⁹⁷ See Written Rebuttal Testimony of Michael Herring.

as to whether it would even be possible for Pandora to do so, Dr. Blackburn appears to overlook (or ignore) the fact that increased ad loads, even if they might boost revenue in the short term, might very well drive away listeners, compromise future earnings, and thus decrease Pandora's financial performance. Rate increases should not be premised on the conclusion that Pandora could afford them (at least in the short term) by pursuing what Dr. Blackburn agrees (assuming Pandora is currently operating rationally) would be a suboptimal strategy.⁹⁸

78. Dr. Blackburn's study of the profitability of Internet firms does not alter these conclusions. Instead, it shows that these firms had more users and higher revenues and that some were more profitable two years after their initial public offerings than they were two years before.⁹⁹ It is not surprising that firms that survive two years beyond their public offerings have more customers and revenue and sometimes higher profits than they had before going public. Nothing about this pattern of growth in users, revenues, and profitability indicates that the firms included in his study did not act rationally or that they did not maximize their profitability – properly defined – at all times. Moreover, many of the firms' in Dr. Blackburn's study failed to achieve profitability or even had greater losses (operating income) following their IPOs than before.¹⁰⁰ Thus, Dr. Blackburn's study shows that "profitability" is uncertain even after years of attempting to build a base of users.
79. Dr. Blackburn's analysis highlights the fact that even those Internet firms that succeed to the point of having an IPO can remain unprofitable or grow even more unprofitable. Thus, the "expected" profits that Internet firms invest to achieve profitability must be considered uncertain until they are actually realized. Most critically, Dr. Blackburn's analysis of profitability provides no basis to assume that Internet firms generally, or Pandora in particular, would be able to raise prices or increase ad inventory to cover additional costs in the short term – and certainly not to do so without harm to their businesses and prospects for long-term success.

V. Dr. McFadden's Analysis Demonstrates that Many Consumers Have a Low Willingness to Pay for Streaming and Do Not Corroborate Dr. Rubinfeld's "Interactivity Adjustment"

A. Dr. McFadden's Results Show That a Significant Share of Consumers Have Low Willingness to Pay for Streaming

80. Dr. McFadden estimates the average willingness to pay for a number of features of streaming services based on results from a survey he designed. At my direction, Dr.

⁹⁸ UMG and EMI recognized that if a music service is behaving optimally, there is no way for it to better monetize its content. "If it is possible to improve the way in which music is monetized without degrading the quality and attractiveness of a platform, a digital retailer would have done so already." COMP/M.6458 – Universal Music Group / EMI Music, Supplementary Submission, at 18-19 (SNDEX0268469-70).

⁹⁹ Blackburn at ¶¶ 68-69.

¹⁰⁰ Blackburn, Table 8.

McFadden's model was rerun using the results of his survey and the computer code provided. The results closely match Dr. McFadden's.¹⁰¹

81. Willingness to pay in the context of Dr. McFadden's model means something quite specific. In Dr. McFadden's model, the features are measured relative to a streaming service with a baseline level of features.¹⁰² His survey asked respondents to make choices over different services with different prices and different combinations of features to elicit the amounts they are willing to pay for different features. Figure 6 shows the features and levels of those of features that Dr. McFadden included in his analysis.

Figure 6
Features Included in Dr. McFadden's Analysis

Attribute	Feature Level
Playlist generation method	<ul style="list-style-type: none"> • Curated by music tastemakers* • Generated by a computer algorithm customized by your preferences • Curated by music tastemakers and generated by a computer algorithm customized by your preferences
Features available for streaming to a computer	<ul style="list-style-type: none"> • Playlists generated by the service* • Playlists generated by the service and Album, artist and song selection on demand
Ability to listen offline	<ul style="list-style-type: none"> • Not available* • Available
Features available for streaming to mobile devices	<ul style="list-style-type: none"> • Not available* • Playlists generated by the service • Playlists generated by the service and Albums and artists chosen by you, but tracks are played in a random order • Playlists generated by the service and Album, artist and song selection on demand
Ability to skip songs	<ul style="list-style-type: none"> • Up to 6 skips per hour* • Unlimited ability to skip tracks
Music library size	<ul style="list-style-type: none"> • 1 million songs* • 10 million songs • 20 million songs • More than 20 million songs
Advertising	<ul style="list-style-type: none"> • 1.5 to 3 minutes of ads per hour* • No ads

¹⁰¹ A comparison of the recreated results and Dr. McFadden's results are contained in Appendix C. The results are a close match to Dr. McFadden's. Dr. McFadden's code implementing his estimation did not set a fixed "seed" for the estimation, which entails generating random numbers. Without a fixed seed, the estimation will yield slightly different results each time the code is run.

¹⁰² McFadden, ¶ 57.

Source: McFadden, Table 1 and ¶ 57.

Note: A * indicates the features included in McFadden’s baseline specification.

82. Dr. McFadden presents only the estimated *average* willingness to pay for each feature addressed in his survey. However, it is possible to estimate each survey participant’s willingness to pay for the features addressed in the survey.¹⁰³ Based on the information for individual respondents, Dr. McFadden notes that there is a group of users who are averse to paying for music streaming services.¹⁰⁴ Of course, all consumers are averse to paying for things, always preferring to pay less rather than more for a good or service. In fact, Dr. McFadden’s results show more than that some consumers are averse to paying for streaming services. The results of his analysis show that a substantial number of consumers place a *negative value* on many of the features streaming services offer and place a negative value on the bundle of features included in high-end subscription streaming services. Thus, Dr. McFadden’s results are consistent with [[REDACTED] [REDACTED]] indicate many consumers have a low willingness to pay for subscription streaming services. However, Dr. McFadden’s results also indicate that a significant group of consumers dislikes and will avoid many features that are normally thought to be desirable. Thus, adding features to a service can actually drive consumers away from it according to Dr. McFadden’s results.
83. Figure 7 illustrates this for a particular feature. The figure shows the distribution of the willingness to pay for a streaming service with more than 20 million songs relative to an otherwise identical service with one million songs, weighted for the population of future users.¹⁰⁵ The height of each vertical line shows the share¹⁰⁶ of respondents with a willingness to pay for the feature within a given range of valuations of the feature (shown on the horizontal axis).

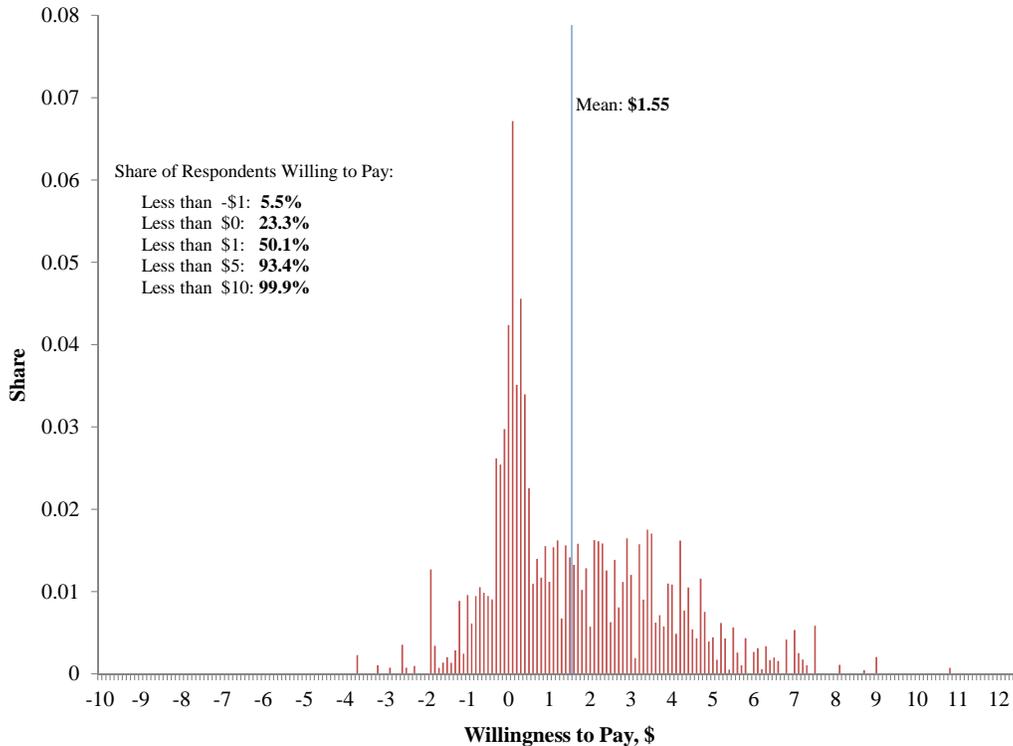
¹⁰³ McFadden, ¶ 52.

¹⁰⁴ McFadden, ¶ 10.

¹⁰⁵ Dr. McFadden weights his results for different populations. His preferred population is what he calls “future users.” McFadden at ¶ 54. The results presented here are weighted for Dr. McFadden’s preferred group.

¹⁰⁶ For example, “0.05” indicates 5% of respondents.

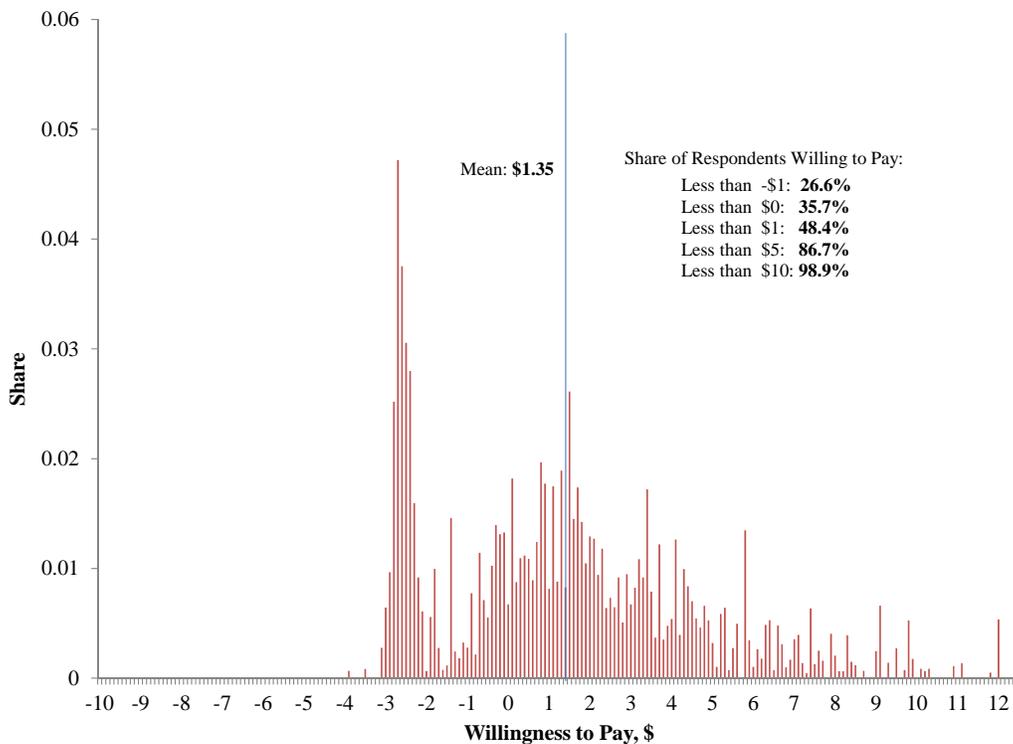
Figure 7
Distribution of Future Users' Willingness to Pay for Catalog of more than 20 Million Songs



84. As illustrated the average willingness to pay for a music library of more than 20 million songs is \$1.55 per month. However, this average does not necessarily describe either the range of values that consumers place on a larger music library or reflect the valuation that is most commonly held by consumers. The figure shows that a significant share of future users - approximately 23% – has a negative willingness to pay for the larger song library. For individuals with these tastes, Dr. McFadden's results indicate that a streaming service with one million songs is preferable to a service with more than 20 million songs, all else equal. Thus, a substantial share of users do not just have a low willingness to pay for more songs, the additional musical content has a negative value for them. Thus, a significant share of consumers will behave in a way that is inconsistent with the general intuition that more songs are always better. Moreover, the average willingness to pay provides no indication of consumers' divergent preferences regarding the size of a song library.
85. In fact, there are some consumers with a negative willingness to pay for most of the features in Dr. McFadden's model, and the share of these consumers is often significant. Figure 8 shows the distribution of willingness to pay for a service with no advertisements. On average, future users are willing to pay about \$1.35 for a service with no ads relative to one with ads. However, nearly 36% of future users prefer a service with ads relative to a service without ads, all else equal. Moreover, the distribution is bimodal, meaning it has two peaks. There is a group of consumers that places a value of between negative \$2 to negative \$3 (indicated on the horizontal axis). The negative willingness to pay for a

service with no advertisements means these consumers prefer a service with advertisements over one without. There is a second peak in the distribution of consumers' willingness to pay for a service with no advertisements between \$1 and \$2. These consumers have the more intuitive preference for a service without ads and will pay something additional for a service with no ads. In this case, the average willingness to pay for a service with no ads masks the fact that there is a bimodal distribution (*i.e.*, a distribution with two peaks) of preferences over the willingness to pay for a service with no advertisements and that the peaks occur so that consumers at the peaks have divergent preferences (*i.e.*, would respond in opposite ways) regarding a service with or without advertisements.

