Public Version

Before the
COPYRIGHT ROYALTY JUDGES
Washington, D.C.

In the Matter of ADJUSTMENT OF RATES AND TERMS FOR PREEXISTING SUBSCRIPTION SERVICES AND SATELLITE DIGITAL AUDIO RADIO SERVICES	)	Docket No. 2006-1 CRB DSTRA

PROPOSED REPLY FINDINGS OF FACT OF SOUNDEXCHANGE, INC.

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I. INTRODUCTION

1. The SDARS' Proposed Findings of Fact underscore the extent to which the case they presented at trial did not survive the trial process. The SDARS in their Findings thus are left to patch together bits and pieces of their opening and rebuttal cases, and by necessity spend an inordinate amount of time attacking SoundExchange's case rather than trying to defend their own. They do not succeed at either task.

2. At trial, the SDARS' proposed rate was based on two benchmarks – the musical works rate and the PSS rate. This Court rejected the musical works rate as a benchmark for sound recordings in its Webcasting decision, even before the opening hearings in this case began. And the PSS rate benchmark was thoroughly undermined at the trial. In their findings, the SDARS apparently now propose three pieces of "corroborative evidence," but each is flawed and was the subject of minimal to no testimony on the record.

3. At trial, and in their Findings, the SDARS spend a great deal of time and energy marshalling facts that they claim are relevant to their novel construction of the four statutory factors. As SoundExchange describes below, that construction is that everything the SDARS have ever done (along with some things they have never done) counts in their favor, while nothing the record companies or artists have ever done counts in their favor, so the SDARS win. In fact, in their view the evidence is so "one-sided" that the rate should be zero, or, for reasons they do not explain, "near zero." As we show in what follows, one problem with this theory is that it bears no relation to any reasonable construction of the four statutory factors. Another problem with this theory is that it bears no relation to the SDARS' own rate proposal or benchmarks. Although it took up much of their trial time, and much of their Findings of Fact,

the SDARS' four factor analysis does virtually nothing to help the Court set a rate under the four factors.

4. At trial and in their Findings, the SDARS attempt to make three thematic points. Unfortunately for them, the factual record fatally undermines all three points.

5. First, the SDARS consistently attempt to denigrate the contribution music makes to their services. In their view, their services may have started out as music services, but now music is a commodity, background filler content that can be equally well obtained in innumerable other places. What really makes their service valuable, they assert, is all of the other content they provide. They need to make this argument, because they pay substantial sums for non-music content, charge their customers substantial sums for the services, and do not want to give sound recording copyright holders anything like a commensurate share. But the evidence does not support these claims. By every measure, music is overwhelmingly the most valuable content on the SDARS' services. It is bad enough for the SDARS that SoundExchange's witnesses establish this point in ways the SDARS cannot rebut. It is fatal that the SDARS' own evidence and own experts time and again make the same point.

6. Second, the SDARS insist that their service is promotional, that the record companies and artists benefit by having their music played on the SDARS' service, and that any royalty the record companies and artists receive is just gravy. Here, too, the SDARS desperately need to make this point, because one of the fundamental purposes of the statute is to compensate the record companies and artists for lost record sales caused by listening to covered digital services such as the SDARS, and acknowledging such lost sales is not consistent with the SDARS "near-zero" rate proposal. Once again, however, the record evidence is all the other way, and once again, it is the SDARS themselves that provide much of the critical evidence.

Inconveniently, they have made the *substitution* effect of their services the centerpiece of their own advocacy before the FCC in support of their proposed merger. Thus, although the SDARS vehemently deny any substitution effect before this tribunal, in their submissions to the FCC this July they just as vehemently insisted that they substitute for other forms of consumption of music. As we show in what follows, the SDARS' own experts acknowledge that the royalty should at least cover the record industry's lost opportunity costs, and the SDARS have done nothing to rebut SoundExchange's evidence as to what that cost is.

7. Finally, unable to mount a case on the first two grounds, the SDARS retreat to a third: they are new, small, fragile and barely surviving, and they cannot afford a rate much above zero. This theme pervades their written Findings, starting with the very first sentence. *See* SDARS Proposed Findings of Fact ("FOF") at 1. But on this point all of the evidence is to the contrary. They may be new, but they are large, robust and growing, and their claims that they cannot afford to pay what would otherwise be a reasonable rate are not supported by the evidence. Instead, the record evidence establishes that the SDARS can afford to pay artists and record companies the same kinds of royalties, in relative terms, that they pay all of their other content providers, and can afford to pay royalties that compensate artists and record companies for the losses they suffer by having their music played on the SDARS' services.

8. For all of these reasons, and based on the empirical and economic facts set out in detail in SoundExchange's Proposed Findings of Fact, and the legal arguments set out in its Proposed Conclusions of Law, this Court should adopt SoundExchange's rate proposal.

A. The SDARS' Arguments To The FCC

9. The weakness of the SDARS' arguments are brought into dramatic relief by a document they filed on July 24, 2007, with the FCC in support of their proposed merger. Their

comments in support of the merger, entered into evidence as SX Trial Ex. 105, include a 103-page brief co-authored by Sirius's counsel in this case, and an 83-page economic analysis conducted by Charles River Associates, the firm at which Dr. Woodbury is a Vice-Principal. SX Trial Ex. 105 at 1, App. A.

10. The SDARS' merger filing contradicts key assertions the SDARS have made in this case. In this tribunal, the SDARS have insisted that their service is not substitutional for other forms of music; in the FCC, the SDARS have insisted that their service *is* substitutional for CDs and other forms of music. In this tribunal, the SDARS have argued that the value of music comes from the nationwide coverage, high fidelity, and music sequencing that they offer; in the FCC, the SDARS argue that these features are not valuable to consumers, who are simply seeking out music. Placing their competing statements next to each other illustrates the gap between the FCC SDARS and the CRT SDARS.

SDARS FCC FILING	**SDARS CRT FINDINGS OF FACT**
"[There is] substantial substitution among satellite radio and various other audio services and devices." SX Trial Ex. 106 at 37.	"[There is no] causal effect between listening to satellite radio and any decline in purchases [of CDs and music downloads]." SDARS FOF at 24 n.4.
"[W]hen people activate a satellite radio subscription, they substitute satellite radio programming for other audio entertainment to which they historically listened." SX Trial Ex. 106 at 37.	"There is no evidence of any correlation between time spent listening to SDARS and numbers of CDs purchased." SDARS FOF at ¶ 273.
"The number of individuals who travel often enough to demand ubiquitous radio coverage is very small." SX Trial Ex. 106 at 74	"The SDARS … enhance the range of creative expression … by broadcasting … in an uninterrupted manner nationwide." SDARS FOF at ¶ 125
"[Some satellite radio customers] do not care about variety or … prefer their own mix of	"Sirius programmers … enhance the listening experience on Sirius music channels." SDARS

songs." SX Trial Ex. 106, App. A at ¶ 69.	FOF at ¶ 374.
"[SDARS] Sports content from MLB, NFL, NBA, and NASCAR are also available on AM/FM ... the Internet ... [and] wireless phones." SX Trial Ex. 106, App. A at ¶ 53.	"Unique non-music content, including [the NFL]" is key to subscriptions. SDARS FOF at ¶ 78.

11. Over and over, in their merger advocacy at the FCC, the SDARS have squarely repudiated their positions in this Court on substitution, the value they bring to music, and other key points. It is understandable then that this filing was never mentioned by the SDARS in their written testimony, and that they have not referred to it in their findings.

B. The Four Factor Test

12. The SDARS' four factor analysis makes a mockery of the statutory test. The premise of the SDARS' arguments about each of the four factors is the same: They are entitled to have weighed in their favor every imagined "contribution" they have made associated with a factor since their inception over a decade ago, while the record companies are not entitled to any consideration for any contribution they have ever made, since they would have made the same contribution even in the absence of their licenses to the SDARS. As the SDARS put it, because the record companies distribute their product to many different services, and "played no role, and incurred no costs or risks, *in connection with the launch or operation of the SDARS*," SDARS FOF at 21 (emphasis added), SoundExchange scores zero on each of the statutory factors.[1]

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[1] *See also, e.g.*, SDARS FOF at 23 ("as the recording industry incurs no additional costs of any significance *in connection with satellite radio*, . . . there is no justification for a rate significantly above zero") (emphasis added); *id* at 26 (the record companies' creative "contributions are made independent of the SDARS and have been/would be made even if the SDARS did not exist . . . Hence, [for this and other reasons] this subfactor favors the SDARS"); *id* at 27 ("The recording industry has made no technological contributions *to satellite radio.*")

Carefully "weighing" all of the record facts under this meaningless test, the SDARS on this logic reach the conclusion that the royalty should be "near zero." When the SDARS call their own test "one-sided," SDARS FOF at 3, they are being modest.

13. One example of the SDARS' approach will suffice. The SDARS claim they should receive a "plus" in the "risk" subcategory on the theory that the FCC might not grant them licenses, even though the FCC granted them licenses over a decade ago. SDARS FOF at 27. In the same way, the SDARS generously give themselves full credit for designing "satellites, terrestrial repeaters, radio receivers, chipsets and miniaturized antennas," all of which innovation (such as it was) occurred well before the start of the last rate period. SDARS FOF at 26.[2] On the other hand, on the SDARS' logic, under the same risk subcategory the record companies should get no credit for the fact that nine out of the ten recordings they produced (and will produce in the future) will lose money for the record companies. Over and over again, on the SDARS' scoring system, on each benchmark score the SDARS hit a home run and the record companies strike out.

(emphasis added); *id* at 28 ("the record industry has received material benefits from satellite radio with no risk"); *id.* (the SDARS deserve credit for opening new markets while the record industry does not because "[a]ll of this has been accomplished without any *incremental* effort or expenditure by the recording industry") (emphasis added); *id.* at 29 (fourth factor favors the SDARS because "this proceeding will have [no] bearing on the long-term viability of the record industry").

[2] The record companies too have a prior history of promoting technological achievement and innovation, dating back almost a century, including such things as phonorecords, tape recorders, and all of the sophisticated technology that makes sound recording possible. The total amount of investment made by the SDARS since their inception may be "enormous" by some scale, SDARS FOF at 27, but relative to the total amount of investment made by the record companies since *their* inception it would be an insignificantly small number. The SDARS' incessantly backwards-looking construction of the four factors, if taken seriously, would tip the scales decidedly in favor of the record companies.

14. If that were the statutory test, the royalty would now and forever into the future always be zero, at least until the SDARS succeeded in driving out of business all of the services with which they compete that must pay for sound recordings in the marketplace. If that were the statutory test, there would have been no reason for Congress to pass a law giving the record companies a digital performance copyright in the first place. And, if that were the statutory test, there would have been no reason to have taken everyone's time over the last year developing a factual record to assist the Court in setting a rate.

15. Of course, that is not the test. To the contrary, the previous adjudicators construing section 801(b) have expressly rejected the SDARS' claim and uniformly have adopted the commonsense view that all record company contributions should be considered just as the statute says, even if the contributions did not benefit exclusively the SDARS. *E.g., 1980 Adjustment of the Royalty Rate for Coin-Operated Phonorecord Players* ("*Juke Box Decision*"), 46 Fed. Reg. 884, 889 (Jan. 5, 1981). *Determination of Reasonable rates and terms for the Digital Performance of Sound Recordings* ("PES I"), 63 Fed. Reg. 25394, 25406-07 (May 8, 1998); *Adjustment of Royalty Payable Under Compulsory License for Making and Distributing Phonorecords; Rates and Adjustment of Rates* ("*Phonorecords*"), 46 Fed. Reg. 10466 (Feb. 3, 1981).

16. The SDARS' approach also is inconsistent with how any economist (except the two economists retained by the SDARS in this proceeding) would understand how a business with multiple revenue streams assesses the value of one of those revenue streams. The SDARS' theory of the case reduces to the proposition that because the record company's cost to provide to the SDARS an additional copy of any of its sound recordings is near zero, near zero is what the royalty should be. If that were the general rule, it would quickly bankrupt the record industry,

and any other business that sells intellectual property. The SDARS do not get their Microsoft software for free even though Microsoft presumably could survive without the SDARS' payments to Microsoft, and even though Microsoft's creative contribution, risk, and so on presumably would be the same with or without the SDARS as a customer. Not a word in the four factors can plausibly be read to suggest that Congress intended to subject sound recordings to an unsustainable regime unknown in the larger economy made up of companies that sell intellectual property.

17. At the same time, no evidence supports the SDARS' claim that Congress created the statutory license "to promote the entrepreneurship demonstrated by the SDARS." SDARS FOF at 5. The SDARS go so far as to say the statute was designed to promote even the *non-music* content they provide over their service, as if Congress intended for the music industry to subsidize Howard Stern's availability in uncensored form across the country. SDARS FOF at 25. It is false that the SDARS "have developed a wide array of original entertainment, talk and news programming, much of it from scratch." *Id.* *See infra* Sections II.B, III.C.1. But even if it were true, it would be irrelevant to this case. To repeat, if Congress wanted to give the SDARS sound recordings for a "near zero" rate as a reward for their "entrepreneurship," or for their nationwide carriage of Howard Stern and Opie and Anthony, it would not have passed the statute in the first place. The license gave the record companies and artists rights they did not have previously, and imposed obligations on the SDARS they did not have previously.

18. Moreover, the SDARS do not establish that the economics of the record industry and of recording artists would be unaffected by the size of any conceivable royalty rate here. To the contrary, as the SDARS are quick to point out, because their revenues are so substantial, and because so many of their customers listen to so many sound recordings, any reasonable license

fee will generate over one billion dollars for the record companies and for artists over the term of the license (although much of that money will simply compensate the artists and record companies for lost CD sales caused by the SDARS themselves). Those revenues will directly and unquestionably increase incentives for the creation and dissemination of sound recordings. Dr. Woodbury's assertion that such substantial added revenue "would likely have an undetectable effect" on artist, record companies, and the supply of sound recordings, SDARS FOF at 22 (quoting Dr. Woodbury), is not supported by any record evidence, is contrary to common sense, and should not be credited.

19. Additionally, it is not the case that the record companies and artists' incremental costs of providing service to the SDARS is "near zero," even if that were the only relevant inquiry. Among the most important costs to consider here are opportunity costs – the losses that the record companies and artists suffer when their music is played by the SDARS. Even Dr. Noll acknowledged that under any reasonable application of the four statutory factors, the record companies and artists would need to recover at least their opportunity costs. Noll WRT at 19, 55, SDARS Trial Ex. 72; *see also* 8/16/07 Tr. 40:7-17 (Noll). Indeed, as SoundExchange demonstrated in its Proposed Conclusions of Law, recovery of record company opportunity costs was one of the principal concerns that led Congress to establish this statutory license. SX COL at ¶ 7.

20. The overwhelming weight of the evidence is that the record companies' lost opportunity costs here are substantial. The SDARS' own filings with the FCC acknowledge the "substantial substitution among satellite radio and various other audio services and devices," SX Trial Ex. 106 at 37, and substantial evidence in the record quantified the extent of these costs. Surveys by Dr. Mantis, XM and Sirius' own internal surveys, additional survey evidence

reviewed and relied upon by Dr. Pelcovits, and NARM survey evidence point to costs of approximately $1.29/customer/month. As SoundExchange shows in detail in what follows, the SDARS are just whistling in the wind when they claim there is "no credible evidence" of this substitution effect, and rely upon anecdotal evidence of a few bands writing thank-you notes to XM or Sirius for playing their songs for proof that the SDARS "may well increase sales of music," SDARS FOF at 24.

21. Yet another unacceptable feature of the SDARS' approach to the four factors is that even though for the most part their findings of fact nominally address the four-factor test, none of those facts or analyses have anything to do with the SDARS' actual rate proposal. All of the SDARS' four factor analysis points to a rate of zero, since, on the SDARS' accounting there is nothing on the record company side of the scale, whereas every action they have ever undertaken "counts" on their side. That analysis does not support the SDARS' benchmarks, and does not support the range of rates they actually propose in this case. To insist, as the SDARS do at length, that they "win" each of the four factors in the end does not help the Court decide what rate to apply.

22. Indeed, though the SDARS complain that SoundExchange has ignored the four factors because it relies on benchmarks, when it comes to proposing a rate, that is exactly what the SDARS themselves do, because it is virtually impossible to do anything else on the facts of this proceeding. Unless the Court grounds its decision here in the real world in which buyers' and sellers' interests are mediated by the markets as captured in actual market rates, no amount of analysis of the four statutory factors will yield a concrete rate. Therefore, unless the Court agrees with the SDARS that the rate should now and in the future always be zero, it has no choice but to look to the marketplace for guidance.

23. Remarkably, the SDARS in their Findings choose to ignore what SoundExchange has demonstrated about the true relationship between the four statutory factors and the marketplace evidence in the case. *See generally* SX COL at Sections II & III. Perhaps this is because the SDARS themselves were unable to identify any relationship at all between the statutory factors and the rates they proposed. The SDARS' repeated assertions to the contrary notwithstanding, SoundExchange did not "ignore the statutory mandate," SDARS FOF at 5, and did not mistakenly believe that this was a "willing buyer/willing seller" case. As SoundExchange demonstrates in its Proposed Conclusions of Law, the CARPs, the Librarian, and the courts all have uniformly adopted or referenced a construction of the four statutory factors that mirrors the economic understanding of the four factors set out by Dr. Ordover because, in Dr. Ordover's words, "simple and basic" economic principles governing pricing in intellectual property are "deeply consistent" with the words of Section 801(b). 8/27/07 Tr. 45:20 (Ordover).

C. The SDARS' Benchmarks

24. It is not surprising that the SDARS spend most of their Findings of Fact attacking SoundExchange's benchmarks, and virtually none defending their own. Their own benchmark analysis did not survive the trial.

25. Starting out, the SDARS barely had benchmarks at all. They pointed to a PSS rate of 7.25% of revenue, and then asserted that this rate supported their rate proposal of .88% of revenue – almost a full order of magnitude lower than their benchmark rate. A principal advantage of benchmarking is that it grounds analysis in real marketplace data and avoids the kind of result-oriented "analysis" that the SDARS found necessary to reduce their "benchmark" rates to the near zero levels they prefer. Benchmarks lose much of their usefulness when the

target market is so very different from the benchmark market that the main determinant of the resulting rate is the many contestable adjustments that experts have to make. That is exactly the case with the SDARS' benchmarks here.

1. The PSS Benchmark

26. The PSS benchmark was thoroughly discredited at trial and the SDARS have failed to resurrect it in their Findings of Fact. It was negotiated with a prior PSS rate (based on a musical works rate) in the background, and with a pending section 801 arbitration in the foreground. It is thus neither a market rate nor a section 801 rate. The SDARS did not establish what it actually is, or what dynamics it reflects.

27. SoundExchange's experts demonstrated that to the extent it is a "section 801 rate," it is one for a very different service negotiated at a very different time, and is of little use here in applying the section 801(b) factors.

28. On the other hand, treating it as a market rate, the PSS rate is an exceptionally poor benchmark. The royalty rate, both sides agree, ultimately should be a reflection of the value of the service to the user, and the value of the PSS service is so different than the value of the SDARS service that using one as a benchmark for the other (especially when no effort is made even to account for the radical difference in value) does not produce a meaningful result.

29. Dr. Woodbury tried to avoid this problem by assuming that music is a commodity product that has the same value no matter how it is enjoyed, so that the fact that the PSS service is essentially valueless becomes, in Dr. Woodbury's view, an irrelevancy. Unfortunately for Dr. Woodbury, the trial proved this assumption wrong as a matter of fact, and wrong as a matter of economic theory. As we show in what follows, in their Proposed Findings of Fact the SDARS fail to resurrect this benchmark.

2. The Musical Works Benchmark

30. The SDARS do not address the Court's previous rejection of the musical works rate. They simply ignore the Court's prior holding. There is no basis for the Court to reach any different conclusion here than it reached in the *Webcasting* decision. The record once again demonstrates that musical works royalties are not an appropriate or useful benchmark for sound recording royalties.

3. "Corroborative Evidence"

31. Because the SDARS' two offered benchmarks did not survive the trial, in their findings of fact for the first time they propose new "corroborative evidence" that was barely discussed or explained by any witness at trial.

32. The first is the current SDARS rate. That rate was negotiated pursuant to a written agreement between the parties that it would not be used as evidence in a future rate proceeding and was non-precedential. If the Court countenances the SDARS' violation of their agreement not to use the agreement as a precedent, it will make future voluntary settlements that much more difficult to negotiate. Moreover, contracting parties should be held to their word, and confidential, non-precedential agreements are by their very nature poor benchmarks. The Court therefore should decline to give any weight to the extremely limited evidence concerning this agreement that is in the record.

33. In any event, the actual terms of the agreement are not in evidence. The SDARS mischaracterize the rate terms when they claim they are percent of revenue rates. They are lump sum payment terms set in early 2003 at a time when the SDARS had barely commenced operations. It is not the case that when the parties negotiated the agreement they had any particular understanding about how those lump sum terms would translate into a percentage of

revenue calculation. SX Trial Ex. 125. It is not in the record whether the rates are the same for XM and Sirius. Nor is there any evidence on the record of the context in which the parties reached agreement, and no witness has testified as to whether the agreement would make an appropriate benchmark or not. What is known is that the agreement was entered into in 2003 at a time when XM and Sirius were just starting out, when Sirius, for example, had a mere 30,000 subscribers, and when the SDARS' prospects were uncertain at best. SX Trial Ex. 125 at 6. For many of the same reasons that apply when considering as a benchmark the PSS rate negotiated at approximately the same time, the prior rate is a poor benchmark – it is a black box, negotiated under very different economic conditions, and whatever the parties' concerns were that led them to agree to the rate that they did are unknown. Here, to boot, the actual rate itself is unknown, and no witness has endorsed its use as a benchmark.

34. Another piece of "corroboration" proposed by the SDARS for the first time in their Findings of Fact is one so-called "custom radio" agreement about which there is testimony– an agreement between Yahoo! and Sony that is not itself in the record. SDARS FOF at ¶ 855. There are an unknown number of other custom radio agreements about which there is no record evidence, and the entire category of "custom radio agreements" is intended to describe agreements that exist in a legal gray area between the statutory webcasting license and unregulated webcasting services that do not fit within that license. Because the record is bare about whether the one Yahoo!-Sony agreement upon which the SDARS belatedly rely is representative of this class of agreements, and for all of the other reasons set out *infra*, it is far too late in the day for the SDARS to attempt to introduce and rely upon this contract. Moreover, the one custom radio agreement that is in evidence shows royalties many multiples higher than the SDARS' rate proposal.

35. Finally, the SDARS embrace Dr. Pelcovits's use of non-music programming deals as a benchmark, though they claim that Dr. Pelcovits's analysis of those deals was marred with "conceptual and empirical flaws." SDARS FOF at 12. But as SoundExchange demonstrated in its opening Findings, and as it describes further in what follows, it is Dr. Benston's use of Dr. Pelcovits's data that is marred with conceptual and empirical flaws, and, properly analyzed, this approach powerfully supports SoundExchange's rate proposal, not the SDARS'.

D. The SDARS Did Not Establish That They Are Unable to Pay a Reasonable Rate; To the Contrary, the Evidence Establishes That They Can Pay.

36. Most of the SDARS' four factor analysis does not merit extended discussion. They simply marshal every effort and risk undertaken by the SDARS since their founding in 1990, and dismiss as irrelevant every effort and risk undertaken by the members of SoundExchange. How this is supposed to assist the Court in setting a rate they do not say.

37. The one point that merits attention is the SDARS' repeated claims that they cannot afford to pay an otherwise reasonable rate. This claim permeates their four-factor analysis: it is their principal reason for claiming that SoundExchange's rate is "unfair" under the second factor, why the rate assertedly fails to reflect the capital investment, cost and risk identified in the third factor, and, most of all, why the rate assertedly is disruptive under the fourth factor.

38. The first sentence of the SDARS' findings starts this drumbeat: They are small and struggling, while the record companies are large and successful; and, as if this proceeding were some kind of sporting contest, the Court should weigh in for the little guy. *See* SDARS FOF at 1. But this claim could not be more false and could not be more irrelevant.

39. First, the SDARS may be "still-developing," SDARS FOF at 1, but they are not small and "fragile, if improving" patients in an intensive care unit needing to be nursed back to health by the Court. *Id.* at 29. They are large, successful, growing companies. "To put real numbers to [the parties'] divergent positions," SDARS FOF at 2, the SDARS currently collectively will have over 2 billion dollars in annual revenue in 2007, and by their own account by 2011 they will have over $ [redacted] billion in annual revenue. Butson WRT at App. F, G, SX Trial Ex. 123. Over the course of the license period they likely will generate, conservatively, over $21 billion dollars in revenue. *Id.* During this rate period the SDARS will broadcast over 100 million songs[3] to a rapidly growing number of subscribers – currently about 17 million, anticipated to grow to over 32 million. *Id.* Using conservative assumptions, over the rate period there will be something on the order of 1,700,000,000,000 (1.7 trillion) songs listened to on XM and Sirius radio.[4]

40. As one would expect of companies with this extraordinary listenership, the SDARS pay substantial sums for content that by any measure is far less significant and valuable than music. Sirius pays Howard Stern over $[redacted] million. SX FOF at ¶ 578 and n. 24. XM pays [redacted] million to Major League Baseball. Woodbury WDT at 18, XM Trial Ex. 8. Fox News, just recently signed lucrative new deals with *both* SDARS for [redacted] million each, SX Trial Ex. 22 (Fox deal); SX Trial Ex. 70 at SX Exhibit 134 DR (XM Fox deal), even though the

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[3] The number is reached using the following calculation: 138 music channels (SDARS FOF at ¶ 97 (XM has 69 music channels); Blatter WDT at 7, SIR Trial Ex. 36 (Sirius has 69 music channels)) x 15.5 song/channel/hour (Pelcovits WRT at 16, SX Trial Ex. 124) x 24 hours/day x 365 days/year x 6 years.

[4] This number is reached using the following calculation: Average of 22 million subscribers (Butson WRT at App. A & B, SX Trial Ex. 123) x 15.5 songs/channel/hour (Pelcovits WRT at 16, SX Trial Ex. 124) x 14.4 hours of listening/week (Pelcovits WRT at App. A, at 1, SX Trial Ex. 124) x 7 days/week x 52 weeks/year x 6 years.

incremental cost of providing its service to the SDARS approached zero, and even though Fox News is not exclusive in any sense of the word.[5] These are not the expenditures of a "fragile" cash-starved start-up.

41. The SDARS' revenues keep rising at a substantially faster clip than their costs, which is precisely their business plan. Outside of this courtroom, the SDARS consistently say, in the words of Sirius CEO Mel Karmazin, that "our financial performance is on track, and we are executing very well on our business plan." SX Trial Ex. 74 at 2 (Karmazin).

42. Moreover, the SDARS did not prove that they are teetering on the edge of insolvency, and they did not prove that SoundExchange's rate proposal would be the proverbial straw that breaks the camel's back. In fact they did not even try to prove these things. The *only* thing they proved is that they have lost money in the past, reflected in an accounting metric called an accumulated deficit. But it was always part of their business plan that they would accumulate substantial losses as they started up. That phenomenon was not caused by the sound recording royalty, and it is not part of the statutory scheme that the sound recording royalty is supposed to be adjusted to allow this deficit to be retired on some schedule that was made up out of whole cloth by the SDARS uniquely for the SDARS' advocacy in this case.

43. Nor are the SDARS small and fragile in relative terms. As compared to the parties represented by SoundExchange, the SDARS earn more revenue than every single artist represented by SoundExchange. At approximately $5 billion *each*, their market capitalization dwarfs that of the only major free-standing record label, Warner Music, which has a market capitalization of $1.7 billion. *See infra* Section III.D.6. Their current revenues of nearly $1

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[5] The SDARS' claims that this can all be explained away by "branding" or "exclusivity" collapsed at trial under their own weight. *See infra* Section II.B.

billion each exceed those of all but a small handful of the record companies represented by SoundExchange. And while the SDARS (outside this Court) tout the fact they are growing at a faster pace than nearly any other consumer service in this Country's history, the record companies are stagnant at best. If this were a contest to determine which party is the most needy, the SDARS would not be winning.

44. But it is not such a contest. What the fourth factor says is that (to the extent possible consistent with implementation of the first three factors) the Court should strive to minimize disruption to prevailing industry practices or to the structure of the SDARS' industry. The SDARS failed to establish that the SoundExchange rate would be disruptive.

45. To be sure, the SDARS' finance expert Mr. Musey claimed that any rate above 5% would be disruptive. Musey WDT at 32-33, XM Trial Ex. 9. But he was quick to acknowledge on cross examination that what would be disrupted by such a rate was merely the expectations of the SDARS' stockholders, who have been told (no doubt by the SDARS themselves) to expect a 5% rate. 6/1/07 Tr. 197:14-198:1 (Musey). Mr. Musey supports his "stockholder disruption" claim with analytics. He shows, for example, that if the royalty rate increases to 10%, investors would have to be content with a 20% increase in their stock value. SX FOF at ¶ 1117-1125. This would "disrupt" their expectations, because they expected an even greater stock price increase. SX FOF at ¶¶ 1117-1125. Sirius's CFO David Frear admitted that he found Mr. Musey's analysis virtually meaningless and without any significance to Sirius' business. 6/12/07 Tr. 208:19-209:7 (Frear); SX FOF at ¶ 1167. Although Mr. Musey was their

sole finance expert at trial, and although this was his principal argument, the SDARS appear to have virtually abandoned it in their findings of fact.[6] The Court should do the same.

46. But the SDARS have no other substantial argument with which to replace it. Dr. Noll too offers quantitative analysis of a sort. He shows that based on certain assumptions about the growth of the SDARS the royalty rate can be manipulated such that the SDARS' accumulated deficit in 2006 would be the same as its accumulated deficit in 2012. In Dr. Noll's view, the royalty rate that accomplishes this result is approximately 6%. 8/16/07 Tr. 169:10-170:4 (Noll). Anything less, according to Dr. Noll, would "put the SDARS operators out of business." Noll WRT at 36, SDARS Trial Ex. 72. In their Findings of Fact the SDARS have updated Dr. Noll's calculations and concluded that even a zero royalty rate will leave the SDARS worse off in 2012 than they are at 2006. SDARS FOF at App. C. To make things right, the record industry actually will have to give the SDARS $ 2.2 billion. *Id.* Thus, by Dr. Noll's reasoning, unless the sound recording royalty is set to zero, and in addition the record industry is ordered to pay the SDARS $2.2 billion, the SDARS will be put out of business.

47. What Dr. Noll and the SDARS never explain is why the sound recording royalty should be used as a lever to assure that the SDARS recover "the correctly computed forward-looking cost of their physical capital across the license term" by 2012, SDARS FOF at 25, an accounting feat neither SDARS has ever accomplished over any period in its history. Dr. Noll's assertions to the contrary notwithstanding, the statutory factors do not call upon the Court to act

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[6] The SDARS devote a part of one paragraph to the argument, where Mr. Musey's conclusions are stated in parentheticals but not further commented upon. SDARS FOF at ¶ 787. Even there, the SDARS' erroneously state that Mr. Musey's conclusions touch upon the SDARS' "long-term viability." While Mr. Musey so stated in his written testimony, as the quoted parentheticals indicate, and as Mr. Musey acknowledged at trial, he was testifying solely about investor expectations, and nothing else. SX FOF at ¶¶ 1168-1180; 1205-1207.

as if it is some centralized planner in the bureaucracy of the Soviet Union in 1950, working out the details of the next "five year plan," assuring some financial result, based on the assumption that the world will come to an end in 2012. As Chief Judge Sledge observed when questioning Dr. Noll on just this point: "Well, your rates seem only one component and [a] relatively insignificant component of the future of satellite radio." 8/16/07 Tr. 81:21-82:2 (Noll). Dr. Noll agreed: "I think it could be." 8/16/07 Tr. 82:3 (Noll).

48. Contrary to the SDARS' claims, SoundExchange will not "cause the SDARS to incur hundreds of millions of dollars in cumulative net losses over the license term." SDARS FOF at 29. Cumulative net losses are a measure of a company's revenues minus its costs. The record companies do not "cause" the SDARS to have a certain level of revenues, and with the single exception of the sound recording royalty, they do not "cause" the SDARS to undertake expenses. Neither can or should the Court feel responsible for the SDARS' balance sheets or the management of their cumulative deficits.

49. Moreover, even if SoundExchange could somehow be blamed for not permitting the SDARS "to recover their forward looking cost of capital" in the 2007-2012 period – and it should not – it is not the case that such a state of affairs "would imperil the survival of the SDARS during the license term." SDARS FOF at 30. The SDARS have never in their history recovered their forward looking cost of capital, because they have not yet grown to a size that makes them profitable businesses. 6/6/07 Tr. 325:22-326:21 (Karmazin). Yet the SDARS have grown and prospered. It is the SDARS' future growth, and not the Court's rate decision, that will determine whether the SDARS ultimately will become a profitable enterprise. For all of their rhetoric, the SDARS' experts do not disagree with that point. *See infra* Section III.D.1.

50. At least Mr. Musey and Dr. Noll are offering quantitative analysis. That is more than can be said for any of the other SDARS witnesses. They were content to hurl pejoratives at SoundExchange's rate proposal. Repeatedly calling the SoundExchange proposal "confiscatory," SDARS FOF at 6, or worse, *see* 6/6/07 Tr. 310:20-22 (Karmazin); 6/5/07 Tr. 361: 3-10 (Vendetti); 6/12/07 Tr. 30:6-17 (Frear), does not make it so. These pejoratives are no substitute for empirical analysis, or data, or even documentary evidence suggesting that there is some reason to question the SDARS' ability to pay a rate at the level proposed by SoundExchange.

51. Moreover, it is not the case that the SoundExchange rate would "force [the SDARS] to take on additional debt or raise additional capital," SDARS FOF at 29-30, but even if it were otherwise, companies raise debt or capital all of the time, and that is not the same thing as being "disrupted." As Mr. Butson explained, even if one accepted every one of the SDARS' hypotheses about debt load (which the Court should not do), the result would be 10 million dollars of added interest payments each year for the SDARS. 8/27 /07 Tr. 278:8-279:10 (Butson). In the context of companies with billions of dollars of revenue, it is incredible to suggest that these added interest expenses would "gravely threaten the viability" of the SDARS. *Id. Compare* SDARS FOF at 30. Such relatively insignificant added interest expenses, even if they were to occur, also cannot possibly be what Congress meant by "disruptive."

52. Finally, both as a matter of fact and as a conceptual matter, Dr. Noll's misunderstanding to the contrary notwithstanding, SoundExchange's rate proposal does not "prevent services from ever recovering their start-up losses or past investments." SDARS FOF at 30. Under any royalty rate proposal – even the SDARS' near-zero proposal – the SDARS' cash flow and EBITDA continue to be negative for the first several years of the license period

before they turn around and become positive. If the SoundExchange proposal is adopted in full, the break-even may be delayed by approximately one year. After that, the SDARS become increasingly profitable, and their accumulated deficits ultimately begin to shrink. Dr. Noll expends substantial effort making the point that if SoundExchange was proposing a rule that the record industry should always take all of the SDARS' profit, and if that rule were "replicated in each license determination," *id.* at 30, no one would ever invest in the SDARS. That is no doubt true, but SoundExchange has not proposed that as a standard, or in fact, to take away all of the SDARS' profits in this rate term, and it has made no proposal whatsoever about how the Court should set the rate in 2012. Dr. Noll has erected a classic straw man.

53. Finally, if it really were the case that the SDARS cannot afford to pay a reasonable rate for all of the music they currently use – and it emphatically is not the case – under SoundExchange's alternative rate proposal they could simply purchase fewer sound recordings than the 100 million or so they would buy based on current purchasing practices. Although SoundExchange believes a percentage of revenue is a superior rate structure here, a per broadcast rate would be astraightforward market-based mechanism to control costs that is far more reasonable and consistent with the four statutory factors than the "near zero" rate the SDARS propose in their findings of fact.

54. The sum of the matter is that there is not a single sentence in the thousands of SDARS' factual findings providing record support for the proposition that SoundExchange's rate would disrupt anything other than possibly the expectations of the SDARS' stockholders.

55. For all of these reasons, set out in detail in what follows, the SDARS' Findings of Fact do not support their rate proposal, and if anything underscore SoundExchange's rate and the Findings that support it.

E. The Merger

56. Finally, a word must be said about the effect of the merger that Sirius and XM seek to undertake. As mentioned above, the SDARS filed a brief with the FCC in support of their merger this past July. In that submission, the SDARS told the FCC that it need not concern itself with conditioning the merger on the SDARS' paying a fair rate under the compulsory license because "the CRB is fully capable of adjudicating this [rate] dispute and of sorting out any relevant information from the merger." SX Trial Ex. 106 at 102 n.361. (SDARS' July 24, 2007 Merger Comments). One would have thought with that express declaration that the SDARS would have presented information to this tribunal about the merger's effect on this case. But instead, they have been silent on the issue, having conducted no analysis of the effect of SoundExchange's rate proposal on a merged SDARS. SX FOF at ¶ 1236.

57. That is not surprising, as the record evidence regarding the merger is devastating to their arguments of fiscal fragility (which are meritless in any event). SX FOF at ¶¶ 1233-1246. It is the SDARS' position, oft-repeated in public, but rarely before this tribunal, that the merger will occur. SX FOF at ¶ 1238. It is also the SDARS' position that the merger will yield $3 - $7 *billion* of cost savings spread throughout every aspect of the companies. SX FOF at ¶¶ 1241-44. These enormous cost savings swamp SoundExchange's rate proposal, and would be a boon to every line item of the SDARS' financial statements. In short, the merger takes any claim of disruption off the table.

58. As with their advocacy to the FCC contradicting other element of their case here, *see supra*, the SDARS cannot have it both ways on the merger issue. Having told the FCC to ignore the merger's effect on rates in this proceeding, the SDARS should not be allowed to run

from the issue in this Court. This Court should thus ensure that adequate provision is made for increased royalties in the event of a merger.

II. THE REALITY OF THE SDARS' EARLY HISTORY AND CHALLENGES

59. In Part IV of their Findings of Fact, the SDARS recount their history in developing and launching their services. SDARS FOF at ¶¶ 54-62 (Sirius), 96-103 (XM). They then proceed to describe their programming decisions and their asserted need to diversify their content offerings in order to attract and retain subscribers, and the critical role that non-music programming has played in growing their businesses. SDARS FOF at ¶¶ 63-95 (Sirius), 104-111 (XM). This discussion takes credit for risks that have passed long ago, overstates more risks, and grossly undervalues the role music plays in their service.

A. History of the Services and Initial Challenges

60. The risks and costs associated with acquiring the FCC license and launching their satellites all occurred nearly fifteen years ago and thus have little relevance in setting royalty rates for the upcoming five-year term, which runs from 2007 through 2012. SDARS FOF at ¶¶ 57, 99 (first steps in acquiring the FCC license was taken in 1990 for Sirius, and 1992 for XM). As Judge Roberts aptly recognized, the SDARS continue to raise these start-up costs and risks, and thus it is quite possible – indeed likely – that they will do so again in the next rate-setting proceeding in 2012, despite the fact that *20 years* would have passed since these costs were incurred and these risks overcome. 8/16/07 Tr. 83:5-87:2 (Noll). Such consideration – and reconsideration – time and time again does not lead to a rate that is at all "reasonable."

61. Moreover, as SoundExchange detailed in its findings of fact, the SDARS grossly overstate their technological innovation, as well as the alleged investments, costs, and risks they have made and taken since their inception. SX FOF at Section VI.C.4 & 5. SoundExchange will

not repeat all of those arguments here but rather refers this Court to is Findings of Facts, as well as *infra*, Section III.C. If this Court does decide to evaluate these past investments, risks, and costs – which it should not for the reasons previously stated – then it must do so based on an accurate assessment of the SDARS' contributions and costs, *see* SX FOF at Sections VI.C.4 & 5, rather than on the inflated presentation offered by the SDARS.

B. The Relative Values of Music and Non-Music Content

62. As SoundExchange established in its Findings of Fact, the evidence in this case overwhelming demonstrates that music programming – not talk, entertainment, sports, or news – is what attracts and retains subscribers. SX FOF at Section IV (discussing in great detail "the relative roles of music and non-music content). Yet, despite this overwhelming and uncontroverted record evidence, the SDARS attempt to argue – unconvincingly and without support – that their non-music programming is what drives their business. SDARS FOF at Section IV.A.2 & B.4. SoundExchange will not reiterate all of the myriad reasons why this is false. However, because the SDARS heavily rely on this mistaken belief about the alleged value of their non-music programming, a few highlights from SoundExchange's Findings of Facts are warranted in response.

63. Despite the SDARS' alleged rationales for "zero[ing] in on sports, talk and entertainment channels," SDARS FOF at ¶ 68, the record evidence in this case establishes that the more than a billion dollars the SDARS have spent to acquire such content have not provided the benefits in terms of attracting and retaining subscribers that music content has and continues to provide. The SDARS' own surveys demonstrate this point beyond cavil. SX FOF at Section IV.C (discussing SDARS' surveys). Forced to ignore their own course-of-business surveys in seeking support for the proposition that non-music content contributes valuable branding and

marketing benefits and leads to increased subscribers, they must instead to turn tables that they created during this litigation – tables that do not in any way prove a causal connection between the acquisition of any given content and the changes in subscribership. SDARS FOF at ¶ 72 & table and graphic, ¶ 78 & table. Despite these tables, the fact remains that the SDARS are unable to refute the extensive survey evidence showing quite the opposite: that music content – not talk, entertainment, sports, or news – is the most valuable programming content to the SDARS. *See* SX FOF at Section IV. *See also* SX Trial Ex. 52 at SX Ex. 125 DR, p. 16; Wind WDT, SX Trial Ex. 51; SX Trial Ex. 35 at 17; SX Trial Ex. 1 at 2, 24, 27; SX Trial Ex. 17 at 6, 10-12.

First, survey evidence presented by Dr. Wind shows incontrovertibly that music programming is the content that both attracts and retains the greatest number of subscribers to the SDARS. SX FOF at Section VI B. In response to a series of open-ended questions, respondents overwhelmingly cited music as the biggest draw, as well as the aspect of satellite radio that subscribers would most miss if it were gone. Wind WDT at 28, SX Trial Ex. 51; SX FOF at Figure 6, p. 116; Wind WDT at 35, SX Trial Ex. 51; SX FOF at Figure 7, p. 117. Likewise, the results of Dr. Wind's constant sums questions are equally revealing. When asked to allocate 100 points among different programming types in terms of the "relative importance of that type of programming to you and your family's decision to subscribe and retain your subscription to satellite radio," respondents overwhelmingly chose music programming as far and away the most important content type. Wind WDT at 37-38, SX Trial Ex. 51; SX FOF at Figure 8, p.119; Wind WDT at 37-38, SX Trial Ex. 51; SX FOF at Figure 9, p.119.

64. *Second*, the SDARS' own internal surveys unanimously demonstrate that music programming – not talk, entertainment, sports, or news – provides the greatest value to the service. That is presumably why the SDARS findings are bereft of any mention of these surveys.

As described in detail in SoundExchange's findings of fact, both Sirius's and XM's own consumer studies corroborate the survey results obtained by Dr. Wind. SX FOF at Section VI C. For example, Sirius's most recent Customer Satisfaction Monitor reveals that [[redacted]], the last month for which Sirius has provided data, cited music programming or commercial-free music – more than twice the number of people who cited talk and entertainment programming – as a reason for being interested in satellite radio. SX Trial Ex. 35 at 17. In addition, Sirius's most recent data demonstrates that music is the most appealing aspect of Sirius, with [[redacted]] of subscribers ranking music programming as what they liked most about Sirius, and [[redacted]] stating that commercial-free music was what they liked best. SX Trial Ex. 35 at 30. By comparison, in the second quarter of 2006, only [[redacted]] of subscribers stated that Howard Stern was what they liked most about Sirius, and only [[redacted]] stated that "sports" was what they liked most, and only [[redacted]] said that the NFL was what they liked most. *Id.*

65. Thus, while Sirius claims that the addition of the NFL directly led to massive subscriber growth that puts music to shame, SDARS FOF at ¶¶ 69, 72 & table at 54, 78, 79-84, its own survey evidence refutes this conclusion. Rather, the evidence reveals that for subscribers who activated Sirius between June 2004 and July 2005 – the first year of NFL programming – only [[redacted]] cited the NFL as the reason for subscribing to satellite radio, as compared to [[redacted]] that cited music programming and [[redacted]] that cited commercial free music. SX Trial Ex. 35 at 17; SX FOF at ¶ 377. Moreover, despite Sirius's claim that the NFL provided greater brand awareness, SDARS FOF at ¶ 78 & table, only [[redacted]] cited the NFL as their reason for choosing Sirius over XM in that same time period. SX Trial Ex. 35 at 18; SX FOF at ¶ 377. Likewise, in the second quarter of 2006 – the most recent time period for which Sirius has provided data –

only [ ] of subscribers cited "sports programming" as the reason for subscribing to satellite radio. SX Trial Ex. 35 at 17; 6/11/07 Tr. 28:7-13 (Cohen); SX FOF at ¶ 377. In fact, an internal Sirius email to Mr. Karmazin discussing Sirius's focus group research explained that [ ] SX Trial Ex. 29 at 1; SX FOF at ¶ 377. Thus, Sirius's own evidence outright refutes the position it presents in its findings of fact.

66. The same is true for XM, whose internal surveys consistently show that "[ ]" SX Trial Ex. 1 at 24; 6/5/07 Tr. 64:15-65:2 (Parsons), and it also ranks highest in [ ]. SX Trial Ex. 2 at 11; SX FOF at ¶ 378. Indeed, XM's surveys reveal that music programming is "the most important type of programming for all demographic groups, SX Trial Ex. 1 at 27; 6/5/07 Tr. 65:3-11 (Parsons), and that [ ] SX Trial Ex. 52 at Ex. 125 DR at p.16. *See also* SX FOF at ¶ 378. A slide from one of XM's own internal surveys (from September 2006) aptly captures the relative values of music and non-music content to the service. SX Trial Ex. 52 at SX Ex. 125 DR, p. 16; SX FOF p. 107. Though both XM and Sirius try to assert (unconvincingly) that sports programming provides tremendous value relative to music in terms of subscriber acquisition and retention, their own surveys show otherwise. In fact, even surveys specifically designed to determine whether the SDARS should acquire particular sports programming demonstrate the predominant importance of music content. For example, when Sirius was considering whether to carry NBA games, it found [ ]. SX Trial Ex. 52 at SX Exhibit 117 DR, at SIR0038898. And when XM was considering whether to continue to carry

NASCAR programming, it observed that [ ] SX Trial Ex. 52 at SX Exhibit 121 DR at XMCRB 00023792 (emphasis added); SX FOF at p. 135.

67. Thus, as the SDARS' own surveys make vividly clear, there can simply be no doubt that music – not sports, talk, entertainment, or news – is by far the most valuable content to both Sirius and XM, no matter how that value is measured.

68. *Third*, the SDARS' own experts support the contention that music ranks higher than all other programming types. For example, in calculating his "channel-attachment" index – an index designed to demonstrate the relative values of music and non-music programming, Woodbury WDT at 19, XM Trial Ex. 8 – Dr. Woodbury found that music programming provides [ ] of the value of the SDARS' programming offerings. Woodbury WDT at 20, XM Trial Ex. 8; 6/13/07 Tr. 90:21-91:2 (Woodbury). *See* SX FOF at ¶¶ 430-432. Likewise, Dr. Hauser's survey evidence confirms Dr. Wind's finding that music programming is more valuable than any and all of the other programming types. SX FOF at ¶¶ 410-414. In fact, his study confirms that losing music would have the greatest effect on subscribers' willingness to pay, that music is more valuable than all the other programming types combined, and that no matter how content value is calculated, music comes out far ahead. SX FOF at ¶¶ 410-414 & Figures 23-26.

69. *Fourth*, though Sirius attempts, through the table on page 54 and graph on page 55 of the SDARS Findings of Fact, to suggest a causal connection between acquisition of non-music content and subscriber growth, there are several more probable explanations for this subscriber growth that are unrelated to the addition of non-music programming content. For example, in February 2005 – a point in time in which Sirius depicts a spike in subscribership – XM announced that it was raising its monthly subscription fee from $9.99 per month to $12.95

per month, placing it on par with Sirius's pricing. 8/22/07 Tr. 238:12-240:10 (Karmazin). Although Sirius would like this Court to believe that a price increase by the only other satellite radio provider would actually disadvantage Sirius, 8/22/07 Tr. 245:9-19 (Karmazin), simple common sense says otherwise. Indeed, it is entirely possible, and in fact likely, that an increase in its primary competitor's prices, and not the addition of any particular non-music programming content led to the increase in subscribers depicted in Sirius's tables and graph. SDARS FOF at ¶¶ 73-78.

70. The SDARS themselves concede that it takes 3-4 years to get radios installed in automobiles and that Sirius did not even begin trying to do so until 1999. SDARS FOF at ¶ 672. Moreover, Sirius had problems with its chipset which delayed its growth. SDARS FOF at ¶ 62. The SDARS cannot reasonably blame music content for their small size in 2003 and 2004. Nor can they fairly claim that non-music content is a panacea.

71. *Fifth*, the SDARS demonstrate their knowledge that music is the key driver of their profitability by spending their most valuable currency on it – bandwidth. As XM explained in an internal presentation, their "Programming Resources [Are] Deployed Consistent with [Their] content Strategy," using [[redacted]] of their bandwidth for music. SX Ex. 120 DR, at 25. Although the SDARS regularly pre-empt other programming for sports events, they *never* preempt music channels. 6/7/07 Tr. 233:2-8 (Cohen). Music is just too valuable.

72. *Sixth*, the evidence refutes the SDARS' claim that this programming provides any kind of "exclusivity" or "branding" value to the businesses. SDARS FOF at ¶¶ 68-69, 75-84, 89-94, 105-110. In terms of exclusivity, as SoundExchange elaborates in great detail in its Findings of Fact, most of the non-music programming that the SDARS claim is exclusive is in fact not exclusive in any real sense. SX FOF at ¶¶ 462-464. For example, the NFL programming that

Sirius broadcasts is no different from programming football fans can receive through other media. Fans can "get radio broadcasts" of NFL games "on NFL.com[,]" and can get "network broadcasts of the NFL games" through DirecTV. 6/7/07 Tr. 348:11-16 (Cohen). In fact, within the NFL contract itself, there is no legal barrier preventing terrestrial radio or new digital media from broadcasting every NFL game. SX Trial Ex. 36. Likewise, NASCAR fans can listen to NASCAR races on terrestrial radio, as well as through NASCAR.com's TrackPass, 6/11/07 Tr. 20:2-21:12 (Cohen), while MLB games are available from numerous outlets, 6/6/07 Tr. 107:14-108:22 (Cook). The same holds true for Martha Stewart and Fox News programming. SX FOF at ¶¶ 463-464. Indeed, the Fox News channels for which XM and Sirius each pay significant sums are both non-exclusive to each other and simply re-broadcasts of Fox News' TV programming. Herscovici WRT at 25-26, SX Trial Ex. 130; *See also* SX FOF at ¶¶ 463-64.

73. With respect to the alleged "brand value" the SDARS claim derives from their non-music programming, though the SDARS attempted in rebuttal to develop a three-pronged presentation of this value, their attempt failed to make the point. None of the three branding experts that testified for the SDARS provided any reliable evidence from which to draw any sort of conclusion concerning the alleged brand value of non-music content. Indeed, the record is devoid of any credible and reliable evidence that this asserted "branding" had any causal effect on subscriber growth. Sirius's own "Brand/Ad Tracker" survey shows that in the third quarter of 2005 - long after the major sports deals were signed, and a year after the Stern deal was announced - Stern was mentioned [redacted] SX Trial Ex. 84 at SIR00018174; SX FOF at ¶ 484. Thus, rather than proving that the non-music content provides any kind of "brand value" to the SDARS, the record instead strongly supports the fact that it has

been, and continues to be, the music programming – not the so-called "branded" non-music programming – that contributes the most to the SDARS in terms of subscriber acquisition and retention.

III. THE SDARS' STATUTORY FACTOR ANALYSIS IS REFUTED BY THE EVIDENCE.

74. In their proposed findings of fact, the SDARS advocate for a novel and unsupportable interpretation and application of the statutory factors that finds no support in the evidentiary record and is foreclosed by the controlling statute and *all* past precedent. In reaching this absurd result, however, the SDARS grossly mischaracterize the record and apply the facts in a way that turns the statutory objectives and the very purpose of copyright law on their heads.

75. It is worth noting at the outset that, despite their rhetoric painting themselves as the champions of § 801(b), the SDARS make almost no use of the statutory factors in arriving at their proposed "near zero" rate. Rather, they begin with two inherently flawed benchmarks, and then make a series of untenable adjustments that they admit have nothing whatsoever to do with the statutory factors. Woodbury WDT at 27-41, XM Trial Ex. 8. Using these expressly non-statutory adjustments, Dr. Woodbury arrives at his unprecedentedly low proposed range of between 0.88% of revenue and 2.35% of revenue. *Id.* at 41.

76. As discussed below and in more detail in SoundExchange's Reply Conclusions of Law, the statutory factors cannot be understood to compel a "near zero" royalty rate. Rather, application of the § 801(b) factors to the evidence in the record yields a royalty rate, such as that proposed by SoundExchange, that begins at 8% of revenue (whether expressed as a percentage of revenue or a per performance rate) and increases as a percentage of revenue as the SDARS

increase their subscribership. Such a rate would advance all of the statutory factors and would be decidedly below a market rate for most, if not all, of the term of this license.

A. Factor 1: The SDARS' Application of the First Factor – Maximizing the Availability of Creative Works – Is Plain Wrong.

77. Section 801(b)(1)(A) seeks to "maximize the availability of creative works to the public." Previous tribunals have concluded that the principal way to achieve this objective is to assure that copyright holders are fully compensated for their creative efforts and continue to be incentivized to create additional works. *See, e.g.*, *Phonorecords*, 46 Fed. Reg. at 10479 (the first factor is to provide "an economic incentive and the prospect of pecuniary reward" for the copyright owner's "creative efforts"); *1980 Adjustment of the Royalty Rate for Coin-Operated Phonorecord Players* ("*Juke Box Decision*"), 46 Fed. Reg. 884, 889 (1981) (holding that "reasonable payment for jukebox performances will add incrementally to the encouragement of creation by songwriters and exploitation by music publishers, and so maximize the availability of musical works to the public"). As the Supreme Court has recognized – and the Librarian has affirmed – the goal of maximizing the availability of creative works "is achieved by allowing the copyright owners to receive a fair return for their labors." *Twentieth Century Music v. Aiken*, 422 U.S. 151, 156 (1975) ("The immediate effect of our copyright law is to secure a fair return from an author's creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good."); *PES I*, 63 Fed. Reg. at 25406. *See also* Navarro WDT at 9, SX Trial Ex. 63.

78. Nevertheless, the SDARS' approach is that the first statutory factor is best served by a rate that is "as low as possible, as lower rates lead to lower prices to consumers" so that the copyright *users* can disseminate and use more creative works as cheaply as possible. SDARS

FOF at ¶¶ 156, 168-169. That application turns the statute and every decision interpreting it on their heads. The Librarian has rejected this approach outright. *PES I*, 63 Fed. Reg. at 25406. As the Librarian has explained, "past CRT precedent and case law" make clear that the first statutory factor is about "stimulating the creative process." *Id.* "The positive interplay between compensation and creation is a basic tenet of copyright law, and as such, its contribution to stimulating the creation of additional works cannot be set aside lightly." *Id.* (discussing the first § 801(b) factor). Indeed, any other interpretation would be antithetical to the very purpose of the copyright laws. As the Supreme Court has recognized, "[t]o propose that fair use be imposed whenever the social value [of dissemination] . . . outweighs any detriment to the artist, would be to propose depriving copyright owners of their right in the property precisely when they encounter those users who could afford to pay for it." *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 559 (1985) (internal quotation marks and citations omitted). As the Court noted, the result of privileging those who disseminate over those who create is that "the public [soon] would have nothing worth reading." *Harper & Row*, 471 U.S. at 559 (internal quotation marks and citations omitted); *see also Eldred v. Ashcroft*, 537 U.S. 186, 206 (2002) (copyright protection aims to "provide greater incentive for American and other *authors* to create and disseminate their work") (emphasis added); *id.* at 206-07 (extending copyright terms was an effort to "encourage copyright *holders* to invest in the restoration *and public dissemination* of their works").

79. Accordingly, the Librarian concluded in the *PES I* decision that evidence of a *service's* method of disseminating creative works could be relevant to the first factor only to the extent that it shows "how the creation of a new mode of distribution will itself stimulate the creation of additional works." *PES I*, 63 Fed. Reg. at 25406. The SDARS have barely even

attempted to show this here. Out of their 48 paragraphs dedicated to the first statutory factor, SDARS FOF at ¶¶ 123-170, in only 3 do they argue that their for-profit *use* of copyrighted sound recordings stimulates the creation of additional creative works by promoting music and driving demand for the artists' works. *Id.* at ¶¶ 145-147. The problem with this, of course, is that there is no evidence to support it. Certainly, the SDARS cite none other than the unsupported theoretical assertions of their economists. *Id.* Aside from their own self-serving statements, they have produced no reliable evidence that their services in any way promote the sale of recorded music or drive its demand. Indeed, as SoundExchange has shown, *all* the record evidence from both SoundExchange as well as the SDARS shows that the opposite is true – that the SDARS' services substitute for and decrease sales of recorded music. *Infra* Section III.B.3; SX FOF at ¶¶ 669-725.

80. There is only one way to "stimulate the creation of additional works," *PES I*, 63 Fed. Reg. at 25406. That is to pay the creators. *Id.* ("The positive interplay between compensation and creation is a basic tenet of copyright law, and as such, its contribution to stimulating the creation of additional works cannot be set aside lightly.") (discussing the first 801(b) factor).

81. The SDARS' theory that "availability of works to the public will be maximized if rates are as low as possible, as lower rates lead to lower prices for consumers," SDARS FOF at ¶¶ 156, 168-169, is also wholly unsupported factually. There is nothing in the record to suggest that the SDARS would actually lower prices to consumers if the sound recording rate was zero or near zero. The SDARS have no history of offering lower rates to consumers to date. Moreover, the SDARS' own witness – Mr. Musey – indicated that the prudent thing for the SDARS to do

would be to give any additional money resulting from lower royalty rates to their shareholders. Musey WDT at 29-32, XM Trial Ex. 9.

82. Unable to point to any record evidence that their services stimulate the creation of additional works, the SDARS instead catalog a litany of their alleged creative contributions that are legally and factually irrelevant.

83. First, they tout the ability of their satellite signals to reach a nationwide audience with a high quality digital audio experience. SDARS FOF at ¶¶ 126-128. They do not even claim this in any way stimulates the creation of additional creative works. They claim instead merely that it makes music available nationwide. Nor is it factually much of a contribution at all. Every digital service in existence is nationwide in its reach, as is terrestrial radio. Indeed, the SDARS made this point themselves – the exact opposite of what they have told this Court – to the FCC in support of their merger. There, unlike here, they argued that national coverage was common. SX Trial Ex. 106, Ex. A at ¶ 62. There, unlike here, they argued that no one cares much about it – "very few potential satellite radio subscribers actually travel around the country enough to justify paying $13 per month for radio service. This product characteristic might be highly salient for long distance truckers, but less important for most others." *Id.*; *see also id.* at ¶ 65 (arguing that "many" of their subscribers do not have a strong preference for high sound quality). They even went so far as to argue that the commercial free aspect of their music service is nothing new or special – consumers who value having their music commercial free have plenty of alternatives to satellite radio including CDs, downloads, subscription services and 1350 commercial free radio stations throughout the country. *Id.* at ¶ 64. This feature – nationwide coverage – also receives very low ratings in the SDARS' internal surveys. SX Ex. 115 DR, at 14 (showing that programming is the key attribute, not features such as nationwide coverage).

84. Second, the SDARS argue that they play many niche genres of music that are not heard anywhere else. SDARS FOF at ¶¶ 129-147. Once again, this is merely about copyright users disseminating creative works for profit. It has nothing to do with contributing to the *creation* of more copyrighted works. As discussed above, there is no evidence that the SDARS' playing of so much music not heard anywhere else (whether by celebrity disc jockeys or anyone else) promotes sales in other retail channels. Rather, it is merely another form of consumption that substitutes for other forms (such as CDs on which all music available) that otherwise would compensate the artists and record companies with fair rates of return. *Infra* Section III.B.3; SX FOF at ¶¶ 669-725; 6/26/07 Tr. 127:1-128:1 (Kushner); 6/26/07 Tr. 154:1-13 (Kushner). It also shows that the SDARS have built their business on their ability to broadcast truly massive amounts of SoundExchange's sound recordings and that they are rewarded for that use in the market place with billions of dollars in revenues.

85. In any event, the SDARS again are making arguments to this tribunal that they have disavowed to the FCC. In their filing before that agency, the SDARS submitted an economic analysis that contends that many listeners "do not care about variety [or] music programmed by others," in an effort to argue that SDARS compete with CDs and MP3s, and other forms of non-programmed music. SX Trial Ex. 105, Ex. A at ¶ 69.

86. Third, in a scant three paragraphs, the SDARS claim credit for making their own original music content available. SDARS FOF at ¶¶ 148-150. They claim, for example, that "artists have recorded a total of some 8200 tracks in XM studios." SDARS FOF at ¶ 148. As a threshold matter, this is the *artists* contribution, not XM's. In any event, a total of 8200 sound recordings equals about 600 hours of programming. The SDARS broadcast approximately three times that amount of SoundExchange's sound recordings *every single day*. Likewise, XM's

Artist Confidential has totaled about 50 hours, and the other live performance shows even less. SDARS FOF at ¶ 401. Even if this somehow were relevant to the first statutory factor – which it is not – it would be *de minimis*. Nor is there a shed of evidence in the record indicating that the SDARS' subscribers care about or value these shows at all. Indeed, the SDARS' own evidence indicates that live music programming and DJs are at the bottom of the list of attributes that subscribers like about Sirius. SX Ex. 115 DR, at 47.

87. The SDARS also claim that they deserve a lower rate under the first statutory factor because they have helped to create a handful of CDs. SDARS FOF at ¶ 150. They do not explain, however, why this is remotely relevant to the rates they should pay SoundExchange for the use of the 2.5 million sound recordings in XM's library – virtually all of which are the results of the creative labors of artists and record companies represented here by SoundExchange.

88. Fourth, the SDARS try to take credit under the first statutory factor by pointing to the non-music content they broadcast. SDARS FOF at ¶¶ 151-155. They fail to explain how this would have anything to do with stimulating the creation of sound recordings, or even with their own irrelevant theory of maximizing the *dissemination* of sound recordings. The statutory license does not exist to give the SDARS low rates for sound recordings so they can spend more on non-music content. Moreover, to the extent that the SDARS are purveying "exclusive" content, giving the SDARS more money purchase such content away from terrestrial radio – as Sirius did with Howard Stern – means that fewer people – not more – actually receive the programming.

89. Finally, the SDARS suggest that higher rates will not lead to the creation of more creative works. SDARS FOF at ¶¶ 163-169. As an initial matter, it is the fundamental premise underlying and animating all of copyright law that there is a direct correlation between

compensation and the production of creative works. *See* SX COL at ¶¶ 32-37. The record confirms that that same principle is true here as a matter of fact, as the following testimony from Mr. Kushner makes plain:

> Q: Now how does the rate that's being set in this proceeding fit into the overall digital business model that Atlantic and Warner?
>
> A: Well, the ability of the record business to be able to create a robust digital future isn't solely dependent on iTunes and Rhapsody and Napster. It's dependent on our ability to get properly compensated for all of the other places where our music is being exploited in the digital sphere and that would certainly include satellite radio.
>
> Q: What's the relationship between the compensation you receive and your creative output?
>
> A: The relationship is direct to a point which is that if in a particular year our sales are down, our income is down, when we go to do our budgeting for the following year, there won't be as much money made available to us for A&R investment or for marketing investment. So we'll have to sign fewer artists and put out fewer records.

6/26/07 Tr. 122:9-123:11. This point is confirmed by basic economics, as well as repeated testimony by multiple witnesses. SX FOF at ¶¶ 781-788; 6/18/07 Tr. 110:9-111:3 (Eisenberg); Chmelewski WDT at 3, SX Trial Ex. 64; *Id.* at 11-12.

90. The SDARS' claim that any revenue from the statutory license is "incremental" is both belied by the sums in controversy here (the difference between the two rate proposals) and the law itself. As the CRT has previously held, incremental revenue does stimulate creation, thereby maximizing the availability of copyright works, and sound recording copyright owners are entitled to fair compensation not only from other revenue streams, but also from this one. *Jukebox CRT*, 46 Fed. Reg. at 888-89.

B. Factor 2: A Fair Return to Copyright Owners and a Fair Income to the Copyright User

91. The SDARS go to great lengths to argue that a near zero royalty rate provides a fair return to copyright owners, and that a rate can only provide a fair income to the SDARS if it ensures that no matter how much the SDARS spend on other content and other parts of their business, the SDARS will have positive net income by the last year of the last term. SDARS FOF at ¶ 195-200. As discussed in more detail in SoundExchange's Reply Conclusions of Law, the SDARS' analysis of the second statutory factor is infected with multiple errors of law that render the discussion in their proposed Findings of Fact wholly irrelevant.

92. At bottom, the SDARS' argument presents a basic choice – is a rate that provides a "fair return" to the copyright owner and a "fair income" to the copyright user more likely to be one that is relatively consistent with (though not identical to) rates that would be negotiated in the free market, or one that is near zero because the SDARS have already spent all of their spare cash on less valuable non-music programming and have an accumulated deficit. As discussed in SoundExchange's Reply Conclusions of Law and below, the SDARS' arguments are foreclosed as a matter of law and fact.

1. The Second Statutory Factor Compels Consideration of Marketplace Rates

93. Prior decisions interpreting the second factor have all concluded that it requires consideration of marketplace analogies and is best satisfied by a marketplace rate. SoundExchange COL at Section IV.B; SoundExchange RCOL at Section V.B. As Dr. Ordover and others have explained, the market itself is the best measure of fairness. Ordover WRT at 25-26, SX Trial Ex. 61. Even Dr. Noll appears to concede that a marketplace rate in a workably competitive market is in the range of fairness. SDARS FOF at ¶ 180.

94. As discussed in more detail in what follows, SoundExchange has provided the Court with numerous marketplace benchmarks, which show both what copyright owners and performers earn in other analogous markets and what the SDARS themselves are willing to pay for far less valuable content. SX FOF at ¶¶ 305-13. In contrast, the SDARS expressly do not rely on benchmarks, market-based or otherwise, to establish fairness. SDARS FOF at ¶ 867. Even so, the SDARS recognize that a rate agreed to by the parties to a voluntary negotiation is likely to be "fair" within the meaning of the statute, SDARS FOF at ¶ 867, thus tacitly conceding that market-based rates provide evidence of fairness.

95. The SDARS argue that any rate above zero would be a "windfall" for copyright owners and performers because record companies would still make sound recordings and disseminate them in other markets if they received nothing from the SDARS. SDARS FOF at ¶¶ 180-82. That argument is both wrong as a matter of law and inconsistent with the record in this proceeding.

96. As discussed in more detail in SoundExchange's Reply Proposed Conclusions of Law, prior tribunals have repeatedly rejected the arguments the SDARS make here, including the suggestion that, because record companies and performers have other income streams, they should not be compensated above a zero rate for the statutory license. *Jukebox CRT*, 46 Fed. Reg. at 889 ("We reject the contention that copyright owners are paid for jukebox performances by mechanical royalties derived from record sales. We recognize that performing rights are distinct from recording rights. The Congress has determined that copyright owners are entitled to be paid reasonable fees for both.").

97. Thus, the SDARS' conjecture (supported by no testimony at all) that the record companies are already receiving a competitive return on investment is irrelevant. SDARS FOF

at ¶¶ 228-36. But even if it were relevant, the evidence in the record demonstrates that the record companies today and in the future will earn a competitive return on investment only if they receive significant revenues from services, such as the SDARS, that are making a massive use of sound recordings and are replacing other forms of consumption of sound recordings. SX FOF at ¶ 1247-1254. A fair return on the rights at issue here is not reduced because the revenues are "incremental"; all record company revenues can be labeled "incremental." To the extent that they have not had a big impact on record companies to date (SDARS FOF at ¶¶ 232-35), that is because the SDARS have been small and have paid very little to date, not because the revenues are not today and will not in the future be necessary income for the record industry. SX FOF at 146-55. Indeed, as Mr. Kushner testified, the division of digital revenues including from public performances by the SDARS are an increasingly important issue in negotiations between record companies, artists, and managers. 6/26/07 Tr. 156:15-157:12 (Kushner).

98. The SDARS argue at length about the record companies manufacturing, distribution, and marketing costs – conceding that record companies spend billions of dollars each year, far in excess of what the SDARS spend, on creating the sound recordings that the SDARS use – but to what end is unclear. SDARS FOF at ¶¶ 219-22. If dollars spent are the measure on this statutory factor (and they should not be), the record companies would win, hands down. *See* SDARS Trial Ex. 14 (SONY BMG financials) (showing total investment exceed [■■■] billion in 2006); SDARS Trial Ex. 35 (WMG 10-K) (showing total investment exceeding [■■■] billion in FY 2005); Ciongoli WDT at 2, SX Trial Ex. 67 (showing UMG's investment of [■■■] billion in 2005).

99. It is ironic that after claiming credit for virtually every expense that the SDARS have ever made, they would challenge as irrelevant Universal Music Group's expenditures on

marketing, manufacturing, distribution and overhead. SDARS FOF at ¶¶ 218-222. The SDARS claim that such costs are irrelevant because, as they see it, they are not related to creating sound recordings. *Id.* That claim misses the entire point of Mr. Ciongoli's testimony. With respect to marketing, for example, Mr. Ciongoli explained that "in the recording industry, 'marketing' does not refer simply to the marketing of our CDs and other physical products. Rather, it is a much broader concept that is best thought of as 'marketing' our artists to their target audiences, turning new songs and albums into 'hits,' and turning new recording artists into 'stars.'" Ciongoli WDT at 5, SX Trial Ex. 67. Marketing is thus a multi-faceted – and enormously expensive and risky – undertaking on the part of the record companies to popularize sound recordings with their target audiences. *Id.* at 2-3. And it is precisely that popularity on which the SDARS trade. Their services are popular because their subscribers want to hear the music that the artists have created and the record companies have popularized.

100. Thus, Mr. Ciongoli emphasized that "it is important to note that virtually all of the costs that I discuss are directly or indirectly necessary for the satellite radio services ("SDARS") . . . to have the sound recordings they use to attract subscribers to their services. Even costs associated with our physical sales fall in this category: without the revenues from physical sales, we would not be able to finance the production of new sound recordings or the associated marketing needed to create new popular music." *Id.*

101. In the end, these arguments about who has spent more provide little assistance in evaluating the second factor. This statutory factor requires consideration of what record companies and artists would ordinarily receive in a free market for similar rights and what the SDARS themselves freely pay for other, less valuable content. A rate that comports with those measures necessarily would be one that provides both a fair return and a fair income.

2. The SDARS' Concept of a "Fair Income" Is Actually a Guaranteed Profit

102. The SDARS argue that the second factor requires the setting of a rate that ensures that the SDARS receive a fair return on all of their investments, no matter what those investments are and no matter their time horizon, within the period of the license. They then look at the SDARS' projected net income, and, based the SDARS' revisions to Dr. Noll's analysis, argue that even at a zero rate, the SDARS will not have net income at the end of the period. SDARS FOF at ¶¶ 183-204. Thus, they claim, a near-zero rate is required.

103. Once again, the SDARS are promoting a false metric to the Court. There is no rate that the Court could set – other than one in which SoundExchange paid the SDARS – that would satisfy the SDARS' made-up criteria. That does not suggest that the SDARS are "fragile" – it merely demonstrates that the metric that the SDARS have provided to the Court has no value whatsoever. Indeed, by the standard that the SDARS have established, none of their agreements for non-music content would offer them a "fair return" because each causes one of the SDARS to expend more money during a period when the SDARS already have no net income.