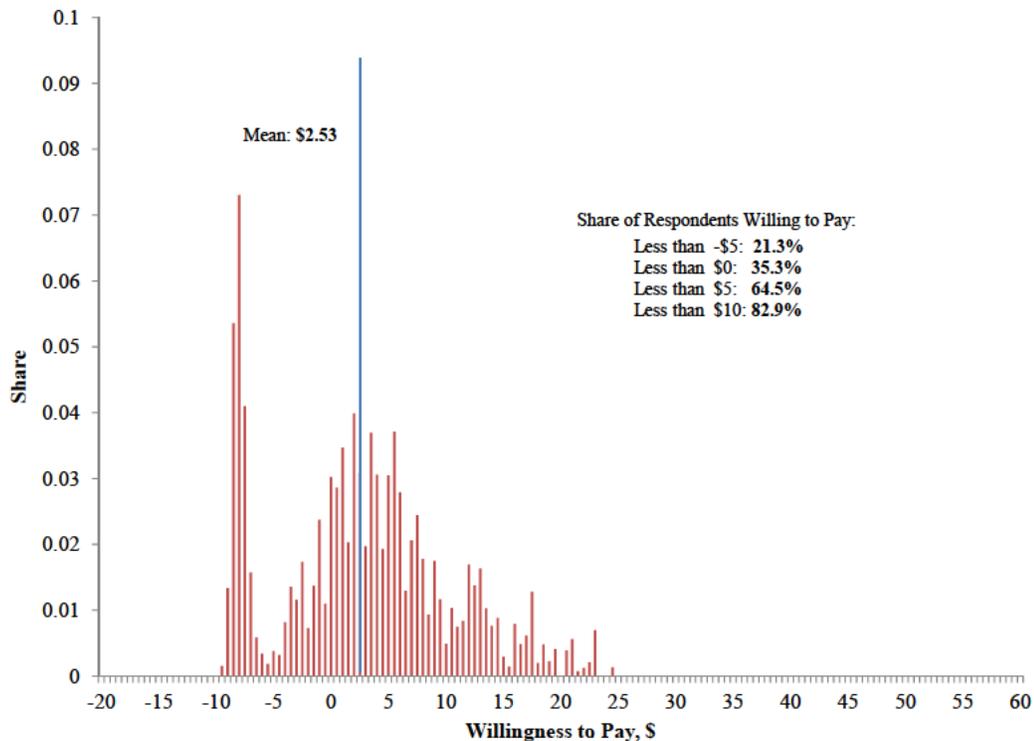
Figure 8
Willingness to Pay for No Advertisements



86. There is no reason that consumers cannot dislike certain features of a webcasting service. The fact that consumers are split on whether a feature adds or detracts from a service means that it is difficult to design a service that will be appealing to all consumers. For example, adding a larger library might seem to be a good way to attract users, but according to Dr. McFadden's results, a larger library is expected to lower the value of a service for 23% of users. Similarly, removing advertisements may seem to be a good way to attract users to a service, but doing so is expected to lower the value of the service for 36% of users. With a wide range of values for individual features, ranging from liking a feature a lot to disliking it a lot, the "convergence" of services with different features in the minds of a large number of consumers becomes less likely.

87. As noted, Dr. McFadden provides only estimates of the average willingness to pay for features of streaming services. Where estimates of the individual willingness to pay are both positive and negative and when the distributions of willingness to pay are bimodal (sometimes with peaks on either side of zero), the average willingness to pay does a particularly poor job of describing the range and even the direction of preferences. In the examples above, the average valuations are positive, indicating positive average valuations for features that would generally be considered to be desirable. However, the full distributions of consumer preferences show that while some consumers like a feature, another group dislikes the feature. It is always the case that the average does not fully describe a distribution. In this case, however, the averages often do not even get the direction of many consumers' preferences right and therefore do not indicate that groups of consumers will respond not just differently to changes in a service's features but in opposing directions.
88. This problem is not limited to individual features of streaming services. It extends to the willingness to pay for the bundles of features included in services. Consider consumers' willingness to pay for a service such as Spotify Premium relative to an ad-supported version of the same service. The difference between services of these types primarily entails restrictions on the level of on-demand mobile service and whether the service allows off-line listening. Since the ad-supported service is free to the user, the relative willingness to pay for the subscription service over the ad-supported service is a measure of consumers' willingness to pay out of pocket for the additional features offered by the subscription service. (Consumers will not pay for the features that they can obtain for free in the marketplace, but consumers will pay for the "extras" that they cannot get for free.)
89. Figure 9 illustrates the willingness to pay for a premium subscription service relative to a free-to-the-user ad-supported service. The figure shows that the distribution of the willingness to pay for the features of a premium on-demand service relative to an ad-supported service is bimodal. One peak occurs where consumers have a negative willingness to pay for incremental features and another peak occurs where consumers have a positive willingness to pay for incremental features, but lower than the typical price of a premium on-demand service. Once again, the average willingness to pay is positive, but does not capture the fact that some consumers prefer services without the incremental features of a premium on-demand service relative to an ad-supported service.

Figure 9
Willingness to Pay for a Premium On-Demand Subscription Service over a Free Ad-Supported Service



90. The figure also illustrates that potentially only a relatively small share of consumers may be willing to pay for a subscription on-demand service relative to an ad-supported on-demand service. In this example, about 17% of consumers value the incremental features of the premium service by more than the typical \$10 subscription price.
91. Of course, even those who value the service by more than \$10 may not buy it because they may prefer an option not included in this example, such as buying CDs, downloading digital tracks, or using a pirate service. The alternatives to using some type of streaming service were not included in Dr. McFadden’s survey, so it is not possible to know from the survey how they are valued by consumers or how they would affect consumers’ choices. As UMG and EMI have asserted [REDACTED] [REDACTED].¹⁰⁷ In this regard, Figure 9 understates the “competition” faced by the premium streaming service. In the music marketplace, consumers would compare the streaming service to many other alternatives rather than just the one alternative in the above example. The availability of other

¹⁰⁷

See, e.g., [REDACTED]
[REDACTED].

alternatives would lower the likelihood that the premium streaming service is a consumer's first choice.

92. Moreover, this example illustrates the limitations of estimates of the average willingness to pay for describing consumer behavior. The figure shows that the average willingness to pay for the subscription service over the ad-supported service is \$2.53, well below a typical monthly subscription price for a premium on-demand service of \$10. If all consumers had the average willingness to pay for the premium subscription service, no one would buy it. However, there are some consumers with more extreme preferences that would be willing to pay the monthly subscription fee *if the only other choice in the marketplace were the ad-supported service*. Thus, the average willingness to pay for features as measured by Dr. McFadden's survey does not tell us about market outcomes. They are unrelated to market prices and do not describe the choices of any individual consumer.
93. Dr. McFadden's analysis identifies a significant share of consumers with a negative willingness to pay for many features of a streaming service. This outcome is most likely related to the fact that fully 25% of his survey respondents uniformly chose the first option in each choice task, the free-to-the-user option. In addition, of all responses provided, about 59% indicated a preference for the free service. Thus, the survey respondents indicated through their responses that they do, in fact, have a strong aversion to paying for an upgraded streaming service with more features. Another alternative, however, is that these and possibly other respondents did not have a good understanding of the survey instrument and disproportionately chose the first choice offered. I understand that John Hauser is addressing this issue.¹⁰⁸

B. Dr. McFadden's Results Do Not Corroborate Dr. Rubinfeld's "Interactivity Adjustment"

94. Dr. Rubinfeld uses the license fees the record labels charge to non-statutory on-demand streaming services as benchmarks for the statutory rates he recommends. Dr. Rubinfeld allows that some adjustment to these rates is appropriate for statutory webcasters. To define an adjustment, he assumes that "the ratio of the average retail subscription price to the per subscriber royalty paid by the licensee to the record label is approximately the same in both interactive and non-interactive markets."¹⁰⁹ In order to adjust the non-statutory rates to a level consistent with this assumption, Dr. Rubinfeld calculates an "interactivity adjustment" equal to the ratio of the average subscription prices of on-demand and non-interactive services.¹¹⁰ Dr. Rubinfeld finds that the ratio of the average retail subscription price of on-demand services and the average subscription price of statutory services is about 2.¹¹¹ The asserted logic of the "interactivity adjustment" is that subscription rates for non-statutory services are about double subscription rates for

¹⁰⁸ Rebuttal Testimony of John Hauser.

¹⁰⁹ Rubinfeld, ¶ 169.

¹¹⁰ Rubinfeld, ¶ 171.

¹¹¹ Rubinfeld, ¶ 171.

statutory services. Therefore, according to Dr. Rubinfeld, license rates for non-statutory services should be about double license rates for statutory services, all else equal. Dr. Rubinfeld uses the “interactivity adjustment” to downward adjust his benchmark interactive license fees to a level he asserts is appropriate for statutory non-interactive license fees.