104. As the Court has repeatedly noted, sound recordings are just one of many costs that the SDARS have and the impact of sound recording royalties is but one piece that affects the SDARS' bottom-line. 8/16/07 Tr. 77:20-82:2 (Noll). It is not the role of the second statutory factor to require that copyright owners and performers to effectively pay for every dollar the SDARS may choose to spend on other things. Indeed, the SDARS' interpretation of the second statutory factor is a "guaranteed profit" standard, not a "fair income" standard. The SDARS appear to concede as much. SDARS COL at ¶ 135 (discussing a "'profitability' standard of fairness").

105. As discussed in more detail in SoundExchange's Reply Conclusions of Law, no prior tribunal has ever suggested the interpretation advanced by the SDARS here, and all prior tribunals have found that the second statutory factor points to marketplace rates. SX COL at ¶ 43. Indeed, contrary to the SDARS' suggestion that their payment of marketplace rates for everything else in their businesses means that they have nothing left over to pay sound recording royalties, courts have regularly found that the fact that copyright users pay marketplace rates for all of their other inputs counsels against moving away from a marketplace rate when applying the § 801(b) factors. *Jukebox CRT*, 46 Fed. Reg. at 889 ("The jukebox industry pays reasonable market prices for all other goods and services they require.").

106. The flaws in the SDARS' claimed metric become even more apparent when one views the repeated statements of the SDARS' own witnesses in this proceeding and the SDARS themselves in their merger filings before the FCC. The SDARS emphasize that they are in business to earn returns in the long-run, investing large amounts today and into the future and perhaps even pricing below levels that they otherwise could, in order to build their subscriber base and earn very significant revenues in the future. SDARS FOF at ¶ 186 ("The nature of the satellite radio business is such that the SDARS had very high up-front costs with the possibility of very large incremental returns in the future."); SX Trial Ex. 106 at Ex. A, ¶ 77, 81, 118 & App.

107. Because the SDARS' "guaranteed profit" standard has no basis in the law, the SDARS then argue that the second statutory factor requires the Court to set a rate that will satisfy the SDARS' investors, whom Mr. Musey claimed would be disappointed if the sound recording royalty rate resulted in a delay in the SDARS becoming free cash flow positive (which the SDARS claim is the "metric that most closely translates into return on investment," SDARS FOF

at ¶ 209) by a single year – which is all that SoundExchange's rate proposal would do. SX FOF at ¶ 1102. Mr. Musey even argues that the Court must concern itself with investor "psychology" because investors may have doubt on "current management's credibility and/or ability to project their results." SDARS FOF at ¶ 210.

108. Mr. Musey's analysis fails on multiple grounds. First, as discussed in SoundExchange's Proposed Conclusions of Law, Mr. Musey's claim that the Court should ensure that the target stock price remains what investors hope it will be is little more than an argument that the Court cannot increase cost in any way – an argument repeatedly rejected by prior tribunals. SX COL at ¶¶ 60-62. Moreover, the SDARS have repeatedly pushed out their projections for when they will be cash flow positive – including by making large investments in other content – and those decisions have not threatened the viability of the companies or their ability to earn fair returns. Herscovici WRT at ¶ 91, SX Trial Ex. 130. The stock price has increased and decreased significantly over time, and there is no evidence that "investor psychology" has been so shaken in a way that prevents the SDARS from earning a fair return or that is disruptive. SX FOF at ¶ 1022. Once again, with Mr. Musey's testimony, the SDARS are giving the Court a false metric to justify a near-zero rate.

109. But even if the Court were to accept the SDARS' own measure, it is clear from Mr. Musey's analysis, as discussed in SoundExchange's proposed Findings, that investors will not suffer a crisis of confidence as a result of a royalty rate of the type proposed by SoundExchange. SX FOF at ¶ 1117-24. Under Mr. Musey's own analysis, a royalty rate of [[redacted]] would result in investors earning returns, through stock appreciation, of 10-25% over an 18-month period. *Id.* It is absurd for the SDARS to argue that this should be a subject of disappointment to investors.

110. The SDARS' last argument for a near-zero royalty rate is perhaps their least compelling – that the SDARS deserve an additional reduction in the rate they pay for sound recordings because they also expend large sums on non-music programming. SDARS FOF at ¶¶ 211-15. This is simply a variation of the SDARS' primary argument that they cannot afford to pay for sound recordings because they have spent all their money on other content. But nothing in the second statutory factor – which, as the 1981 Mechanicals CRT found, was intended to ensure that copyright users could enter the market, not to ensure that they could have additional money to spend on other types of content, SX RCOL at Section V.B – suggests such a result, and this argument is in no way connected to a "fair income" for the copyright user. Indeed, this is another example of double counting by the SDARS – they first reduce their benchmark to adjust for non-music programming (as all the experts do) and then want an additional discount for the same thing on this statutory factor.

111. Finally, the SDARS claim that the record companies already are earning a competitive return, and they contrast this with the SDARS' purportedly dire financial condition. They point, for example, to the fact that Warner Music Group increased its revenues by $65 million from 2004 to 2005 and by $14 million from 2005 to 2006. SDARS FOF at ¶ 230. That is an increase of only 1.9% in 2005 and only 0.4% in 2006. One has to wonder what the SDARS' point is. In sharp contrast to WMG's declining fortunes, from 2004 to 2005 XM's revenue increased $314 million – an increase of 128% – and Sirius's revenue increased $175 million – an increase of 260%. Herscovici WRT at App. I, SX Trial Ex. 130. The following year, when WMG increased its revenue by $14 million (0.4%), XM increased its revenue by $375 million and Sirius increased its revenue by $395 million – an increase of 163%. *Id.* These numbers tell a very different story than what the SDARS pitch in their findings of fact.

112. And it does not stop there. Like XM and Sirius, WMG also has a significant accumulated deficit – $516 million as of the end of fiscal year 2006. SDARS Trial Ex. 35 at SE 0214110 (WMG 2006 10-k). XM and Sirius point to their debt loads, but WMG has a higher debt load than XM and Sirius, with long-term debt as of the end of fiscal year 2006 of more than $2.2 billion. SDARS Trial Ex. 35 at SE 0214134 (WMG 2006 10-k). In contrast, as of the end of 2006, Sirius had only $1.1 billion in debt. SDARS Trial Ex. 69 at 21 (Sirius 2006 10-k). The interest rates of WMG's recent indebtedness exceed, in some cases, that of the debt that Sirius was able to access in mid-2007. *Id.* XM and Sirius also suggest that their stock prices and market capitalization reflect significant risk, but WMG's stock prices has fluctuated significantly and its market capitalization is actually less than that of XM and Sirius. *See infra* Section III.D.6.

113. The SDARS' use of Sony BMG's financial numbers is no better. In an effort to show the purportedly healthy returns that Sony BMG is enjoying, the SDARS point to a [ ] increase in on-line digital revenue and a [ ] dollar increase in mobile revenues. SDARS FOF at ¶ 231. These numbers are meaningless in isolation. The record shows – and the SDARS ignore – that, in reality, SONY BMG has seen its total net revenue decline from [ ] in 2000 to [ ] in 2006 (in nominal dollars), despite the fact that BMG acquired another significant label (Zomba) in 2002. SDARS Trial Ex. 14 at SE0203204. From 2000 to 2006, SONY BMG had [ ] *Id.*

3. The Record Is Replete With Evidence that the SDARS Service and the SDARS' Use of Music Substitutes for Other Sales of or Revenues From Sound Recordings

114. The SDARS assert that a fair return for copyright holders is a "near-zero" rate because their service is not substitutional for other forms of music. SDARS FOF at ¶¶ 237-318.

But just this past July, the SDARS, represented in part by the same law firm that represents them before this tribunal and in a report written by the same consulting firm (CRA International) that employs Dr. Woodbury, argued with equal vigor to the FCC that their service *is* substitutional. SX Trial Ex. 106 (SDARS' comments in support of their proposed merger). Indeed, it was a main thesis of that document that consumers substitute away from CDs and other forms of music when they get satellite radio, thereby demonstrating that the SDARS competed with those forms of music. SX Trial Ex. 106 at 37 ("Satellite radio competes with and is substitutable for numerous other audio entertainment services and devices."). As Dr. Herscovici explained, it is a basic tenet of antitrust economics that competition means substitution: by definition, products that compete do not promote each other. Herscovici WRT at 10, SX Trial Ex. 130; 8/29/07 Tr. 230:11-231:15 (Herscovici).

115. The contrast in the statements between the documents is remarkable:

SDARS FCC FILING	SDARS CRT FINDINGS OF FACT
"[There is] substantial substitution among satellite radio and various other audio services and devices." SX Trial Ex. 106 at 37.	"[There is no] causal effect between listening to satellite radio and any decline in purchases [of CDs and music downloads]." SDARS FOF at 24 n.4.
"[W]hen people activate a satellite radio subscription, they substitute satellite radio programming for other audio entertainment to which they historically listened." SX Trial Ex. 106 at 37.	"There is no evidence of any correlation between time spent listening to SDARS and numbers of CDs purchased." SDARS FOF at ¶ 273.
"Usage data from Sirius and XM demonstrate that there is substantial demand substitution between satellite radio and other audio entertainment devices." SX Trial Ex. 106, Ex. A at 12.	"Displacement of Time Spent Listening to CDs Does Not Demonstrate Decreased CD or Digital Purchases." SDARS FOF at ¶ 273

116. The SDARS' Findings fail *even to mention* their merger comments, let alone venture an explanation as to how they could have taken directly contradictory positions before the FCC and this tribunal.

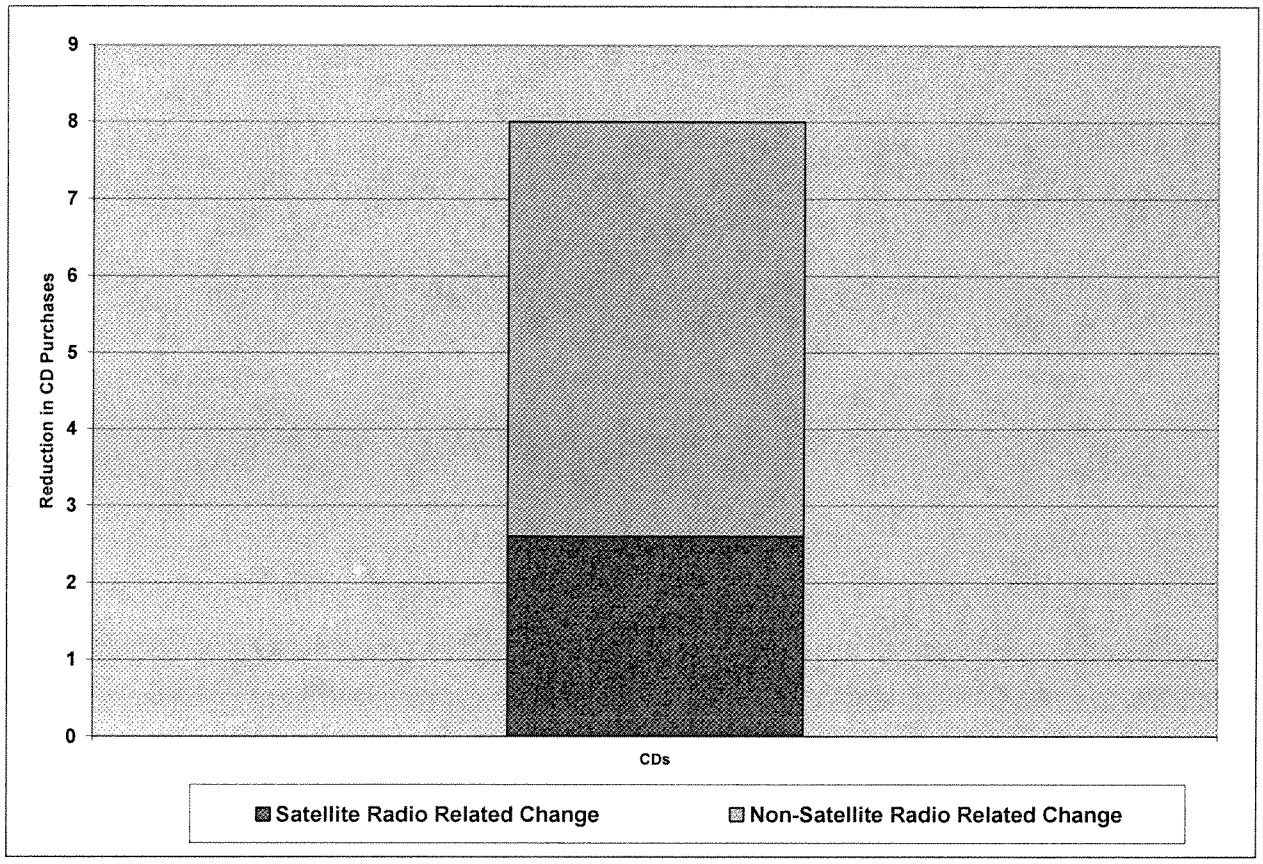
117. The record evidence in this case clearly establishes that the SDARS' submission to the FCC was accurate.

a. The Mantis Survey Shows The SDARS Are Substitutional.

118. The Mantis survey used a rigorous, conservative, and well-accepted methodology to establish precisely what the SDARS argued to the FCC: satellite radio substitutes for music purchases. *Compare* Mantis WRT at 2, SX Trial Ex. 132 ("[S]atellite radio has a substitutional effect upon music purchases.") *with* SX Trial Ex. 136 at 37 ("[There is] substantial substitution among satellite radio and various other audio services and devices....") (SDARS' merger comments). And while the SDARS criticize the Mantis survey and the copious evidence of substitution in this case, it is telling that they have declined to conduct their own study on the question, perhaps realizing that it would be counterproductive for their arguments before this tribunal.

119. The bulk of the SDARS' critique is that the Mantis survey was leading. The record shows otherwise. At the outset, the SDARS ignore the fact that Mr. Mantis found that only 2.6 CDs/year out of the total reduction of 8.0 CDs/year he found could be attributed to satellite radio. SX FOF at ¶ 691. That modest percentage is hardly consistent with a survey that supposedly led respondents to cite a substitution effect. As the figure below shows, the percentage change that the Mantis survey attributes to satellite radio is but a fraction of the total change the survey measured.

Far From Being Leading, The Mantis Survey Found That Only A Portion of The Reduction In CD Purchases Was Due To Satellite Radio



120. Mr. Mantis explained that the kind of "before and after" survey he conducted is extremely common in the field of consumer research, and is understood to be just as reliable as contemporaneous diary surveys, in which respondents are told to keep track of their purchases of certain products then explain why they changed their purchase behavior. SX FOF at ¶ 676. The SDARS had the opportunity to cross-examine Mr. Mantis, and they presented no evidence demonstrating that before and after surveys are leading. Instead, they argued that the survey is leading because the barest fraction of respondents (approximately 4%) said that satellite radio *was not* the cause of their changed purchases, and that other respondents used pronouns like "it"

when describing why they purchased fewer CDs. SDARS FOF at ¶ 249. These arguments are refuted by the evidence.

121. *First*, as Mr. Mantis explained, as a matter of consumer research technique, his survey used the "standard, routine," and indeed necessary, approach for getting at the respondent's reasons for changing behavior. Mr. Mantis stated:

> The question is not, "Tell me how satellite radio has caused you to purchase fewer CDs." That's not the question that was used here. The question used here to make the question consistent with the pre/post test places the timeframe that you want the respondent to look at, and that is: why did you purchase fewer before the event and after the event? Without stating what the event is, the question, again, is meaningless and the pre/post test would fail. Again, this is a standard, routine question used in pre/post testing.

8/30/07 Tr. at 231:1-14 (Mantis).

122. *Second*, the Mantis survey employed a follow-up probe that asked if the respondent had "*any other reasons*" for explaining the change in behavior. Mantis WRT at App. B at 2, SX Trial Ex. 132 (emphasis added). That probe made no mention of satellite radio, and thus is not leading in any conceivable way (nor do the SDARS contend that it is). When the SDARS quote from the Mantis survey, they invariably omit this follow-up prompt. *E.g.*, SDARS FOF at ¶ 249.

123. *Third*, as Mr. Mantis explained, he only counted a response as being related to satellite radio where the respondent *solely* cited satellite radio-related reasons for the change in their purchasing behavior. Thus, in order for the survey to have had any meaningful leading effect, the respondent would have had to have been led to give a satellite radio related answer in the first part of the control question, *and* then to have suppressed his "true" reason when then interviewer asked if he had any other reasons. SX FOF at ¶ 684. The SDARS have not

explained – nor could they – how the survey results could be biased given this conservative methodology.

124. *Fourth*, in defending his own survey, Dr. Hauser testified that the mere fact that a choice is suggested to a respondent *will not* cause the respondent to select it when he otherwise would not. When Dr. Hauser was asked if respondents would be likely to give points to features in his constant sum survey simply because they were listed, Dr. Hauser said that his "survey is self-correcting" and because respondents "could have given [the suggested option] zero." 8/21/07 Tr. at 272:15-20. (Hauser). If Dr. Hauser's respondents were capable of not being led to a particular answer simply because the question referred to it, then so were the Mantis survey respondents. Indeed, as noted above, and unlike the Hauser survey, the Mantis survey followed the allegedly leading question with a neutral prompt for additional reasons, thus giving the respondent an entirely neutral second opportunity to answer the question.

125. *Fifth*, if the survey had been leading, one would have expected to see the same percentage of reducers and increasers to cite satellite radio as the cause for their change, because the questions put to them were identical (save for the words "more" or "fewer" as appropriate). Yet "if you look at the data very, very closely, and you look at the satellite radio responses given by those individuals that fall into Category 1 … you find that you *don't have the same number or proportion* of satellite radio Category 1 responses in Category 1 for those that purchase more. The data are asymmetrical." 8/30/07 Tr. 229:16-230:3 (Mantis) (emphasis added). Thus "[i]f there were any bias, leading, or suggestive nature of the question, it would affect respondents that indicated that they purchase fewer with the same frequency as it would affect respondents that indicated that they purchase more. *That's not the case*. The data do not support the

contention that the question is leading or suggestive." 8/30/07 Tr. 230:4-11 (Mantis) (emphasis added). Again, the SDARS have offered no explanation to counter this point.

126. The SDARS also claim that respondents would be unable to determine how many CDs they purchased in a "typical three month period" before and after getting satellite radio. SDARS FOF at ¶ 259. Again, their claim rests on bare assertion: as Mr. Mantis testified, such questions are a fixture of consumer research, and found to be just as accurate as contemporaneous diary studies—indeed, pre/post studies of the type Mr. Mantis conducted were found to be so accurate that they have largely replaced the more expensive diary studies in the field of consumer research. 8/30/07 Tr. at 239:19-242:10 (Mantis).

127. The SDARS should know this: Sirius's own Customer Satisfaction Monitor asks respondents "Now, thinking back before you got your Sirius satellite radio, approximately what percent of the time in your vehicle was spent listening to each one of these – AM radio, FM radio, CDs, cassettes, MP3 players? And what percent of the time were you listening to nothing?" SX Trial Ex. 35 at 26. Sirius believes that consumers could answer this question: their survey witness, Ms. Heye, testified that that the Customer Satisfaction Monitor "is used in the ordinary course of business by Sirius' management in making business decisions." Heye WDT at ¶11, SIR Trial Ex. 37. In fact, the Mantis survey provided *more* accurate data than the Sirius survey because it asked consumers to consider a typical three month period, which Mr. Mantis explained "gives the individual the opportunity to look at a period of time that they can assess reliability, and also that period of time, whether it's typical, and, therefore, the average three-month period." 8/30/07 Tr. 180:3-8 (Mantis). The Sirius survey lacked any such focusing period.

128. Likewise, while the SDARS criticize the Mantis survey for not asking how many CDs the respondent bought "immediately before" getting satellite radio, the Sirius survey cited above likewise places no such limitation. And as Mr. Mantis explained, such a limitation would be "inappropriate": respondents are asked to pick a *typical* three-month period, because directing them to a particular time would not ensure that the study considered a period of time in which the individual had purchased a typical amount. 8/30/07 Tr. at 217:19-219:16. (And one imagines that if Mr. Mantis *had* asked respondents to state how many CDs they purchased "immediately" before getting satellite radio they would have protested (a) that the question was leading, and (b) was likely to provide a skewed view of the respondent's purchases, rather than an assessment of average purchases).

129. The SDARS also assert that Mr. Mantis's survey is unreliable because he coded the answers himself. SDARS FOF at ¶ 262. Again, this is simply bald assertion. Mr. Mantis included every single one of the verbatim responses and the coding decisions he made in his report. There is no room for hidden bias.

130. The truth is that Mr. Mantis used an extremely conservative coding scheme in which respondents who gave reasons such as "More variety on satellite radio" or "Well I think most of the music I listen to is on satellite," were *not* included because they also gave non-satellite radio reasons. SX FOF at ¶ 688. As Mr. Mantis explained, coders will always come to slightly different conclusions in making coding decisions, but that does not mean that the survey results are unreliable. 8/30/07 Tr. 232:12-233:4 (Mantis).

131. In sum, the Mantis survey demonstrates what the SDARS have argued to the FCC: satellite radio is substitutional for CD purchases. The survey also stands in stark contrast to the *utter absence* of contrary survey data commissioned by the SDARS to support their claim

in this Court that their service is promotional. Although it is inconvenient for the SDARS to admit here what they have advocated elsewhere, that does not affect the reliability or results of the Mantis survey.

b. The SDARS' Listening Surveys Show That The Service Is Substitutional, As Does The NARM Survey.

132. The SDARS' claims become even more tendentious when they try to argue that their own listening surveys do not show that their services are substitutional. SDARS FOF at ¶ 272. Again, the SDARS neglect to tell this Court what they told the FCC: "*usage data* from Sirius and XM demonstrate that there is substantial demand substitution between satellite radio and other audio entertainment devices." SX Trial Ex. 106, Ex. A at 12 (emphasis added). The data to which they refer in the public redacted version of their FCC filings is, of course, usage data from their own internal surveys which show that CD/MP3 listening drops by about *2/3rds* on average after a customer gets satellite radio—and all of that time is replaced by satellite radio. SX FOF at ¶¶ 696-699 (SDARS surveys show listening time to CDs and MP3s decreases by [REDACTED] (XM) and [REDACTED] (Sirius) upon getting satellite radio). Amazingly, before the FCC, Dr. Woodbury's firm argued that this data showed substitution (SX Trial Ex. 106, Ex. A at 12) and Dr. Woodbury argued to this Court that the *very same data* showed promotion. Woodbury WRT at 42 and Ex. 11, XM Ex. 8.

133. The SDARS' only response in their proposed findings is to argue that usage data does not show substitution because CDs and satellite radio are not perfectly substitutable. That misses the point: while there may not be 100% substitution between the two services, there is plainly – to use the SDARS' words – "substantial demand substitution." SX Trial Ex. 106, Ex. A at 12.

134. Likewise, although the SDARS seek to run from the compelling evidence of substitution in the NARM survey, that survey provides further corroboration of the substitutional effect of the service. The SDARS begin, as usual, by asserting bias, implying that NARM's members for some reason hope that SoundExchange would prevail in this case. SDARS FOF at ¶ 244. Yet the SDARS neglect to note that the survey was not commissioned for this litigation but was rather a course of business survey used by a large trade organization. Wind WRT at 20, SX Trial Ex. 129. The SDARS have not explained why an independent survey would be biased against their claims in this proceeding (albeit *consistent* with their claims to the FCC).

135. Moreover, NARM is made up of large retailers like Amazon, Circuit City, and Target, all of whom sell satellite radio products as well as other forms of music. Wind WRT at 20, SX Trial Ex. 129. Indeed, that is presumably why they chose to examine the buying habits of satellite radio listeners in the first place.

136. In any case, the SDARS' proposed findings are noticeably devoid of any actual criticism of the NARM results. Those results showed that satellite radio listeners were substantially less likely to purchase CDs and MP3s than terrestrial radio listeners, and that nearly 85% of satellite radio listeners said that the reason they bought less music was that "*they were satisfied listening to the music on satellite radio.*" SX FOF at ¶¶ 702-703 (emphasis added).

137. Instead, the SDARS claim that the study is invalid because the circumstances surrounding it are supposedly "unilluminating." SDARS FOF at ¶ 244. It is not obvious what additional illumination the SDARS seek: the record shows that the survey was commissioned by an independent group for its own business purposes, conducted over the internet, and that it incorporated the responses of 3,136 consumers including 326 who listened to satellite radio. Wind WRT at 20-21, SX Trial Ex. 129.

138. If the SDARS truly believed that the "demographics" of the survey respondents made the survey unreliable, or that further "statistical analysis" would lead to a different result, SDARS FOF at ¶ 244, they could have cross-examined Dr. Wind to make those points, as the SDARS were provided with the necessary information in discovery to explore such claims. They did not do so because that course of action would have been unfruitful, and their unsubstantiated claims of bias and unreliability should not be credited.

139. That absence of substance is indicative of the SDARS' entire argument concerning the substitution effect. It is SoundExchange that has provided *all* of the empirical evidence on this question: the Mantis survey, the NARM survey, the XM and Sirius listening surveys, as well as Dr. Wind's survey, which Dr. Herscovici and Dr. Pelcovits both reviewed, discussed, and found reliable. SX FOF at ¶¶ 694-695.

140. In the face of the overwhelming quantitative evidence showing substitution, the SDARS retreat to their anecdotal evidence about record companies' promotional efforts – mostly a few "thank you" emails from bands whose work was featured on satellite radio. SDARS FOF at ¶¶ 282-317. Leaving aside the fact that these claims conflict with their FCC filing, their anecdotal evidence proves nothing and is overwhelmed by the quantitative evidence that SoundExchange has presented. The SDARS' anecdotes only accentuate the SDARS' failure to present quantitative evidence of their own. *See supra.* And in any case, the unanimous testimony of the record executive and artists before this Court is that satellite radio does not have a net promotional effect on the sale of sound recordings. *See generally* SX FOF at ¶¶ 707-713.

141. Dr. Herscovici rebuts the SDARS' anecdotal evidence in his written rebuttal testimony, and much of this rebuttal is contained in SoundExchange Proposed Findings of Fact. SX FOF at ¶¶ 716-78; Herscovici WRT at 8-10, SX Trial Ex. 130. No one disputes that record

companies can work with a satellite radio provider to promote a particular artist or track. Herscovici WRT at 8, SX Trial Ex. 130. The SDARS' own evidence shows this is done, on a case-by-case basis, often through interviews, live performances, and similar arrangements. SDARS FOF at ¶ 294-95. In those circumstances, on a case-by-case basis, the SDARS and the record companies include exchanges of value beyond the statutory license. SDARS FOF at 292-295; Herscovici WRT at 8-9, SX Trial Ex. 130.

142. But that the SDARS and record companies and artists may be able to reach agreement on marketing efforts that are mutually beneficially says nothing about the impact of satellite radio overall, on a catalog-level for an entire record company, or an individual track basis. Herscovici WRT at 8, SX Trial Ex. 130.

143. Indeed, the record evidence shows that record companies spend little time and few resources promoting sound recordings to the SDARS. As Mr. Kushner explained, within the overall marketing spend of record companies such as Atlantic Records, virtually nothing is spent on satellite radio. 6/26/07 Tr. 112:8-17 (Kushner). Little or nothing is spent on satellite radio promotion because record companies do not believe that satellite radio is an effective way to reach a large number of consumers in a short period of time. 6/26/07 Tr. 112:18-22 (Kushner).

144. As was explained repeatedly by witnesses for SoundExchange, record companies, recording artists, and performers do not view satellite radio as increasing sales of sound recordings. SX FOF at ¶¶ 707-14. Indeed, in the very marketing plans that the SDARS tout, it is clear that satellite radio is of almost no importance. SX FOF at 711-14; 6/21/07 Tr. 52:12-19 (Renshaw); SDARS Trial Ex. 23. As explained by Simon Renshaw, satellite radio is "really close to the bottom of the list" of media outlets used to promote artists. 6/21/07 Tr. 40:14-18 (Renshaw).

145. The suggestion that record companies seek airplay or provide some CDs to the SDARS provides little on which to base a conclusion about promotion. This Court rejected the same anecdotal evidence in the Webcasting proceeding. *Webcasting II*, 72 Fed. Reg. at 24095. To be sure, satellite radio companies receive a benefit by receiving CDs, and record companies receive royalties if they are played; such behavior does not demonstrate that satellite radio promotes the sale of sound recordings in other channels. As Dr. Herscovici explained, the record companies have no ability to stop the substitution that occurs on satellite radio, even if they were to refuse to provide their content. Herscovici WRT at 8-10, SX Trial Ex. 130. Mr. Bronfman testified, however, that he would withhold his content if he were able and the SDARS were offering a paltry royalty rate, precisely because he believes that the SDARS substitute for other forms of revenue for the record companies. Bronfman WDT at 8, SX Trial Ex. 59.

146. Even if airplay on satellite radio could be used to promote sales of an individual sound recording, that would not mean that satellite radio increases the sales of sound recordings overall or in the aggregate for a record company. Indeed, the evidence that does exist suggests that any impact of terrestrial radio airplay on sales is likely to be heterogeneous – helping some artists and harming others. Herscovici WRT at 8, SX Tr. Ex. 130.

147. To the extent that airplay may be of value to some sound recordings, record companies and satellite radio companies have demonstrated that they can enter into individual agreements to promote particular recordings. Such agreements show that a market can adjust for heterogeneity in the promotional impact of the SDARS' service, but also amplify that there is no basis for discounting the royalties on all sound recordings for satellite radio. Herscovici WRT at 8-9, SX Tr. Ex. 130.

148. Finally, arguments about the claimed promotional effect of terrestrial radio are useless here. SDARS FOF at ¶ 285. First, Congress created the digital performance right in sound recordings because it believed that services such as the SDARS would substitute for, rather than promote, sales of sound recordings in a manner completely different from terrestrial radio. SX RCOL at Section III.A. Second, the SDARS have produced no evidence to suggest that the effect of satellite radio airplay and the effect of terrestrial airplay are the same.

149. In any event, the record shows that the value the influence of terrestrial radio on sales of sound recordings has waned and continues to wane. 6/26/07 Tr. 111:2-16, 172:10-17 (Kushner). The value of terrestrial radio play is different for different types of artists. Terrestrial radio play is not very significant on the sales of Rock sound recordings; touring and Internet exposure are more important. For Pop and Urban music, terrestrial radio remains an important predictor of success. 6/26/07 Tr. 111:2-112:7 (Kushner). But record companies are spending less on terrestrial radio promotion, particularly through independent promoters. 6/26/07 Tr. 175:12-20 (Kushner).

150. Amounts spent on promoting to terrestrial radio through independent promoters make up a small and declining portion of overall record company marketing expenditures. For Atlantic Records in fiscal year 2005, independent promotion was only [redacted] of the marketing budget, down from [redacted] of the marketing budget in fiscal year 2002. In contrast, music video productions and cooperative advertising made up more than [redacted] of overall marketing expenditures in fiscal year 2005. SDARS Tr. Ex. 49 (Breakdown of WMG marketing expenditures).

c. This Court Should Take The Substitution Effect Into Account When Setting A Rate.

151. The SDARS' alternative argument is that even if there is a substitution effect, this Court should not take it into account. SoundExchange's proposed findings explain in some detail why this argument is wrong. SX FOF at ¶¶669-671, 720-25. Indeed, the SDARS' own witnesses agree that substitution is an opportunity cost for which copyright owners must be compensated. SX FOF at ¶671 (citing testimony from Drs. Noll, Woodbury, and Chipty on this point). The arguments that the SDARS now employ to ask the Court to ignore the substitution effect are unavailing and contradicted by the record evidence.

152. The SDARS argue that when a consumer buys fewer CDs because of satellite radio, that substitution is only compensable to the extent that the consumer listens to music on satellite radio. SDARS FOF at ¶¶ 272-75 That is incorrect and, in any case, immaterial given that the evidence on substitution shows unequivocally that consumers are in fact listening overwhelmingly to music, and other sound recordings, on satellite radio. *First*, in the marketplace, a copyright holder would not care why a consumer bought fewer CDs upon getting satellite radio; satellite radio could not exist (and cause its substitution effect) without music. 8/30/07 Tr. 20:5-17 (Herscovici). The sound recording copyright holder thus would insist upon (and receive) compensation for the lost sales as a condition for granting use of the copyright that makes satellite radio possible. SX FOF at ¶ 672.

153. *Second*, the Mantis survey provides powerful evidence that when consumers buy fewer CDs because of satellite radio, they do so because of satellite radio's *music* offerings, not its non-music content. Of the 690 verbatim responses that Mr. Mantis received, not a single one cited the SDARS' non-music programming as a reason for changing purchase habits. 8/30/07

Tr. at 192:21-193:3. In contrast, many of the responses specifically singled out music programming as a reason for reducing purchases. *See generally* Mantis WRT at App. D, SX Trial Ex. 132.

154. *Third*, the NARM survey also provides another measure showing that the overwhelming cause of the reduction in purchasing of CDs derives from the music on satellite radio. 85% of the respondents in the NARM survey said that they no longer purchased CDs because "they were satisfied listening to the *music* on satellite radio." SX FOF at ¶¶ 702-703 (emphasis added).

155. *Fourth*, the record evidence is overwhelming that SDARS subscribers spend more time listening to music on satellite radio than anything else. Sirius's and XM's surveys show that music listening alone accounts for up to 67% of all listening. SX FOF at ¶ 386. These percentages rise even higher when listening to kids and comedy programming is taken into account. *E.g.*, Wind WDT at 39, SX Trial Ex. 51 (showing 14% of all listening is to comedy and kids channels). And they rise higher still, when one recognizes that other non-music channels play a substantial amount of sound recordings. Herscovici WRT at 14-17 & App. K, SX Trial Ex. 130. Thus, based on both the NARM data and the listening data, it is clear that virtually all of the substitution of sales of sound recordings derives from the music programming of XM and Sirius.

156. *Fifth*, the arguments about substitution are directly contradictory to those made by the SDARS in their own findings. In Dr. Woodbury's testimony and the SDARS' findings, the SDARS argue that the Court must factor in his view that the existence of non-music channels will promote the sales of sound recordings (and thereby justifies a lower rate). Woodbury WRT

at 48-49, XM Ex. 8. If, in fact, non-music channels contribute to substitution instead, Dr. Woodbury's argument requires the Court to find that effect as justifying a higher rate.

157. The SDARS make two other arguments in passing. First, they argue that the evidence shows substitution only at the "industry level" and not at the level of individual record companies. SDARS FOF at ¶¶ 265-66. In Dr. Noll's view, substitution is irrelevant because, in a free market, individual record companies would compete with each other for revenues derived from satellite radio performances and any potential promotional value and would thereby drive the royalty rate down to zero.

158. As a threshold matter, it is worth noting that, after running from marketplace analogies throughout their entire case, the SDARS seek to embrace them here. In any event, Dr. Noll's analysis of the market is wrong as a matter of economic theory and refuted by evidence in the record.

159. There is no reason to believe that record companies would engage in some form of mutual assured destruction – each seeking airplay on satellite radio so aggressively that they drive the rates down to a level where all of them lost money, to the tune of hundreds of millions of dollars per year in lost sales over the course of the license. As Dr. Herscovici explained, while record companies may, on an individual track basis, find some promotional or other benefit in satellite radio, such benefits are heterogeneous – they do not apply to all tracks in all ways and no record company would license its entire catalog for reduced rates. Herscovici WRT at ¶¶ 23-24, SX Trial Ex. 130. The evidence in the record demonstrates that even when record companies do direct license sound recordings for a perceived promotional benefit, they do not discount royalties and indeed, where additional benefits are being provided to the SDARS, actually demand the record companies and receive significant additional payments. Herscovici

WRT at 8-10, SX Trial Ex. 130. Finally, the record demonstrates that, even for those services that the record companies believe are promotional – such as clip samples and music videos – record companies demand and receive significant percentage of revenue and other compensation (including [ ] of revenue for clip samples and [ ] of revenue for music videos). SX FOF at ¶¶ 836, 612.

160. This evidence wholly refutes Dr. Noll's theory and demonstrates that there is no basis to conclude that, in a free market, record companies would compete so much that they would accede to royalty rate that would cause all of them to lose money.

161. The SDARS' second passing argument is the non-sequitur that because SDARS listening may also displace terrestrial radio listening, this Court should ignore the substitution effect caused by CDs. SDARS FOF at ¶¶ 276-281. In the first place, Congress has chosen to require the SDARS to pay for their use of sound recordings; the SDARS have no basis for claiming a discount simply because Congress has not made the same choice concerning terrestrial radio. Moreover, a change in terrestrial radio listening is irrelevant to the substitution effect. SoundExchange's members lose $1.29 per SDARS subscriber per month because of substitution from CDs. SX FOF at ¶ 721. Unless SoundExchange receives a royalty of at least that magnitude, SoundExchange's members *will lose money* as a result of the compulsory license, regardless of any substitution from terrestrial radio. *See* SX FOF Section IV.

162. As Dr. Herscovici found, although marketplace benchmarks are the best measure of this second statutory factor, at a minimum, record companies must receive sufficient income to offset the substitution effect. The data supplied by Dr. Mantis and other data that Dr. Herscovici reviewed (including Dr. Wind's survey) demonstrates that the SDARS services in 2007 will result in approximately 37 to 40 million fewer CDs being sold. 8/30/07 Tr. 97:20-99:6

(Herscovici). Over the course of the license, based on consensus analyst projections, that means that over *375 million fewer CDs* will be sold as a result of satellite radio. 8/30/07 Tr. 97:20-99:6 (Herscovici); SX FOF at Figs. 36, 39 (setting forth consensus subscriber projections).

163. In addition, as Dr. Herscovici explained, the substitution effect for other forms of consumption of music – other than CD sales, such as on-demand subscription service – likely has grown and will continue to grow. 8/30/07 Tr. 97:2-19 (Herscovici). On this point, the SDARS agree – at least when they are talking to the FCC. SX Trial Ex. 106, at Ex. A ¶¶ 30, 105 (arguing to the FCC that substitution will increase over time). Moreover, the increasing availability of portable devices that allow listening to XM and Sirius outside of the home or car will only increase the substitution effect of satellite radio, particularly with respect to other forms of digital music. Herscovici WRT at 37, SX Tr. Ex. 130.

C. Factor 3: Relative Contributions – There Is No Reason to Adjust a Market Rate Based on the Third Statutory Factor.

164. As discussed in more detail in SoundExchange's Reply Conclusions of Law, the SDARS' analysis of the third statutory factor is dominated by the same flaw found in all of their findings – a belief that everything the SDARS have ever done and will ever do "counts" and nothing the record companies and performers have ever done or will ever do "counts." That argument finds no support in the case law or the statute itself.

165. As discussed in more detail below, record companies and performers provide the lion's share of the creative contribution that is essential to the SDARS service and the SDARS' technical contributions, while real, are vastly overstated because in most cases the SDARS simply paid for existing technologies. With respect to costs, risks, investment, and the opening

of new markets, these are precisely the sort of factors that are accounted for in the marketplace. *See infra* Section III.C.; SX FOF at ¶¶ 314-320.

166. In their proposed findings, the SDARS provide no basis for the Court to value their costs, risks, and investment. They simply catalogue expenditures from past, present, and future, and argue that the probable returns on these investments are irrelevant. If this factor requires consideration of absolute dollars of investment, the record companies would "win" hands-down because in a single year, the record companies expend far more than the SDARS in creation and distribution of sound recordings. If the factor requires, as it should, a more nuanced examination of the investments and likely returns – i.e., the risks – it is clear that while the SDARS' risks are declining, the record companies' risks are increasing, in part due to the impact of satellite radio on sales of sound recordings.

167. However the factors come out, the record demonstrates that there is no basis for departing in any significant way from a marketplace rate based on this factor. Like all companies in the marketplace, the SDARS and the record companies have costs, make investments, and face risks. Those costs, investments and risks are fully accounted for in the record companies' agreements with digital music service providers in the free market and the SDARS' agreements with non-music content providers in the free market. Nothing in the record of this case suggests a departure here.

1. The SDARS Creative Contributions Are Minimal.

168. The SDARS do not really suggest that record companies and performers do not make an enormous creative contribution, nor could they. As their own surveys say, the music created by record companies and performers is the reason why most of their customers subscribe and is what most of their subscribers listen. SX FOF at Section IV.

169. The works at issue in this proceeding are essentially the entire combined creative output of the U.S. recorded music industry over the decades, including works of artists such as Bob Dylan, Whitney Houston, the Dixie Chicks, Bruce Springsteen, Barbra Streisand, Alicia Keys, Kenny Chesney, Martina McBride, Sheryl Crow, Stevie Wonder, Diana Krall – to name just a few. Kenswil WDT at 1-2, SX Trial Ex. 66, Eisenberg WDT at 2-3, SX Trial Ex. 53. These artists and the record companies for whom they record are the creators of the 2.5 million sound recordings that XM plays on more than 60 channels of commercial-free music every day. SDARS FOF at ¶ 395. Consistent with the Librarian's findings in the PES I proceeding, record companies and artists make the creative contribution that is essential to the success of the SDARS' service.

170. In the face of the entire creative output of the recorded music industry and the creative labors discussed in SX FOF at ¶¶ 854-901, the SDARS argue that they are entitled to offsetting credit for non-music programming and the additions they make to music programming. Neither provide any basis for concluding that this subfactors favors the SDARS.

a. Non-music "Creative" Contributions

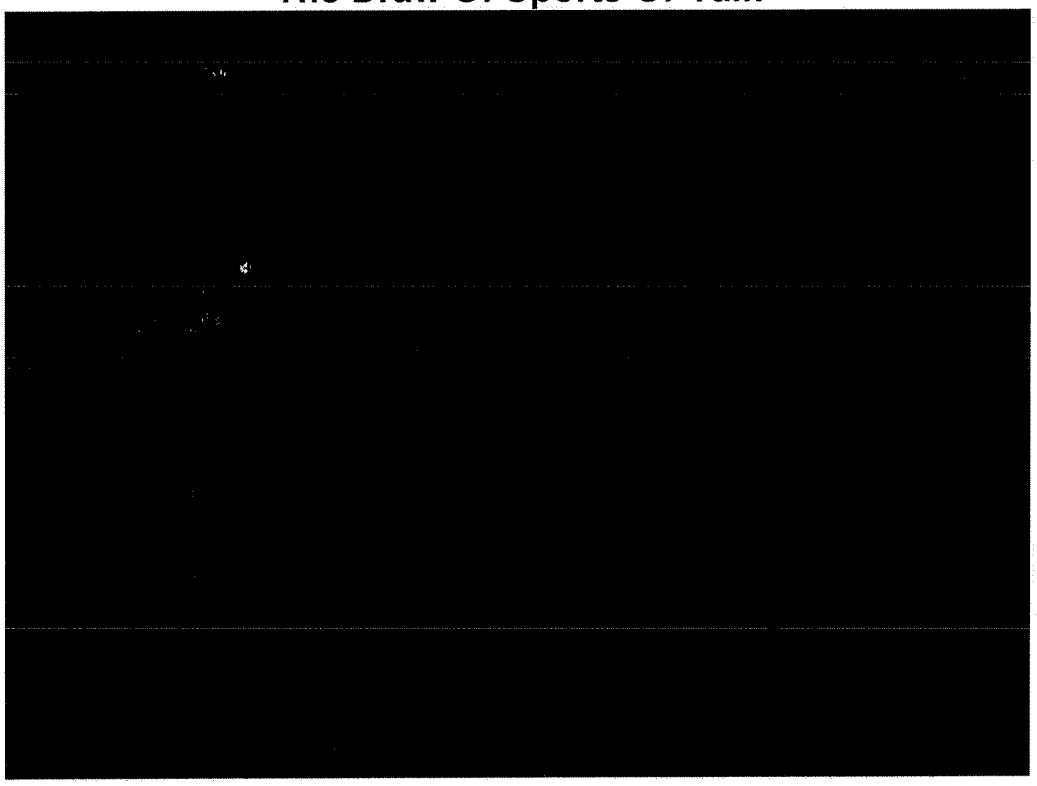
171. With respect to the SDARS' non-music creative contributions, the SDARS are incorrect that those contributions entitle the SDARS to a discount in the rate that they pay for the use of sound recordings. As explained at length in SoundExchange's reply conclusions of law, § 801(b) is not intended to take account of efforts made in regard to non-music programming. SX RCOL Section V.C.1. Nothing in the statute says that recording artists and record companies must subsidize Howard Stern, Opie & Anthony and Maxim, and the other non-music content sources that the SDARS claim credit for. SDARS FOF at ¶¶ 324-368.

172. Indeed, it would be double-counting to give the SDARS any credit for their non-music programming. All of the rate proposals in this case – whether they are expressed in percentage of revenue, per subscriber, or per broadcast form – attempt to determine the value of sound recordings; that is, they attempt to set a rate pegged solely to the value of sound recordings, and not to the value of anything else, including the value of the SDARS' non-music programming. To reduce those rates further on the basis of that non-music programming would thus in effect remove their value from the rate twice.

173. The other half of the equation is that no matter how many times the SDARS repeat the puffery that non-music content "enhances the appeal of the [SDARS'] service and thereby attracts and keeps subscribers," SDARS FOF at ¶ 327, all of the data in the record shows that music programming is a substantially bigger draw than any other type of programming. Survey after survey shows this to be the case, *see generally* SX FOF Part IV, which is why the SDARS' discussion of their non-music programming is entirely devoid of citations to survey evidence. One would never even know from the SDARS' findings that they conduct massive surveys on a regular basis, Heye WDT, SIR Trial Ex. 37 (or at least did until the pendency of this hearing) that show music is their most valuable content. Sirius may have spent $188 million on the NFL and $125 million for Fox News alone, SX FOF at ¶ 240, but their own survey evidence shows that sports and news programming is *far* less of a draw to their service, as compared to music programming. Indeed, Fox News, although a popular channel, resulted in only a small number of subscribers ([redacted]) canceling their service when it was briefly off the air at Sirius. SX Trial Ex. 39 (email from Christine Heye re: cancellations following the dropping of Fox News).

174. The figure below shows the percentage of Sirius subscribers who cited music, sports, and/or talk programming as a reason for being interested in the service, broken down by time period in which their subscription started. SX Trial Ex. 35 at 17. Music dominates every time period, thus demonstrating that the contributions that the SDARS make to non-music programming are valued far less than the contributions that SoundExchange makes by providing sound recordings.

Sirius's Own Data Show That The Draw Of Music Is Far Greater Than The Draw Of Sports Or Talk



Wind AWDT at 21, SX Trial Ex. 52.

175. Thus, whatever creative contributions that the SDARS make with respect to their non-music programming, they are neither cognizable under the statute nor substantial compared to the record companies' and artists' creative contribution: the creation of sound recordings.

Moreover, they are already accounted for in the benchmarks used by SoundExchange's experts, which separated out the value of non-music programming.

b. The SDARS' Music Contributions

176. The SDARS' arguments concerning the contributions to music fail to come to terms with the central fact that it is music that makes music valuable. SoundExchange has already explained at length why this factor favors them. SX FOF at ¶¶ 852-901. And SoundExchange has also explained that the quantitative evidence in the case, as opposed to the SDARS' self-serving assessment of their contribution, demonstrates that sound recordings are a more important creative contribution than anything the SDARS add. SX FOF at ¶¶ 442-453. Thus, contrary to the SDARS' assertions, subscribers indicate that they like it when DJs talk less, not more, SX FOF at ¶ 448, and really just prefer when the SDARS play commercial-free music, uninterrupted by anything else. SX FOF at ¶ 448. And as a matter of law, prior tribunals have consistently declined to give broadcasters credit for the "broadcast day," in recognition of the fact that it is the copyrighted material, and not the method of its organization, that gives it its value. SX COL at ¶ 53.

177. In any event, the SDARS again are making arguments to this tribunal that they have disavowed to the FCC. In their filing before that agency, the SDARS submitted an economic analysis that contends that many listeners "do not care about variety [or] music programmed by others," in an effort to argue that SDARS compete with CDs and MP3s, and other forms of non-programmed music. SX Trial Ex. 105, Ex. A at ¶ 69. Thus, even the SDARS recognize that it is the music itself, and not how it is programmed that attracts consumers.

178. Likewise, the notion that the SDARS' original music programming amounts to a significant contribution compared to the contribution of sound recordings cannot withstand

scrutiny. The SDARS have available to them a library of *2.5 million sound recordings* under the terms of the compulsory license. SDARS FOF at ¶ 395. And as explained in SoundExchange's reply conclusions of law, the SDARS play approximately *1,000,000 hours of sound recordings each year*. SX RCOL at ¶ 94. Yet when XM points to its original programming, it can cite a mere "fifty 'Artist Confidential'" shows (each of which is an hour long,) as well as a few other shows that it has created. SDARS FOF at ¶ 400-401. Sirius has produced even less original programming. And of course, when an artist like Bob Dylan or Eminem creates a show for the SDARS, the vast bulk of the programming is the sound recordings themselves. SDARS FOF at ¶ 404 (noting that the Bob Dylan show each week "plays songs on a different theme," and that Tom Petty "digs up vintage rock and roll tracks").

179. Moreover, the SDARS' own surveys demonstrate that their subscribers do not value this live music programming, do not like DJs who chatter, and have little interest in "on-air personalities." SX Ex. 115 DR. at 47 (showing that attributes related to music channels dominate favored attributes and DJs, on-air personalities, and live shows are not valued).

180. To be sure, the SDARS play a wide variety of music, including many types of music that are not available for free on terrestrial radio, SX FOF at ¶¶ 456-459, a fact which the SDARS understand as being a large selling point for them. SX FOF at ¶ 460. The SDARS are correct: consumers do listen to their service for the niche music they cannot get from the radio, and that is why (as the evidence so clearly shows) the SDARS are a substitutional service for CDs and other forms of music. SX FOF at ¶¶ 708-701 (explaining how the SDARS' niche music causes subscribers to substitute away from the CDs that contain such music).

181. In sum, when one considers the creative contributions of the SDARS with respect to music programming, they pale in comparison to the creative contributions of SoundExchange.

2. Technological Contribution

182. In their proposed findings, the SDARS have vastly overstated their technological contribution – which consists mainly of paying for already proven technology.

183. As an initial matter, the SDARS withdrew their one expert on technological issues, Roger Rusch,[7] likely because, among other things, it was clear that Mr. Rusch had made statements in the past about how "cost effective" the SDARS technology is. Elbert WRT at 4, SX Trial Ex. 122; SX FOF at ¶ 965. Only SoundExchange produced an expert witness, Bruce Elbert, qualified to testify concerning the SDARS' technology. 8/27/07 Tr. 165:21-166:3, 169:20 (Elbert). In the absence of any expert testimony, the SDARS rely on the testimony of several of their fact witnesses – none of whom were qualified as experts in satellite technology.

184. While these SDARS witnesses may testify to facts – such as the *fact* that XM purchased the Hughes 702 satellite, "a basic satellite that Hughes offers," SX FOF at ¶ 922, quoting 6/6/07 Tr. 207:5-9 (Masiello) – they have no basis for opinion testimony of any probative value. The SDARS' witnesses' opinion(s) about what is "a new, untested technology," SDARS FOF at ¶ 430-431, quoting Karmazin WDT ¶ 27, SIR Trial Ex. 1.1, or what qualifies as a technological innovation, SDARS FOF at ¶ 490, citing Masiello WDT ¶ 25, XM Trial Ex. 7, should be given no weight. In some cases, the fact witnesses the SDARS put on to testify about their respective employers' satellite systems *were not even employed* at the company at the time satellites were launched. 6/7/07 Tr. 77:2-5 (Smith).

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[7] The SDARS initially offered the testimony of Roger Rusch, who had experience in the satellite field, but they later withdrew Rusch's testimony, 6/6/07 Tr. 6:9-22, and ultimately submitted no expert opinion concerning their technological contributions.

185. Quite rightly, SoundExchange's expert Mr. Elbert "refused to characterize any aspect of Sirius" – or, for that matter, XM's – "service as innovative." SDARS FOF at ¶ 439. As the SDARS readily admit, "'[s]atellites had been used to deliver audio programming for decades'" ahead of the XM and Sirius services. SDARS FOF at ¶ 429, quoting SDARS Trial Ex. 92 at 251. By alleging merely that "[n]o commercial satellite company, before XM or Sirius, had ever developed a . . . system that combined" the *exact* elements used by XM and Sirius, SDARS FOF at ¶ 429, the SDARS skirt the fact that their systems borrow heavily from numerous predecessor satellite systems. *See* SX FOF at ¶¶ 903-919 (detailing contributions of Comsat, Western Union, DirecTV, Dish Network by Echostar, NASA, WorldSpace, Iridium, GlobalStar, and various other media companies to the development of satellite technology).

186. For instance, contrary to the SDARS' proposed findings of fact, neither Sirius nor XM designed their own satellites. SX FOF at ¶ 920. The SDARS claim that Sirius "design[ed] satellites tailored to its specifications," SDARS FOF at ¶ 435, and that XM "custom-design[ed]" its systems, SDARS FOF at ¶ 481, and "develop[ed] and launch[ed] its own satellites," SDARS FOF at ¶ 483. In fact, XM and Sirius both took advantage of commercially-available solutions to their engineering challenges. SX FOF at ¶¶ 920-926. Both companies were able to contract with satellite manufacturers who could build precisely the satellites the SDARS needed, and with launch companies who successfully launched all of the SDARS' satellites into orbit. SX FOF at ¶¶ 920-926.

187. As well, as the SDARS recognize, XM was able to "commission Alcatel to . . . design the payload for the [XM] satellite[s]," SDARS FOF at ¶ 488. Alcatel had previous experience designing a payload very similar to XM's, because Alcatel had already designed the payload for WorldSpace, a satellite radio broadcasting system similar to XM that was an early

investor in XM. SX FOF at ¶¶ 923-924. Ultimately, XM benefited greatly from WorldSpace's prior experience with satellite radio broadcasting, not only by taking advantage of Alcatel's expertise in designing its satellite payload, but also by signing a "technical services agreement" with WorldSpace (and with DirecTV as well) "which 'allow[ed] [XM] to access any of their engineers on . . . an hourly basis.'" SX FOF at ¶ 924, quoting 6/4/07 Tr. 328:21-329:4 (Parsons) (alterations in SX FOF).

188. Although the SDARS bemoan the time it took for their systems to be designed and built, SDARS FOF at ¶ 481, in fact, they were able to get their systems off the ground relatively quickly, as compared to other satellite systems, due to the lessons learned from the satellite systems that preceded them. Elbert WRT at 28, SX Trial Ex. 122.

189. Contrary to the SDARS' proposed findings of fact, *see* SDARS FOF at ¶ 486 (alleging that the S-band frequency spectrum "had never before been used" for communications) the S-band frequency used by the SDARS is "not . . . a new piece of spectrum" and has been used "as long as" other bands such as the C or the KU or the L bands. 8/27/07 Tr. 215:22-217:1 (Elbert). As Mr. Elbert testified, the S band "was used for satellites for years prior" – in fact, as early as "the first geostationary communications satellite . . . back in 1963." 8/27/07 Tr. 216:8-14 (Elbert).

190. Well ahead of the founding of either Sirius or XM, the satellite industry was aware of the engineering principles that allow transmission to mobile receivers. Elbert WRT at 37, SX Trial Ex. 122. For their mobile receivers, XM and Sirius drew heavily on the experiences of Iridium and GlobalStar. In fact, the satellite component of XM and Sirius's vehicular antennas is found in the handset and vehicular antennas used with Iridium and GlobalStar devices, and the component of XM and Sirius's vehicular antennas that receives signals from the

terrestrial repeaters is based on designs for cellular telephones. SX FOF at ¶¶ 941-942. The SDARS simply ignore the unrebutted record evidence on the these points. *See* SDARS FOF at ¶ 433.

191. The SDARS also claim that, prior to their service offerings, "commercial . . . antennas capable of capturing the . . . signal from a satellite were generally large." SDARS FOF at ¶ 453. This, too, is a mischaracterization of the history of satellite technology and the record in this proceeding. As Mr. Elbert testified, small receiving antennas existed for years before XM or Sirius needed to use them. Elbert WRT at 32, SX Trial Ex. 122.

192. Contrary to their proposed findings, Sirius did not invent diversity, although they claim that Sirius "created a system that would deliver the signal through three types of diversity." SDARS FOF at ¶ 434. Diversity has long been a well-known technique within the satellite industry, and was used as early as the late 1970s. SX FOF at ¶ 943; 8/27/07 Tr. 198:14-20 (Elbert).

193. Nor did the SDARS pioneer the use of terrestrial repeaters to enhance service, despite their attempts to imply otherwise. *See* SDARS FOF at ¶¶ 440-443. Despite their suggestions that they were breaking new ground by using repeaters, the SDARS admit – as they must – that "companies had made use of terrestrial repeater networks" prior to XM and Sirius coming into existence. SDARS FOF at ¶ 443. Terrestrial repeaters had been used by the United States Army as early as the 1960s, and terrestrial repeaters were used extensively by cellular telephone networks prior to the SDARS' creation of their services. Elbert WRT at 34, SX Trial Ex. 122.

194. Sirius's orbital configuration is not unique, either, despite the SDARS' attempts to persuade the Court otherwise, *see* SDARS FOF at ¶ 436. As SoundExchange laid out in its

findings of fact, as Sirius internal documents show, and as Sirius witnesses eventually admitted at trial, Sirius adopted the "Molnyia"-type highly elliptical orbit that was pioneered by Russian satellite engineers decades ahead of the SDARS' services. SX FOF at ¶ 946, 6/7/07 Tr. 91:7-92:2 (Smith), Elbert WRT at 36, SX Trial Ex. 122; 8/27/07 Tr. 219:15-220:20 (Elbert).

195. The SDARS claim that Sirius was the first to "apply[] the concept of statistical multiplexing to audio." SDARS FOF at ¶ 446. This is a blatant mischaracterization of the record. Although Sirius's fact witness Smith may have claimed as much (the source the SDARS cite to support the first two sentences of ¶ 446 is unclear), in fact, the record shows that DirecTV used statistical multiplexing to broadcast its *audio-only* channels well ahead of Sirius and XM. Elbert WRT at 39, SX Trial Ex. 122. Similarly, the SDARS admit now that XM did not develop its own audio compression techniques, but instead licensed its audio compression technology from another company called Neural Audio. SDARS FOF at ¶ 503.

196. Ultimately, as the SDARS recognize, their own role in their own technology was one of mere "incremental development." SDARS FOF at ¶ 513. This "incremental work" is simply "the normal standard engineering process used" by all kinds of companies – not only satellite businesses – who want to use technology. 8/27/07 Tr. 217:7-14 (Elbert). As Mr. Elbert explained, "everything about [the SDARS] that matters, from a technological standpoint, pre-existed." 8/27/07 Tr. 198:21-199:1. The SDARS simply "integrate[d] together a number of existing proven technologies." 8/27/07 Tr. 198:17-20.

197. Ultimately, the record on technological contribution suggests mainly that the SDARS paid money for technology invented by others; they have no credible evidence – and certainly no expert testimony – to suggest that they have made significant innovations. Nor have they provided a basis for quantifying their claimed innovation.

3. The SDARS' Evidence of Their Capital Investments Does Not Help the Court Set A Rate Under the Third Statutory Factor

198. In paragraphs 516-621 of their proposed findings, the SDARS list every imaginable expense they have incurred since founding their companies (in Sirius's case) in 1992. The laundry list does nothing to help the Court evaluate the parties' respective contributions under the third statutory factor.

199. Once again, the SDARS repeat their theme: every dime that they have done since they first initiated their businesses counts, while no investment from the record companies count because "the record industry has expended no additional funding whatsoever with respect to satellite radio." SDARS FOF at ¶ 516. On that basis, according to the SDARS, their victory on this subfactor "cannot be seriously questioned." *Id.* A review of the record based on the real cost, investment, and risks faced by these companies demonstrates that each of the parties in this proceeding include large sophisticated businesses that have real risks, costs, and investment, but that the risks that the record companies are facing are increasing, while those of the SDARS are declining. Moreover, the very existence of the SDARS and their subsitutional effect poses serious risk to the record companies; the reverse is not true-- the SDARS could not even exist without the record companies and artists.

200. The SDARS observe that they have spent more than they have brought in and that as a result they have cumulative deficit on their books. But as Sirius' own CFO David Frear testified, it is the nature of the SDARS business that they have "very high upfront costs with the possibility of large incremental returns in the future." SDARS FOF at ¶ 520. The SDARS' argument here is that the Court should consider all of the costs – past, present, and future – but ignore the likely pay-off. As Dr. Herscovici explained, that is the wrong way to look at costs,

risks, and investments, which must be viewed together along with the likely reward. Herscovici WRT at 28-30. Seen properly, there is no basis for finding an advantage for the SDARS.

201. One peculiar feature of the SDARS' laundry list of expenditures is that it is not limited in time either backwards or forwards. They claim full credit for every penny they spent since they were founded, including, for example their 1997 FCC license fees, well before even the prior license term. But a list that stopped there would "by no means [be] complete." SDARS FOF at ¶ 529. They likewise claim credit for the "$1 billion on capital investment" they expect to spend during the *next* license term. *Id.* ¶ 524.

202. Their long list of SDARS expenditures covers everything from developing training manuals for customer service employees, SDARS FOF at ¶ 544, to "furniture, fixtures, vehicles and other equipment." *id.* ¶ 532; *see generally id.* ¶¶ 519-620. These are not remotely relevant under § 801(b). Indeed, the Court expressed frequent frustration as this material was being inserted into the record at trial because the SDARS failed to establish any foundation for its relevancy. 6/5/07 Tr. 15:13-15 (Parsons) (Chief Judge Sledge: "I'm having a hard time seeing any benefit from this testimony"); 6/11/06 Tr. 339:1-7 (Moore) (Judge Roberts: "I am . . looking at the legal standard. . . I have to say I don't see anything up there about customer care satisfaction or related thereto. So I am wondering what you are attempting to show here"); *id.* 340:1-9 (Chief Judge Sledge); 6/6/07 Tr. 244:19-21 (Masiello) (Chief Judge Sledge: "Mr. Miller, I think I've missed something. What's the purpose of Mr. Masiello's testimony?"). They have not explained this material's relevancy in their written findings, either. SoundExchange will stipulate that the SDARS are businesses and that they have incurred expenses.

203. But along with expenses come revenues – something the SDARS prefer to ignore before this Court (though not in their quarterly reports). And the costs that they expend today

have future rewards. As Dr. Herscovici explained, all of the SDARS' costs, including their satellites, are dedicated to making long-term revenue and, seen in that light, they are both more reasonable and less risky than the SDARS would like to suggest. Thus, XM invested $566 million to launch 2 satellites in 2005. The present discounted value of the revenues to be earned from use of those satellites (which have a 15-year life) is $14.6 *billion.* Herscovici WRT at 27 & App. L, SX Tr. Ex. 130. Thus, investment in satellites is really only about 50 cents per subscriber per month – less than Sirius pays for Howard Stern and less than XM pays for [ ]. Herscovici WRT at 27 & App. L, SX Tr. Ex. 130; 8/30/07 Tr. 31:3-20 (Herscovici). The same analysis could be applied to virtually any of the SDARS costs.

204. It is impossible for the SDARS to explain why such a calculation of all past and future expenditures is of any relevance in setting a rate here. While the SDARS set out investments in absolute terms, they have made no effort to discuss them in comparative terms with like businesses, so there is no way to know if these expenses are unusual for like business that have high start up and fixed costs and also high incremental margins, such as the benchmark satellite television business. In short, it is impossible to do anything with this cost information.

205. The uselessness of the SDARS' unadorned list of expenses simply underscores the degree to which "marketplace evidence, standing alone" is what truly addresses this subfactor. *Amusement & Music Operators,* 676 F.2d at 1157. As Dr. Ordover testified, functioning competitive markets set prices that reflect capital investment and costs. Ordover WDT at 29, SX Trial Ex. 61; Herscovici WRT at 21-22, SX Trial Ex. 130. Indeed, the "willing buyer/willing seller" standard requires the Court to consider "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 . . . technological contribution, capital investment, cost and risk." 17

U.S.C. § 114(f)(2)(B)(ii). In its recent Webcasting decision, in analyzing this requirement, this Court concluded that "[b]ecause we adopt a benchmark approach to determining rates, we agree with *Webcaster I* that [these] considerations 'would have already been factored into the negotiated price' in the benchmark agreements." *Webcasting II,* 72 Fed. Reg. at 24092; *id.* at 24095 (factors are "implicitly accounted for in the [benchmark] rates").

206. If, however, this factor was to be decided by a laundry list of costs, then there is no doubt that the record industry from the past and into the future would "win." Since the beginning of the recording industry, the record companies have spent hundreds of billions of dollars to create the sound recordings that are the lifeblood of the SDARS. Indeed, the record establishes that a single record company, UMG spends more than [[redacted]] billion annually in the business of creating and investing in sound recordings. SX FOF at ¶ 975. Ciongoli WDT at 3-9, SX Trial Ex. 67.

4. In Any Case, The SDARS Have Overstated Their Relevant Costs, Risks, And Investments.

207. Much of the SDARS' discussion of the subfactors is repetitive of the flawed arguments they made with respect to other factors, and SoundExchange will not repeat its responses to those arguments here. *See supra.* A few of their cited risks and costs bear mentioning, however. The SDARS start their discussion of risk by again claiming that their technology should somehow entitle them to a lower royalty rate. The SDARS allege, disingenuously, that "[t]here was a substantial risk that their systems would not work." SDARS FOF at ¶ 624. They go on to claim they utilized "innovative" technologies, "many of which had not been tested in actual commercial service." SDARS FOF at ¶ 625.

208. As the unrebutted evidence in the record shows, the SDARS' systems were constructed with well-proven technologies that have been used for many years in the satellite industry. SX FOF at ¶¶ 929-930; *see also* 8/27/07 Tr. 234:11-14 (Elbert) ("[T]his is the reason why we make as few changes as we can. We don't want to change something that we're going to launch . . . ."); *supra* Section III.C.2 (explaining that the SDARS' satellite and terrestrial systems borrow heavily from systems that preceded them). Internal SDARS documents describe XM's satellites as "designed . . . with lowest technical risk" and Sirius's satellites as able to "contain . . . risk" through "proven technology." Elbert WRT at 19, SX Trial Ex. 122. And, finally, the SDARS were able to – and, at times, both chose to – insure themselves against any remaining risk that their satellite systems would not work. SDARS FOF at ¶¶ 955-960.

209. The SDARS also claim they faced "risks that [their] satellites would experience launch failures" and "of other technological failures." SDARS FOF at Sections V.G.1.b & V.G.1.c. The SDARS' characterization of these risks is exaggerated. As SoundExchange's satellite expert Bruce Elbert testified, satellite businesses regularly insure themselves against the risk of satellite launch failures and in-orbit failures. SX FOF at ¶¶ 955-960. XM maintains in-orbit or satellite "life" insurance, and has successfully had claims paid for minor degradation to its service. SX FOF at ¶¶ 958-959. Sirius, on the other hand, does not maintain in-orbit or "life" insurance on its satellites, Elbert WRT at 15, SX Trial Ex. 122, which should demonstrate to the Court how seriously Sirius takes the possibility of in-orbit failure. SX FOF at ¶ 960; *see also* Elbert WRT at 15, SX Trial Ex. 122 (explaining that suspending satellite "life" insurance coverage may be a reasonable business decision under some circumstances).

210. Equally importantly, as with so many of the other risks the SDARS lament, the risk of launch failure never came to pass. Neither XM nor Sirius has ever experienced a launch failure. Elbert WRT at 12, SX Trial Ex. 122.

211. The SDARS claim they "faced risks associated with raising a substantial amount of capital in order to put the satellites into operation and start the service." SDARS FOF at ¶ 626. More specifically, they claim that they might not have "obtain[ed] sufficient financing to initiate service," SDARS FOF at Section V.G.1.d., and that they might not have "obtain[ed] sufficient financing to survive long enough to reach profitability," SDARS FOF at Section V.G.1.h. and ¶¶ 683-687.

212. However, these claims of risk are hollow, first and most importantly because the SDARS *have* raised enough capital to initiate their service. As well, the riskiness of investment in the SDARS has declined dramatically over the last several years. SX FOF at ¶ 1174. Furthermore, only a forward-looking analysis can address the objectives raised by the fourth factor. SX FOF at ¶ 1177. Like any business with high start-up costs but low costs associated with each new customer it brings in, the SDARS always planned to lose money in the early years until they attracted enough customers to recover those fixed start-up costs. Although the SDARS' witnesses repeatedly point to these accumulated start-up losses as evidence that they are struggling, on cross-examination, both SDARS revealed that they fully expect that they will become EBITDA and free cash flow positive (regardless of the royalty rate) over the next few years. SX FOF at ¶ 42.

213. The SDARS next claim they have "faced many regulatory risks" including the risk that the FCC would not "authoriz[e] the satellite radio services" or that the FCC would not award licenses to XM and Sirius. SDARS FOF at Section V.G.1.a. and ¶¶ 629-639. Like so

many of the other risks the SDARS bemoan, this is a risk that has completely failed to materialize. Ten years ago, in 1997, XM and Sirius both were granted licenses to operate commercial satellite radio services in the United States. SDARS FOF at ¶¶ 59, 99. Moreover, XM and Sirius were granted the *only* two licenses to operate commercial satellite radio services in the United States, insulating them significantly from risk. Elbert WRT at 10, SX Trial Ex. 122. Likewise, the risks that the SDARS would not obtain regulatory approval for terrestrial repeaters and uplink facilities, as well as international coordination for the satellites in order to avoid interference, SDARS FOF at ¶ 632, have also passed. Karmazin WDT ¶ 29, SIR Trial Ex. 1.1.

214. In connection with their other claims about their risks, the SDARS assert that they are "subject to numerous [FCC] regulations," non-compliance with which "could result in fines, additional license conditions, license revocation or other detrimental FCC actions," and that this somehow exposes them to risk. SDARS FOF at ¶¶ 634-635. It should go without saying that the risk of "regulatory problems" stemming from "non-compliance with FCC conditions," SDARS FOF at ¶¶ 634-639 – essentially the risk that the SDARS will be penalized for violating government regulations – is not a risk of which the statute takes notice.

215. The SDARS also claim they faced other risks related to getting their product to market: "risks related to gaining acceptance with OEMs," the "risk of consumer electronics retailers not promoting satellite radios," and the "risk of electronics manufacturers not building SDARS-designed radios." SDARS FOF at Sections V.G.1.e-g and ¶¶ 666-682. In addition, they claim they "faced a serious problem of public acceptance." SDARS FOF at ¶ 627. More specifically, they claim they faced the "risk of lack of sufficient consumer acceptance of the service . . . to attain profitability." SDARS FOF at Section V.G.1.i. and ¶¶ 688-701. Once

again, these risks clearly never came to pass and the SDARS have given the Court no way to quantity or measure the import of these historical concerns.

216. The SDARS also claim they face a "risk posed by the music industry seeking excessive royalties." SDARS FOF at ¶ 702. This is nonsense. In essence the SDARS claim that Congress wanted to give them a lower rate because they might fear a higher rate. The SDARS are well short of the threshold of credibility here. In any event, as SoundExchange has explained, *see infra*, its rate proposal minimizes disruption to the industry. There is no support for the SDARS' claim that SoundExchange's rate proposal will have a disruptive impact. SX FOF at ¶ 1180. Indeed, since any royalty rate would potentially decrease the growth potential of the SDARS stock as compared to a lower royalty rate, this argument carried to its extreme would suggest that the proper royalty should be zero. SX FOF at ¶ 1171.

217. Finally, contrary to the SDARS' baseless claims, *see* SDARS FOF at ¶ 703 ("[T]he . . . risks the SDARS have undertaken in the past and those risks that they continue to confront greatly outweigh the risks assumed by the record labels, if any."), the recording industry is not immune from risks related to the SDARS. In fact, the record industry faces significant risks from the substitution effect the SDARS have. *Supra.*

5. Opening New Markets

218. The SDARS contend that the statutory factor that requires this Court to consider the parties' relative "contribution to the opening of new markets for creative expression and media for their communication" weighs heavily in their favor. *See* SDARS FOF at ¶¶ 704-715; *see also* 17 U.S.C. § 801(b)(1)(C). However, the SDARS' proposed findings under this factor do nothing more than regurgitate their proposed findings under the other section 801(b)(1)(C)

factors. And as with the other section 801(b)(1)(C) factors, the SDARS fail to provide a meaningful way to quantify this factor that they claim should weigh in their favor.