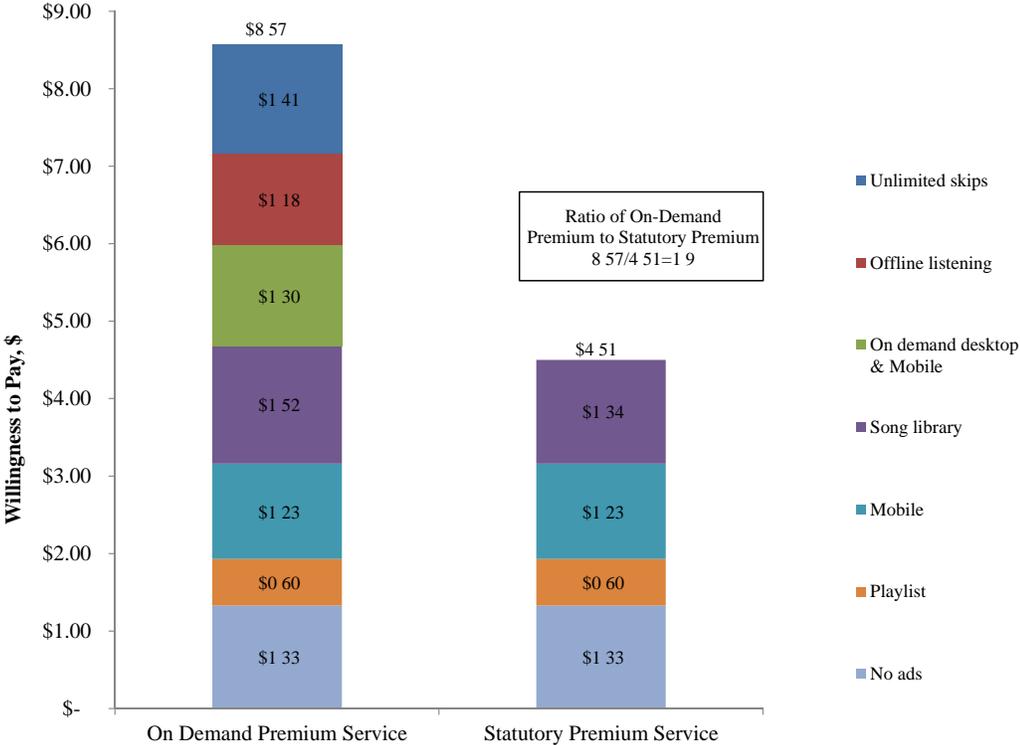
95. As support for his calculation of an “interactivity adjustment” using subscription prices, Dr. Rubinfeld asserts that Dr. McFadden’s estimates of consumers’ willingness to pay for the features of interactive and non-interactive services indicates that the “interactivity adjustment” calculated from subscription prices is “conservative.”¹¹² By this, Dr. Rubinfeld means that the ratio of the average willingness to pay for the features of an interactive service (computed from Dr. McFadden’s survey) is slightly less than double the willingness to pay for the features of a statutory service. The implication is that the downward adjustment to Dr. Rubinfeld’s benchmark license rates would be smaller if he used the alternative “interactivity adjustment” based on his calculations using Dr. McFadden’s results rather than his “interactivity adjustment” based on average subscription prices.
96. Despite the fact that Dr. Rubinfeld has used Dr. McFadden’s estimates of willingness to pay in order to calculate a result that is close to his “interactivity adjustment,” Dr. Rubinfeld’s claim that Dr. McFadden’s estimates of willingness to pay support his “interactivity adjustment” is incorrect for two reasons. First, Dr. Rubinfeld’s “interactivity adjustment” is designed to keep the ratio of subscription prices and license fees the same for statutory and non-statutory services.¹¹³ As a matter of basic arithmetic, this adjustment involves subscription prices and license fees. It is not related to Dr. McFadden’s estimates of the average willingness to pay for the features of different types of services. In fact, Dr. McFadden’s estimates of willingness to pay need not have any relationship to market prices, which means that they cannot be used in a calculation designed to preserve the relationship between retail subscription prices and license fees as Dr. Rubinfeld assumes should be done.
97. Second, Dr. Rubinfeld’s two calculations are based on different sets of features. He uses all of the features of interactive and non-interactive services when calculating an interactivity adjustment based on willingness to pay. Of course, consumers will not pay for features they can get for free. Therefore, the subscription prices measure the value of only those features not available for free in the marketplace.
98. Figure 10 illustrates Dr. Rubinfeld’s calculation of the interactivity adjustment from the average willingness to pay for different streaming features estimated by Dr. McFadden. Dr. Rubinfeld assumes that a subscription statutory service, such as Pandora One, has no advertisements, playlists from algorithm and tastemakers, a mobile service, and a song library of 10 million songs. The total average willingness to pay for this bundle of

¹¹² Rubinfeld, ¶ 171.

¹¹³ Rubinfeld, ¶ 169.

features based on Dr. McFadden’s estimates is \$4.50.¹¹⁴ Dr. Rubinfeld assumes that a premium on-demand service includes no advertisements, playlists from algorithm and tastemakers, and a mobile service, just as the statutory service does. In addition, the on-demand service includes a library of more than 20 million songs (rather than 10 million), on-demand on the desktop and on mobile, offline listening, and unlimited skips. The total average willingness to pay for this on-demand service based on Dr. McFadden’s estimates is \$8.57.¹¹⁵

Figure 10
Dr. Rubinfeld's Analysis of Consumer's Willingness to Pay
 All Respondents, Weighted by U.S Future Users



Source: Rubinfeld, Exhibit 14.

99. The ratio of the average willingness to pay for the bundle of features Dr. Rubinfeld defines as his on-demand service relative to the bundle of features Dr. Rubinfeld defines as his statutory service is \$8.57 divided by \$4.51, which is equal to 1.9. As noted, Dr. Rubinfeld claims this calculation indicates that his “interactivity adjustment” of 2 is conservative because an “interactivity adjustment” of 1.9 would lead to a smaller

¹¹⁴ Rubinfeld, Exhibit 14.

¹¹⁵ Rubinfeld, Exhibit 14.

downward adjustment of the non-statutory license fees he uses as benchmarks than the adjustment he actually uses.¹¹⁶

100. In fact, Dr. Rubinfeld’s two calculations using prices and willingness to pay are unrelated. This is easily seen in an example illustrating Dr. Rubinfeld’s adjustment of his benchmark license rates. Dr. Rubinfeld assumes that the “the ratio of the average retail subscription price to the per-subscriber royalty paid by the licensee to the record label is approximately the same in both non-interactive and interactive markets.”¹¹⁷ This means, for example, that if interactive license fees are 40% of interactive retail subscription fees, then statutory (non-interactive) license fees should be 40% of statutory (non-interactive) retail subscription fees. The arithmetic of his “interactivity adjustment” is straightforward. If the ratio of interactive subscription fees to statutory subscription fees is about 2, dividing interactive license fees by 2 yields a statutory license fee that will be in the same proportion to statutory subscription fees as interactive license fees are to interactive subscription fees.¹¹⁸
101. I do not endorse Dr. Rubinfeld’s calculation, but it is straightforward to see that if the ratio of retail subscription prices to license fees is to be the same in the interactive and statutory marketplaces, a ratio of *prices* is what is needed to do the necessary arithmetic.
102. It is also straightforward to see that the estimates of the average willingness to pay have nothing to do with the retail subscription prices of music services. This is most easily seen in Figure 10 above, which recreates Dr. Rubinfeld’s Exhibit 14. The average willingness to pay for an interactive service (derived from Dr. McFadden’s survey) is \$8.57 according to Dr. Rubinfeld. This is lower than the average price of an interactive service, which he calculates to be \$9.86 per month.¹¹⁹ An individual with the average willingness to pay for an interactive subscription service that Dr. Rubinfeld calculates would not buy the service at the average price. In fact, no one would buy the vast majority of interactive subscription services, most of which have a subscription price of \$9.99 per month or higher. Similarly, Dr. Rubinfeld calculates that the average subscription price for a statutory service is between \$4.84 and \$5.27 per month. In either case, this amount is below the average willingness to pay for a statutory service of \$4.51 per month. This example illustrates that there is simply no economic relationship between the average willingness to pay estimated by Dr. McFadden (and added up by Dr. Rubinfeld) and the price of the services offered in the marketplace.

¹¹⁶ Rubinfeld ¶ 171.

¹¹⁷ Rubinfeld, ¶ 169

¹¹⁸ For example, if the interactive subscription fee is \$10, the interactive license fee per user is \$4, and the non-interactive statutory subscription fee is \$5, the ratio of the interactive license fee to the interactive subscription price is 40% ($\$4/\$10=40\%$) and Dr. Rubinfeld’s “interactivity adjustment” is 2 ($\$10/\$5=2$). If the \$4 interactive license fee is divided by the interactivity adjustment, the implied license fee for non-interactive statutory services is \$2 ($\$4/2=\2). The resulting non-interactive license fee is 40% of the non-interactive subscription fee of \$5 ($\$2/\$5=40\%$).

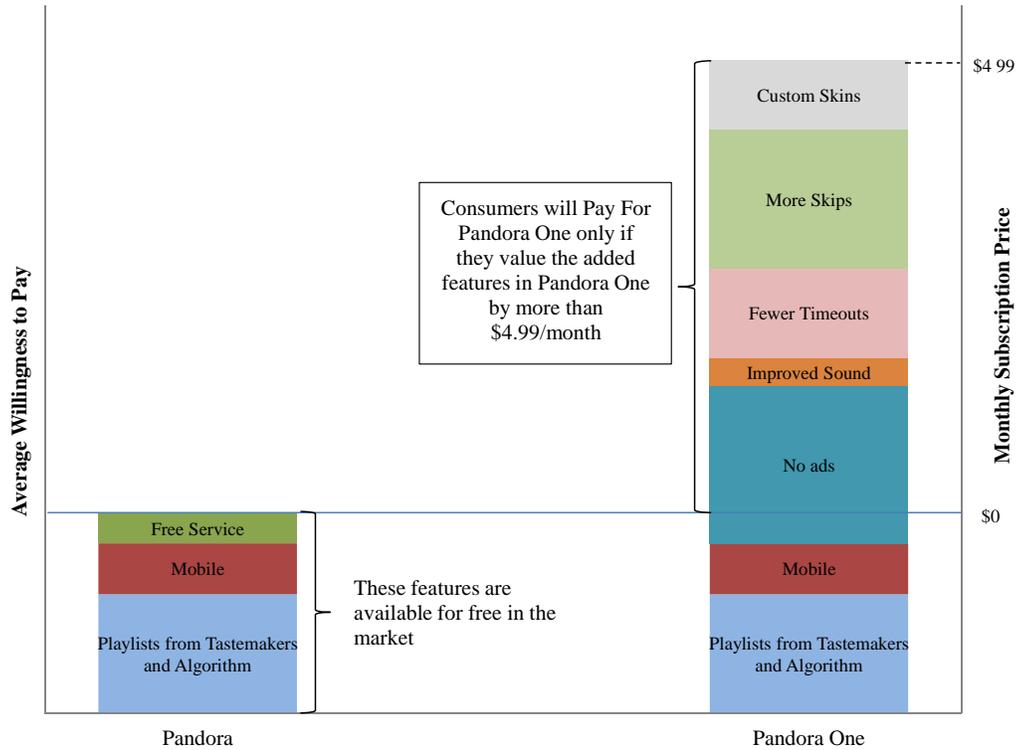
¹¹⁹ Rubinfeld, Exhibit 5.

103. In short, Dr. Rubinfeld intends for the ratios of subscription prices to license fees to be the same in the interactive and non-interactive markets.¹²⁰ However, there is no relationship between the average willingness to pay for the features included in a service and the market price of that service. Therefore, no calculation using estimates of average willingness to pay will preserve the relationship Dr. Rubinfeld uses to develop his proposed statutory rates.
104. Dr. Rubinfeld's use of the average willingness to pay to support his "interactivity adjustment" suffers from another flaw. Many of the features used to build up the estimate of the average willingness to pay for his hypothetical interactive and statutory services are available for free in the marketplace. Of course, consumers will not pay all of the features of a service when they can get many for free. When deciding to buy a subscription service rather than a free-to-the-user service, the consumer makes her choice based on whether the features included in the subscription service and not included in the free service (*i.e.*, the extras obtained from the subscription service) are worth the subscription fee.
105. The implication of consumer behavior is that the estimates of the average willingness to pay that Dr. Rubinfeld calculates in Figure 10 include the value of features that consumers will not be willing to pay for in the marketplace. As a result, the features that Dr. Rubinfeld uses to estimate the ratio of the average willingness to pay for an interactive subscription service and a statutory non-interactive service are not the same features that consumers evaluate when deciding to buy a subscription service or to use a free-to-the-user service. In addition, some of the features that are relevant to the choice of whether to buy a subscription service are not addressed in Dr. McFadden's study.
106. The following example illustrates this point.
107. Figure 11 illustrates a consumer's decision regarding whether to sign up for the premium statutory service Pandora One under the assumption that the next best choice is Pandora's ad-supported service. The left-hand bar in Figure 11 shows the features offered by Pandora's ad-supported service that are included in Dr. McFadden's survey analysis. The market price to the user of this service is \$0 - it is free to the user. The right-hand bar shows the features of Pandora One. It includes the features of "Pandora," with the exception that it is not a "free service." In addition, Pandora One offers no ads, improved sound quality, fewer timeouts, more (but not unlimited) skips, and custom skins.¹²¹ Of course a consumer will make an incremental expenditure on a music service only if she values the additional features more than the additional expenditure necessary to obtain them. Thus, the consumer is paying a subscription fee of \$4.99 per month to obtain the features included in Pandora One less the features included in ad-supported Pandora. The subscription fee does not provide any indication of her willingness to pay for the features that she could obtain for free in the marketplace.

¹²⁰ Rubinfeld, ¶ 169.

¹²¹ See <http://www.pandora.com/one> (accessed February 22, 2015).