219. The SDARS' claims that XM "envisioned a new form of radio that had never before been attempted," SDARS FOF at ¶ 706, and that "Sirius was required to create an entirely new means of providing audio programming," SDARS FOF at ¶ 707, are undermined by the record in these proceedings. SoundExchange's satellite expert Bruce Elbert, the only witness qualified as an expert in satellite technology in these proceedings, explained that the SDARS did not "invent" satellite radio – rather, businesses like WorldSpace, building on the decades-long history of satellite engineering, had already established a model for distributing audio content via satellites. SX FOF at ¶ 903-919; Elbert WRT at 6-9, SX Trial Ex. 122.

220. Again, under the guise of "opening new markets, the SDARS tout the so-called "technological innovations" involved in their services. But as SoundExchange has demonstrated, the SDARS cannot lay claim to having innovated. *See infra* Section III.C.2; SX FOF at ¶¶ 902-970. Indeed, this will only be a new revenue stream for artists and record companies because Congress gave the SDARS the right to perform sound recordings and if the rate set in this proceeding more than sufficient to offset the substitution impact on other sales of sound recordings.

221. As well, the SDARS' claim that they "represent a new revenue stream from the standpoint of the record companies and artists," SDARS FOF at ¶ 713, rings false, given that there is extensive evidence that listening to SDARS substitutes for the sale of CDs and the sale of music through other, higher-royalty-paying services, *supra* Section III.B.3.

222. As discussed in more detail in SoundExchange's Proposed Conclusions of Law, the SDARS' claim to have opened new markets is actually far less valid than the claim made by

the PSS more than a decade ago. Whereas the PSS were the first of their kind, the SDARS are among many digital music services – including many that can deliver sound recordings for use portably or on-the-go. Herscovici WRT at 30, SX Tr. Ex. 130. That the SDARS are using a different transmission medium – based on technology that was already well-known – does not in any suggest that they have been the key to the exploding array of digital music options available to consumers. Rather than opening new markets and expanding the extent to which consumers can access creative works, the SDARS are merely displacing music consumption in other markets. Herscovici WRT at 30, SX Tr. Ex. 130. In their filings before the FCC, the SDARS emphasize this marketplace at great length, arguing that they really are little different from the "broad array" of options facing the consumer. SX Trial Ex. 106, at 36, and SoundExchange agrees, but that also means that, given that marketplace, there is no reason for the SDARS to pay a rate dramatically below their competitors.

D. Factor 4: The SDARS' Disruption Case Is Unsubstantiated.

223. Past cases always have treated disruption as a short-term phenomenon addressed by increasing rates gradually, as SoundExchange has done. The SDARS have made a more dramatic claim: that SoundExchange's rate will destroy the SDARS. But they do not even try to prove that claim. Instead they throw up a series of false metrics, all trying to find some rationale for their claim that any rate even $1 above the [[redacted]] that Sirius has budgeted (or the 4% that Mr. Vendetti approved on the stand) would be disruptive, even though sound recording royalties are only one of many line items in the SDARS' budgets and the SDARS have repeatedly expended enormous sums on non-music content programming, despite their recent claims of poverty. In the end, the SDARS submit to the Court a series of false metrics, none of which provide any basis on which this Court could find that the SDARS' business will be disrupted. In

the end, the SDARS and their investors simply want to pay less. That is claim that many copyright users have made before copyright royalty tribunals and it is one that has no place in the analysis of disruption.

1. The Parties' Projections of the SDARS' Probable Future Are Nearly Identical

224. As a threshold matter, it is worth noting that there is no material dispute about the projected future growth of subscribership and revenues (as well as all other financial metrics) of the SDARS. The parties' Findings of Fact are essentially in agreement about the SDARS' financial projections. In particular, the Sirius and XM figures rely upon in the SDARS Findings, *see* SDARS FOF at ¶¶ 737, 740, are in accord with the more comprehensive statements contained in SoundExchange's Findings, which also include for comparison's sake the more conservative financial results of the Butson models, and the SDARS' more optimistic internal projections. *See* SX FOF at ¶¶ 1093-1097. As the SDARS' acknowledge in their Findings, the projections show a "consistent trend toward profitability and achievement of free cash flow." SDARS FOF at ¶ 737.

225. The only significant difference between the Frear model produced for litigation purposes upon which Sirius relies in its Findings of Fact, and the Butson model, is that Sirius for purposes of this litigation only assumes that there will be no retail rate increase throughout the rate term and that rates will decline in real terms. SDARS FOF at ¶ 760. Mr. Butson, the internal Sirius data produced in discovery, and virtually every analyst covering Sirius assume that Sirius' retail rates will at least keep pace with inflation. SX FOF at ¶¶ 1079-1084. Sirius' assumptions about its retail rate delays the time at which Sirius will become cash flow and EBIDTA positive by about one year. *Compare* Butson WRT App. E with SDARS FOF at ¶ 737.

As we established in our Findings of Fact, Sirius' assumption that its retail rates will decline in real terms in every year of the rate term is incredible and should be rejected by the Court. SDARS FOF at ¶¶ 1073-1084.

226. The XM data in the SDARS' Findings, FOF at ¶ 740, similarly conforms to the XM data reported in SoundExchange's Findings, *see* SX FOF at ¶ 1096, where it is compared to the analysis provided by Mr. Butson and collected in discovery from XM.

227. Although the SDARS denigrate Mr. Butson's projections as "optimistic" and assert that "many" of his assumptions are incorrect, SDARS FOF at ¶ 29[8] (and level far more extreme charges against Mr. Butson in Mr. Frear's written rebuttal testimony, *see* SX FOF at ¶¶ 1085-1089), the above comparisons show that in almost every respect, Mr. Butson's projections are more *conservative* than those relied upon by the SDARS themselves. Indeed, the SDARS take Mr. Butson to task for relying on subscriber growth numbers that are slightly more conservative than those used by Sirius. SDARS FOF at ¶¶ 761-762.[9]

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[8] Ultimately, they challenge only two of his assumptions, and both are trivial. The SDARS take Mr. Butson to task for using analysts reports that did not fully capture Sirius' OEM revenue share payments, because Sirius did not make those payments public. SDARS FOF at ¶ 763. This assertedly led to a understatement of costs in the amount of $55 million over the six year license term. But the SDARS will expend tens of billions of dollars over this period – making this amount immaterial, and in any event Mr. Butson freely acknowledged that the SDARS are privy to more accurate and granular information than they reveal publicly. The SDARS also take Mr. Butson to task for failing to recall on the witness stand where in his model he captured advertising revenue share, a sum of [redacted] over the rate term, which is, once again, an immaterial sum in the context of tens of billions of dollars of expenditures. *Id.* at ¶764.

[9] It is misleading, however, to suggest that Mr. Butson "chose" a low subscriber count or a high revenue per subscriber. SDARS FOF at ¶ 762. As Mr. Butson explained, the numbers he used were not his own but were derived by averaging publicly available analysts reports. SX FOF at ¶ 1061. It was not Mr. Butson, but 18 out of the 19 analysts whose reports he reviewed, that projected that Sirius' retail rates would keep pace with inflation. *Id.* ¶ 1083.

228. Because there is no real dispute between the parties' projections, which show dramatically increasing revenues, free cash flow, and other metrics, the SDARS are reduced to arguing that the Court should not exercise its judgment to consider the future at all. SDARS FOF at ¶ 747. That suggestion both ignores the fourth statutory factor and prior decisions. As the D.C. Circuit has held, the four statutory factors call upon the Court to exercise its predictive judgment based on the record before it. *Recording Industry Association of America v. Copyright Royalty Tribunal*, 662 F. 2d 1, 8 (D.C. Cir. 1981).

2. The SDARS' First Attempt – Investor Expectations

229. In the SDARS' direct written testimony, the *only* argument they made concerning disruption was advanced by their sole finance expert, Mr. Armand Musey. He argued that a royalty rate increase above the level expected by analysts would lead to a lowering of the target price of the SDARS' stocks, and so "disrupt" the expectations of the SDARS' shareholders. Musey WDT at 19-38. This argument did not survive the trial. It was rejected by Sirius' CFO David Frear on cross-examination as irrelevant from the point of view of Sirius' business. 6/12/07 Tr. 156:11-14 (Frear) (Judge Roberts: "Given what you have just said . . ., Mr. Frear, I can't help but think . . ., what is the significance of Mr. Musey's testimony?").[10] *See also* 6/12/07 Tr. 148:9-156:20; 205:14-209:7. On cross-examination Mr. Musey acknowledged he had never even read the four statutory factors but was under the mistaken impression that the fourth factor addressed disruption to investor expectations. 6/13/07 192:8-193:22 (Musey).

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[10] As to Mr. Musey's weighted average cost of capital analysis, Mr. Frear was particularly scathing. 6/12/07 Tr. 148:20-21 ("for me [Mr. Musey's], chart [the WACC] actually doesn't say anything – anything, not to me.") *Id.* at 150:11-15 (Mr. Musey's WACC analysis "it's not helpful to me in running a me...I tend not to look at [analysts'] assumptions of risk as I run a business.").

230. As explained in detail in SoundExchange's Proposed Findings of Fact, Mr. Musey's testimony actually supports SoundExchange and demonstrates that there would be no disruption if the Court were to adopt SoundExchange's rate proposal. SoundExchange FOF at VI.D.4.d. Not surprisingly, Mr. Musey's argument does not even appear in the disruption section of the SDARS' Proposed Findings of Facts, beyond one mention in a parenthetical buried in paragraph 787. Rather, the SDARS attempt to reformulate it as a "fair income" argument; as discussed, it once again proves SoundExchange's point, not the SDARS.

3. The SDARS' Second Attempt – Operating Losses

231. When their one argument in the direct phase fell apart, the SDARS tried to piece together in rebuttal and in their findings of fact an argument that they cannot afford a rate at the level proposed by SoundExchange, and will be forced to shut down if it is adopted. But no record facts support this argument, and to the contrary the overwhelming weight of the record evidence is to the contrary.

232. The SDARS' new favorite argument is that they are "fragile" because they are not currently profitable and have sustained billions of dollars of operating losses. SDARS FOF at ¶ 722. By "fragile" (a word that is used repeatedly in the SDARS' findings of fact), the SDARS mean to imply that the SDARS are teetering on the edge of insolvency and that any reasonable royalty rate could push them over the edge. But as we show in what follows, that is false, and the record disproves it.

233. The SDARS have, and always have had in the past, operating losses. Even under the most optimistic scenario, and even if the royalty rate were set at zero, they will continue to have operating losses for several years to come. SDARS FOF at App. C. As discussed below, as with the "investor expectation" metric from the direct phase, operating losses through 2012 are a

false metric. They tell the Court nothing about the SDARS' financial health and nothing about the proper level of the royalty rate.

234. It was always part of the SDARS' plan to sustain billions of dollars of operating losses before they turned the corner and became profitable. As Dr. Noll acknowledged on cross examination: "Most of these high-tech industries, because of the nature of their cost structure, the high-fixed cost, low-marginal cost, do have huge start-up losses initially. . . . So the fact that they're losing a lot of money doesn't give you any real information." 8/16/07 Tr. 89:21-90:15 (Noll). Companies like DirectTV and the cell phone companies all developed substantial deficits which they did not begin to retire until they attracted sufficient customers to begin to pay off their start up costs, and these companies are not now and were not at a comparable stage of their development ever considered "fragile." DirectTV to this day still carries a $2.9 billion accumulated deficit, 13 years after it obtained its first customer, and it did not begin to reduce that deficit until 2005, 11 years after it began service. Butson WRT at 4, SX Trial Ex. 123.

235. To their investors and to the world at large, the SDARS do not suggest that such losses are a problem; indeed, they continue to describe themselves as intensely robust. Sirius for example believes that it has a very solid business model and that it is executing on it almost flawlessly. SX Trial Ex. 28 at 6. It tells investors that the potential for satellite radio is huge today, 6/12/07 Tr. 59:12-16 (Frear), SX Trial Ex. 41 at 7; that the SDARS are positioned for good long-term growth. 6/12/07 Tr. 60: 1-2 (Frear); and that Sirius presents an attractive business model characterized by low monthly churn, high prepaid rates, significant operating leverage, and long-term EBITDA margins of 40-50%. *Id.* and SX Trial Ex. 41 at 27 (SIR00014956). Sirius also believes it is favorably situated in a "high growth" industry with significant barriers to entry," that it benefits from broad OEM and retail distributions, and that it

presents "improving operating metrics" and a "fully funded business plan." *Id.* at 6 (SIR00014935). And as Mr. Frear acknowledged, SDARS have "high contribution margins and ... very stable fixed costs that don't grow at the same rate as revenue does and so you get significant operating leverage." 6/12/07 Tr. 64: 9-13 (Frear). As a result "our contribution margin as a percentage of our revenue has stayed relatively stable right around the 70% range. And our other costs of the business haven't grown anywhere near as fast as the revenues are growing, and, so in essence the EBIDTA losses of the business are shrinking each year. [That] is a good thing." *Id.* at 65:9-18 (Frear).

236. Even in their Findings, the SDARS acknowledge that both companies are growing at a strong pace and that they are on track to meet 2007 growth projections. SDARS FOF at ¶¶ 723-730. They also acknowledge that the key to their eventual profitability is subscriber growth, *id.* at ¶ 730, a point that is made repeatedly without contradiction in the record. *See, e.g.,* Butson WDT at 12, SX Trial Ex. 57; 6/13/07 Tr. 162:15-18 (Musey); 6/6/07 Tr. 24:2-7 (Vendetti).

237. The SDARS nevertheless claim that SoundExchange's rate proposal causes the SDARS to suffer net losses each year of the license period and that, as such, it is disruptive. SDARS FOF at ¶¶ 743-744. But that claim suffers from at least two major flaws. First, the SDARS have always had operating losses and project to have them into the future. Why the SDARS cannot expend more money on sound recordings today, as opposed to chipsets several years ago, or the Howard Stern deal in 2004, is never explained, nor could it be. Second, and related to the first, net loss is derived from subtracting total costs from total revenues. The sound recording royalty is merely one cost item – it is not solely responsible for a company's net losses or gains, any more than any cost or revenue item is responsible. The SDARS' approach to the

financial issues in this case – to place all the responsibility on the sound recording royalty for its profit and loss statement – has no basis in finance and none in the four statutory factors.

238. As the record demonstrates, the SDARS have suffered net losses in every single year of their existence, and even under their own near zero rate they would continue to suffer losses at least through 2009. Frear WRT, SIR Trial Ex. 59. Those losses are the result of the fact that the SDARS have not yet achieved a size that allows them to have net income, but 1) they are well on their way to doing so and 2) that has always been their business plan. For that reason, as Mr. Butson explained without contradiction, the relevant question is whether the companies are growing and the losses are shrinking. Butson WRT at 14-16, SX Trial Ex. 123. As to that, the SDARS' own Findings of Fact show that in every year under SoundExchange's rate proposal the deficits for both of the companies decline. SDARS FOF at ¶744 (chart). The effect of the SoundExchange proposal is merely to delay the time by which the companies become net income positive. The SDARS have not even attempted to show that that delay would have any disruptive effect on their businesses.

239. Exactly the same point is true about the free cash flow metric. The SDARS themselves argue in their Proposed Findings of Fact that free cash flow is the "metric that most closely translates into return on investment," SDARS FOF at ¶ 209. The SDARS bemoan the fact that under SoundExchange's proposal, the companies do not turn free cash flow positive until the end of the license term. SDARS FOF at ¶ 745. But exactly the same thing is true if one assumes the SDARS' own near zero royalty. *See* Butson WRT App. E, SX Trial Ex. 123. Directionally, under either proposal, free cash flow for both companies improves every year (except 2012 for Sirius, because it purchases satellites that year). *Id.* To put this in perspective, Sirius has sustained these losses since 1992, and if its preferred near zero rate is adopted it

projects those losses will end in 2009, meaning it will have taken 17 years to achieve that milestone. With SoundExchange's rate, that milestone will be achieved in 2010, 18 years after the business started. *Id.* The SDARS are unable to explain why this one-year delay is of any significance. As Dr. Herscovici explained, they are not because so long as the future revenue streams are growing and strong, *i.e.*, so long as the SDARS continue to gain subscribers by having attractive content, there is no threat to their viability from a royalty rate of the sort SoundExchange has proposed. Herscovici WRT at 33-42, SX Trial Ex. 130.

240. Indeed, the SDARS do not even try to show that the one-year delay in becoming cash flow positive would have any effect on their businesses. *See* 6/13/07 Tr. 206:15-16 (Musey) ("Q: You make no claim about what a delay in achieving a state of positive cash flow would do to the underlying business, do you? A: I do not.").

241. In any event, the SDARS' claim that their losses are "a direct consequence of the extraordinary sound recording royalty sought by SoundExchange," SDARS FOF at ¶746, is false. Under any royalty, the SDARS will suffer losses in the early years and those losses will decrease over time. Of course, *any* cost increase, including an increase in a royalty payment, will decrease cash flow and net income. If a business can virtually eliminate the cost associated with its most important input, its financial situation will improve, at least on paper. Herscovici WRT at 33-34, SX Trial Ex. 130. That is simply a mathematical point and has nothing to do with "disruption" or "fairness," unless the SDARS mean to suggest (as they appear to do) that any rate above zero is by definition disruptive and unfair. If that were the test, Congress would not have granted a license in the first instance.

242. Finally, the claim that all losses must be eliminated by 2012, SDARS FOF at ¶ 747, or that the Court should jigger the sound recording royalty rate to make it work out that the

sum of free cash flow totals over the years 2007-2012 equals zero, *id.* at ¶ 800, is totally artificial and has nothing to do with finance, with the SDARS "economic viability," *id.*, or with any of the statutory factors. No SDARS witness testified that they faced a 2012 deadline to turn losses into gains, and such testimony would have been incredible. In any event, that is an impossible goal. The SDARS accumulated deficit, which they tout as perhaps the most significant metric, will not be eliminated by 2012 even at a zero rate. Neither can their deficits accumulated only over the rate period (Dr. Noll's preferred metric) be reduced to zero through manipulation of the royalty, according to the SDARS new Appendix C, SDARS FOF at App. C, unless the record industry is ordered to pay the SDARS $2.2 billion. *Id.*

243. Ultimately, the SDARS' arguments about operating losses and free cash flow are simply an argument that they do not want their costs to increase. The claim that any sound recording royalty above the [[redacted]] that Sirius has budgeted is dispositive is really a claim that any increase in any line item would be disruptive. SX Trial Ex. 58; SDARS FOF at ¶ 735. There is nothing in the record to support that claim and a host of data, in particular the large sums the SDARS spend for non-music content and their own statements about having a great future despite having current operating losses, that belies the claim.

244. In the end, the SDARS's disruption argument is one that prior tribunals have routinely rejected. The argument that any increase in cost beyond what had been planned will be disruptive or lead to bankruptcy is one often heard by copyright royalty panels and regularly rejected as a measure of disruption under the fourth statutory factor. "The fact that an increase in the rate will increase costs is not per se an argument against raising the rate" under § 801(b)(1)(D). *Phonorecords*, 46 Fed. Reg. at 10486. *See also id.* at 10481 ("We reject the contention that any immediate increase in the mechanical royalty payable to copyright owners,

would be disruptive on the record industry. The record in this proceeding clearly shows that an increase in the compulsory license is necessary to afford copyright owners a fair return."). Moreover, the fact that the SDARS pay market rates for everything else – especially less valuable non-music content that serves the identical purpose that sound recordings do – strongly counsels against moving far from a market rate here (other than to ramp up the rate over time). *Jukebox CRT*, 46 Fed. Reg. at 889 ("The jukebox industry pays reasonable market prices for all other goods and services they require. We hold that they can pay the schedule we have adopted for the central commodity of their boxes without adverse impact.").

245. Indeed, many of the arguments that the SDARS make here are identical to those that Copyright Royalty Tribunal considered and rejected when they were made by cable companies, albeit in a proceeding to set two different rates under standards that required the CRT to "make a reasonable adjustment" to rate in one case and to set "reasonable' rates giving due consideration to "the economic impact on copyright owners and users," in the other. *Adjustment of the Royalty Rate for Cable Systems*, 47 Fed. Reg. 52146, 52152 (1982) (quoting H.R. 94-1476, at 176). In that proceeding, cable company witnesses testified about:

> the extensive capital investment required in the construction of systems, and the number of years required before many systems become profitable. But our record establishes significant growth in the number of cable subscribers and the prospect of a further steady rise in the percentage of households serviced by cable. . . . [cable witnesses further] asserted that many of the cable systems currently being built will not show a profit before the eighth to twelfth year of operation. Copyright owners in their evidence presented a different picture of the health of the cable industry, but even our acceptance of NCTA's assessments would not produce the result in this proceeding urged by NCTA.

47 Fed. Reg. at 52153.

246. In that proceeding, the CRT rejected the cable industry's claims of poverty, as well as its demand that copyright license rates be set in so that cable operators could show profitability and pay copyright owners last:

> Our statutory mandate to consider the impact of the royalty schedule on the cable industry does not suggest that our task is to ascertain if the cable industry after paying for all other regular costs of operation has adequate remaining revenue for payment of reasonable copyright fees for the carriage of distant signals. The rates we have adopted will result in a significant increase in the cost to an operator for carriage of a distant signal, and are likely to have an impact on the level of profitability of some cable systems. But we cannot restrict our rate determination to its effect on cable industry profits. Rather, we must strike a balance between copyright owner and user, while also remembering that only the cable operator has freedom of choice in this congressional mandated marriage.

47 Fed. Reg. at 52153.

247. Finally, it is worth noting that, in the event of a merger between XM and Sirius, which those companies believe is likely to occur, the entire argument about operating losses -- even if taken at face value -- disappears. As the SDARS have indicated, if the merger is approved, the SDARS will realize accelerated and enhanced cash flows and "significant, realizable cost synergies" that will benefit both consumers and investors. SX Trial Ex. 5 at 5, 8. As a result of the merger, while costs will decline in virtually every category, there will also be an improvement in all revenue categories, including subscription revenue, advertising revenue, and equipment revenue. SX Trial Ex. 76 at 3; 8/15/07 Tr. 193:9-13 (Frear). In fact, the merger will lead to estimated capitalized cost saving of approximately $3 to $7 billion. SX Trial Ex. 5 at 9. *See also* 6/5/07 Tr. 91:13-92:11 (Parsons). Those cost savings wipe away the complaints of the SDARS about operating losses under any rate proposal. Because the SDARS themselves are on the verge of seeking to radically change this industry and to erase the arguments on which

they principally rely for a low rate through 2012, the Court should ensure that the royalty rate adopted accounts for the possibility of a merger.

4. The SDARS Third Attempt – Accumulated Deficits.

248. Although the bogey-man of "accumulated (or cumulative) deficit" featured prominently at trial, the SDARS virtually abandoned it in their discussion of disruption in their Proposed Findings of Fact. As with the other metrics discussed above, "accumulated deficit" is a meaningless statistic for purposes of the analysis here.

249. Critically, the SDARS acknowledge and quote Dr. Noll's admission that the growth of the cumulative deficit would not be disruptive "with respect to this product," *i.e.*, the SDARS, because it is entirely a backwards looking metric. SDARS FOF at ¶ 748 (quoting Dr. Noll). Dr. Noll goes on to say that the Court's failure to address the deficit here might dissuade investors in new businesses who also need to obtain sound recording licenses under section 801. *Id.* But there are no such businesses, as Congress has determined that the willing buyer/willing standard seller will apply to any new technologies and any new subscription services. Thus, all of the SDARS' rhetoric about hampering the development of new technologies is irrelevant to the application of the statutory factors here.

250. In any event, Dr. Noll's point, echoed by Mr. Frear, SDARS FOF at ¶749, is that no one would invest in a business if there were some rule or regulation in place that assured that it would never recover start up losses. That is a straw-man. SoundExchange is proposing no such rule, and in fact the accumulated deficits grow in the early years under any conceivable rate, just as the rate of growth of the deficits shrinks every year under any conceivable rate. Once again, the SDARS' point seems to be that there is something magic about 2012; thus, they point out that under the SDARS proposal "accumulated deficits continue to climb every single year

during the license term," SDARS FOF at ¶ 750, while under their proposal the deficits stop rising near the end of the rate period. That is true. Under the SoundExchange proposal, for example, Sirius' deficits do not begin to shrink until 2013, one year *after* the end of the rate period. *See* Butson WRT, App. A. The SDARS never explain why that makes any difference, and it does not. Many highly successful businesses, such as Amazon.com and DirectTV, continue to this day to show billion dollar accumulated deficits on their books a decade or more after they first began providing service. Butson WRT at 4, SX Trial Ex. 123; SX FOF at ¶¶ 1009-1010. As Mr. Butson demonstrates, the accumulated deficit is a meaningless accounting statistic, and there is no evidence that either Mr. Vendetti or Mr. Frear have ever so much as mentioned the term outside of this litigation in all of the years they have been involved with the SDARS. *See* 8/27/07 Tr. at 266:11-267:7 (Butson) (in his years of meeting with representatives of XM and Sirius he never heard them once mention accumulated deficits).

251. Dr. Noll makes a similar and equally misguided point about the SDARS' forward-looking costs – he states the obvious point that for these businesses to be successful these costs must be recovered over the long run, or no one would invest in the SDARS businesses. SDARS FOF at ¶¶ 752-758. He points out that the SDARS' losses are such that under a 6% royalty the SDARS will be no worse off in 2012 than they are in 2006, while under SoundExchange's royalty they will be. He concludes from this that any royalty higher than 6% "will put the SDARS operators out of business." Noll WRT at 36, SDARS Trial Ex. 72.

252. Now, according to the SDARS, counsel has updated the Noll calculation based on the more recent SDARS financial results reported in the rebuttal phase of the case. Those results, appearing in their Appendix C to the Proposed Findings of Fact, purportedly show that even with a zero royalty rate the SDARS still would be worse off in 2012 than they are in 2006,

to the tune of $2.2 billion. SDARS FOF at ¶ 758 & App. C. Since it is Dr. Noll's testimony that this number must be brought down to zero or the SDARS will be put "out of business," the SDARS conclusion must be that this Court should not set a "near zero" royalty, but a negative royalty that requires SoundExchange to pay the SDARS $2.2 billion, or else they will go out of business.

253. This "revised" version of Dr. Noll's analysis merely underscores the utter meaninglessness of that analysis. Among other things, it shows that the sound recording royalty is not what "causes" deficits or prevents the recovery of forward-looking costs, and it should not be used as a lever to "fix" them. Herscovici WRT at 33-34; SX Trial Ex. 130.

254. Still later the SDARS seize upon a 4% rate, because assuming a 4% rate, the sum of all free cash flows from 2007 to 2012 happens to total to around zero, and cumulative zero free cash flow from 2007-2012 is asserted to be "necessary for [the SDARS'] viability." SDARS FOF at ¶ 800. They do not say why this is so. The SDARS at the same time assert that the accumulated net income or profit from 2007-2012 achieves some minimally acceptable level if the royalty rate is set at 4%, though they do not identify that magic net income number. SDARS FOF at ¶ 800. According to Mr. Frear's calculation, that number is a loss of $964 million. Frear, Sir Ex. 58 (summing up annual "Net Loss" lines). The SDARS do not explain the talismanic significance of having cumulative net losses be no greater than $964 million during the rate period, perhaps because it is not as round or satisfying a number as zero, the cumulative free cash flow number that they urge the Court to generate through manipulation of the royalty rate.

255. Presumably, since the SDARS are becoming increasingly profitable, had the rate period ended at 2011 instead of 2012, the SDARS would have found a lower rate than 4% to

have been "necessary for [the SDARS'] viability," and if the rate period had ended at 2013 a higher number would have been allowable.

256. Not only do such arguments make no sense from an economic point of view, they would put the Court in the position of an administrator seeking to use the sound recording royalty to micro-manage the SDARS' profit and loss statements to generate a particular (and wholly arbitrary) set of outcomes. That kind of economic thinking went out of fashion with the fall of the Berlin Wall. It has nothing to do with any of the four statutory factors.

257. Finally, neither Dr. Noll nor any other SDARS witness is able to explain what makes 2012 such a magical date for the SDARS' finances. Indeed, when pushed in Court by Judge Wisniewski as to how long a period of time it should take before accumulated deficits are overcome, and why they should be overcome on the back of the record industry, Dr. Noll said only that he "didn't know how to go about [solving] that problem," and that it was "up to [the Court] to decide." 8/16/07 Tr. 88:16-89:20. The SDARS' misuse of the financial evidence in this case merely underscores that their "fairness" and "disruption" claims are completely hollow.

258. As with the other measures of disruption, the SDARS have even less of an argument assuming the merger goes through. The $3 - $7 billion in cost savings means that the SDARS will rapidly reduce their accumulated deficits – although that measure is of no use in any event. *See supra.*

5. The SDARS' Fourth Attempt – Borrowing.

259. Finally, the SDARS claim that the increased costs associated with SoundExchange's royalty proposal would make it difficult for the SDARS to refinance existing debt. SDARS FOF at ¶¶ 765-782. But as with their other claims involving disruption, they fail to prove their case. Indeed, the record demonstrates that the SDARS have always been able to

borrow money, even when their prospects were far less rosy, and that they have done so just recently on highly favorable terms.

260. The SDARS witness Mr. Musey testified that both XM and Sirius have credit ratings below investment grade, which prevents many banks from loaning them money, increases the cost of debt, SDARS FOF at ¶ 769, and that "the company is significantly challenged in borrowing money as it is." *Id.* at 768 (quoting Musey). It is remarkable that the SDARS continue to rely on this testimony, because 1) the SDARS themselves tell the world outside this proceeding that the investment community (as distinct from the ratings agencies) views their bonds as much better than junk bonds, Herscovici WRT at 38, SX Trial Ex. 130 (quoting David Frear, CFO of Sirius), and 2) immediately prior to and subsequent to this testimony both XM and Sirius borrowed money on extremely favorable terms, disproving Mr. Musey's statement that they were "significantly challenged."

261. Specifically, in June 2006 Sirius entered into a credit agreement with Loral for a loan of $250 million associated with a new satellite on favorable terms of LIBOR plus 4.75%. *Id.* p. 15; 8/15/07 Tr. 134:6 (Frear). In the first quarter of 2007 Sirius obtained an even more favorable loan of $250 million for a 5.5 year term at LIBOR plus 2.25% – an exceedingly favorable rate equal to 7.625% . SX Trial Ex. 74 at 4. That rate was far below rates that Sirius obtained in prior years, showing that the marketplace has great confidence in the companies. Herscovici WRT at 39, SX Trial Ex. 130. At that time, Sirius commented in its press release that "the issue was very well received in the marketplace with strong demand and attractive pricing." *Id.* (citing "SIRIUS Completes $250 Million Loan," *M2 Presswire*, June 22, 2007). Similarly, just prior to the time that Mr. Musey offered his expert opinion, XM entered into a leaseback arrangement for one of its satellites for approximately $289 million at a rate of approximately

10%. 6/5/07 Tr. at 307:15, 308:10 (Vendetti). *See also* XM Trial Ex. 10 at Vendetti at Ex. 1, p. 51-52, F24-F29 & Ex. 2, p. 15. Sirius's bonds are trading at par, and according to Mr. Vendetti, "during 2006, XM replaced its existing debt structure, moving from higher-rate secured debt to lower-rate unsecured debt." Vendetti WDT at 14, XM Trial Ex. 4. In particular, XM significantly lowered the cost of its debt by replacing 12% and 14% notes with 9.75% notes. These are the practices of companies on sound financial footing, Butson WRT at 17-18, SX Trial Ex. 123; Herscovici WRT at 38, SX Trial Ex. 130, not companies that are "significantly challenged in borrowing money." SDARS FOF at ¶768.

262. The SDARS further take Mr. Butson to task for assuming that they would be able to re-finance existing debt at a rate of 10%. SDARS FOF at ¶765. They first point out that much of that debt is convertible, and that the stock conversion price is above the current stock price. *Id. See also id.* at ¶¶ 792-94. But Mr. Butson conservatively assumed that none of the debt would be converted to stock, and all would be refinanced not as lower-priced convertible notes, but at a rate of 10%. The SDARS' arguments about the current notes being convertible and "under water" are thus irrelevant.

263. Next the SDARS rely on a snippet of oral testimony from Mr. Frear in which he states that Sirius might have trouble re-financing existing debt because of reduced EBITDA levels and the ratio of debt to EBITDA caused by the SoundExchange rate proposal. SDARS FOF at ¶ 767. There is no analysis supporting this testimony, and no expert endorsed Mr. Frear's view, which was not part of his written testimony. His oral testimony is not credible. As Mr. Frear admitted, the ratios and EBITDA figures upon which he relies were far *worse* when Sirius borrowed the money initially, 8/15/07 Tr. 211:2-19 (Frear). And, as Mr. Butson

concluded in uncontradicted testimony, it is far easier to roll over existing debt than it is to increase borrowing. Butson WRT at 17.

264. Mr. Vendetti too suggested that XM might have difficulty refinancing its existing debt if SoundExchange's rate proposal were adopted. Vendetti WDT ¶ 7, XM Trial Ex. 10. But on cross-examination he acknowledged that he was only making a mathematical statement that XM would make less money with a higher royalty, a conclusion that Chief Judge Sledge observed meant that his written testimony about disruption "has no meaning." 6/6/07 Tr. 29:5-13 (Vendetti). Mr. Vendetti failed to provide any evidence, or even any conjecture, as to what level of royalty rate below the maximum rate proposed by SoundExchange would in his opinion make it possible for XM to access the debt market to refinance its existing debt. 8/15/07 Tr. at 55:7-11 (Vendetti). He provided no quantification of any increased risks associated with a higher royalty, and no analysis linking XM's allegedly limited access to financial markets to any particular royalty rate. 6/16/07 Tr. at 30:20-31:9 (Vendetti).

265. The SDARS assertions to the contrary, Mr. Butson did not "guarantee" that the existing debt could be refinanced. SDARS FOF at ¶ 777, and he did not "misapprehend" that credit facilities would have to be refinanced, no matter what rate proposal was adopted. *Id.* ¶ 776. Instead, he, along with Dr. Herscovici, provided substantial and uncontested empirical financial analysis which demonstrated that SDARS' claims that such re-financing was at risk are not credible. *See* SX FOF at ¶¶ 1217-1232.

266. As these experts explained, most of the SDARS' debt comes due in 2009, and by that time the projections are that with SoundExchange's rate adopted Sirius will be within a year of achieving positive free cash flow and positive EBITDA. Butson WRT at App. E. Sirius was nowhere approaching those milestones when it initially took on that debt, and its prospects were

far more uncertain. In fact, even at the time of the oral rebuttal hearings in August 2007, when the debt markets were in turmoil as a result of problems in the subprime mortgage lending area, and with the bond market well aware of SoundExchange's rate proposal, XM and Sirius senior secured bonds with coupons in the 9% range were trading at around 11%. 8/27/07 Tr. 277:17-278:7 (Butson).[11]

267. Nor is the $2.4 billion debt load of these two companies unreasonable, given their business model. The combined interest expense of $178 million is only 11% of 2006 expected revenues, and this percentage will decline significantly over the next several years as subscribers and revenues grow. Additionally, as indicated, of the total long-term debt figure, all but $126 million comes due in 2009 or later. By approximately that time, both companies will be close to producing positive free cash flow, meaning they will be able to finance their business and debt payments with internally generated cash flow.

268. Looked at another way, when most of the debt comes due in 2009, Sirius projects that it will collect approximately $1.5 billion in revenue, Butson WRT App. A, F. Projected EBITDA margins for 2010-2015, respectively, are $118 million, $266 million, $358 million, $513 million, $613 million, and $708 million. *Id.* Projected revenues over that same period total more than $16 *billion*. Butson WRT App. A. The claim that banks will not refinance their existing debt for a company with those financial prospects borders on the frivolous. Herscovici WRT at 38-39, SX Trial Ex. 130. Absent materially negative unforeseen circumstances,

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[11] Mr. Butson did not recognize as "false" his analysis of the debt as a result of the financial crises that was occurring at the time of his rebuttal testimony. SDARS FOF at ¶ 779. To the contrary he rejected the SDARS' counsel's claims that re-financing was impossible in this crisis situation, and testified that the SDARS' bonds were still trading at a level only slightly above their face value, in spite of the crisis. 8/28/07 Tr. 38:7-16 (Butson).

companies with billions of dollars of annual revenue, projected double digit EBITDA margins, and significant expected free cash flow will be able to access the credit markets to refinance their debt that was obtained when the SDARS had a radically less favorable financial outlook. Butson WRT at 18, SX Trial Ex. 123; SX FOF at ¶¶ 1217-1232.

269. Even if one assumed, conservatively, that the increased costs resulting from SoundExchange's rate proposal drove the bond price to, for example, 12%, that would result in approximately an additional $10 million in interest charges annually from the charges set out in Mr. Butson's models. These are relatively insignificant cost increases for companies the size of XM and Sirius and would not materially effect Mr. Butson's conclusions. 8/27/07 Tr. 278:8-279:10 (Butson).

270. The SDARS' claim that Mr. Butson should not have concluded that the SDARS did not need to borrow additional funds and were fully funded, in light of the fact that Mr. Frear testified to the inadequacy of a $41 million cash cushion, which he claimed would be the "low" point in the rate term if SoundExchange's rate proposal were adopted. SDARS FOF at ¶¶ 770-771. But this is simply to acknowledge that Mr. Butson is correct that at all times under SoundExchange's rate proposal, both SDARS are liquid. If in fact in 2009 it appears that Sirius will have a cushion of only $41 million, and it seeks to borrow additional funds at that point, even Mr. Frear does not suggest that it will have any difficulty borrowing to create such a cushion. At that point it will have over $1.5 billion of revenue annually, and it would be incredible to suggest that it could not borrow to increase the amount of cash on hand. And, the fact that XM and Sirius both accessed the debt market successfully in 2007 does not mean the companies were not "fully funded" at that time. SDARS FOF at ¶ 771. As Mr. Vendetti explained at trial, it borrowed opportunistically. 6/5/07 Tr. 308:11-309:5 (Vendetti). That has

nothing to do with the SDARS status of being fully funded. Indeed, Sirius itself states that it is fully funded. 6/12/07 Tr. 139:13-14 (Frear).

271. Finally, as with all of disruption arguments made by the SDARS, the claim that they will have difficulty borrowing becomes even more absurd in the event of the expected merger. SX FOF at ¶¶ 1233-46.

6. One Final Comparison

272. As explained above, the various measures offered by the SDARS provide no basis for concluding that the SDARS will in anyway be disrupted by the rates proposed by SoundExchange. Each of the measures proposed by the SDARS tells the court nothing about their long-term viability.

273. XM and Sirius suggest that they are radically different from other companies and therefore cannot afford a market rate because 1) they have substantial debts; 2) their stock value is low and/or fluctuates; or 2) they have significant accumulated deficits. They use these factors to suggest that their financial prospects are in jeopardy and they cannot afford to pay much for sound recordings. But these factors do not differentiate XM and Sirius from many companies – including record companies to whom they owe royalties in this proceeding.

274. Warner Music Group is the only stand-alone record company that is publicly traded; it includes both a sound recording business and a music publishing business. WMG has approximately a 20% share of the U.S. sound recording market. Bronfman WDT at 1, SX Trial Ex. 59.

275. Like XM and Sirius, WMG also has a significant accumulated deficit – $516 million as of the end of fiscal year 2006. SDARS Trial Ex. 35 at SE 0214110 (WMG 2006 10-k).

276. XM and Sirius point to their debt loads and argue that they will have difficulty raising money in the future, but WMG has a higher debt load than XM and Sirius, with long-term debt as of the end of fiscal year 2006 of more than $2.2 billion. SDARS Trial Ex. 35 at SE 0214134 (WMG 2006 10-k). In contrast, as of the end of 2006, Sirius had only $1.1 billion in debt. SDARS Trial Ex. 69 at 21 (Sirius 2006 10-k). The interest rates of WMG's recent indebtedness exceed, in some cases, that of the debt that Sirius was able to access in mid-2007. SDARS Trial Ex. 35 at SIR 0214134.

277. XM and Sirius also suggest that their stock prices and market capitalization reflect significant risk, but WMG's stock prices has fluctuated significantly and its market capitalization is under $4 billion, less than that of Sirius, which is over $5 billion. *See* SDARS Trial Ex. 35 at 35 (Warner Music Group 10-K, showing stock price of $25.60); *id.* at 90 (showing 149 million outstanding shares); SDARS Ex. 69 at 25 (Sirius 10-K showing stock price of $3.74); *id* at F-7 (showing 1.4 billion outstanding shares).

278. Unlike XM and Sirius, no one projects WMG's revenues to grow at the rate that XM and Sirius' will. Whereas XM and Sirius project revenues to almost triple from 2007 to 2010, the prospects for sound recording companies are on the decline. Herscovici WRT at 3-12, SX Trial Ex. 130.

279. These comparisons merely show that the SDARS are no different from many companies and the metrics about which they complain are no different than those faced by companies across the United States, who pay market price for their inputs all the time. That the SDARS have borrowed money and may borrow again, have an accumulated deficit, and have a market cap collectively of $10 billion does not distinguish them. And it certainly provides no basis for finding disruption here.

7. Conclusion

280. In sum, the SDARS' claims that it would be disruptive to adopt SoundExchange's rate proposal are not supported by the record evidence, which establishes to the contrary that the SDARS would not be disrupted by a royalty rate at the level proposed by SoundExchange.

281. The SDARS have provided literally nothing in response to the testimony that 1) their long-term prospects are exceedingly strong under SoundExchange's rate proposal if adopted, as shown by the analysis of Mr. Butson and Dr. Herscovici; 2) they have and continue to borrow money with no difficulty, including in times when their future prospects were less strong; and 3) they have paid market rates for many things, most particularly non-music content that is less valuable than the sound recordings at issue here. SX FOF at Section VI.D. There is thus no reason to conclude that paying less for sound recordings would have a disruptive impact.

282. Thus, for all of the above reasons, the SDARS' four-factor analysis lends no support to their near-zero rate proposal.

IV. THE PSS RATE: A FLAWED BENCHMARK DIMINISHED BY FAULTY ANALYSIS

283. The SDARS' benchmarks do not support their rate proposal any more than their four-factor analysis does.

A. No One Knows Whether the PSS Rate Reflects the 801(b) Factors, Much Less How to Adjust Those Factors for Differences Between the PSS Services and the SDARS

284. The best the SDARS can say about the rate negotiated between the record companies and the PSS in 2003 is that the rate "*presumably* reflects the parties' *expectations* of the value of the 801(b) factors and what the CARP would have decided . . . had the parties litigated." SDARS FOF at ¶ 818 (emphasis added). Their argument that the PSS rate is valuable

as a benchmark because it reflects the § 801(b) factors thus is based not on evidence but on speculation – the SDARS admittedly do not know whether that rate is based on the § 801(b) factors or not. And even if the parties who negotiated the PSS rate did attempt to address the § 801(b) factors, as the SDARS again admit, the rate reflects not a CARP's application of those factors, but only the parties' "expectations" of how a CARP would apply the factors. *Id.* Whether the parties to the PSS negotiation had an accurate expectation of how the CARP would apply the 801(b) factors is anyone's guess. And if the parties settled the case because they did not *want* the 801(b) factors to enter in, that too is unknown.

285. Quite apart from the uncertainty engendered by the fact that the parties to the PSS rate negotiation might or might not have considered the § 801(b) factors, and might or might not have accurately predicted how a CARP would apply the § 801(b) factors, there is also great uncertainty about how to translate the application of the § 801(b) factors from the PSS to the SDARS. The SDARS argue that the PSS rate represents an upper bound for the royalty here because the SDARS "outperform" the PSS on each of the § 801(b) factors. SDARS FOF at ¶¶ 859-860. But that is demonstrably untrue.

286. For example, the CARP which set the PSS rate in 1998 considered the PSS services to be promotional. 63 Fed. Reg. 25394 at 25,407 ("If anything, the Panel believed that the Services decreased the risk to the recording companies because the digital audio services have substantial promotional value"). The SDARS services, on the other hand, substitute for other sales of recorded music. SX FOF at ¶¶ 673-713. Although Dr. Woodbury considered promotion and substitution to be quite important to the application of the § 801(b) factors, he did not in any way account for this difference between the PSS and the SDARS. As Dr. Herscovici found, the assumption of promotion was the linchpin of Dr. Woodbury's analysis; once removed,

Dr. Woodbury's analysis of each of the statutory factors falls apart. Herscovici WRT at 11, SX Trial Ex. 130; 8/29/07 Tr. 235:1-18 (Herscovici).

287. Instead, Dr. Woodbury considered the SDARS and PSS to be equally promotional, and this unfounded assumption pervaded his analysis of the 801(b) factors. In his written direct testimony, for example, Dr. Woodbury devoted five pages to a discussion of why a low royalty rate supposedly would maximize the availability of creative works to the public under Section 801(b)(1)(a), because the SDARS allegedly promote the sales of recorded music. Woodbury WDT at 43-47, XM Trial Ex. 8. Similarly, with respect to Section 801(b)(1)(c), Dr. Woodbury opined that the SDARS services impose no costs or risks on the record companies because playing sound recordings on the SDARS does not, in his view, substitute for purchases of CDs or downloads. Woodbury WDT at 51, XM Trial Ex. 8. Dr. Woodbury returned to this theme in his oral testimony, stating that the SDARS outperform the PSS services with respect to maximizing the availability of creative works because "I think in terms of their promotional components XM and Sirius again score higher than Music Choice[. . . .]" 6/12/07 Tr. 302:3-9 (Woodbury). He reaffirmed his assumption that under § 801(b)(1)(c) the risks to the record companies are reduced because the SDARS give the record companies "a new outlet for CD promotion." 6/12/07 Tr. 319:18-320:1 (Woodbury).

288. However, the evidence is overwhelming that Dr. Woodbury was wrong, and that the SDARS in fact substitute for other sales of music by the record companies. Ironically, economists from CRA International – the consulting firm where Dr. Woodbury is a Vice President (8/23/07 Tr. 163:22-165:4 (Woodbury)) – forcefully and repeatedly made this point in the report they prepared to support the proposed merger of XM and Sirius. They state, for example, that "satellite subscribers can and do substitute" for "many other popular audio

entertainment options" including "CD players" and "MP3s and iPods." SX Trial Ex. 106 at Ex. A at 10. It is no wonder that Dr. Woodbury opted not to read their report, even though it was emailed to him. 8/23/07 Tr. 165:5-166:3 (Woodbury). Dr. Woodbury's opinion that the SDARS promote sales of recorded music is flatly at odds with his own colleagues at CRA International, and with the position XM and Sirius have taken in their merger-related filings with government agencies. *See* SX FOF at ¶¶ 673-674.

289. In addition, SoundExchange provided abundant survey evidence proving that the SDARS substitute for sales in other markets, including (1) a study conducted for SoundExchange by Mr. Mantis, showing that the SDARS substitute for the sale of 2.6 CDs per subscriber per year (*see* SX FOF at ¶¶ 675-693); (2) a second study conducted for SoundExchange by Dr. Wind and relied upon by Dr. Pelcovits and Dr. Herscovici in their rebuttal testimony, which reached the same conclusion (*see* SX FOF at ¶¶ 694-695); (3) a survey conducted for the National Association of Recording Merchandisers showing that satellite radio listeners were significantly less likely to have purchased CDs and downloads in the last year compared to non-subscribers, and that 84.7% of the satellite radio subscribers who did not buy CDs or downloads in the last year said they did not do so because "they were satisfied listening to the music on satellite radio" (*see* SX FOF at ¶¶ 700-703); and (4) two surveys conducted by the SDARS themselves showing that time spent listening to CDs and downloads drops dramatically when consumers obtain satellite radio (*see* SX FOF at ¶¶ 696-699).

290. The SDARS' clear substitution effect on sales of CDs, downloads and other forms of music consumption has independent economic significance, because the lost sales represent an opportunity cost to the record companies of $1.29 per subscriber per month (8/28/07 Tr. 118:5-19, 120:12-21 (Pelcovits)), and all economists agree that opportunity costs represent a floor

beneath which the seller will not price and beneath which the return to the seller cannot be characterized as fair. 8/23/07 Tr. 163:5-10 (Woodbury); 8/20/07 Tr. 182:12-15, 183:21-184:6 (Benston); Noll WRT at 19, SDARS Trial Ex. 72. But for the purposes of this discussion, the SDARS substitution effect also illuminates the flaws in Dr. Woodbury's attempt to use the PSS rate as a benchmark.

291. With respect to the first and third § 801(b) factors – the only factors the SDARS consider relevant to a benchmark analysis (*see* SDARS FOF at ¶¶ 866-867) – Dr. Woodbury's belief that the SDARS promote music sales figured prominently in his discussion of why the SDARS "outperform" his PSS benchmark. *See supra.* Dr. Woodbury could not have been more wrong. While the PSS rate originally was set based in part on the premise that the PSS are promotional,[12] 63 Fed. Reg. 25394 at 25,407, the SDARS plainly are substitutional for other music sales. This 180-degree difference in how the relevant § 801(b) factors would apply to the benchmark PSS market and the target SDARS market exemplifies why it is wrong to assume, as Dr. Woodbury does, that the 801(b) factors affected the PSS rate way in the same way those factors apply to the SDARS.

292. Even the SDARS seem to recognize, contrary to Dr. Woodbury, that the PSS and SDARS cannot be equated with respect to promotion and substitution. The SDARS' discussion in their proposed findings of fact concerning why the SDARS "outperform" the PSS on each of the § 801(b) factors strikingly omits any discussion of promotion and substitution, even though

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[12] If the parties who negotiated the 2003 PSS rate indeed considered how the 801(b) factors should affect that rate – a supposition for which there is no evidence – it is logical to expect that they would have analyzed those factors under the assumption that the PSS services are promotional, consistent with the guidance they had from the 1998 CARP decision.

Dr. Woodbury made that discussion the cornerstone of his § 801(b) analysis. *See* SDARS FOF at ¶¶ 859-868.

293. Similarly, if the parties to the 2003 negotiation of the PSS rate did indeed consider the § 801(b) factors, how did they apply the fourth factor, which requires setting a rate that minimizes the disruptive impact on the structure of the industries involved and on generally prevailing business practices? And how would the PES negotiators' application of that factor to the PSS translate into a rate for the SDARS, which have far brighter financial prospects than the PSS? The SDARS have provided no evidence on this question.

294. The SDARS attempt to sidestep this question, contending that it is not necessary to know what effect Section § 801(b)(1)(d) had on the PSS negotiation, so long as the Court sets a rate in this case that does not disrupt the SDARS industry. SDARS FOF at ¶ 866. That argument is entirely illogical. If, for example, the PSS negotiators concluded that 30% of revenue would be a reasonable PSS rate, but they reduced it to 7.25% of revenue because the particular financial condition of the PSS rendered such a rate disruptive under the fourth § 801(b) factor, there is no reason why the SDARS should start off with a benchmark rate of 7.25% unless their financial condition matches that of the PSS in 2003. The SDARS are entitled to a rate that minimizes any disruptive impact on their industry, not a rate that minimizes the disruptive impact on the PSS.

295. It is no surprise that the SDARS try to argue that they need not compare the PSS and SDARS with respect to the fourth § 801(b) factor. First of all, virtually nothing is known about how the PSS rate was negotiated, exactly what the PSS' financial condition was in 2003, and how Section 801(b)(1)(d) impacted the 2003 rate. What is known is that the Librarian in 1998 thought the PSS services were in trouble and that the amount of PSS royalties that

SoundExchange distributes is so small it does not begin to approach litigation costs. SDARS Trial Ex. 26. Adjusting a PSS rate to account for the different ways that the fourth § 801(b) factor might have affected the PSS in 2003 compared to the SDARS today is impossible given the dearth of information about the 2003 negotiation. But what *is* known is that structure of the SDARS industry apparently is not disrupted by recent agreements to spend well over *$1 billion* on non-music content (SX FOF at ¶ 1128) – something that surely could not be said of the PSS. Nor could the PSS say, as the SDARS can, that they have grown faster than any other telecom or media subscription service. 6/19/07 Tr. 145:15-17 (Butson).

296. Sirius' revenue growth has been remarkable – from $0.8 million in 2002 to $12.9 million in 2003, to $66.9 million in 2004, to $242.2 million in 2005, to $637.2 million in 2006. SIR Trial Ex. 61 at SIR Exhibit 47, p. 26. Sirius expects to reach $1 billion in revenues by the end of 2007. 136:19-137:9 (Frear). No wonder Sirius' CEO, Mr. Karmazin, can report on an earnings call that "demand for SIRIUS continues to be strong, our financial performance is on track, and we are executing very well on our business plan." SX Trial Ex. 74 at 2.

297. XM's success story mirrors Sirius. XM is one of the fastest growing consumer products in history, having grown faster in its early years than cable television, cell phones and MP3 players. XM Trial Ex. 10 at Vendetti Ex. 1, p. 1. Like Sirius, XM expects to earn over $1 billion in revenues by the end of 2007. Butson WRT App. B, SX Trial Ex. 123.

298. For these reasons, the SDARS have a bright financial future, and it is for that reason that they are willing to invest huge sums of money in non-music content that contributes less to their bottom line than music. *See* SX FOF at ¶¶ 332-432. There is nothing in the record that remotely suggests a similarly bright future for the PSS. To the contrary, the PSS industry is beset with problems: two of the three PSS have withdrawn from the business; the remaining PSS

is transitioning to video products; and the SDARS themselves provide PSS-type services to satellite television at a price that is effectively [[redacted]]. *See* Pelcovits WRT at 13 n.30, SX Trial Ex. 124; SX Trial Ex. 209 RP, Tr. 200:21-201:2 (Chipty). The "disruption" factor of Section 801(b)(1)(d) is far more likely to have depressed the PSS royalty rate in 2003 than it would a royalty rate for the SDARS being set today.

299. In short, if one accepts that SDARS' unsupported argument that the PSS rate reflected the parties' expectations of how a court would apply Section 801(b), it seems entirely likely that the PSS rate is far too low, both because the PSS were deemed promotional while the SDARS are substitutional (which affects Dr. Woodbury's analysis under both Section 801(b)(1)(a) and 801(b)(1)(c)), and because the disruption factor of Section 801(b)(1)(d) would likely have exerted far greater downward pressure on the PSS rate compared to the SDARS. At the very least, it is not possible to adjust the PSS rate to account for the different ways the PSS service and the SDARS service today compare under the Section 801(b) factors, making it a deeply flawed benchmark.

B. The PSS Rate Most Likely Was Derived From the Musical Works Rate, and Should be Rejected for That Reason Alone

300. However the parties came to agree on 7.25% of revenues as a royalty rate for the PSS in 2003, it seems reasonable to conclude that the starting point for their negotiations was the existing 1998 rate of 6.5% set by the Librarian. The most plausible interpretation of the 2003 negotiation, given and the closeness of the 2003 rate to the 1998 rate, is the 1998 PSS rate strongly influenced the 2003 negotiated rate. 8/28/07 Tr. 126:1-128:13, 129:10-130:2 (Pelcovits). *See also* 8/23/07 Tr. 54:3-15 (Woodbury) (agreeing that the logical starting point for the negotiation was the 1998 rate). And the 1998 PSS rate was based on a musical works

benchmark – the same musical works benchmark that this Court rejected in its Webcasting Determination. Pelcovits WRT at 11-12, SX Trial Ex. 124; Woodbury WDT at 14, XM Trial Ex. 8; SX Trial Ex. 119 at SX Exhibit 209 RP, Tr. 139:21-142:11 (Chipty).

301. The only reason the 1998 PSS rate was grounded on the musical works benchmark was that, at the time, digital markets had not yet developed and there was no better benchmark. *See* 67 Fed. Reg. at 45247. Now there are multiple digital markets for sound recordings which demonstrate, as this Court has found, that sound recordings normally command a multiple of the musical works rate. Webcasting Determination, 72 Fed. Reg. at 24094.

302. Consequently, the PSS rate is not an "801(b)" rate, as Dr. Woodbury would have it. Instead, it is a musical works rate. For all the reasons the musical works benchmark is inappropriate in this case, the PSS benchmark which sprang from that rate should be rejected as well.

C. The PSS Benchmark Rate Was Not Adjusted for the Exponentially Higher Derived Demand of the SDARS

303. Quite apart from the fact that the 2003 PSS rate is useless as a starting point for the analysis in this case, Dr. Woodbury's adjustments to that rate – or lack thereof – were equally flawed. In particular, Dr. Woodbury entirely failed to account for the difference in consumer demand for the PSS and the SDARS.

304. There is a monumental difference in consumer demand for the PSS compared to the SDARS. That difference in consumer demand is reflected in the prices paid for the services. The sole remaining PSS, Music Choice, receives $[.■] per subscriber (Pelcovits WRT at 13, SX Trial Ex. 124), while the SDARS receive approximately $6.00 per subscriber for the music portion of their service. 6/13/07 Tr. 52:1-7 (Woodbury). Assuming, as Dr. Woodbury does, that

the price per consumer paid for the Music Choice service accurately reflects consumer demand for the service, the difference is on the order of [ ]%.

305. That consumers place a very different value on the PSS compared to the SDARS is unsurprising in view of their different functionalities. Most obviously, the SDARS offer a mobile service, while the PSS do not, and consumers value mobility. *See* SX FOF at ¶¶ 1354-1355, 1368-1369. Moreover, consumers can listen to music via a PSS only over their television, which further limits the listening experience to those rooms in the home that contain a TV, and limits the fidelity of the sound to that provided by television speakers. So different are the PSS and the SDARS that the PSS are not regarded by the SDARS as competitors. In their filings seeking approval of the proposed merger between XM and Sirius, the SDARS nowhere mention the PSS in the list of audio entertainment services with which they compete. SX Trial Ex. 106. Indeed, the SDARS provide music content [ ] to satellite television services because they view music transmitted over the television as a promotional tool rather than a competitor. SDARS FOF at ¶ 873.

306. Multiple economists have attested, and this Court in its Webcasting Determination agreed, that differences in consumer demand for a music service determine the royalty paid for sound recordings licensed by the service. Consumer demand must be accounted for in any benchmark analysis. The economic logic is straightforward. The price paid for sound recordings (or anything else) is a function of demand. When a music service is licensing sound recordings, its demand for the sound recordings is derived from the demand by consumers for the music service. The more the consumers value the music service, the greater the music service's demand for the sound recordings and, all else equal, the higher the royalty. As Dr. Ordover explained, "the demand for music through the channels of distribution is a derived demand, and

how these distributors will be willing to pay depends on . . . the willingness to pay of their customers." 6/21/07 Tr. 120:2-19 (Ordover). Likewise, Dr. Pelcovits noted that "the demand for sound recordings by a music service is a 'derived demand.' That is, the music service's demand for sound recordings is derived from the consumers' demand for music played on that service." Pelcovits WRT at 9, SX Trial Ex. 124.

307. This Court accepted the validity of derived demand analysis in its Webcasting Determination. There, the Court based its rate on an interactive subscription music service benchmark, after that rate was adjusted for the lower value (and therefore lower derived demand) that consumers placed on the target market non-interactive webcasting services. As this Court explained (Webcasting Determination, 72 Fed. Reg. 24092):

> Both markets are input markets and demand for these inputs is driven by or derived from the ultimate consumer markets in which these inputs are put to use. In these ultimate consumer markets, music is delivered to consumers in a similar fashion, except that, as the names suggest, in the interactive case the choice of music that is delivered is usually influenced by the ultimate consumer, while in the non-interactive case the consumer usually plays a more passive role. Pelcovits WDT at 5-15. But this difference is accounted for in Dr. Pelcovits' analysis. In order to make the benchmark interactive market more comparable to the non-interactive market, Dr. Pelcovits adjusts the benchmark by the added value associated with the interactivity characteristic.

308. Just as this Court accepted that the royalty rate paid sound recordings licensed by interactive music services must be adjusted downward to reflect the lower consumer demand for the exact same sound recordings delivered by a non-interactive music service,[13] so too should the

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[13] The SDARS assert that higher royalty rates for interactive music services are attributable at least in part to the assumption that such services are significantly substitutional for sales of recorded music through other channels. SDARS FOF at ¶ 881. But this Court's downward adjustment of the interactive market rate in order to derive a non-interactive webcasting rate was not due to any supposition that interactive services are more substitutional. In fact, the Court found no empirical evidence that such was the case, and declined to find that

royalty rate paid by the PSS be adjusted substantially upward – if that rate is to be used at all – to account for the greater derived demand for sound recordings delivered by the SDARS' network. Indeed, because the consumer value is so different, and the necessary adjustment so large, it is difficult to imagine a worse benchmark than the PSS.

309. The SDARS pay lip service to the concept of derived demand. For example, they state that "the demand for Music Choice by cable companies is derived demand and does reflect the value that consumers place on the service . . . ." SDARS FOF at ¶ 872. Similarly, the SDARS assert that the record companies receive from the PSS a percentage of the PSS revenues "reflecting the value of the audio music service." SDARS FOF at ¶ 822. While the SDARS acknowledge the concept, however, Dr. Woodbury made no derived demand adjustment to reflect the [ ]% difference in consumer value between the PSS and the SDARS. Indeed, his "functionality adjustment" was intended to accomplish precisely the opposite result – to ensure that any higher revenues received from consumers by the SDARS, compared to the PSS, are not shared with the copyright owners. *See* SX FOF at ¶¶ 820.

310. Dr. Woodbury's rationale for his functionality adjustment is this: if consumers place a higher value on a subscription to the SDARS because it offers music on a mobile basis, or because the consumers are not limited to listening to music over their television set as they are with the PSS, or for any other reason, that higher consumer value is attributable solely and exclusively to the SDARS' efforts to create a service that is not restricted to in-home listening over a television. SDARS FOF at ¶¶ 820, 825, 833, 880. The other side of the coin, according to Dr. Woodbury, is that music has an "inherent value" which remains the same no matter

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any adjustment to the benchmark rate was necessary to account for substitution. Webcasting Determination, 72 Fed. Reg. at 24,095.

whether the music is available almost anywhere (as with the SDARS), or only in those rooms in the home that contain a television (as with the PSS). SX FOF at ¶ 1336.

311. Thus, according to the SDARS, "over 70% of the SDARS revenues are attributable to their provision of a delivery and distribution mechanism for content as opposed to the value of the programming that is delivered." SDARS FOF at ¶ 833. Dr. Woodbury's functionality adjustment ensures that the royalty rate excludes any share by the copyright owners in those revenues. *Id.*

312. The logic of this position is less than dubious. The SDARS network would be literally worthless without content. No consumer would pay a penny to hear total silence, even if it was transmitted in digital quality, coast-to-coast, on a mobile basis. It makes no sense to say 70% of revenues are attributable solely to the network, when the network has no value without content. "The customer pays the retail price because the customer wants the music, not because the customer wants to finance the laying of cable or the launching of satellites." *U.S. v. Broadcast Music, Inc.*, 316 F.3d 189, 195 (2d Cir. 2003). As the Second Circuit held, it is for that reason that the retail price of a consumer service, rather than the wholesale price, better values the music on which a consumer service is based. *Id.*

313. As Dr. Ordover said, translating this same concept into economic terms, a "service that invests a lot and creates a high value [service] to consumers jointly ... with other inputs will end up paying a portion of that incremental value to the input that makes this investment at all profitable .... That's what we spoke about when I talked about Ramsay pricing. All of those things reflect that simple and basic economic precept, which I believe is ... deeply consistent with 801(b)." 8/27/07 Tr. 45:10-20 (Ordover). "If there is net [consumer value]

created, that ought to be divided and will be divided in the market as between the two contributors. Both are essential and without both there would be no value. *Id.* 47:16-20.

314. As Dr. Pelcovits points out, the contrary "logic" of Dr. Woodbury's arguments could just as easily support a claim by the copyright owners for 100% of the revenues. "The value of the SDARS service to consumers reflects the combination of content and mobility, and one could just as well approach the issue by asking what the value of the SDARS service would be without content. The answer is zero, and by this logic the entire value should go to the music and none to the SDARS." Pelcovits WRT at 8, SX Trial Ex. 124. Dr. Pelcovits joins Dr. Ordover in concluding that where the consumer value is based on both the contribution of the SDARS in creating a network, *and* the contribution of the copyright owners in supplying the sound recordings that consumers want to hear, the resulting revenues are shared. *Id.*

315. It is apparent that Dr. Woodbury's approach simply ignores the concept of derived demand and treats music as a commodity. The higher consumer demand for the SDARS compared to the PSS should not, in Dr. Woodbury's view, have any impact on the royalties that the copyright owners are paid. He contends, for example, that even though consumers will pay more for a mobile music service, 6/13/07 Tr. 6:22-7:5 (Woodbury), a record company will not receive a higher royalty from a mobile music service compared to a non-mobile service, even if the costs of the two services are the same. 8/23/07 Tr. 174:19-176:11 (Woodbury); *see also* 6/13/07 Tr. 5:19-9:5 (Woodbury) (stating that Dr. Woodbury would expect music to be paid the same amount on a per-unit by portable and non-portable music services). Essentially, Woodbury divorces the consumer's demand for the music service from the service's demand for sound recordings, contending that consumer demand for the service simply has nothing to do with the service's demand for sound recordings.

316. Dr. Woodbury has never articulated any recognized economic theory to support this approach, and it is contrary both to recognized theories of "value pricing" for intellectual property (*see* Pelcovits WRT at 4, SX Trial Ex. 124; 8123107 Tr. 306:1-307:14 (Ordover)) and to this Court's acceptance of derived demand adjustments to the interactive market benchmark in the webcasting case. *See* Webcasting Determination, 72 Fed. Reg. at 24092.

317. The SDARS attempt to argue that Dr. Ordover and Dr. Pelcovits conceded the validity of Dr. Woodbury's analysis, at least in part. SDARS FOF at ¶ 826. But the SDARS confuse two different concepts. They describe Dr. Woodbury's functionality adjustment as simply adjusting for the fact that in the case of the PSS there are two different companies (the PSS and the cable company) which combine to offer a music service to consumers, while in the case of the SDARS there is only one company which provides an end-to-end service. There is no reason, according to the SDARS, why the music royalty would be different just because the same music service is offered by one vertically integrated company rather than two companies. SDARS FOF at ¶¶ 822-825. And if that were all there was to it, Dr. Ordover and Dr. Pelcovits might agree.[14] *See* 8/27/07 Tr. 12:3-14:2, 18:1-7, 20:14-18 (Ordover). But in this case we do not have a single company offering the *same* service with the *same* functionality and the *same*

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[14] The hypothetical posed to Dr. Pelcovits, discussed by the SDARS at SDARS FOF at ¶ 826, is irrelevant. Dr. Pelcovits was asked whether the copyright owners would receive a higher royalty where a music service offers Internet connectivity in addition to the music service, at an additional price. He responded that adding the Internet connectivity service would not increase the royalty. But no one has ever suggested that the music royalty would increase as a result of higher consumer value that results from services or content unrelated to music. In the hypothetical, the Internet connectivity is a discrete service that has nothing to do with the music service, and in no way enhances or affects the consumer's ability to listen to the music. The point of derived demand analysis that the sound recording royalty is higher when the music service delivers the music in a way which improves the music listening experience by providing mobility, better sound quality, interactivity, or other desirable music-related characteristics.

consumer value that is offered by the combination of two companies in the case of the PSS. Rather, the SDARS offer a very *different* service, with *different* functionality and a much *higher* consumer value than the service offered to consumers by the PSS and cable companies. It is the fact that the SDARS make music available to consumers in a way which is functionally different from the PSS/cable television company combination, and valued more highly by consumers, which brings into play the concept of derived demand that Dr. Woodbury so assiduously ignores. *See* 8/23/07 Tr. 292:7-293:9 (Ordover).

318. Dr. Woodbury's theory also ignores empirical evidence. SoundExchange has demonstrated that where consumers place a higher value on a music service, the record companies both seek and in fact obtain higher royalties. SX FOF at ¶¶ 1351-1357. For example, consumers pay $15 per month for portable interactive services, and the record companies obtain a royalty of at least [[redacted]] per play. Consumers pay approximately $10 per month for non-portable interactive services, and the record companies obtain a royalty of at least [[redacted]] per play. Consumers pay approximately $4 per month for subscription non-interactive webcasting services, and the record companies receive between $.0011 and $.0019 per play. SX FOF at ¶ 1356. The rough correlation between consumer prices and the sound recording royalty is obvious. And it makes sense. Where consumer demand is higher, the record companies can charge a higher royalty, and the increased consumer demand allows the music service to pass on this higher cost to consumers.

319. Indeed, the fallacy of Dr. Woodbury's approach is even more clear when one looks at how the SDARS themselves price their different services. According to Dr. Woodbury's analysis, the SDARS should price their subscription Internet radio offering vastly below their satellite offering because of, as Internet radio providers, they are "hand-off"

providers. But that, of course, is not true. XM offers a subscription webcasting services of 70 music channels to subscribers for $7.99 per month. Herscovici WRT at 10, SX Tr. Ex. 130. Sirius offers Sirius Internet Radio, which gives subscribers all of Sirius' music channels and some (but not all) of Sirius' non-music channels for $12.95 per month -- the same price as Sirius' satellite radio product. Herscovici WRT at 10-11, SX Tr. Ex. 130. As these prices reflect, it is the value to consumer that drives pricing of services and the value of music, not the costs of the transmission media.

320. The SDARS attempt to explain away this empirical evidence, arguing that the higher royalties charged for more valuable music services occur not because of the effect of derived demand, but because either (1) the music service receives an additional legal right, such as the right to make copies, or (2) the music service presents a greater threat of cannibalizing CD sales. SDARS FOF at ¶¶ 881, 887.

321. The SDARS proffered explanation does not hold water. Consider portable interactive music services and non-portable interactive music services. If it is the SDARS' position that the difference in the sound recording royalty ([redacted]/play versus [redacted]/play) is due to the fact that a portable interactive music service is more likely to cannibalize CD sales, then they are effectively admitting that the SDARS mobile service is more likely to cannibalize CD sales as well. After all, the only difference between the portable and non-portable interactive services (and the only reason the former would cannibalize sales more than the latter) is the ability of the consumer with a portable service to listen to music without being tethered to a computer. If that is what causes cannibalization, however, it is equally true that subscribers to the SDARS listen to music without be tethered to a computer, and the SDARS should be just as substitutional (and thus would pay a relatively higher royalty than the PSS).

322. The SDARS must fall back, then, on the notion that the portable interactive services pay a higher royalty because they obtain a different right – the right to make copies of the sound recording rather than simply streaming the sound recording on demand. SDARS FOF at ¶ 887. But that argument is contrary to the facts. As Dr. Pelcovits testified, most non-portable interactive music services allow their subscribers to make "tethered" or conditional downloads of sound recordings, just as the portable services do. 8/28/07 Tr. 138:2-20 (Pelcovits). In other words, the non-portable interactive services obtain precisely the same rights from the record companies – the right to give the consumer a reproduction or temporary copy – that the portable interactive services obtain. There is no difference in legal rights that would explain why the sound recording royalty for portable interactive music services is a multiple of the sound recording royalty for interactive non-portable music services.

323. Moreover, the SDARS' argument elevates form over substance. What consumers are willing to pay does not depend on the nature of the legal right; indeed consumers may well not even be aware of the legal technicalities. *See* 8/28/07 Tr. 150:19-151:4 (Pelcovits) ("In my opinion and we're talking here about functionality, what matters is what the consumer can do and if it's a non-interactive service, carrying it with you is mobility and, in my opinion, that's very similar in value to carrying a device to which you have downloaded material on a conditional basis"). Nor does the fact that a separate legal right exists mean that it has any independent economic significance for the music service buyers and the record company sellers. The SDARS themselves argue, for example, that the right to make ephemeral copies is a separate legal right without any economic significance. SDARS FOF at ¶¶ 898-899. And as Dr. Pelcovits pointed out, record companies receive the same royalty from interactive music services regardless of whether they transmit to their customers a tethered download or a stream,

notwithstanding that tethered downloads and streams may involve different legal rights. 8/28/07 Tr. 140: 5-22, 251:14-253-19 (Pelcovits).