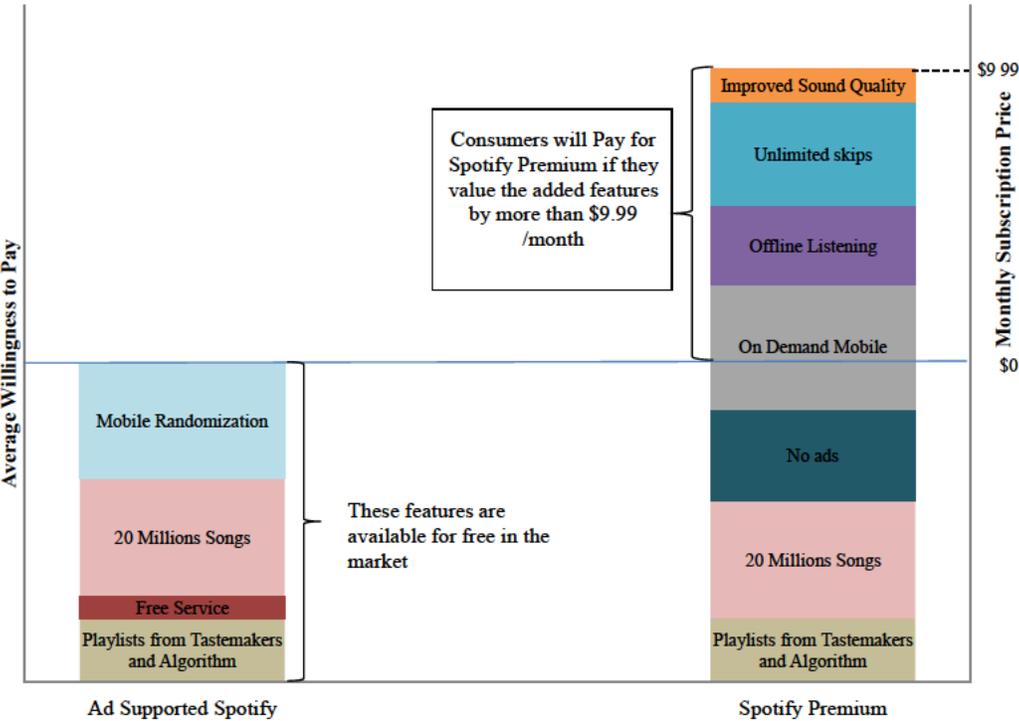
Figure 11
Consumers Pay for Features that Are Not Available for Free in the Market



108. A consumer making the decision to subscribe to the premium Spotify service must make the same type of choice. Figure 12 illustrates a hypothetical consumer choice for deciding between ad-supported Spotify and premium Spotify. A free option, such as ad-supported Spotify may be the consumer's second-best alternative to choosing to subscribe to premium Spotify for \$9.99 per month. Once again the consumer will pay a subscription fee only if he values the features not available for free in the marketplace by more than the subscription fee. In this case, the consumer will subscribe to Spotify Premium if he values improved sound, unlimited skips, offline listening, on-demand mobile rather than randomized mobile, no ads, and the loss of having a free service by more than \$9.99 per month.¹²²

¹²² <https://www.spotify.com/us/premium/> (accessed February 22, 2015).

Figure 12
Consumers Pay for Features that Are Not Available for Free in the Market



109. Figure 13 compares the features that Dr. Rubinfeld uses to calculate the “interactivity adjustment” based on subscription prices and willingness to pay. The figure illustrates that the two “interactivity adjustments” are based on the values of different sets of features in this example. When choosing to buy a subscription service, consumers consider the value of the “extra features” that are not available in free services. These features are shown in the top row of Figure 13 for the choices involved in the above example. In Dr. Rubinfeld’s calculation based on estimates of average willingness to pay, however, he includes all features of the services, whether they are available for free in the marketplace or not. As the figure shows, the sets of features relevant to the consumers’ choices to subscribe are not the same as the features Dr. Rubinfeld uses when estimating the relative willingness to pay for an interactive and non-interactive service. Of course, if consumers consider a different set of features when deciding which music service to buy than Dr. Rubinfeld used to calculate an “interactivity adjustment” based on estimates of average willingness to pay, there is no reason that the two calculations will agree except by chance.¹²³ The example also illustrates that some of the features that are relevant to consumers’ choices, such as improved sound quality, are not included in Dr. McFadden’s analysis.

¹²³ In general, consumers choose the product that gives the greatest surplus from the products available in the marketplace. This does not affect the conclusion that no matter how a consumer ranks her choices, the features relevant to the decision to subscribe or not subscribe to a particular service will not be the same as those Dr. Rubinfeld uses to estimate an “interactivity adjustment” based on Dr. McFadden’s analysis.

Figure 13
Comparison of Features Valued by Dr. Rubinfeld’s Calculations of the “Interactivity Adjustment”

	<u>Statutory Service</u>	<u>On-Demand Service</u>
<i>Rubinfeld's Calculations Based on Subscription Prices</i>	<u>Pandora One v. Pandora's Free Service</u>	<u>Spotify Premium v. Ad-Supported Spotify</u>
	No Advertising less Free Service	No Advertising less Free Service
	Fewer Timeouts	On-Demand Mobile Service less Mobile Randomization
	More Skips	Offline Listening
	Custom Skins	Improved Sound Quality (320 kbps)
	Improved Sound Quality (192 kbps)	
<i>Rubinfeld's Calculations Based on Dr. McFadden's Estimates of Average WTP</i>	<u>Statutory Subscription Service v. McFadden's Baseline Service</u>	<u>Non-Statutory Subscription Service v. McFadden's Baseline Service</u>
	Catalog from 1M to 10M Songs	Catalog from 1M to 20M+ Songs
	No Advertising	No Advertising
	Playlists from Algorithm and Tastemakers	Playlists from Algorithm and Tastemakers
	Mobile Service	Mobile Service
		On-Demand Mobile and Desktop
		Offline Listening
		Unlimited Skips

110. Dr. Rubinfeld’s attempt to use Dr. McFadden’s estimates of the average willingness to pay for features of streaming services is incorrect. Dr. Rubinfeld’s primary assumption regarding the adjustment of interactive license fees to estimate statutory license fees depends on the ratio of interactive and statutory subscription fees and interactive and statutory license fees. Estimates of the average willingness to pay do not have any economic relationship to the market prices his adjustment demands. There is no reason that replacing prices with estimates of the average willingness to pay in his “interactivity adjustment” will preserve the ratios of subscription prices to license fees as he assumes should be done. In addition, Dr. Rubinfeld’s use of Dr. McFadden’s estimates of willingness to pay for features to support his calculation of an “interactivity adjustment” fails to account for the fact that consumers will not pay for features that they can get in the marketplace for free. Thus, Dr. Rubinfeld’s calculation using estimates of average willingness to pay from Dr. McFadden’s survey are economically meaningless.

**Before the
COPYRIGHT ROYALTY JUDGES
LIBRARY OF CONGRESS
Washington, D.C.**

In The Matter Of:

**Determination of Royalty Rates
for Ephemeral Recording and
Digital Performance of Sound
Recordings (Web IV)**

14-CRB-0001-WR (2016-2020)

DECLARATION OF STEVEN R. PETERSON

I, Steven R. Peterson, declare under penalty of perjury that the matters set forth in my
Written Rebuttal Testimony in the above-captioned proceeding are true and correct.

Executed this 23rd day of February 2015.



Steven R. Peterson, Ph.D.



CURRICULUM VITAE

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PROFESSIONAL EXPERIENCE

Compass Lexecon
Boston, MA
Executive Vice President, April 2013 – present
Senior Vice President, January 2006 – March 2013
Managing Director, August 1999 – December 2005

The Economics Resource Group, Inc.
Senior Economist, 1992 – July 1999
Economist, 1990 – 1992

Northeastern University, Boston, MA
Adjunct Faculty, 2011-2013

Harvard University, Cambridge, MA
Teaching Fellow, 1989 – 1990

EDUCATION

Harvard University, Cambridge, MA
Ph.D. in Economics, 1992
Dissertation: “Strategic Aspects of Litigation and Settlement”

University of California, Davis
A.B., Economics, 1987, Highest Honors

TESTIMONY AND CONSULTING EXPERIENCE

National Association of Broadcasters

In re Antitrust Consent Decree Review: American Society of Composers, Authors and Publishers/Broadcast Music, Inc. Comments on Behalf of the National Association of Broadcasters (August 6, 2014).

Leidos, Inc.

United States of America v. Leidos, Inc., in the United States District Court for the District of Columbia. Expert Report (March 28, 2014).

Radio Music License Committee

Radio Music License Committee v. SESAC, Inc., SESAC, LLC, and SESAC Holdings, Inc. in the United States District Court for the Eastern District of Pennsylvania. Declaration (November 14, 2013). Deposition (December 4, 2013). Trial Testimony (December 10, 2013).

BJ's Wholesale Club, Inc.

Irene Cappalli v. BJ's Wholesale Club Inc. in the United States District Court, District of Rhode Island. Expert Report (March 15, 2012). Deposition (April 27, 2012). Declaration (February 12, 2013).

National Marine Fisheries Service

Consultant to National Marine Fisheries Service on market power and excessive-share limits in the Surf Clam and Ocean Quahog fisheries (2010 – 2011).

Energy Intensive Manufacturers Working Group

Coalition for Responsible Regulation, Inc. et al. v. United States Environmental Protection Agency, in the United States Court of Appeals for the District of Columbia Circuit. Declaration (September 14, 2010).

Amex Construction Company, Inc.

ExxonMobil Oil Corporation v. Amex Construction Company, Inc., in the United States District Court, Northern District of Illinois, Eastern Division. Expert Report (February 15, 2010). Deposition (March 2, 2010).

Delta Air Lines, Inc.

Consultant to Delta Air Lines on LaGuardia/Reagan National Airport slot swap with U.S. Airways (2009 – 2010).

Imperial Credit Industries, Inc.

In re: Imperial Credit Industries, Inc., in the United States Bankruptcy Court, Central District of California, Santa Ana Division. Rebuttal Report (April 27, 2007). Trial Testimony (May 22, 2008).

Delta Air Lines, Inc.

Consultant to Delta Air Lines on Delta-Northwest merger (2007 – October 2008).

Greater Lakeside Corporation

The Higbee Company v. Greater Lakeside Corporation, Causeway LLC of Delaware, Broadway Management Corporation, and Jeffrey Feil, in the United States District Court for the Eastern District of Louisiana. Expert Report (September 18, 2007). Supplemental Expert Report (September 25, 2007). Deposition (October 19, 2007).

TransCanada Corporation

Consultant to TransCanada Corporation on acquisition of ANR Group (2007).

Exxon Mobil Corporation

JAAM, Inc., d/b/a Tigerland Exxon v. Exxon Mobil Corporation and Mon Valley Petroleum, Inc., in the United States District Court for the Western District of Pennsylvania. Expert Report (January 12, 2007).

Finova Capital

In Re: Finova Capital Corporation and Finova Mezzanine Capital, Inc., in the United States Bankruptcy Court for the District of Delaware. Expert Report (May 19, 2006). Deposition (August 2, 2006).

Volvo Cars of North America, Inc.

Bay Ridge Volvo American, Inc. et al. v. Volvo Cars of North America, Inc., in the United States District Court Southern District of New York. Expert Report (June 1, 2005). Deposition (August 17, 2005). Supplemental Expert Report (November 11, 2005).

Israel Electric Corporation, Ltd.

Israel Electric Corporation Ltd. vs. the Public Utilities Authority, the Minister of National Infrastructures, the Minister of Finance, the Israel Securities Authority and the Government Corporations Authority (Request for Injunction): In the Israeli Supreme Court, No. /04, August 2004. Statement (August 30, 2004), with Joseph P. Kalt and Paul B. Vasington.

Flying J, Inc.

Flying J, Inc. v. Comdata Network, Inc., in the United States District Court of Utah (Northern Division). Declaration (June 22, 2004). Damages Report (June 22, 2004). Deposition (October 6, 2004). Hearing Testimony (November 19, 2004).

Musicmatch, Inc.

Gracenote, Inc. v. Musicmatch Inc., In the United States District Court Northern District of California (Oakland Division). Expert Report (February 17, 2004). Declaration (February 24, 2004). Deposition (March 2004).

Monica Pappas, Bill DeVitt, and Monica Pappas Associates
The Healthcare Financial Group, Inc., v. Monica Pappas DeVitt et al., in the District Court, Arapahoe County, Colorado. Filed written expert testimony on lost-profits damages (February 2003).

Ticketmaster Corporation
Evaluated damages from asserted anti-competitive conduct (2003).

Amoco Production Company, Amerada Hess Corporation, and Shell Western E&P, Inc.
Assessed fair market value of CO₂ for payment of royalties. Analyzed issues of market structure of CO₂ industry and marketability of CO₂ at the well (2002).

American Airlines
Conducted analysis of market structure, capacity additions, and pricing in an antitrust suit asserting predatory conduct (2001).

For a Mutual Insurance Company
Conducted market research and performed benchmarking analyses to establish pricing approach and prices for new internet services (2000).

Bass Enterprises Production Company
Assessed fair market rental value of oil-bearing property temporarily taken by the federal government (2000).

Boeing Company
Filed declaration of behalf of Boeing Company (Delta Launch Services, Inc.) for a NASA administrative proceeding regarding release of contract information under the Freedom of Information Act (2000).

Honeywell, Inc.
Conducted study of damages arising from monopolization in the market for ring laser gyroscope inertial navigation systems. Conducted analysis of damages arising from patent infringement (1998).

British Airways, Plc.
Conducted study of the competitive effects of British Airways' proposed alliance with American Airlines. Advised on and assisted with presentations before the European Commission (1998).

HarperCollins Publishers
Brother Records, Inc., et al., v. HarperCollins Pub. Inc., et. al. Filed written expert testimony on damages in libel litigation (December 1997).

Northeast Utilities

Before the Federal Energy Regulatory Commission, OA97-237-000, ER 97-1079-000, and EC97-35-000. Conducted analysis of competition in the New England generation market. Filed affidavit in support of NU's Answer to Requests to Reject or Condition Approval of Market-Based Rates (with Frank A. Felder) (July 1997).

McDonnell Douglas Corporation

McDonnell Douglas Corporation v. National Aeronautics and Space Administration, in the U.S. District Court for the District of Columbia. Filed affidavit describing how the public release of cost and price information affects negotiations and competition in markets for launch services (November 1996).

Pennzoil

Before the Federal Energy Regulatory Commission, Docket No. IS95-35-000. Provided written direct testimony (October 1996) and oral testimony (January 1997) on the cost of capital of oil pipeline facilities.

Pennzoil

Before the Federal Energy Regulatory Commission, Docket No. IS94-37-000 and Docket No. IS 94-23-000. Provided written direct testimony (April 1995) and oral testimony (November 1995).

BP Exploration (Alaska) Inc.

Modeled the costs and benefits associated with increased enhanced oil recovery activities within the Prudhoe Bay Unit (1995).

Burlington Northern Industries-Santa Fe Pacific Corporation

Performed cost-benefit analysis of the proposed Burlington Northern/Santa Fe merger. Analyzed the benefits accruing to shippers from expanded single-line service (1994 – 1995).

PUBLICATIONS AND RESEARCH

“Using Economics to Identify Common Impact in Antitrust Class Certification,” American Bar Association, Section of Antitrust Law, Economics Committee Newsletter, Vol. 11, No. 1, Spring 2011 (with Andrew Lemon).

“Rigorous Analysis to Bridge the Inference Gap in Class Certification” (with Andrew Lemon), *Journal of Competition Law and Economics*, March 2011.

“Oil Price Volatility and Speculation” (with Kenneth Grant), *The Energy Daily*, August 25, 2009.

“Understanding Today’s Crude Oil and Product Markets” (with Kenneth Grant and David Ownby), American Petroleum Institute, 2006.

“Understanding Natural Gas Markets” (with Charles Augustine and Bob Broxson), American Petroleum Institute, 2006.

“Regulatory Failure in the California Electricity Crisis” (with Charles Augustine), *The Electricity Journal*, August/September 2003.

“Market Power Analysis in a Dynamic Electric Power Industry” (with F. Felder), *The Electricity Journal*, April 1997.

“Testing the Merits of Providing Customized Risk Management” (with Frank A. Felder and Sarah E. Tobiason), 17th Annual North American Conference of the United States Association for Energy Economics, International Association for Energy Economics, October 1996.

“Competition Between Regulators and Venue Shopping by Natural Gas Pipelines in California” (with Joseph P. Kalt), 14th Annual Conference of the Advanced Workshop in Regulation and Public Utility Economics, May 1995.

“Environmental Regulation and International Competitiveness: What Does the Evidence Tell Us?” (with Adam B. Jaffe, Paul R. Portney, and Robert N. Stavins), *Journal of Economic Literature*, Vol. 33, March 1995.

“Implementation of the Core of a Two Person Exchange Economy without Integer Games or Refinements of Nash Equilibrium” (with Simon Grant, Stephen King, and Ben Polak), *Economics Letters*, 1992.

OTHER REPORTS AND PRESENTATIONS

“Antitrust Analysis of Aftermarkets,” American Bar Association, Section of Antitrust, 2010 Spring Meeting (with Edward Schwartz and Paula Render).

“Do Environmental Regulations Impair Competitiveness? A Critical Review of Economic Studies” (with Barry Galef and Kenneth Grant). Prepared by ICF Consulting Group and The Economics Resource Group, Inc., for the Office of Policy Analysis and Review, Office of Air and Radiation, U.S. Environmental Protection Agency, September 1995.

“Indexing Natural Gas Pipeline Rates” (with Amy B. Candell, Joseph P. Kalt, Sheila M. Lyons, and Stephen Makowka). Explored indexing as a form of Incentive regulation for natural gas pipelines and created the Pipeline Producer Price Index that could be used to implement indexing proposals. The Economics Resource Group, Inc., April 1995.

“Environmental Regulations and the Competitiveness of U.S. Industry” (with A. Jaffe, P. Portney and R. Stavins), U.S. Department of Commerce, Economics and Statistics Administration, Washington, DC, NTIS No. PB-93-193514, July 1993.

HONORS AND AWARDS

Jacob K. Javits Fellow, Harvard University, 1987 – 1991

Phi Beta Kappa, University of California, Davis, 1987

Appendix B
Documents Considered

1. Reports and Depositions

- a. Report of David Blackburn, October 6, 2014
- b. Testimony of Daniel L. McFadden, October 6, 2014
- c. Written Direct Testimony of Michael L. Katz, October 7, 2014
- d. Testimony of Daniel L. Rubinfeld, October 6, 2014
- e. Declaration of Rand Levin, November 20, 2014
- f. Declaration of Paul Robinson, November 20, 2104
- g. Deposition of Daniel Rubinfeld, December 11, 2014
- h. Deposition of Aaron Harrison, December 5, 2014
- i. Deposition of Charles Walk, February 20, 2015
- j. Written Direct Testimony of Simon Fleming-Wood, October 6, 2014
- k. Written Direct Testimony of Stephan McBride, October 14, 2014
- l. Written Rebuttal Testimony of Mike Herring
- m. Rebuttal Testimony of John Hauser

2. Documents

- a. NPD's Music Acquisition Monitor, Q4 '13, SNDEX0096777 – 96820
- b. Nielsen, Music 360 US, October 2013, NAB00006637-6745
- c. Sony Music GDB Strategy, SME Curated Music, SNDEX0214793-SNDEX0214806
- d. 
- e. Glenn Peoples, "Investors Put \$2.4 Billion into Music in 2013, Streaming Tops List," Billboardbiz, January 31, 2014.
- f. "Car Wars", NAB00006329-6371
- g. SoundExchange, Inc.'s Responses and Objections to the First Set of Interrogatories from the Licensee Participants.
- h. Kelly Clarkson, *Stronger*, Phase 1 Marketing Plan, SNDEX0110108-127
- i. Carrie Underwood, *Blown Away*, Marketing Plan, SNDEX0110047-99

- j. Lady Gaga, Marketing Notes as of April 28, 2011, SNDEX0097934-49
- k. Pink, *The Truth About Love*, SNDEX0110186-203
- l. WMG Digital Strategy, SNDEX0119485-9571
- m. [REDACTED]
- n. [REDACTED]
- o. Nate, Rau, "Sony Nashville CEO talks importance of country radio," *The Tennessean*, February 21, 2015, available at <http://www.tennessean.com/story/money/industries/music/2015/02/20/sony-nashville-ceo-talks-importance-country-radio/23768711/>
- p. Joshua D. Angrist and Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricists Companion*, March 2008.
- q. James H. Stock and Mark W. Watson, *Introduction to Econometrics*, (Boston: Addison Wesley, 2003), Chapter 11.
- r. www.pandora.com
- s. www.spotify.com
- t. Federal Register/Vol. 74, No 40/ March 3, 2009
- u. Federal Register/Vol. 74, No. 154/August 12, 2009
- v. Federal Register/Vol. 72, No. 83/May 1, 2007
- w. Federal Register/Vol. 79, No. 80/April 25, 2014
- x. Federal Register/Vol. 74, No. 136/July 17, 2009
- y. Pandora, 2014 Annual Report
- z. Yahoo! Finance
- aa. <http://www.soundexchange.com/service-provider/rates/>.
- bb. Thomas E. Copeland and J. Fred Weston, *Financial Theory and Corporate Policy*, 3rd Ed. (Reading: Addison-Wesley Publishing Company, 1988).
- cc. <http://deliradio101.com/for-artistsbands/streaming-music-royalties>
- dd. The Evolving Role of Radio in Music use and Purchase, August 2013, IHM 0077199 – 77217
- ee. SNDEX0126178-179
- ff. SNDEX0126601

- gg. SNDEX0126177
- hh. SNDEX0126596-600
- ii. SNDEX0126597
- jj. SNDEX0126592-595
- kk. SNDEX0125700

3. **Data**

- a. Sndex0049480-Restricted.xlsx
- b. Sndex0049482-Restricted.xlsx
- c. Sndex0126123_Restricted.xlsx
- d. Sndex0126124_Restricted.xlsx
- e. SNDEX0018269.dta
- f. SNDEX0018378.dta
- g. Sndex0018192.Csv
- h. SNDEX0282314-2318

Appendix C

Comparison of Dr. McFadden's Results to Recreated Results

Attribute	Unweighted (Recreated)	Unweighted (McFadden)	Weighted, US Pop. (Recreated)	Weighted, US Pop. (McFadden)	Weighted, US Users (Recreated)	Weighted, US Users (McFadden)	Weighted, US future Users (Recreated)	Weighted, US future Users (McFadden)
No ads	1.22	1.20	1.32	1.30	1.38	1.36	1.35	1.33
Current Plan	1.20	1.20	1.19	1.19	1.19	1.18	1.19	1.19
Catalog 1M to 10 M	1.35	1.34	1.35	1.35	1.35	1.34	1.35	1.34
Catalog 1M to 20M	1.62	1.57	1.64	1.59	1.64	1.59	1.64	1.60
Catalog 1M to 20M+	1.56	1.51	1.58	1.54	1.59	1.54	1.55	1.52
Playlists: tastemakers to algorithm	0.84	0.84	0.83	0.83	0.85	0.85	0.85	0.86
Playlists: both tastemakers and algorithm	0.53	0.52	0.59	0.57	0.65	0.64	0.62	0.60
Free Plan	0.27	0.28	0.31	0.33	0.29	0.30	0.18	0.21
On demand desktop	0.66	0.67	0.65	0.67	0.64	0.66	0.66	0.68
Mobile service	1.16	1.19	1.15	1.18	1.28	1.30	1.21	1.23
Mobile service randomization	1.54	1.58	1.56	1.60	1.69	1.73	1.63	1.67
Mobile service on demand	1.66	1.69	1.74	1.77	1.92	1.96	1.82	1.85
Offline listening	1.04	1.04	1.16	1.17	1.25	1.25	1.18	1.18
Unlimited skips	1.38	1.37	1.40	1.40	1.47	1.47	1.41	1.41

**THIS EXHIBIT CONTAINS
RESTRICTED INFORMATION
SUBJECT TO PROTECTIVE ORDER
IN DOCKET NO. 14-CRB-0001-WR
(2016-20) (WEB IV). IT WAS
THEREFORE OMITTED FROM THIS
PUBLIC VERSION.**

**THIS EXHIBIT CONTAINS
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UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
WASHINGTON, D.C. 20580

Office of the Director
Bureau of Competition

**Statement of Bureau of Competition Director Richard A. Feinstein
In the Matter of Vivendi, S.A. and EMI Recorded Music
September 21, 2012**

Today, the Commission voted to close its investigation of the proposed acquisition by Vivendi, S.A., parent company of Universal Music Group (“Universal”), of EMI Recorded Music (“EMI”). After a thorough investigation into the likely competitive effects of the merger, Commission staff did not find sufficient evidence that the acquisition would substantially lessen competition in the market for the commercial distribution of recorded music in violation of Section 7 of the Clayton Act.