324. Finally, it is not true, as the SDARS contend, that the marketplace evidence fails to prove the existence of a premium for portability or mobility. SoundExchange submitted abundant evidence drawn from a multitude of contracts demonstrating that record companies are paid a higher royalty by portable music services. Ordover WRT at 9, SX Trial Ex. 119. Similarly, Dr. Pelcovits testified that "there is evidence that the service that is available on a mobile phone is more valuable, than the same service provided on a computer. 8/28/07 Tr. 153:8-22 (Pelcovits).[15]

325. None of the three examples offered by the SDARS comes close to proving the SDARS claim that music services offering mobility and portability do not pay higher royalties:

> • Bizarrely, one example that the SDARS cite in support of this argument is Apple's iTune's service, claiming that the record companies do not receive a premium when consumers listen to a download on a portable device rather than on a computer. SDARS FOF at ¶ 888. It seems unlikely that anyone regards iTunes as a non-portable service (and certainly not Apple, which earns considerable revenue selling iPods). And the prices charged by the record

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[15] The SDARS claim that Dr. Pelcovits rejected the portable interactive services as a benchmark to determine an appropriate royalty for mobile webcasting. SDARS FOF at ¶ 892. The SDARS' citations to the record on this point, however, say nothing of the kind. *See* 8/28/07 Tr. 137:6-138:15, 143:8-17 (Pelcovits). The SDARS also claim that this Court rejected a wireless premium in its Webcasting Determination, and on that basis they argue that there is no reason here to adjust the PSS benchmark to account for the fact that the SDARS offer a mobile service. SDARS FOF at ¶¶ 891-892. All the Court found, however, is that the data offered in support of the wireless premium in the webcasting case was not adjusted to reflect the differences between the markets and products represented by that data and the statutory webcasting services, and therefore the Court could not apply it in that case. In addition, the Court found insufficient evidence to conclude that music transmitted to over a wireless connection was more valuable than music transmitted to that same computer over the Internet. 72 Fed. Reg. at 24096. That is a different matter, however, than a finding that there is no higher royalty when music is transmitted to a portable device rather than being limited to play over a computer.

companies – [redacted] of revenues (Ordover WRT at 9, SX Trial Ex. 119) – reflect the fact that iTunes offers music on a portable basis.

- The second example is the supposed disappearance of the "immediacy adjustment" used by Dr. Ordover in his analysis. SDARS FOF at ¶ 888. But the immediacy adjustment is entirely irrelevant here. What Dr. Ordover was considering was whether record companies earn a premium where consumers obtain music on a mobile basis by having music streamed directly to a portable device, as opposed to having to first download the music to a computer and then transfer it to a portable device. Ordover WDT at 49-50, SX Trial Ex. 61. Regardless of whether the immediacy adjustment is warranted, *see* SX FOF at ¶ 635, in either case the music is portable. Whether the record companies earn a higher royalty for music that is immediately portable or mobile, compared to the royalty where the music is made portable or mobile through a two-step process, is irrelevant to whether the record companies earn a higher royalty for portable/mobile music.

- The third supposed example showing that there is no premium for portability are two agreements between [redacted], on the one hand, and [redacted] on the other. SDARS FOF at ¶ 889. While it is correct that those two agreements contain a per play rate of [redacted] per play regardless of whether the music is provided on a portable or non-portable basis, the SDARS ignore the fact that both contracts have a "greater of" royalty formula that includes a per subscriber and percentage of revenue metric as well. Under the [redacted] contract, the per subscriber fee is more than [redacted] as high for consumers who listen to music on a portable basis compared to those who listen on a non-portable basis, and the percentage or revenue fee is substantially higher as well (leaving aside the fact that the percentage of revenue is also applied against a higher revenue base in the case of portable music). *See* SDARS Ex. 85. The [redacted] contract similarly provides higher payments to [redacted] under the per-subscriber and percentage of revenue metrics for portable music. *See* SDARS Ex. 86. These two contracts (ignoring the many other contracts reviewed by Dr. Ordover) hardly prove that the royalties for portable and non-portable services are the same.

326. It is clear, therefore, that portable music services pay higher royalties for sound recordings. It is also clear that those higher royalties result from higher consumer demand for the service.

327. As their fallback position, the SDARS argue that even if the record companies can extract a higher royalty from portable music services (*i.e.*, services that allow consumers to

transfer a conditional download to a portable device) they do not obtain higher royalties from mobile music services (*i.e.*, services which stream a sound recording to a portable device). To credit that argument, however, one would have to believe one of two things. First, one would have to believe that consumers value portability but not mobility, despite the fact that both perform the same function in the consumers' eyes by allowing them to listen to music on the go. That hardly seems likely, and in any event, Dr. Woodbury admits that consumers do in fact value mobile music services more highly than non-mobile music services. 6/13/07 Tr. 6:22-7:5 (Woodbury). Alternatively, one would have to believe that consumer valuation or consumer demand simply has nothing whatever to do with the royalty paid to the copyright owners, and instead the demonstrably higher royalties for portable music services are attributable to either the greater likelihood that they cannibalize CD sales or to a technical difference in the legal rights conveyed. But there is no evidence that portable music services would cannibalize CD sales to a greater degree than mobile music services, as both provide the same functionality to consumers. And the evidence is clear that the market does not value performance rights and reproduction rights differently where they are used to perform the same function, as in the case of interactive music services that either stream music on demand or transmit tethered downloads but pay the same royalty either way. 8/28/07 Tr. 140: 5-22, 251:14-253-19 (Pelcovits).

328. In any event, the debate over whether mobile music services pay a higher royalty in the market compared to non-mobile services misses the point. The point, under derived demand analysis, is that where the consumers' demand for a music service is relatively higher – for any reason – the music service's demand for sound recordings will also be higher and the record company will be able to charge a higher royalty. There is no doubt in this case that consumer demand for the SDARS is exponentially higher than the demand for the PSS services.

(Pelcovits WRT at 9, SX Trial Ex. 124). Dr. Woodbury's analysis failed to account for the differences in consumer demand between the SDARS and PSS, the effect those differences in consumer demand would have on the services' demand for sound recordings, and the consequent effect on the royalties paid.

D. Comparison of the SDARS' Proposed Rate to the Statutory Webcasting Rate Proves the Errors in Dr. Woodbury's Analysis of the PSS Benchmark

329. Comparing the rate proposed by Dr. Woodbury to the rate determined by this Court in the webcasting case exposes the problems with Dr. Woodbury's analysis. Dr. Pelcovits converted the SDARS' proposed rate to a per play rate for the purposes of comparison to the webcasting rate, and found that the webcasting rate ranges from 10 to 15 times higher than the SDARS proposed rate. Pelcovits WRT at 17-18, SX Trial Ex. 124.

330. There is no reasonable explanation for this disparity. As noted above, one of the arguments made by the SDARS in an attempt to dismiss examples of sound recording royalties higher than those the SDARS propose to pay is that the higher royalties result when legal rights other than the sound recording performance right are conveyed. SDARS FOF at ¶¶ 881, 887. That does not, however, explain why the webcasting rate is so much higher. Statutory webcasting services are non-interactive and generally non-mobile services which do not obtain any legal rights not granted to the SDARS.

331. The SDARS also attempt to explain sound recording royalties multiple times higher than those the SDARS propose to pay on the grounds that the music services that pay higher royalties are those which are more likely to cannibalize sales of CDs and downloads. SDARS FOF at ¶¶ 881, 1261. That too does not explain why the webcasting rate is so much higher. There is no reason to think that webcasting services cannibalize sales of other recorded

music any more than the SDARS do. Indeed, in its Webcasting Determination the Court found no evidence from which it could conclude that the statutory webcasters had a quantifiable promotional or substitutional effect, 72 Fed. Reg. at 24095, while in this case there is clear evidence that the SDARS substitute for other sales of recorded music. SX FOF at ¶¶ 673-719.

332. Finally, the SDARS claim that any benchmark must be adjusted to account for the costs of the music service. SDARS FOF at ¶ 811. That overstates the testimony of the economic experts retained by the SDARS. In fact, Dr. Woodbury testified that costs should be accounted for when adjusting a percentage of revenue rate from a benchmark market to a target market, but costs need not be taken into account when adjusting a per play rate. 8/23/07 Tr. 179:1-180:4 (Woodbury), *see also* 6/13/07 Tr. 5:19-9:5 (Woodbury). Dr. Noll's testimony, similarly, addresses only the alleged need to account for costs in connection with adjusting a percentage of revenue fee from the benchmark to the target market. *See* Noll WRT at 93, 110, SDARS Trial Ex. 72. Costs do not explain why the webcasting per play rate turns out to be more than 10 to 15 times the amount of the proposed SDARS royalty rate. And costs do not explain the massive sums the SDARS themselves pay for non-music content.

333. Finally, the webcasting rate was determined under the "willing buyer/willing seller" standard, while this case will be decided under the 801(b) standard. Even the SDARS do not appear to suggest, however, that Section 801(b) would mandate a 90% reduction in the royalties that otherwise would be negotiated in a free market. And that is especially so where it is reasonable to believe that the SDARS sound recording royalty would be *higher* than the statutory webcasting royalty if negotiated in a free market, given that the SDARS offer the additional functionality of mobility. Pelcovits WRT at 17, SX Trial Ex. 124; 8/28/07 Tr. 90:3-18 (Pelcovits).

334. Nothing explains the low level of the SDARS proposed royalty except that the PSS rate is an outlier to begin with, and the analysis of that rate was flawed. The PSS rate may be low because consumer demand for that service is almost non-existent, or because the original PSS rate set in 1998 was based on the now-rejected musical works benchmark, or for other reasons. Whatever the reason, the SDARS proposal does not stand up to a comparison with the webcasting rate or with any other rate in the digital market (much less to the amounts that the SDARS pay for non-music content), and it should be rejected.

V. THE SDARS' ALLEGED CORROBORATING EVIDENCE DOES NOT SUPPORT THEIR RATE PROPOSAL

335. Because their principal benchmarks did not survive the trial, the SDARS have called into service what they call "corroborating evidence" – other benchmarks that (with one exception) they did not propose as evidence at trial. None of this evidence supports the SDARS' rate proposal.

A. The Prior SDARS Agreement is Expressly Non-Precedential and, In Any Event, Was Negotiated At a Time When the SDARS Were Tiny Companies With Few Subscribers, Low Revenues and Uncertain Prospects

336. The SDARS first claim that the agreement negotiated in 2003 which set the rates currently paid by the SDARS provides support for their current rate proposal. SDARS FOF at ¶¶ 812-813, 851. That assertion is wrong for a variety of reasons.

337. To begin, as the SDARS well know, the 2003 agreement was expressly non-precedential. The 2003 agreement states that "[t]he parties to the Agreement intend that it shall be non-precedential, and shall not be admissible as evidence or otherwise taken into account in any administrative, judicial, or other government proceeding, except that it may be taken into account to a limited degree in one circumstance relating to the bankruptcy of a service, as

described below. The parties would not have entered into the Agreement but for this understanding." SX Trial Ex. 125 at n.10.

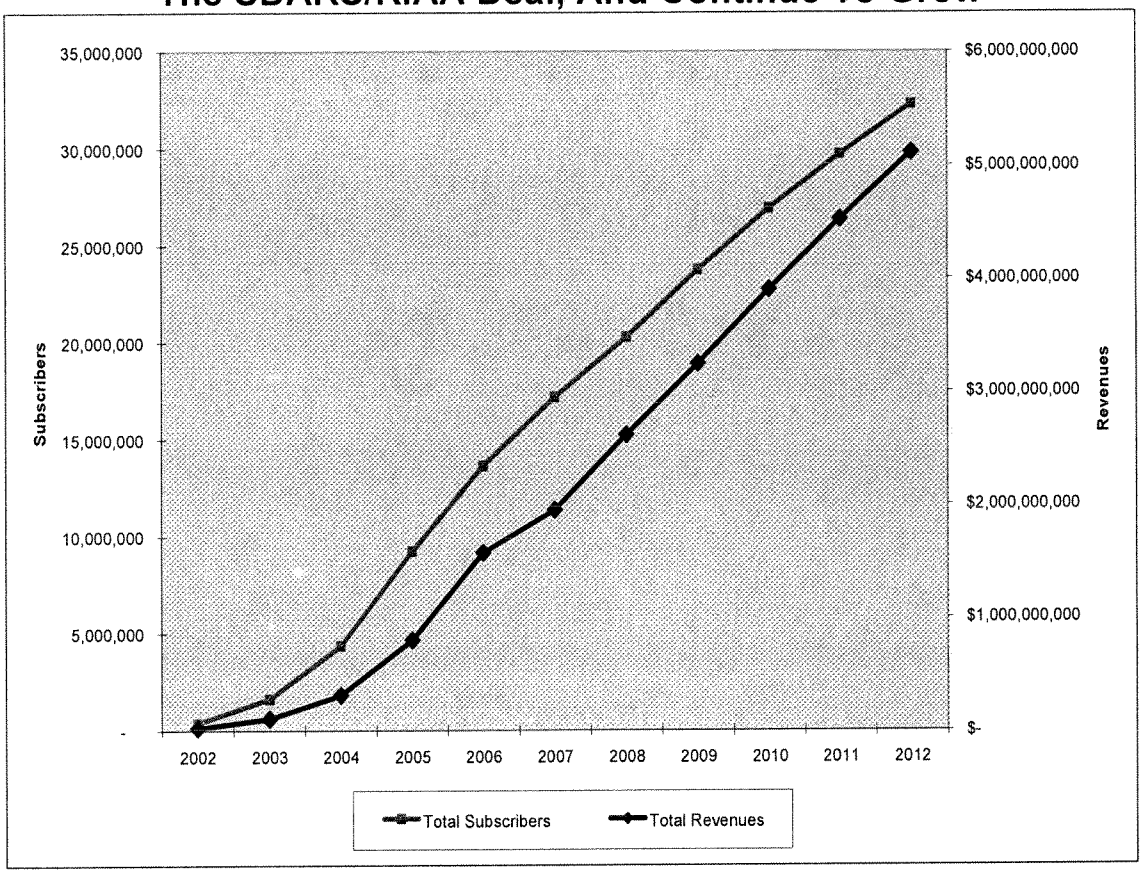
338. Prior tribunals have past viewed non-precedential agreements with deep skepticism. As the 2002 webcasting CARP noted, "voluntary agreements containing 'no-precedent clauses' are highly suspect as rate benchmarks, requiring an examination of the 'totality of the circumstances.'" Report of the Copyright Arbitration Royalty Panel, February 20, 2002, at 90, *quoting* 63 Fed. Reg. 49,823. The entire point of making a contract non-precedential is that the parties are agreeing to deal terms that they know they would never accept in the future. In essence, by making the agreement non-precedential, the parties acknowledged that the rates they arrived at in 2003 would not represent fair rates today.

339. The SDARS seemingly suggest that SoundExchange has waived the provisions of the 2003 agreement which render it non-precedential. SDARS FOF at ¶ 813. That is not so. In the course of examining the SDARS' chief financial officers about the SDARS' balance sheets, SoundExchange inquired about the current cost of music royalties or the amounts the SDARS had budgeted for royalties, just as it inquired about a variety of other costs. *See* 6/6/07 Tr. 16:5-8 (Vendetti); 6/12/07 Tr. 192:6-22 (Frear). It is difficult to explore the SDARS' finances – which the SDARS have put very much at issue in this case – without inquiring about all of the costs, including the sound recording costs. At no time did SoundExchange ask questions about the 2003 agreement itself, or the terms and conditions of that agreement. No examination by SoundExchange has ever even hinted that this Court should disregard the provisions of that agreement which render it non-precedential. In accordance with the terms of the 2003 agreement and prior CARP decisions, therefore, this Court should disregard the 2003 agreement.

340. Even if this Court did not consider the 2003 agreement "highly suspect" as a benchmark (in the words of the Web I CARP) in light of its "no precedent" language, the 2003 agreement is of no value today. The world is a very different place now than it was in early 2003 when the SDARS/RIAA agreement was negotiated. At that time, XM had only 350,000 subscribers and Sirius had but 30,000. SX Trial Ex. 125 at p. 6. By the end of 2006, XM had 7.6 million subscribers (XM Trial Ex. 10 at Vendetti Ex. 1, p. 1), and Sirius had approximately 6.6 million subscribers. SX Trial Ex. 28 at 2; SIR Trial Ex. 57 at 24. As of year-end 2002, XM had revenues of $20.2 million (Herscovici WRT at App. 1, SX Trial Ex, 130), and Sirius had revenues of $0.8 million. SIR Trial Ex. 47 at 26. In 2006, XM earned revenues of $933 million, and is projected by to have revenues of $1 billion in 2002. Vendetti WDT, Ex. 1, at 38; Butson WRT App. B, SX Trial Ex. 123. Sirius earned revenues in 2006 of $637.3 million (SIR Trial Ex. 61 at SIR Ex. 27, p. 2), and expects to reach approximately $1 billion in revenue in 2007. 6/12/07 Tr. 100:3-5 (Frear).

341. Since 2002 XM and Sirius have experienced annual growth rates of 100% and 200%, respectively. Herscovici WRT at 6 and App. H, SX Trial Ex. 130. Growth is expected to continue at a rapid rate, as the chart below demonstrates:

The SDARS' Subscribership And Revenues Have Skyrocketed Since The SDARS/RIAA Deal, And Continue To Grow



Herscovici WRT App. H & I, SX Trial Ex. 130; Butson WRT App. A & B, SX Trial Ex. 123. The differences between the finances and the prospects of the SDARS, then and now, makes the 2003 agreement irrelevant.

342. Illustrating the financial progress of the SDARS, within the last two years they have paid or committed to pay well over $1 billion for non-music content. *See* SX FOF at ¶ 240.

343. It is inconceivable that the copyright owners would negotiate an agreement today with terms similar to the terms agreed upon in 2003. The copyright owners may have been willing to accept a low royalty from Sirius in 2003 when it had 30,000 subscribers and less than $1 million in revenue. When Sirius has 6.6 million subscribers and $637 million in revenue, and

gave Howard Stern a five year contract that ultimately will cost in excess of $700 million (SX FOF at ¶ 578 and n.24), it is a very different story.

344. Finally, the record does establish that the SDARS agreement is an agreement with lump sum payments each year; it is not expressed as a percentage of revenue. SX Trial Ex. 125 at 6. Consequently, whatever percentage of revenue those fixed dollar payments turned out to be for 2006, there is no evidence concerning what they were in earlier years. Moreover, it is important to recognize that when the parties negotiated their deal in 2003, they did not and could not know what the fixed dollar amount payments would be as a percentage of revenue in 2007 because they did not know what the SDARS revenues would be in 2007. The parties may well have expected much slower revenue growth for the SDARS, and therefore that the fixed dollar payments would represent a far greater percentage of the SDARS revenue than has turned out to be the case. Lacking information about what the parties projected the SDARS' revenue growth to be, the Court has no way to know what the parties thought they were agreeing to in terms of a percentage of revenue rate.

345. In the webcasting case, the Court faced a very similar argument that an old, non-precedential agreement that had lump sum payments should be used as a benchmark. In rejecting use of a 2001 RIAA-NPR agreement, the Court held that that it was impossible to take the lump sum payments and use them as a proxy for a per station or per stream royalty "given that there was nothing in the contract or the record to indicate the parties' expectations as to levels of streaming or the proper attribution of payments for any given year or how additional stations beyond the 410 covered by the agreement were to be handled." *Webcasting II*, 72 Fed. Reg. at 24098. And this was only one of multiple flaws that the Court found. *Id.* at 24098-99. These flaws are further exacerbated here because 1) both parties' disclaim the precedential value

of the agreement (the NPR agreement was offered by a third party) and 2) the agreement itself is not even in the record.

346. If anything, the 2003 agreement undermines the SDARS' current rate proposal. There is no question that the SDARS are vastly larger and vastly more successful businesses today than they were in 2003. Yet the SDARS propose a rate that is actually lower than what they intimate they agreed to pay back in 2003, at a time when they had already incurred all of the upfront costs to launch their satellites and build their networks, but had attracted few subscribers and earned paltry revenues.

B. Dr. Woodbury's Attempt to Characterize One Portion of the Rate Provisions in Certain Custom Radio Agreements as "Corroborating" Evidence Simply Proves How Little Support Exists for the SDARS' Rate Proposal.

347. Although the SDARS' claim that certain custom radio agreements corroborate their rate proposal (SDARS FOF at ¶ 855), the reality is just the opposite. SoundExchange discussed the custom radio agreements in detail in its opening findings of fact (SX FOF at ¶¶ 1370-1375, and will not repeat that evidence here. Suffice it to say that the custom radio agreements contain a "greater of" rate structure in which the custom radio services pay a royalty that is the greater of a percentage of revenue or a per play rate. 8/23/07 Tr. 180:5-181:3 (Woodbury). Dr. Woodbury only analyzed one agreement, and only with respect to the percentage of revenue rate, wholly ignoring the per play rate. Woodbury WRT at 29-30, SDARS Trial Ex. 80. And the SDARS did not introduce the agreement on which they relied into evidence, thereby denying the Court the opportunity to review all of its terms.

348. The only custom radio agreement in evidence has a per play rate of [[redacted]] per play. SDARS Trial Ex. 87. Dr. Pelcovits' translation of the SDARS' rate proposal into a per

play rate reveals that the SDARS would pay one-tenth of that amount – [[redacted]] per play. Pelcovits WRT at 17, SX Trial Ex. 124. Such a disparity between the SDARS rate proposal and the custom radio agreements hardly provides "corroboration" for the SDARS.[16]

349. The SDARS suggest that a percentage of revenue fee under the custom radio agreements should be subject to two adjustments: one for the cost differential between the SDARS and the custom radio services; and the other to account for the non-music content carried by the SDARS. SDARS FOF at ¶ 1300. Neither adjustment is necessary with respect to a per play rate, however, even under the SDARS' economic theories.

350. With respect to any alleged cost differential between the SDARS and the custom radio services, the SDARS do not have any information about the custom radio services' cost structure. They have no basis to make an adjustment, and cannot reasonably assume that the costs of a custom radio service are similar to that of the PSS (which is effectively what the SDARS assume in their calculations), especially since the custom radio services have to pay for Internet bandwidth and the PSS do not. More importantly, Dr. Woodbury does not believe that per play rates need to be adjusted to account for costs differences between the benchmark and target markets. 8/23/07 Tr. 179:1-180:4 (Woodbury), *see also* 6/13/07 Tr. 5:19-9:5 (Woodbury).

351. The SDARS also argue that a custom radio rate must be adjusted to account for non-music content. SDARS FOF at ¶ 1300. But for obvious reasons, there is no need to make such an adjustment with a per play rate, since it is imposed only on plays of music.

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[16] Moreover, like the webcasting services, the custom radio services generally are not mobile or portable services. Therefore, as Dr. Pelcovits observed with respect to the webcasting services, it is reasonable to expect that the mobile SDARS service would pay a higher royalty. Pelcovits WRT at 17, SX Trial Ex. 124; 8/28/07 Tr. 90:3-18 (Pelcovits).

352. If neither of the SDARS proposed adjustments needs to be made with respect to a per play rate, the Court is left with the fact that the only custom radio agreement in evidence in this case has a rate that is ten times the SDARS' proposed rate. Far from bolstering the SDARS' case, the custom radio agreements prove that the SDARS rate proposal is far too low. And, of course, the record is silent about the other custom radio agreements entered into by the record companies. There is no evidence about whether the one agreement relied upon by the SDARS is representative.

C. The Non-Music Programming Benchmarks Support SoundExchange

353. Ironically, the SDARS claim that analysis of the non-music content agreements provides corroboration for their rate proposal. SDARS FOF at ¶856. The SDARS' rate proposal, the SDARS assert, would pay SoundExchange perhaps $250 million over the term of the statutory license. SDARS FOF at ¶ 834. By contrast, Sirius will pay Howard Stern (and his manager) more than [$[redacted]] million over a five-year contract term. SX FOF at ¶ 578 and n. 24. The NFL will receive [[redacted]] million, Major League Baseball will receive [[redacted]] million, NASCAR will receive [[redacted]] million and Fox News will receive [$[redacted]] million, to name the more prominent examples. SX FOF at ¶ 240. In short, even though the SDARS own economic expert, Dr. Woodbury, concluded that music accounts for somewhere between 48% and 68% of the value of all content on the SDARS (Woodbury WDT at 20, 34, XM Trial Ex. 8; 6/13/07 Tr. 90:21-91:11 (Woodbury)), the SDARS propose to pay sound recording royalties that are only slightly over one-third the amount Sirius that pays to one lone (and not universally loved) shock jock.

354. The remarkable claim that non-music content deals corroborates the SDARS' rate proposal is based on the calculations of Dr. Benston, who concluded that the SDARS will

pay approximately 3.5% of their revenues for non-music contract during the license term. SDARS FOF at ¶ 856. As described in more detail in SoundExchange's findings of fact, Dr. Benston was able to arrive at this figure only by excluding from his calculations the single largest non-music content agreement (Howard Stern) and by double-counting advertising revenues. SX FOF at ¶¶ 580-588. In reality, a fair analysis of non-music content costs through the end of the license term in 2012 demonstrates that an equivalent rate for sound recordings would be in excess of 16% of revenue. *Id.*

D. The SDARS Offer No Reason to Resurrect the Musical Works Rate

355. The final "corroborative" evidence offered by the SDARS is the musical works rate. The SDARS' short discussion of that rate at SDARS FOF at ¶¶ 852-854 is striking chiefly for the fact that it offers absolutely no reason for this Court to reconsider its rejection of the musical works benchmark in the webcasting case. *See* 72 Fed. Reg. 24084 at 24094. Remarkably, the SDARS do not even mention this Court's decision, much less offer any claim that they have introduced any evidence or made any argument that would suggest a different outcome.

356. None of the supposedly corroborating evidence, therefore, actually corroborates the SDARS' rate proposal. The prior SDARS/RIAA agreement in 2003 would be useful only if, among other things, it were still 2003 and the SDARS were still nascent companies with a tiny fraction of their current subscribers and revenues. The custom radio agreements, to the extent that there is any evidence in the record about them, support a rate that is ten times what the SDARS are proposing (not taking into account that the custom radio services do not provide mobility and therefore are not as valuable as the SDARS). The non-music content agreements will pay the non-music content providers multiples of what the SDARS propose to pay for sound

recordings. And the musical works rate has already been rejected by this Court in part on the grounds that "substantial empirical evidence shows that sound recording rights are paid multiple times the amounts paid for musical works rights" in other markets. *Webcasting II*, 72 Fed. Reg. 24084 at 24094.

VI. THE SDARS' "PER PLAY" PROPOSAL IS BY THEIR OWN EXPERT'S ADMISSION A "SECOND BEST" ALTERNATIVE

357. The SDARS' proposed rate structure is every bit as flawed as their benchmarks. The SDARS propose to structure the royalty rate in this case according to what they call a "per play" rate. The SDARS' per play rate is entirely different than the "per play" or "per performance" rate adopted by this Court in its Webcasting Determination. The Webcasting per-performance rate requires a payment each time a single listener hears a single sound recording. The SDARS' proposed per play rate would require a payment for each broadcast or transmission of a sound recording, regardless of how many people listen to it.

358. Dr. Woodbury acknowledged that "other things equal, it might be preferable to have a per listener or per play per listener rate." 8/23/07 Tr. 150:5-14 (Woodbury). The SDARS' proposal, which measures only broadcasts and not "performances" (as that word is used in the Webcasting Determination) is, in Dr. Woodbury's words, "a second-best alternative." *Id.*; *see also* 8/16/07 Tr. 152:14-16 (Noll) ("to the best approximation these rates should be on a per performance basis").

359. Notwithstanding that their own experts either provide no support for the SDARS rate structure (Noll), or lukewarm support at best (Woodbury), the SDARS attempt to justify their proposed structure by arguing that it is consistent with this Court's interim reporting regulations for Section 114 licenses. SDARS FOF at ¶ 807. That is incorrect. The Court

permitted webcasters, on an interim basis, to estimate Actual Total Performances by providing data concerning (1) the Aggregate Tuning Hours for each channel, and (2) the channel on which each sound recording was played, and (3) the Play Frequency for each sound recording. *Notice and Recordkeeping for Use of Sound Records Under Statutory License*, 69 Fed. Reg. 11515 at 11525-11526 (Mar. 11, 2004). Only the combination of this data allows SoundExchange to estimate the actual number of performances, because the combination of this data allows SoundExchange to determine not only how many times a sound recording was broadcast on a given channel, but also how many people were listening to that channel (at least approximately). *Id.* Thus, the data provided allows for the estimation of actual performances, in contrast to the SDARS' proposed rate structure, which will report only the number of broadcasts of sound recordings, entirely unrelated to the number of people who listen to each broadcast.

360. The deep-seated problems with the SDARS' proposed rate structure are described at length in SoundExchange's findings of fact (*see* SX FOF at ¶¶ 1440-1449). It will suffice for present purposes to say that the SDARS have done nothing to justify a rate proposal that their own expert says is "distortionary." 8/16/07 Tr. 222:1-6, 158:1-2 (Noll).

361. Perhaps recognizing the problems with their proposal, the SDARS now suggest that if the Court determines that a fee keyed to the actual number of performances (*i.e.*, plays per listener) is warranted, the SDARS would be able to create systems to track and report the number of performances for each sound recording. SDARS FOF at ¶ 807 and n.18. SoundExchange

submits that if the SDARS want the benefits of a per play rate, rather than a percentage of revenue rate, they should take the steps necessary to implement such a system.[17]

VII. THE SDARS' CRITIQUE OF SOUNDEXCHANGE'S BENCHMARKS FAILS.

A. Dr. Wind's Survey Was Properly Conducted And Its Results Are Consistent With Those of Dr. Woodbury and Dr. Hauser.

1. Introduction

362. In an effort to rebut SoundExchange's benchmark analysis, the SDARS challenge the finding of Dr. Pelcovits and Dr. Ordover, based on the Wind survey, that approximately half (53% - 56%, depending on the particular measure) of the revenues of the SDARS' service comes from delivering music. SDARS FOF at ¶ 905.

363. Their critique is erroneous on multiple levels, each of which is discussed in a subsection below. First, the SDARS' own experts, including Dr. Woodbury and Dr. Hauser, reached precisely the same conclusion concerning the value of an all-music SDARS service. That is, both of them found that consumers value music programming more than *all other SDARS content combined*, and both of them found that consumers would be willing to *pay $6.00 per month or more* for a music-only SDARS service. There is no dispute among the experts on this point.

364. Second, Dr. Hauser's primary argument is that a $6.00 figure is too high because it does not give the SDARS credit for their non-programming contributions, such as a nationwide coverage, display of artist and song titles, etc. Thus, the argument goes, Dr. Wind has

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[17] The SDARS claim that even if they create systems to track performances, such systems might be "somewhat imprecise." SDARS FOF at ¶ 807 and n.18. SoundExchange submits that "somewhat imprecise" is troubling. If the SDARS do not want to pay on a percentage of revenue basis, and if they are as technologically sophisticated as they claim, they can and should do better.

supposedly grossly overstated the value of music. This argument is a straw man: SoundExchange's rate proposal is nowhere near $6.00 per month. Instead, based on the benchmarking analyses that Dr. Pelcovits and Dr. Ordover conducted, SoundExchange has proposed a rate structure beginning at 80 cents per subscriber per month and going up to $2.25 per subscriber per month, absent a merger. The difference between these numbers and $6.00 reflects the very features that the SDARS claim are missing from SoundExchange's valuation of music. Put another way, that is precisely what benchmarking does: it shows how value is divided between copyright holder and copyright user.

365. To be sure, Dr. Hauser's approach also attempts to account for the SDARS' contributions by asking – via a survey rather than benchmarking – how much consumers value the various aspects of the SDARS service. That approach has several flaws which cause it to understate the value of music. But the critical point is that Dr. Hauser's own analysis, which supposedly isolates the true value of SoundExchange's contribution, finds that *respondents are willing to pay $2.93 [per subscriber per month] for music in general, a number that is reduced to $1.78 when music is limited to music of the 70's, 80's, 90's and today.*" SDARS FOF at ¶ 930 (emphasis added). In sum, Dr. Hauser finds – once all the other variables in his view are properly accounted for – that the value of SoundExchange's contribution is $1.78 per subscriber per month. That result supports SoundExchange's rate proposal, and refutes the SDARS' proposal, which is but a fraction of what Dr. Hauser's study implies.

366. Finally, the Wind survey itself is entirely reliable. For the reasons outlined above and described in greater detail below, it was wholly appropriate for the Wind survey to look at the value of music programming as a whole, because the economists' subsequent benchmarking

took care of dividing the value of that programming between the SDARS and SoundExchange. The remainder of the SDARS' criticisms are equally unsubstantiated. *See infra.*

2. Every Expert In This Case Agrees That At Least 50% Of The Value Of The Service Comes From Music Programming

367. Dr. Pelcovits and Dr. Ordover relied on Dr. Wind's survey in finding that 53% - 56% of the value of the SDARS' content comes from the value of music. That number is accurate and appropriate for reasons discussed below, but it is also corroborated by the SDARS' own analysis. When Dr. Woodbury calculated the value of the SDARS' content to consumers, he found that between [redacted] came from music programming as derived through his cancellation index.[18] SX FOF at ¶¶ 428-432. Dr. Woodbury further agreed, consistent with this valuation, that in effect consumers "pay about $6 a month for the music content over the SDARS service." 6/13/07 Tr. at 52:1-7 (Woodbury). Indeed, if one takes the average of [redacted] and multiplies it by $11.25 (the figure that Dr. Ordover found represented the average SDARS revenue per customer per month, SX FOF at ¶ 639), Dr. Woodbury's calculations show that a music-only SDARS service would be worth [redacted]

368. As it turns out, Dr. Woodbury significantly understates what an SDARS music-only service would cost: the SDARS have now announced plans, post-merger, to offer a near music-only service plan (that excludes "premium" music channels they now offer) for $9.95 per month, a price substantially in excess of 50% of the price of the service as a whole. SX Trial Ex.

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[18] This figure likely *understates* the value of music. The Sirius survey that Dr. Woodbury relied upon asked subscribers whether they would cancel if any *particular* music channel was removed. It is likely that many consumers, however, would not cancel if any one channel were removed – particularly given the breadth of the SDARS' music offerings – but would cancel if music programming as a whole were removed. Because this proceeding is about the value for a blanket license of music, a channel-by-channel analysis therefore understates the value of that license.

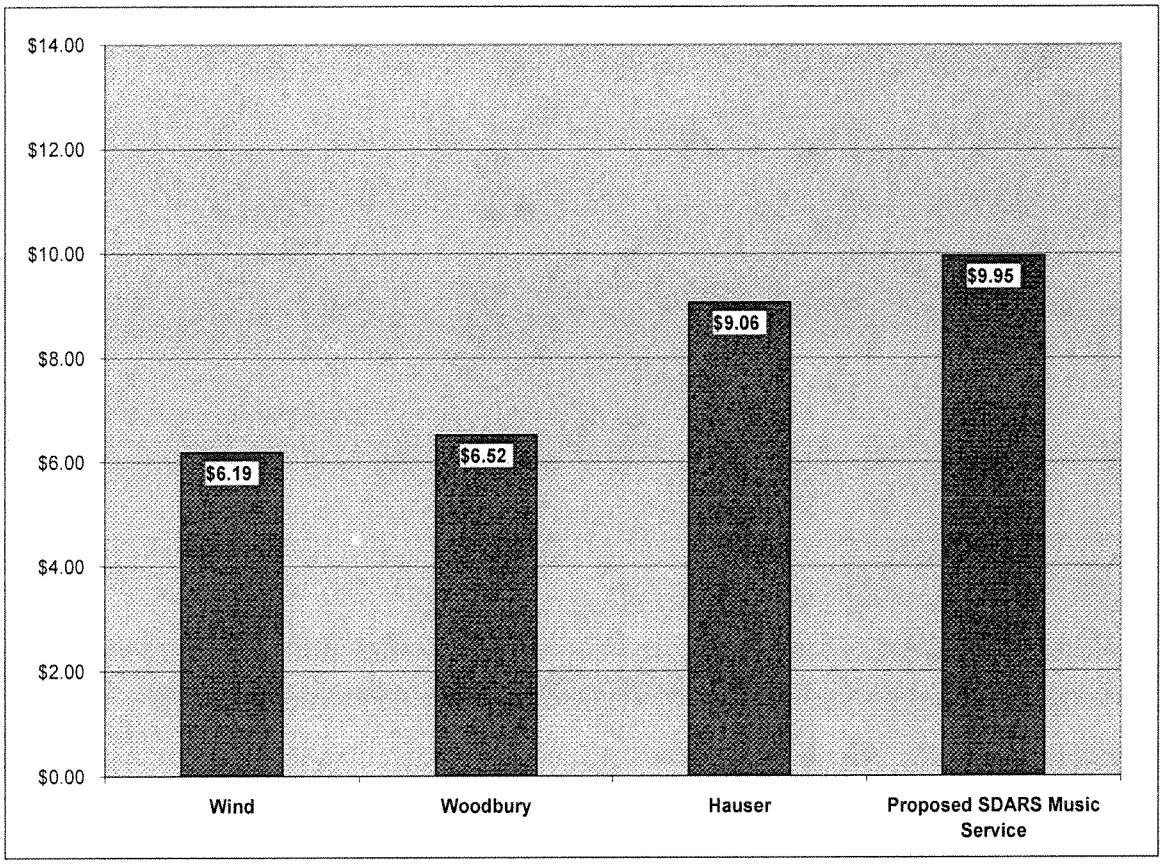
106 at 13 (touting the SDARS' "Mostly Music" package). In other words, for the SDARS to attack the 50% figure, they must disavow not only Dr. Woodbury's calculations but also their own marketing department's evaluation of what consumers are willing to pay for music content.