Universal is the largest recorded music company in the world. EMI is the fourth largest. Together with Sony Music and Warner Music Group, Universal and EMI are among the four “Majors” in the recorded music industry. The Majors distribute recorded music through a variety of retail channels, including: (1) the sale of compact discs in large mass merchandise and big box stores; (2) the sale of compact discs online; (3) the sale of digital downloads; and, increasingly, (4) the subscription to interactive music streaming services. Although independent recorded music companies, including a large number of independent record labels and distributors, compete in the market for commercial distribution of recorded music, the majority of independent record labels rely on the Majors to provide distribution services.

Based on its review of company documents, discussions with industry participants, and empirical analysis, Commission staff did not find sufficient evidence of head-to-head competition to conclude that the combination of Universal and EMI would substantially lessen competition. In the recorded music business, the products are highly differentiated, and companies compete for distribution in multiple ways, including: (1) the sale of new titles in large retailers; (2) the sale of catalog titles; and (3) the opportunity to promote artists and records. Commission staff therefore considered the level of direct competition between Universal and EMI across all of these different types of channels. Universal is very strong in popular new releases, but EMI – the smallest of the Majors – has a portfolio much more heavily weighted toward older titles. Further, while all of the Majors participate to different degrees in a variety of catalog discount programs, the competition between Universal and EMI in this area is relatively insignificant. We emphasize, however, that the decision to close is fact-driven and based largely on the different product portfolios of Universal and EMI. It is entirely possible that a transaction between other market participants or on different terms may yield a different conclusion.

Commission staff also assessed the impact of the acquisition on the development of interactive music streaming services. Staff focused on whether Universal would have enhanced bargaining leverage after the acquisition, allowing it to extract from streaming services superior financial terms, or advantaged positioning for its content. Commission staff sought to determine whether the transaction would lead to higher costs to interactive streaming consumers or a more

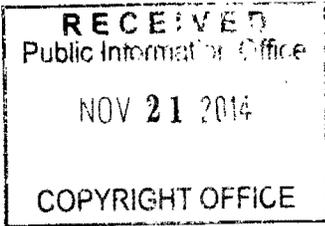
limited selection of recorded music. Commission staff found considerable evidence that each leading interactive streaming service must carry the music of each Major to be competitive. Because each Major currently controls recorded music necessary for these streaming services, the music is more complementary than substitutable in this context, leading to limited direct competition between Universal and EMI. In the end, insufficient evidence existed showing that Universal and EMI offer products that could be viewed by streaming services as direct substitutes.

Commission staff also did not find sufficient evidence to support the concern that Universal's acquisition of EMI would significantly increase the potential for coordination among recorded music companies. Market conditions have changed since previous antitrust enforcement actions, such as in the unique situation of *Three Tenors*. The evidence showed that recorded music products are differentiated, with each record label offering a wide portfolio of titles, the success of which, in many instances, is uncertain and not strongly correlated with the success or failure of other titles. The net price for each title often is not particularly transparent because of the complexity of negotiated arrangements between record labels, distributors, retailers, and other rightsholders. Further, many factors impact sales of a particular title, and the transaction does not change competitors' ability to monitor each other or respond to competitive activity. In addition, the absence of evidence that EMI's competitive behavior has been disruptive to the status quo in recent years undermined the argument that it had functioned as a maverick.

We worked closely with the European Commission throughout the investigation, but reached different conclusions because of different evidence unique to each jurisdiction. For example, concentration levels in a number of EU Member States were significantly higher than the combined market share of Universal and EMI in the United States. In addition, the markets in Europe have a different, larger, and more diverse set of customers, and it appears that the market dynamics relating to digital streaming services differ significantly from those found in the United States. Although the Commission did not conclude that a remedy was needed to protect competition in the United States, we note that the remedy obtained by the European Commission to address the different market conditions in Europe will reduce concentration in the market in the United States as well.

**THIS EXHIBIT CONTAINS
RESTRICTED INFORMATION
SUBJECT TO PROTECTIVE ORDER
IN DOCKET NO. 14-CRB-0001-WR
(2016-20) (WEB IV). IT WAS
THEREFORE OMITTED FROM THIS
PUBLIC VERSION.**

**THIS EXHIBIT CONTAINS
RESTRICTED INFORMATION
SUBJECT TO PROTECTIVE ORDER
IN DOCKET NO. 14-CRB-0001-WR
(2016-20) (WEB IV). IT WAS
THEREFORE OMITTED FROM THIS
PUBLIC VERSION.**



Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re
DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (WEB IV)
DOCKET NO. 14-CRB-0001-WR
(2016-2020)

DECLARATION OF RAND LEVIN

I, RAND LEVIN, DECLARE:

1. I am Senior Vice President, Business & Legal Affairs for Universal Music Group ("UMG"), a colloquial umbrella name for a group of recorded music companies. I submit this declaration in support of SoundExchange, Inc.'s Opposition to iHeartMedia, Inc.'s ("iHeart") Motion to Compel SoundExchange to Produce Documents in Response to Discovery Requests ("Motion"). The matters set forth in this declaration are based on my own personal knowledge or, where indicated, I have been informed of those matters and believe them to be true. If called as a witness in these proceedings, I could and would testify competently to the contents of this declaration.

2. I understand that iHeart's Motion asks the Judges to order SoundExchange to collect and produce from each of the major recorded music companies, including UMG, documents regarding the promotional effect of webcasting services. In particular, I understand that iHeart's Motion asks the Judges to order SoundExchange to collect and produce the following types of documents: "studies, analyses, surveys, presentations, or memoranda" that "refer or relate to" "the existence or nonexistence of a substitutional or promotional effect" from

any statutorily licensed webcasting service “on other sources of record company revenue.” I also understand that iHeart has asked the Judges to order that SoundExchange collect such documents from employees in the promotion departments of each record label inside each major record company.

3. UMG owns several U.S. record labels with promotion departments, including, among others, Interscope Geffen A&M Records, Island Records, Def Jam Records, and Republic Records. Based on my experience and understanding, I believe it is unlikely that “studies, analyses, surveys, presentations, or memoranda” of the type described above are generated or regularly maintained in the promotion departments at UMG’s record labels. The labels’ promotion departments focus primarily on promoting releases by their artists on terrestrial radio. As a general matter, the promotion departments do not focus on promotional activities on statutorily licensed webcasting services.

4. If a record label engages promotional activities through a statutorily licensed webcasting service, the label generally does so through its marketing or sales departments. That type of marketing activity, in general, would be in the nature of short-term programming or commercials focusing on a particular artist or release. I am informed and believe that, in the ordinary course of their work, the labels’ promotion, marketing and sales departments do not create “studies, analyses, surveys, presentations, or memoranda” regarding the promotional or substitutional effects that statutorily licensed webcasting services have on other sources of record company revenue.

5. I am informed and believe that, such studies, to the extent they exist at all at UMG, would be most likely to exist at the UMG corporate level.

6. I also understand that iHeart's Motion appears in part to ask that SoundExchange collect and produce documents described as: "all documents" "relating to" "the existence or nonexistence of a substitutional or promotional effect by" "terrestrial radio on other sources of record company revenue." I also understand that iHeart asks the Judges to order the collection of such documents from the promotion departments of individual record labels, and covering a time period from 2009 to the present.

7. It would be incredibly burdensome to search for and collect the documents just described. In the first place, the phrase documents "relating to" a "promotional effect" on record company revenue from terrestrial performances is vague and extremely overbroad. People who work in promotion departments try to get their label's artists played on terrestrial radio, in the hope that increased plays could help lead to increased record sales. In other words, almost everything these employees do "relates" in some sense to the possibility that terrestrial radio plays could positively affect record sales. These employees' documents are extremely likely to "relate to" this broad description. I believe that it would be very difficult, if not impossible, to come up with a means for searching for documents that "relate to" "terrestrial radio" having a positive "promotional effect" on record company revenue that would not produce an extraordinarily large number of documents.

8. The number of custodians whose files would have to be searched for documents of the type described above would be massive. There have been hundreds of employees from 2009 to the present in promotion-related positions at UMG's U.S. labels. Including former employees (assuming they could even be located), that number would increase substantially. Adding all present (let alone past) independent contractors and interns who might have been involved in promotions would substantially increase this number.

Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury under the laws of the United States that, to the best of my knowledge, information and belief, the foregoing is true and correct.

Dated: November 20, 2014



RAND LEVIN

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on November 21, 2014, I caused a copy of **DECLARATION OF RAND LEVIN** to be served via electronic mail and via first-class, postage prepaid, United States mail, to the Participants as indicated below:

Participants

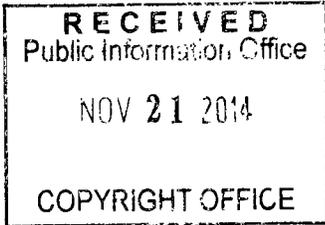
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Karen Easton



Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.

In re
DETERMINATION OF ROYALTY
RATES AND TERMS FOR
EPHEMERAL RECORDING AND
DIGITAL PERFORMANCE OF SOUND
RECORDINGS (WEB IV)
DOCKET NO. 14-CRB-0001-WR
(2016-2020)

DECLARATION OF JULIE SWIDLER

I, JULIE SWIDLER, DECLARE:

1. I am Executive Vice President Business Affairs and General Counsel for Sony Music Entertainment ("Sony Music"). I submit this declaration in support of SoundExchange, Inc.'s ("SoundExchange") Opposition to iHeartMedia, Inc.'s ("iHeart") Motion to Compel SoundExchange to Produce Documents in Response to Discovery Requests ("Motion"). The matters set forth in this declaration are based on my own personal knowledge or, where indicated, I have been informed of those matters and believe them to be true. If called as a witness in these proceedings, I could and would testify competently to the contents of this declaration.

2. I understand that iHeart's Motion asks the Judges to order SoundExchange to collect and produce from each of the major recorded music companies, including Sony Music, documents regarding the promotional effect of webcasting services. In particular, I understand that iHeart's Motion asks the Judges to order SoundExchange to collect and produce "studies, analyses, surveys, presentations, or memoranda, referring or relating to the existence or

nonexistence of a substitutional or promotional effect” by any webcasting service operating pursuant to a statutory license “on other sources of record company revenue.” I further understand that iHeart’s Motion asks the Judges to order SoundExchange to undertake this collection from individuals within the promotion departments of each record label within each such company.

3. Based on my experience and understanding, it is unlikely that documents of the type described in quotations in the preceding paragraph would be found within the promotion departments of Sony Music’s individual record labels. Sony Music operates several U.S. record labels, including Columbia Records, Epic Records, RCA Records, Sony Music Nashville, Sony Music U.S. Latin, and others, and each has its own separate promotion department. The promotion department within each label focuses on promoting releases by that label’s artists through terrestrial radio. The labels’ promotion departments generally do not engage in promotional activities with webcasting services that operate pursuant to the statutory license.

4. To the extent a record label engages in any type of promotional activity with webcasting services that operate pursuant to the statutory license, those activities generally take place through the label’s marketing department. Such activity, to the extent it happens at all, generally consists of one-off, discrete, short-term programming or commercials featuring or focusing on a specific artist or release. Neither the labels’ promotion departments nor their marketing department create in the ordinary course of their work “studies, analyses, surveys, presentations, or memoranda” regarding the promotional or substitutional effects that webcasting services operating pursuant to the statutory license have on other sources of record company revenue.

5. To the extent that Sony Music engages at all in creating “studies, analyses, surveys, presentations, or memoranda” regarding the promotional or substitutional effects that webcasting services operating pursuant to the statutory license have on other sources of record company revenue, such documents would be created at the Sony Music corporate level.

6. I understand that at least some portion of iHeart’s Motion appears to ask the Judges to order SoundExchange to collect and produce, among other things, “all documents” “relating to” “the existence or nonexistence of a substitutional or promotional effect by” “terrestrial radio on other sources of record company revenue.” I further understand that iHeart’s request that the Judges order SoundExchange to collect documents from within the promotion departments of each individual record label would apply to this request. I further understand that iHeart’s requests are directed at all responsive documents from 2009 to the present.

7. The process of searching for and collecting documents of the type described in the preceding paragraph would be an enormous undertaking. It is not clear what is meant by a document that “relates to” performances on “terrestrial radio” having a “promotional effect.” Generally speaking, the people in a promotion department focus on promoting releases by that label’s artists through terrestrial radio, so virtually everything they do “relates to” the possibility that such plays may have a positive effect on recorded music revenue. It would be extremely difficult, if not impossible, to frame a search of electronically stored documents that would help to identify documents that “relate to” “terrestrial radio” having a “promotional effect.”

8. The number of custodians whose files would have to be searched for documents of the type described in the preceding paragraph would be massive. There are currently well over a hundred employees in the radio promotion departments at Sony Music’s major U.S. labels. Since 2009, there have been over two hundred employees in promotion-related positions

at Sony Music's major U.S. labels. These numbers do not include employees working in marketing departments at those labels.

Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury under the laws of the United States that, to the best of my knowledge, information and belief, the foregoing is true and correct.

Dated: November 20, 2014


Julie Swidter

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on November 21, 2014, I caused a copy of **DECLARATION OF JULIE SWIDLER** to be served via electronic mail and via first-class, postage prepaid, United States mail, to the Participants as indicated below:

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Karen Easton

this declaration, I use the name "iHeart" to refer to Clear Channel while the company had that name.

3. WMG commenced discussions with iHeart regarding a potential agreement in approximately October 2011. The agreement was concluded in October 2013. I was involved in internal discussions at WMG regarding the negotiations. I also participated in direct discussions with iHeart regarding the agreement.

4. I am informed and believe that SoundExchange's attorneys have collected emails from 10 WMG custodians who were integrally involved in the negotiations with iHeart. I am informed and believe that SoundExchange's attorneys have reviewed and produced in excess of 2,000 WMG emails (including attachments) that WMG exchanged with iHeart in connection with the negotiations. I am further informed and believe that, after applying electronic search terms, SoundExchange's attorneys have identified more than 30,000 additional internal WMG emails (along with attachments, where applicable) that potentially relate to the analysis or valuation of some or all elements of the proposed transaction. These additional emails would have to be reviewed both for responsiveness and privilege in order to comply with the search and production of the type that iHeart requests in its Motion.

5. A privilege review of the WMG internal communications that iHeart seeks would be essential. As with any significant transaction, WMG attorneys were involved in providing privileged legal advice in connection with the negotiation of the agreement. With respect to the agreement with iHeart, six different lawyers provided substantial legal advice in connection with the agreement. The counsel for WMG included the following lawyers who work at WMG: Ron Wilcox, Virginia Lockhart, Jon Glass, and me. Steven Englund, a lawyer at Jenner & Block LLP, and Orin Synder, a lawyer at Gibson, Dunn & Crutcher LLP, also provided legal advice to

WMG in connection with the transaction. Based on my experience in connection with the negotiation of the WMG-iHeart agreement, in-house and outside attorneys were frequently consulted for legal advice in communications that relate to the analysis or valuation of some or all elements of the transaction.

6. A privilege review of WMG's internal communications would be very time-consuming and costly. As is not uncommon for a transaction of the size and complexity of the WMG-iHeart agreement, numerous legal questions arose throughout the negotiations. Requests for privileged legal advice and responses providing such advice often were set forth in email communications within WMG and/or with outside counsel. And those communications frequently were forwarded to, or included as part of the email reply chains of, other WMG custodians. Accordingly, a privilege review of a single email could, and in many cases would, involve the review of multiple embedded email messages.

7. A privilege review of WMG's internal communications also would require complex and time-consuming analysis of individual communications. As with many transactions, the WMG attorneys involved in the WMG-iHeart negotiations participated in business as well as legal discussions. The question whether a particular communication reflects a request for legal or business advice often is not self-evident and requires an understanding of the context surrounding particular discussions. In my experience, it is not uncommon for a single communication with an in-house lawyer to involve both legal and business issues. Accordingly, a privilege review of WMG's internal communications very likely would involve a significant number of sentence-by-sentence, or paragraph-by-paragraph, privilege issues. Such a review almost certainly would require a significant number of redactions.

iHeart's Motion to Compel Production of Documents from Individual Record Labels' Promotion Departments Regarding the Promotional Effects of Webcasting and Terrestrial Radio

8. I understand that iHeart's Motion also asks the Judges to order SoundExchange to collect and produce from each of the major recorded music companies, including WMG, documents regarding the promotional effect of webcasting services. In particular, I understand that iHeart's Motion asks the Judges to order SoundExchange to collect and produce "studies, analyses, surveys, presentations, or memoranda, referring or relating to the existence or nonexistence of a substitutional or promotional effect" by any webcasting service operating pursuant to a statutory license "on other sources of record company revenue." I further understand that iHeart's Motion asks the Judges to order SoundExchange to undertake this collection from individuals within the promotion departments of each record label within each such company.

9. Based on my experience and understanding, it is unlikely that documents of the type described in quotations in the preceding paragraph would be found within the promotion departments of WMG's record labels. WMG owns several U.S. record labels with promotion departments, including Warner Bros. Records ("WBR"), Atlantic Records ("Atlantic"), and Warner Music Nashville ("WMN"). The promotion departments within each label focus on promoting releases by that label's artists through terrestrial radio. The labels' promotion departments generally do not engage in promotional activities with webcasting services that operate pursuant to the statutory license.

10. To the extent a label engages in any type of promotional activity with webcasting services that operate pursuant to the statutory license, those activities generally take place through the label's marketing and sales departments. I understand that such activity, to the extent it happens at all, generally consists of discrete, short-term programming or commercials

featuring or focusing on a specific artist or release. I am informed and believe that neither the labels' promotion departments nor their marketing or sales departments create in the ordinary course of their work "studies, analyses, surveys, presentations, or memoranda" regarding the promotional or substitutional effects that webcasting services operating pursuant to the statutory license have on other sources of record company revenue.

11. To the extent that WMG engages at all in creating "studies, analyses, surveys, presentations, or memoranda" regarding the promotional or substitutional effects that webcasting services operating pursuant to the statutory license have on other sources of record company revenue, I believe that such documents would be created at the WMG corporate level.

12. I understand that at least some portion of iHeart's Motion appears to ask the Judges to order SoundExchange to collect and produce, among other things, "all documents" "relating to" "the existence or nonexistence of a substitutional or promotional effect by" "terrestrial radio on other sources of record company revenue." I further understand that iHeart's request that the Judges order SoundExchange to collect documents from within the promotion departments of each record label would apply to this request. I further understand that iHeart's requests are directed at all responsive documents from 2009 to the present.

13. The process of searching for and collecting documents of the type described in the preceding paragraph would be an enormous undertaking. It is not clear what is meant by a document that "relates to" performances on "terrestrial radio" having a "promotional effect." Generally speaking, the people in a promotion department focus on promoting releases by that label's artists through terrestrial radio. Therefore, much of what promotional employees do in their daily work could be said to "relate to" the possibility of terrestrial radio performances having a positive effect on record sales. I believe that it would be extremely difficult to isolate,

from within all documents in the promotion departments related to promoting the play of records on terrestrial radio, documents that could be said to “relate to” “terrestrial radio” having a “promotional effect” on record company revenues.

14. The number of custodians whose files would have to be searched for documents of the type described in the preceding paragraph would be substantial. In their respective promotion departments, Atlantic currently has approximately 60 employees, WBR currently has approximately 31 employees, and WMN currently has approximately 19 employees. Since iHeart’s Motion requests documents over the last five years, the potential number of custodians would be even larger due to turnover in these promotion departments. Based on the facts above, I believe that the total number of potential custodians within the promotion departments of WMG’s U.S. labels over the last five years would exceed 150.

Pursuant to 28 U.S.C. § 1746 and 37 C.F.R. § 350.4(e)(1), I hereby declare under the penalty of perjury under the laws of the United States that, to the best of my knowledge, information and belief, the foregoing is true and correct.

Dated: November 20, 2014



PAUL M. ROBINSON

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on November 21, 2014, I caused a copy of **DECLARATION OF PAUL M. ROBINSON** to be served via electronic mail and via first-class, postage prepaid, United States mail, to the Participants as indicated below:

Participants

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Karen Easton

**THIS EXHIBIT CONTAINS
RESTRICTED INFORMATION
SUBJECT TO PROTECTIVE ORDER
IN DOCKET NO. 14-CRB-0001-WR
(2016-20) (WEB IV). IT WAS
THEREFORE OMITTED FROM THIS
PUBLIC VERSION.**

**THIS EXHIBIT CONTAINS
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**Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Library of Congress
Washington, D.C.**

<i>In re</i>)	
)	
)	
DETERMINATION OF ROYALTY)	DOCKET NO. 14-CRB-0001-WR
RATES AND TERMS FOR)	(2016-2020)
EPHEMERAL RECORDING AND)	
DIGITAL PERFORMANCE OF SOUND)	
RECORDINGS (<i>WEB IV</i>))	
)	

SOUNDEXCHANGE, INC.’S RESPONSES AND OBJECTIONS TO THE FIRST SET OF INTERROGATORIES FROM THE LICENSEE PARTICIPANTS

SoundExchange, Inc., hereby responds and objects to the First Set of Interrogatories to SoundExchange from the Licensee Participants (“Interrogatories”).

General Objections

1. SoundExchange, Inc. (“SoundExchange”) objects to the Interrogatories, including all Definitions and Instructions, to the extent they purport to impose upon SoundExchange any requirements that exceed or are inconsistent with 17 U.S.C. § 803(b), 37 C.F.R. § 351.5, or any other applicable rule or order governing this proceeding, including prior precedent.
2. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they are not relevant to the claim or defense of any party or to the extent they are not reasonably calculated to lead to the discovery of admissible evidence. 37 C.F.R. § 351.5(b)(2). By responding to an interrogatory, SoundExchange does not concede that the interrogatory is relevant to the claim or defense of any party and reserves all objections to the use or admissibility of any response or of any information, materials, or documents that are contained, identified, produced, or disclosed in response to an interrogatory.
3. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they are ambiguous, duplicative, or vague.
4. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they require SoundExchange to spend an unreasonable amount of time, effort, or resources in order to respond and to the extent that full compliance is not reasonably practical within the time allowed by the Discovery Schedule.

5. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they are oppressive, harassing, overbroad or unduly burdensome.
6. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they are not limited in geographic scope to those matters at issue in this proceeding. Unless otherwise indicated in response to a particular interrogatory, SoundExchange will produce responsive information as related to the United States or worldwide if it includes the United States.
7. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they are not limited to time periods reasonably related to the matters at issue in this proceeding. Unless otherwise indicated in response to a particular interrogatory, SoundExchange will provide responsive information for the time period beginning January 1, 2011, through the present.
8. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they call for information already in the possession of the parties propounding these Interrogatories, information that is publicly available and readily accessible, or information already produced in this proceeding. Such Interrogatories are unduly burdensome and overbroad and would needlessly increase the cost of this proceeding.
9. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they seek information or documents protected from discovery under any statute, regulation, protective order, or privilege, including the attorney-client privilege and work-product immunity doctrine. SoundExchange will not produce any documents or information so protected. The inadvertent disclosure of such documents or information shall not be deemed a waiver of any such privilege or immunity.
10. A response by SoundExchange to any interrogatory does not indicate and should not be construed to mean that SoundExchange agrees, admits or otherwise acknowledges that the information requested is within the scope of discovery permitted in this proceeding, or that the information is relevant or admissible.
11. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they seek to impose obligations on any member of SoundExchange that is not a participant in this proceeding and has not provided a witness in this proceeding.
12. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent they seek documents or information that are not in the possession, custody, or control of SoundExchange, including documents or information from other parties or members of SoundExchange.
13. SoundExchange objects to the Interrogatories, including all Definitions and Instructions, to the extent any particular interrogatory seeks information from multiple companies or organizations. Moreover, SoundExchange objects to the extent the Interrogatories are compound and include discrete sub-parts which count as separate interrogatories. Such interrogatories constitute multiple interrogatories.

14. The responses and objections contained herein are made to the best of SoundExchange's present knowledge, belief and information, and are based on a reasonable and diligent search for responsive information. SoundExchange reserves the right to amend or supplement its objections and responses based on, among other reasons, its continuing investigation of this matter, further review, or later acquisition of responsive information.

Objections to Definitions

1. SoundExchange objects to the definition of "Digital Music Service" in Definition No. 2 as overbroad because it purports to define the relevant universe of services without limitation to issues that are relevant to this proceeding and in such a manner that would defeat the statutory provisions defining discoverable information. To the extent the Interrogatories purport to impose an obligation to provide information related to all the types of services included in the overbroad array of services described in the definition, SoundExchange objects to the definition as irrelevant, overbroad, unduly burdensome, oppressive, harassing and not reasonably limited to subject matters at issue in this proceeding.
2. SoundExchange objects to the definition of "Document" and "Documents" in Definition No. 3 to the extent it purports to impose obligations beyond the scope of the applicable statute and regulations governing discovery in this proceeding, including 17 U.S.C. § 803(b), 37 C.F.R. § 351.5, and any other applicable rule or order governing this proceeding, and to the extent it suggests that the Federal Rules of Civil Procedure govern discovery in this proceeding.
3. SoundExchange objects to the definition of "Identify" in Definition No. 5 to the extent it seeks the addresses of people who are represented by counsel and should be contacted through counsel. SoundExchange objects to the definition of "Identify" in Definition No. 7 as overbroad and unduly burdensome.
4. SoundExchange objects to the definition of "Record Company" in Definition No. 13 as overbroad, unduly burdensome, oppressive, harassing and beyond the scope of permissible discovery in this proceeding, to the extent it seeks to impose obligations on the thousands of SoundExchange record company members that are not participants in this proceeding and have not provided a witness in this proceeding, and to the extent it defines a Record Company to include all companies related to it.
5. SoundExchange objects to the definition of "Recording Industry Association of America" and "RIAA" in Definition No. 14 because RIAA is not a participant in this proceeding and has not provided a witness in this proceeding. SoundExchange further objects to the definition as overbroad to the extent it refers to affiliated companies, which could be interpreted to refer to hundreds of record companies, and to the extent it purports to include anyone acting on RIAA's behalf.
6. SoundExchange objects to the definition of "Sony" in Definition No. 15 as overbroad and unduly burdensome to the extent it purports to impose an obligation to provide

information from an unreasonably wide array of people and entities, including numerous labels and anyone acting on Sony's behalf.

7. SoundExchange objects to the definition of "SoundExchange," "you" and "your" in Definition No. 16 as overbroad, oppressive, harassing, and unduly burdensome to the extent that its reference to "affiliated companies" seeks to impose obligations on the thousands of record companies to whom SoundExchange distributes royalty payments. SoundExchange also objects to the definition as overbroad and vague to the extent it purports to impose obligations on anyone acting on SoundExchange's behalf.
8. SoundExchange objects to the definition of "SoundExchange Witness" in Definition No. 17 as overbroad and unduly burdensome to the extent it seeks information from witnesses who "will supply testimony" in this proceeding, but who have not yet been disclosed or identified as direct case witnesses.
9. SoundExchange objects to the definition of "WMG" and "Warner" in Definition No. 19 as overbroad and unduly burdensome to the extent it purports to impose an obligation to provide information from an unreasonably wide array of people and entities, including numerous labels and anyone acting on WMG's behalf.
10. SoundExchange objects to the definition of "UMG" and "Universal" in Definition No. 20 as overbroad and unduly burdensome to the extent it purports to impose an obligation to provide information from an unreasonably wide array of people and entities, including numerous labels and anyone acting on UMG's behalf.

Objections to Instructions

1. SoundExchange objects to Instruction No. 1 to the extent it is inconsistent with the Discovery Schedule or the governing statute and regulations.
2. SoundExchange objects to Instruction No. 2 as overbroad, unduly burdensome, harassing, and oppressive to the extent it seeks information or documents from RIAA, which is not a participant in this proceeding and has not provided a witness in this proceeding. SoundExchange further objects to the instruction as overbroad, unduly burdensome, harassing, and oppressive to the extent it seeks information from the "attorneys, member companies, agents, employees, representatives" or anyone "directly or indirectly employed by or connected with SoundExchange, RIAA or [] Record Company," without limitation. There are thousands of Record Companies and the request to provide information in the possession of any of them is egregiously overbroad. Similarly, the instruction to produce information in the possession, custody or control of SoundExchange's attorneys and member companies or anyone "directly or indirectly employed or connected with SoundExchange" is overbroad, unduly burdensome and exceedingly vague. As a general matter, where applicable and except as otherwise indicated in response to a specific request, SoundExchange will search for and provide information from SoundExchange, the three major record companies at the corporate level, and the witnesses who submitted written direct testimony on behalf of SoundExchange.

3. SoundExchange objects to Instruction No. 3 to the extent it imposes upon SoundExchange any requirement to answer the Interrogatories “under oath.” The governing statute, regulations, and Discovery Schedule do not impose this requirement.
4. SoundExchange objects to Instruction No. 5’s request for a privilege log. The governing statute, regulations, and Discovery Schedule do not provide for the exchange of privilege logs. Creating a privilege log would be unreasonable and unduly burdensome within the very short discovery period provided in this proceeding.
5. SoundExchange objects to Instruction No. 7 to the extent it purports to require SoundExchange to guess as to the meaning intended by impossibly ambiguous language.
6. SoundExchange objects to Instruction No. 8 and Instruction No. 9 as overbroad and unduly burdensome to the extent they seek to impose obligations beyond those permitted by the Court's Discovery Schedule and the governing statute and regulations.
7. SoundExchange objects to Instruction No. 11 as overbroad and unduly burdensome to the extent that it is not limited to time periods reasonably related to the matters at issue in this proceeding. Except as otherwise indicated in response to a specific request, SoundExchange will search for and produce documents and information for the time period January 1, 2011 to the present.

Responses and Specific Objections

Interrogatory No. 1: Identify each agreement between a Record Company and a Digital Service entered into during the Relevant Period, or in effect during all or any part of the Relevant Period, indicating which ones were provided to Drs. Rubinfeld and Lys and which ones were not.

Response: SoundExchange incorporates all of its General Objections and Objections to Definitions and Instructions as if fully stated here.

SoundExchange further objects to this Interrogatory as overbroad and unduly burdensome, and because it seeks information that is not relevant to the claim or defense of any party and is not reasonably calculated to lead to the discovery of admissible evidence. There have been numerous agreements executed since January 1, 2009, between Record Companies and Digital Music Services, as those terms are defined in the Interrogatories. Many of those agreements are irrelevant to the issues in this proceeding, and it would be extremely difficult and time-consuming to compile a list of all of them. SoundExchange objects that the Licensee Participants have made no effort to limit this interrogatory to agreements relevant to this proceeding. SoundExchange also objects because this interrogatory seeks information for time periods not reasonably related to this proceeding.

SoundExchange also objects to the extent this interrogatory seeks information that is not in its possession, custody or control, or the possession, custody or control of any person or entity submitting written testimony in this proceeding.

SoundExchange further objects to this Interrogatory as overbroad and unduly burdensome as it seeks extremely detailed information that would be difficult or impossible to compile in the limited amount of time allowed by the Discovery Schedule and would needlessly increase the costs of this proceeding.

SoundExchange also objects to this interrogatory as overbroad and unduly burdensome to the extent that it is not limited to time periods reasonably related to the matters at issue in this proceeding.

Subject to and without waiver of these general and specific objections, SoundExchange responds as follows: SoundExchange has conducted a reasonable and diligent search to collect revenue information for each year since 2011 from the major record companies at the corporate level to the extent that they track revenue in the listed categories. *See* SNDEX0111010-SNDEX0111033; SNDEX0114986-SNDEX00115240; SNDEX00113693-SNDEX00114208; SNDEX0106867 – SNDEX0106868; SNDEX0118300- SNDEX0118302.

The record companies do not track all of the requested revenue categories and are providing information for those categories that they maintain in the ordinary course of business. For example, there is generally no way to track revenue from mobile vs. non-mobile downloads. Similarly, most of the record companies do not maintain records that are specific to each category of Digital Service.

Interrogatory No. 7: For each year from 2011 to the present, describe in detail the efforts and expenditures made directly or indirectly by Record Companies to promote, cause, induce, or encourage Digital Services or over-the-air radio broadcast radio stations, including those whose broadcasts are Radio Station Simulcasts, to perform sound recordings, including a description of each type of such activity (including album giveaways; artist visits to Digital Services or over the air broadcast radio stations; promotional giveaways other than albums; payments to third parties, including independent promoters; the activities and costs of in-house promotions personnel; and advertisements in industry publications, tip sheets, and other publications), including identification of the persons primarily responsible at each Record Company for such promotion, and a statement by year and by Record Company of the amount spent on each such type of activity. Your answer should identify and clearly distinguish among efforts and expenditures made in connection with over-the-air broadcast radio stations and different types of Digital Services.

Response: SoundExchange incorporates all of its General Objections and Objections to Definitions and Instructions as if fully stated here.

SoundExchange further objects to this interrogatory as unduly burdensome and duplicative because it requires SoundExchange to collect numerous categories of “detail[ed]” information from hundreds of record companies and labels, most of which are not participants in this proceeding. SoundExchange cannot reasonably obtain and describe this information in the time allowed by the Discovery Schedule and without needlessly increasing the cost of these proceedings. SoundExchange will respond to this interrogatory by providing information from

Sony, Universal, and WMG, and references to “Record Companies” in this response are to these companies.

Subject to and without waiver of these general and specific objections, SoundExchange responds as follows. As described in Response Nos. 15, 16, 29, 30, 57, and 58 to SoundExchange’s Responses to the Licensee Participants’ First Set of Requests for Production, SoundExchange is producing certain documents regarding the Record Companies’ expenditures in promoting artists or sound recordings.

SoundExchange also provides the following general description of the activities that the three major record companies have engaged in to promote or encourage Digital Services or over-the-air broadcast radio stations to perform sound recordings.

In general, when a Record Company released a new album, it created a coordinated marketing plan for that album and artist. That plan may have involved many components, including billboards, advertising in magazines, social media, interviews, live performances, and music videos. One of the many components of that marketing strategy may have been to promote a particular track from the album on terrestrial radio. The Record Companies have in-house promotion departments that promoted these tracks on terrestrial radio.

To encourage terrestrial radio stations to perform particular sound recordings, employees from the promotion department met with programming directors to provide them with information about the sound recordings and the artists. The promotion department also often provided programming directors with a copy of the sound recording or album. In some cases, the Record Company’s promotion person brought the artist and/or the artist’s manager to the meeting. And in some instances, Record Companies retained independent promoters.

From time to time, each Record Company sponsored contests on terrestrial radio, including album giveaways, concert ticket giveaways, and opportunities to meet artists. These contests were generally components of the Record Company’s coordinated marketing plan and were designed to promote audience awareness of the artist and his or her album.

Record Companies generally do not treat non-interactive Digital Services the same way they have treated terrestrial radio stations. On occasion, Record Companies have participated in marketing or advertising programs offered by non-interactive digital services.

With respect to on-demand Digital Services, Record Companies generally have not engaged in activities aimed at inducing or encouraging such services to perform sound recordings by their artists. Rather, Record Companies have engaged in marketing activities intended to encourage the users of such on-demand digital services to perform particular sound recordings. In addition, on occasion, Record Companies have negotiated with such services for banner advertisements, “front page” positioning on their website, and/or positioning on their playlists.

November 8, 2014

By: /s/ Glenn D. Pomerantz

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