369. Dr. Hauser's survey only confirms this. When Dr. Hauser – who was supposedly correcting for flaws in the Wind survey – asked the same question about willingness to pay for a non-music service. He found that the value of music was higher than all other programming types put together ($9.21 for music versus $8.74 for all other programming types), and thus that the value of music comprises more than 50% of the value of the SDARS' content. SX FOF at ¶¶ 410-11.

370. The same result held when Dr. Hauser used his preferred cumulative, random ordering method ($3.37 for music versus $3.34 for all other programming types). SX FOF at ¶¶ 413-15.

371. Consistent with this, Dr. Hauser found that consumers valued a music-only SDARS at $9.09 per month, even using his preferred cumulative, random ordering method. Hauser WRT at Ex K-1 , SDARS Trial Ex. 77 (summing the values of a SDARS service with national reception, high sound quality, current levels of commercials, and current levels of music). Thus, the percentage values that Dr. Pelcovits and Dr. Ordover used are justified not just by Dr. Wind's analysis, and not even just by Dr. Wind's and Dr. Woodbury's analyses, but also Dr. Hauser's analysis. Put simply, *every expert – from both sides – has concluded that music programming is worth more to the consumer than all other programming combined.*

The Experts Agree: A Music-Only SDARS Service Would Be Worth More Than Half As Much As The Whole SDARS Service



3. Dr. Hauser's Focus On Non-Programming Features Confirms The Methodologies Used By Dr. Pelcovits and Dr. Ordover.

372. The SDARS' only remaining move is to argue that Dr. Hauser's survey provides a more accurate value of music because it takes into account the value of *non-programming* features, such as nationwide coverage. They argue at considerable length that the Wind study is irrelevant because it primarily looked at the value of music relative other forms of programming, and not non-programming features. SDARS FOF at ¶¶ 917-924. Their claims rest on a misconception of how benchmarking works.

373. As noted above, all experts agree that music programming comprises 50% or more of the value of the SDARS' content. The experts (and the SDARS themselves) also agree

that a music-only SDARS service would have a value of at least $6.00 per month. SoundExchange, however, *has notably not asked for a royalty of $6.00 per subscriber per month.* In fact it has asked for a share of that amount, beginning at $.80 per subscriber per month and rising only to $2.25 per subscriber per month, absent a merger.

4. Dr. Hauser's methodology complements, not contradicts, the methodology used by Dr. Pelcovits and Dr. Ordover.

374. Dr. Hauser's criticisms are thus in reality a confirmation of the appropriateness of SoundExchange's rate proposal. Dr. Ordover and Dr. Pelcovits used the 50% figure because it reflects the revenues brought in by a music-only SDARS. They then used benchmarks to compute the share of that value to which SoundExchange is entitled. Dr. Hauser reaches a similar result relying entirely on survey evidence.

375. Dr. Ordover found on the basis of the Wind survey that the revenues for a music-only SDARS service would be 55% of the revenues of the entire service. Ordover WDT at 41, SX Trial Ex. 61. But Dr. Ordover did not conclude that SoundExchange would be entitled to a royalty equal to 55% of the SDARS' revenues, even though by definition they would be the sole provider of content for that service.

376. Instead, using benchmarks from relevant markets, Dr. Ordover found that SoundExchange would be entitled to royalties equal to between 35% and 50% *of that 55% of total revenues– i.e.*, 19% (55% * 35%) and 28% (55% * 50%) of total revenue. SX FOF at ¶ 623 (illustrating Ordover calculations). The difference between those royalty rates and the 55% figure that the Wind survey finds for a music service as a whole represents the fair compensation to the SDARS for the non-programming features that they provide.

377. Likewise, with Dr. Pelcovits's Stern analysis, Dr. Pelcovits found that if Howard Stern was entitled to 50% of the revenues he brought in, then SoundExchange would be entitled to 50% of the revenues sound recordings brought in. Pelcovits WDT at 13-14, SX Trial Ex. 68. Dr. Pelcovits found, based on the Wind survey's Sirius subscriber results, that music was responsible for 56% of Sirius's revenues, and thus computed that SoundExchange would be entitled to 28% of total revenues (*i.e.*, 50% of 56%) before further reductions for musical work rights and programming costs. SX FOF at ¶¶ 561-62.

378. Dr. Hauser cannot quarrel with the proposition that a music-only SDARS would bring in half or more of the revenues of a full SDARS service: he found the same thing, as did Dr. Woodbury. *See supra.* Nor can he claim that the 56% needs to be reduced to account for non-programming features. The revenue that Howard Stern brought in was in part also due to Sirius's non-programming features (*e.g.*, nationwide coverage, high fidelity, etc– the value that Sirius added to the consumer product), and that is presumably why he received only 50% of that revenue as his payment. It would be treating music differently (and improperly) to say that Sirius is entitled to a greater share of the revenues due to music, when music and Howard Stern have a similar relationship to Sirius: each adds valuable content to the service, whose price reflects the value of that content as well as the value that Sirius adds.[19]

379. In other words, when music is licensed to other providers, the terms of the license, *i.e.*, the benchmark, capture the value that the provider offers. And when the SDARS license

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[19] The SDARS argue that SoundExchange's payments should be reduced further on the basis of a calculation of the value of pre-1972 works, but the calculation is also erroneous for reasons described below.

non-music content, the rate they pay for that content reflects the fact that the SDARS' functionality contributes to some of the value of that content.

380. As SoundExchange explained in its findings of fact, the Hauser analysis is simply another way of getting at the value of SoundExchange's contribution to the SDARS' service. SX FOF at ¶¶ 399-400. For the reasons given above, Dr. Hauser would agree that the value of a music-only SDARS service would be $6.00 or more. Dr. Pelcovits and Dr. Ordover then used benchmarking and modeling analyses to determine SoundExchange's contribution (*e.g.*, looking to the royalty rate SoundExchange obtains from other licensees of its copyrights). Dr. Hauser, in contrast, asked his survey respondents to value each aspect of the SDARS' service to isolate SoundExchange's contribution as distinct from the SDARS'. They are two different ways of asking and answering the same question, and while Dr. Hauser's approach contains numerous errors, *see* SX FOF at ¶¶ 416-425, Dr. Hauser's final result is illuminating.

5. Dr. Hauser's Conclusion Is Entirely Consistent With SoundExchange's Rate Proposal.

381. The SDARS said it best in their findings of fact: "[I]f [Dr. Hauser's] questions are asked cumulatively, in an unbiased, random order, respondents are willing to pay $2.93 [per subscriber per month] for music in general, a number that is reduced to $1.78 when music is limited to music of the 70's, 80's, 90's and today." SDARS FOF at ¶ 930.

382. Putting aside for a moment the methodological flaws in Dr. Hauser's calculations, his "unbiased" result of $1.78 per subscriber per month is on its own terms entirely consistent with SoundExchange's rate proposal, which extends from 80 cents per month per subscriber (or 8% of revenues) to $2.25 per month per subscriber (or 17% of revenues). It is far in excess of the SDARS' own proposal of 2% to 4.2% of revenues per month.

383. The SDARS imply that the $1.78 must be reduced further as part of a benchmarking analysis, SDARS FOF at ¶ 906, but that is incorrect. The $1.78 already, by definition, takes into account every penny of the SDARS' contributions, and leaves only SoundExchange's contribution remaining. Dr. Hauser's survey went to great lengths to remove the value of all non-music content, the SDARS' nationwide coverage, their sound fidelity, and every other non-music feature of the service he thought valuable. SDARS FOF at ¶¶ 940-944. And when all the shaving was done, he concluded that value of the sound recordings at issue in this case is $1.78 per subscriber per month. To remove further value through the benchmarking process would be to credit the SDARS twice for their contributions. Put another way, there are two methods to determine the relevant value of sound recordings once one arrives at the value of a music-only SDARS service (which all experts agree is in excess of $6.00): one can use benchmarking to divide up the value, or one can use surveys. SoundExchange took the former approach, and Dr. Hauser took the latter approach, but the result is the same either way.

384. In response, the SDARS will likely claim that Dr. Hauser used an alternative method of valuing music that valued it at 46 cents per subscriber month, rather that $1.78. Even Dr. Hauser did not stand by that figure, however. It is not the result that he reports in his summary of conclusions. Hauser WRT at ¶ 16, SDARS Trial Ex. 77. ("[T]he value of music programming from the 70's, 80's, 90's, and today is $1.78). And at trial, Dr. Hauser conceded this figure is biased toward the SDARS, 8/21/07 Tr. 332:19-21 (Hauser). That is something of an understatement as the 46 cent figure implies that the SDARS have contributed *85% of the value of music programming*, even after all the supposedly non-music programming features (high fidelity, nationwide coverage, etc.) are taken out. The SDARS reach this low figure by giving themselves credit for all sorts of features that derive their value from music, such the fact

the music is "uncensored." Indeed, the calculation gives the SDARS credit *twice* for having commercial-free music– its value is removed first in the mall survey, and then in the internet survey. Hauser WRT at Ex K & M, SDARS Trial Ex. 77. The SDARS should not get credit for "commercial-free" even once given that it merely shows that consumers appreciate uninterrupted music. Giving themselves credit twice for it is doubly unjustified.

6. Dr. Hauser's Result Understates The Value Of SoundExchange's Contribution.

385. Indeed, the reality is that the $1.78 understates the value of the sound recordings at issue for the following reasons.

386. *Sound recordings on non-music channels.* The record is clear that non-music channels play sound recordings. Sound recordings comprise a large portion of the programming on comedy and kids channels, and they are a common feature of other programming as well. SX FOF at ¶¶ 439-446 (citing Herscovici testimony and Sirius surveys). Dr. Hauser's calculations, however, do not include the value of any of these sound recordings.

387. *Non-programming features that derive their value from sound recordings.* One of the difficulties of trying to determine the value of each component of the SDARS service via survey (rather than through benchmarking) is that the value of the components are interdependent. For example, when Dr. Hauser asked respondents to place a value on the audio fidelity of the SDARS, he attributed none of that value to SoundExchange, even though the audio fidelity is largely useless absent music programming. This problem is especially acute with respect to Dr. Hauser's valuation of the SDARS' "commercial free" features. The value of "commercial free" was second only to the value of music itself in Dr. Hauser's survey. Yet Dr. Hauser accorded none of that value to SoundExchange, even though when consumers say that

they value the commercial free aspect of the SDARS, they are indicating that they like the fact that they play lots of uninterrupted music (because it is the music channels that are commercial-free). SX FOF at ¶ 417.

388. *Overstatement of the value of pre-1972 recordings.* As SoundExchange explains below, this Court need not decide the legal question of whether the statutory license covers pre-1972 sound recordings, but to the extent that Dr. Hauser's survey attempts to determine their value, his methodology grossly overstates their importance. *See infra* Section VII.A.8.

389. *Filter adjustment.* Dr. Hauser actually found in his mall-intercept survey that the value of music programming was $3.37. Hauser WRT at ¶ 99, SDARS Trial Ex. 77. Coupled with even the uncorrected results of his internet survey, that would yield a value of music of $2.02 (= 60% of $.3.37) per subscriber per month, rather than $1.78. Dr. Hauser does not explain why he made this downward adjustment other than to vaguely assert that it was necessary to mimic a filter question used by the Wind survey. Hauser WRT at ¶¶ 98-100, SDARS Trial Ex. 77. As Dr. Hauser has failed to provide an adequate explanation of the adjustment, it should not be taken into account.

390. In sum, even though he understates the value of sound recordings, Dr. Hauser's reaches a conclusion regarding the value of sound recordings that is entirely consistent with SoundExchange's rate proposal, and entirely inconsistent with the SDARS'.[20]

7. Dr. Wind's Study Is Reliable.

391. As the above discussion indicates, the simplest rejoinder to the SDARS' claim that Dr. Wind's survey is unreliable is to point out that Dr. Woodbury and Dr. Hauser reached

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[20] SoundExchange discusses additional limitations to Dr. Hauser's work at SX FOF at ¶¶ 402-27.

the same conclusions as Dr. Wind did. If Dr. Wind's survey was leading, it led respondents to the same results that Dr. Woodbury and Dr. Hauser found.

392. And in fact, the bulk of the SDARS' critique is that Dr. Wind's valuation of music wrongly lumps in the contributions that the SDARS make to that value. SDARS FOF at ¶ 931. Contrary to Dr. Noll and Dr. Hauser's assertions, SDARS FOF at ¶¶ 928-937, the Wind willingness to pay question asked precisely the right question for the economic analysis it was used for: it allowed the economists to determine what percentage of the SDARS' revenue was due to music programming, as opposed other programming types. When the SDARS say that Dr. Wind's valuation is too high, they blind themselves to what the economists did with that valuation. And when one examines the value of sound recordings as found by Dr. Pelcovits and Dr. Ordover, it turns out to be remarkably similar to the value found by Dr. Hauser using the SDARS' preferred method. Although the SDARS devote much energy to their "voice of the counsel" and "tires on the car arguments," the Wind survey reached the same conclusion that their own surveys, including Dr. Hauser's, did. There is no controversy here: SoundExchange's rate proposal is supported with equal vigor by the Pelcovits/Ordover analysis as it is by the Hauser analysis.

393. The SDARS' other criticisms are also unavailing. They begin by making the audacious claim that the Wind survey is unreliable because it reports the responses of only current subscribers and considering subscribers rather than showing what future subscribers might value. This is a surprising statement given that the SDARS all but *stopped* conducting their own surveys once this proceeding began. SX FOF at ¶ 371. Why the SDARS all but ceased their own consumer research during the course of the proceeding is something that only they can explain, but one can only surmise that if such studies would have been helpful to them,

they would have commissioned them. Instead, the SDARS likely suspected new surveys would tell them (and the Court) what all of their past surveys have told them: music programming is their most valuable offering. SX FOF at ¶¶ 370-396. As a result, the Wind survey data is the most recent and most comprehensive survey data in the case, and the SDARS should not be heard to complain of a lack of even more recent surveys.

394. This raises a second point, which is that the SDARS introduced two extremely voluminous surveys into evidence in the opening phases of this case, and turned over perhaps a dozen more in discovery. Yet one can search their proposed findings in vain for a mention of their own surveys. This is an extraordinary and telling omission. If Dr. Wind's findings regarding the value of music were truly off the mark, surely XM and Sirius would have their own survey evidence to cite in response. But the SDARS have no survey evidence that supports their claims: that is why SoundExchange's testimony has been full of citations to the SDARS' own surveys, *see e.g.,* SX FOF at ¶¶ 370-396, and the SDARS have been forced to pretend that they do not have sophisticated market research departments that create (or at least *did create*) these surveys on a regular basis. Again, it is SoundExchange that has built a copious record through Dr. Wind's testimony, and through the SDARS' own surveys on the value of music, and the SDARS that have failed to make out any affirmative case on the point whatsoever (save for Dr. Hauser, whose findings are in accord with Dr. Wind's).

395. That is why this Court should give no credit to the SDARS' claim that Dr. Wind's study is supposedly unreliable because the demographics of the Wind respondents allegedly do not match the demographics of the SDARS subscribers. SDARS FOF at ¶ 915. First, the Wind results are entirely consistent with the SDARS' own surveys: there is no reason to think that any bias exists in terms of demographics, and the SDARS have introduced no evidence on this point.

And second, the SDARS were fully capable of reweighing Dr. Wind's data to match any demographic pattern they like (indeed, they reran his entire survey and obtained the same results): vague assertions about the effects of demographics prove nothing.

396. The same responses hold for the SDARS' criticisms about the reliability of Dr. Wind's methodologies generally. SDARS FOF at ¶¶ 910-912. The SDARS have no explanation for how they claim Dr. Wind's study is unreliable when it reached the same conclusions that their own studies and experts have. And in any case, the Wind survey was an extremely rigorous survey conducted by one of the country's most foremost survey and marketing experts.[21] SX FOF at ¶ 347, Wind WDT at 1, 3-20, and App A, SX Trial Ex. 51. The survey showed through

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[21] Dr. Wind's work has been repeatedly cited favorably by the federal courts. *E.g.*, *Pharmacia Corp. v. GlaxoSmithKline Consumer Healthcare, LP*, 292 F. Supp. 2d 594, 601 (D.N.J. 2003) (agreeing with testimony of Dr. Wind with respect to consumer beliefs about nicotine patch products); *Miramax Films Corp. v. Columbia Pictures Entertainment, Inc.*, 996 F. Supp. 294, 299 (S.D.N.Y. 1998) (crediting Dr. Wind's survey as the basis for the court's findings concerning consumer confusion); *Hertz Corp. v. Avis, Inc.*, 867 F. Supp. 208, 211 (S.D.N.Y. 1994) (noting Dr. Wind's criticism of a consumer survey that the court ultimately discredited); *Metro Mobile CTS, Inc. v. NewVector Comm., Inc.*, 643 F. Supp. 1289, 1292 (D. Ariz. 1986) (noting, and ultimately agreeing, with Dr. Wind's testimony that challenged advertising statements actually deceive or have a tendency to deceive); *Inc. Pub. Corp. v. Manhattan Magazine, Inc.*, 616 F. Supp. 370, 392 (S.D.N.Y. 1985) (finding persuasive Dr. Wind's testimony attacking a survey); *Anheuser-Busch, Inc. v. Stroh Brewery Co.*, 587 F. Supp. 330, 337-38 & 337 n.8 (E.D. Mo. 1984) (crediting Dr. Wind's survey and noting that Dr. Wind "has considerable expertise and experience in the field of consumer research"); *Procter & Gamble Co. v. Colgate-Palmolive Co.*, No. 96 CIV. 9123(RPP), 1998 WL 788802, at *60 & 60 n.25 (S.D.N.Y. Nov. 9, 1998) (crediting Dr. Wind as "an experienced expert in consumer research" and noting, in crediting his survey, that "the universe was properly defined, a representative sample of the universe was selected, the questions to be asked of interviewees were framed in a clear, precise, and non-leading manner, the data was analyzed in accordance with accepted statistical principles, and the objectivity of the entire process was assured" (internal citations omitted); *Johnson & Johnson-Merck Consumer Pharms. Co. v. SmithKline Beecham Corp.*, No. 91 Civ. 0960 (MGC), 1991 WL 206312, at *6 (S.D.N.Y. Oct. 24, 1991) (noting Dr. Wind's criticism of a consumer survey that the court ultimately discredited).

measure after measure that music is the most valuable aspect of the SDARS' service. SX FOF at ¶¶ 339-368. The SDARS have advanced no legitimate reason for not crediting the Wind results.

8. SoundExchange Has Correctly Accounted For Pre-1972 Works

397. Many of the SDARS' arguments discussed in the preceding section are premised on the often-unstated assumption that this Court must exclude the value of sound recordings fixed prior to 1972. This novel and complex legal issue has never been raised or litigated in the context of §§ 114 and 112, and the SDARS provide little analysis and no case law to support their argument here.

398. The plain text of Section 114 creates a statutory license for "sound recordings," a term defined in the statute without any reference to the date on which the sound recording was fixed. 17 U.S.C. § 114(d)(2). Nowhere in § 114 is there a limitation on the grant of the statutory license that says that the SDARS are permitted to reproduce and play some sound recordings, but not othersIf pre-1972 sound recordings were not covered by the statutory license, it would mean that such sound recordings, generally subject to federal copyrights, *see* 17 U.S.C. § 301, would be governed by a patchwork of state laws, raising the possibility that the SDARS could be permitted to reproduce and perform pre-1972 sound recordings in some states, but not others. This result would be inconsistent with the intent of Congress at the time of the passage of the DPRSA in 1995 and the DMCA in 1998, which was to create an administrable blanket license that would best serve the public interest by striking a delicate balance between the interests of all copyright owners and nation-wide services such as the SDARS.

399. There is, however, no need to address the merits of this novel and unresolved legal question because there is no basis in the record for doing so. The SDARS have not claimed

any "discount" on the statutory license as a result of their use of pre-1972 sound recordings, nor have they provided any persuasive evidence by which the Court could calculate such a discount.

400. Although the SDARS suggest that the value of music, in comparison to non-music content, should be reduced because (they claim) pre-1972 sound recordings do not fall within the statutory license, such claims do not provide a basis for reducing the royalty rate here, if expressed as a percentage of revenue or derived therefrom. The SDARS have failed to create a record in this proceeding that would show that they are entitled to a discount for pre-1972 sound recordings. SX FOF ¶ 435.

401. For instance, Dr. Woodbury, in his rebuttal testimony, purported to provide statistics concerning the ratio of pre-1972 sound recordings to all sound recordings played on the SDARS. Woodbury WRT at 21-23, SX Trial Ex. 80. That measure, however, provides no evidence of listening to pre-1972 sound recordings by consumers or their value. SX FOF ¶ 435. If, as the record demonstrates, there is vastly more listening to channels that play post-1972 sound recordings and relatively little listening to pre-1972 sound recordings, a "reduction" based on the number of broadcasts of pre-1972 sound recordings would not reflect a fair deduction. SX FOF ¶ 435.

402. Moreover, Dr. Woodbury's report on the ratio of pre-1972 sound recordings to all sound recordings played on the SDARS is inherently unreliable. He made no effort to determine whether the sound recordings he excluded as "pre-1972" had been remixed or remastered after 1972. SX FOF at ¶ 1461; 8/23/07 Tr. 157:20-159:8 (Woodbury). The SDARS cite to Copyright Office Circular No. 56 in their proposed Conclusions of Law to argue that merely transferring old sound recordings to a new medium in an automated process may not qualify for copyright protection, but that circular also makes clear that remixing pre-1972 sound

recordings does provide sufficient originality for a new copyright. Dr. Woodbury wholly ignored re-mixed versions of pre-1972 sound recordings in his analysis, and double-counted the pre-1972 sound recordings on Sirius's 60s Vibrations channels -- thereby increasing the purported percentage of pre-1972 sound recordings played. *See* SX FOF ¶ 437; Woodbury WRT at SDARS-Woodbury Ex. 30, p. 1-2, SDARS Trial Ex. 80 (counting Sirius's 60s Vibrations channel twice).

403. Furthermore, the information Dr. Woodbury relied on as he prepared his report all came from the SDARS themselves, and that data contains "widespread" incorrect information about the release dates of sound recordings played by the SDARS -- from no reported release date, to reported release dates that are demonstrably false (e.g., a pre-1972 release date for an album released by an artist born after 1972 or by a band formed after 1972) to reports of a massive number of works dated "1971" -- suggesting that the SDARS simply defaulted to 1971 whenever they did not bother to determine the true date of release or remixing. Kessler WRT at 4, SX Trial Ex. 127; 8/29/07 Tr. 21:20-22:11. As Ms. Kessler discussed in her testimony, the SDARS' reporting of release years is completely unreliable. This evidence suggests that the SDARS over-report performances of pre-1972 recordings, presumably in a belief that performance royalties to SoundExchange may not be due for such recordings. SX FOF at ¶ 436.

404. Ultimately, the record demonstrates that pre-1972 sound recordings are of particularly low value when compared to post-1972 sound recordings. SX FOF ¶ 438. Dr. Hauser's survey found that listening to music from the 40s, 50s, and 60s was the second lowest-rated feature of the SDARS, out of all 29 features he examined. Hauser WRT at Ex. L, SDARS Ex. 77.

405. Finally, even assuming, arguendo, that some percentage of the sound recordings broadcast on the Services' music channels are not compensable, that percentage is more than made up for by the large amounts of post-1972 sound recordings that the Services uses on their non-music channels. SX FOF ¶ 439; Herscovici WRT at 14-17 & App. K, SX Trial Ex. 130.

406. Music pervades the SDARS' so-called "non-music" channels, including the Howard Stern channels. SX FOF ¶¶ 440-444. So-called "non-music" channels often have hours of programming entirely dedicated to the playing of sound recordings, Coleman WDT at ¶ 37, SIR Trial Ex. 34, or use sound recordings many times an hour to set the tone or theme of the programming, Herscovici WRT at 14-17 & App. K, SX Trial Ex. 130, 6/7/07 Tr. 237:5-239:6 (Coleman). As discussed in more detail in SoundExchange Proposed Findings of Fact, many of the "non-music" channels that the SDARS tout in their own proposed findings actually play sound recordings back-to-back for large stretches of the day. The Sirius OutQ channel features 61 hours of pure music programming of recent popular hits. Herscovici WRT at 15, SX Trial Ex. 130. Similarly, the Road Dog Trucking channel has 53 hours per week of pure music programming playing back-to-back sound recordings. Herscovici WRT at 16, SX Trial Ex. 130. And these are just examples of the large volumes of sound recordings used by so-called "non-music" channels. Thus, any claim that there should be a "deduction" for pre-1972 works is more than offset by the use of sound recordings on the so-called "non-music" channels. SX FOF ¶ 446.

407. It follows that if this Court were to adopt a rate structure based on a percentage of revenue, there would be no need or basis on which to decide the question of whether pre-1972 sound recordings fall under the statutory license. The SDARS have simply failed to proffer sufficient evidence to support their position. It is also the case that a rate based on a per play

metric would largely moot the issue. Upon the SDARS' accounting to SoundExchange, SoundExchange or its individual members themselves could take up with the SDARS the issue of whether particular sound recordings are compensable under the statutory license or whether, under the common law of one or more of the 50 states, there is a common law right to make digital performances and reproductions of sound recordings, as the SDARS do under the § 114 and §112 statutory licenses.

B. The Sirius Agreement With Howard Stern Provides a Useful Measure of How the SDARS Value and Compensate Their Most Important Content

408. SoundExchange, through its experts, provided the Court with a range of benchmark evidence and economic analysis concerning the value of sound recordings to the SDARS. Among the benchmarks was an examination by Dr. Pelcovits of the agreement between Sirius and Howard Stern. The SDARS criticize the Howard Stern benchmark analysis of Dr. Pelcovits on a number of general grounds, none of which have merit.

409. First, the SDARS complain that the Stern agreement represents a single data point, and therefore is not reliable. SDARS FOF at ¶ 1054. It is an odd complaint coming from the SDARS, whose entire case rests upon a single data point – the PSS agreement negotiated in 2003.

410. Moreover, Dr. Pelcovits was careful to consider whether the Stern agreement was an outlier, or in fact was representative of the value that the SDARS place on content. He reviewed other non-music content deals, and found that the SDARS paid [ ] million for Major League Baseball ([ ] million if a contract extension clause is exercised), [$] million for the NFL, [ ] million for NASCAR, [ ] million for Fox News, and [ ] million for the National Hockey League. SX FOF at ¶ 240. In Dr. Pelcovits' opinion, the fact

that the SDARS were willing to commit such large amounts to other content provided assurance that the Stern agreement was not simply a rogue deal. 7/09/07 Tr. 73:3-74:16. (Pelcovits).

411. Dr. Pelcovits further explored some of the individual content deals and compared the amounts spent on each of those deals to the number of new subscribers each was expected to bring to XM or Sirius. While he was not comfortable using any one of these agreements as a stand-alone benchmark because the evidence was ambiguous with respect to whether XM and/or Sirius decision-makers actually relied on the subscriber projections in making their contracting decisions (7/09/07 Tr. 74:17-76:11 (Pelcovits)), he found that the data generally supported his Stern analysis. Specifically, he concluded that the percentage of incremental revenue paid to the NFL by Sirius is similar to the percentage of incremental revenue paid by Sirius to Howard Stern, and the percentage of incremental revenue paid to Oprah Winfrey was in the mid-to-high 20% range. 7/09/07 Tr. 74:17-76:11 (Pelcovits). The corresponding royalty for music, using the Oprah Winfrey agreement as a benchmark, would be in the mid-to-high teens as a percentage of total SDARS revenue. 7/09/07 Tr. 78:10-78:20 (Pelcovits). These results gave Dr. Pelcovits further confidence in the Stern analysis. 7/09/07 Tr. 147:1-148:21 (Pelcovits).

412. The SDARS also fault the Stern benchmark analysis on the grounds that the Stern agreement was negotiated in 2004, and might be negotiated differently today. SDARS FOF at ¶ 1059. Here again, the SDARS are the proverbial pot calling the kettle black. Their benchmark analysis relies on the 2003 PSS agreement, and is allegedly corroborated by the 2003 SDARS/RIAA agreement. Obviously, the Stern benchmark represents more recent data than the economic evidence offered by the SDARS. Moreover, the financial condition of the SDARS has indisputably improved dramatically since 2004, *see* Herscovici WRT at App. I, SX Trial Ex. 130, and if Sirius could afford to pay Howard Stern hundreds of millions of dollars in 2004

without disrupting its business, it surely can afford to pay the copyright owners equivalent value for sound recordings today.

413. With respect to their general assault on the Stern benchmark, the SDARS final argument is that the Stern agreement was not negotiated subject to the Section 801(b) factors. What the SDARS persistently ignore is that consistent prior precedent under Section 801 instructs the Court to begin its analysis with market evidence, where possible *See, e.g., Recording Industry of America v. Librarian of Congress*, 176 F.3d 528, 528 (D.C. Cir. 1999); PES I, 63 Fed. Reg. at 25396. That market evidence may then be adjusted if necessary pursuant to the § 801(b) factors, but marketplace rates have provided the basic foundation for a prior royalty rate determinations. SoundExchange has followed the guidance of these decisions. It has provided the Court with evidence of how the SDARS would value sound recordings in the market – and the Stern benchmark is one component of that analysis – and then it adjusted the market-based rates in accordance with the statute. Pelcovits WDT at 13-14, SX Trial Ex. 68; Pelcovits AWDT at 8, SX Trial Ex. 70. The result is that SoundExchange's proposed rates are below the market throughout the term of the license.

1. The SDARS Fail To Distinguish Howard Stern From Music in Any Meaningful Way

a. Howard Stern is Not More Important To Satellite Radio Than Music

414. In a variety of ways, the SDARS attempt to persuade the Court that Howard Stern cannot be compared to music with respect to the benefits he brings to Sirius and the opportunities he gave up by signing a contract with Sirius. SDARS FOF Section VII. C.

415. A substantial part of the "Stern is unique" theme sounded by the SDARS is that Stern is a larger-than-life figure – the "single biggest radio personality probably in history in

prime time," (6/6/07 Tr. 258:21-259:1 (Karmazin) – who by his very presence saved Sirius, vaulted it ahead of XM in the marketplace, and breathed life into Sirius's relationships with its OEM partners. SDARS FOF Section VII. C. 2.

416. To bring a little reality to this picture, however, it should be recalled that Sirius's own internal research paints a very different picture. According to a study conducted for Sirius by an independent survey research firm, [ ] with [ ] of radio listeners saying their overall image of him is [ ] SX Trial Ex. 83 at 11. According to the study, Howard Stern had [ ], and that he [ ] SX Trial Ex. 83 at 12, 13. Common associations with Stern include "disgusting" and "goes too far." SX Trial Ex. 83 at 13. The bottom line, according to this study: [ ] SX Trial Ex. 83 at 31 (emphasis added).

417. The claim that Stern is the reason Sirius suddenly became more effective competing with XM likewise is belied by actual data. Despite the announcement of the Howard Stern deal and Stern's alleged promotion of his move to Sirius, an October 2005 study conducted for Sirius concluded that [ ]. SX Trial Ex. 84 at 5. Moreover, according to the study, [ ] SX Trial Ex. 84 at 12 (emphasis added). Sirius's internal Brand/Ad Tracker survey found that in the third quarter of

2005, long after the Stern deal was announced, Stern was mentioned by only [redacted]. SX Trial Ex. 84 at 80.

418. What the SDARS do not say is that something else happened to boost Sirius's ability to compete with XM. XM raised its prices. Until sometime in 2005, XM's basic subscription price was $9.95 per subscriber, while the Sirius basic subscription price was $12.95. XM then raised its subscription price to match Sirius. 8/22/07 Tr. 238:12-240:10 (Karmazin). Given Stern's negative image with the "vast majority" of potential subscribers, SX Trial Ex. 83 at 12, the XM price increase seems at least an equally important contributor to Sirius's turn of fortune. Moreover, as the SDARS concede, Sirius was beset by problems with their chip sets and slow development of OEM relationships. SDARS FOF at ¶¶ 61-62. Resolution of these problems almost certainly was a serious factor in growth as well.

419. The SDARS' willingness to attribute any positive development to Howard Stern, regardless of whether a causal connection actually can be shown to exist, can be seen in their claims that Stern dramatically enhanced the relationship between Sirius and its OEM partners. According to Sirius, for example, within two weeks of the announcement that Stern would be joining the Sirius content lineup, Ford Motor Company announced that it would increase the number of product lines equipped with Sirius receivers. SDARS FOF at ¶ 1072. It seems quite unlikely however, that a corporate behemoth like Ford reacted quite so quickly, re-examining its product offerings and contractual relationships and publicly announcing such a change a mere two weeks after the Stern announcement. It seems far more likely that this move was in the works well before the signing of Howard Stern was announced. Indeed, the SDARS themselves claim that it takes 3-4 years to get an automaker to put a satellite radio into a car. SDARS FOF at ¶ 672.

420. Despite the unsupported opinions of Sirius executives, all of the survey data shows that music is, and has always been, far more important than Stern or any other radio personality. For example, Sirius's survey research shows that for those who were aware of satellite radio, [redacted] SX Trial Ex. 84 at 15. Even Dr. Woodbury's channel attachment index shows that music is far more valuable than Mr. Stern. Woodbury WDT at Ex. 10, XM Trial Ex. 8 (showing that music is more valuable than Mr. Stern by more than 50% with attachment values of .692 for Mr. Stern and 1.09 for music).

421. As abundant survey evidence shows, music is far more important than *all* of the talk radio personalities. Although the SDARS claim that adding Howard Stern or other non-music content was important, the reality is that the SDARS started off with music as their core content because without music their satellites would never have gotten off the ground. It may well be true that Stern and music are not comparable in terms of importance, but that is because all the survey evidence shows that music is far *more* important. Howard Stern's alleged value to Sirius, therefore, does not make him a poor benchmark when the target market involves music.

b. Exclusivity

422. Perhaps the SDARS' principal argument for why Stern cannot be compared to sound recordings is that Stern agreed to an exclusive deal with Sirius, while music is also available on satellite radio's competitor, terrestrial radio. SDARS FOF Section VII. C. 2.

423. The SDARS claim that Dr. Pelcovits "recognized the value of exclusivity, admitting that, in the context of his own analysis, exclusive content might attract more customers than non-exclusive content." SDARS FOF at ¶ 1045. They then say that Dr. Pelcovits did not

take exclusivity into account because he considered it "only in the context of attracting subscribers." *Id.* But that is exactly the point. In Dr. Pelcovits' opinion, the only real impact of exclusivity is that exclusive content might attract more subscribers, and that is precisely what he *did* take into account. 7/9/07 Tr. 56:4-57:10 (Pelcovits); *see also id.* Tr. 55:9-56:3.

424. Dr. Pelcovits's Stern analysis assessed how many subscribers Stern likely brought to Sirius. Pelcovits WDT at 11-13, SX Trial Ex. 68; Pelcovits AWDT at 4-8, SX Trial Ex. 70. Perhaps the number of subscribers was increased by the fact that Stern is exclusively available on Sirius, but if so, that value of exclusivity was captured when Dr. Pelcovits determined the number of Stern subscribers.

425. Indeed, the SDARS cannot point to any value of exclusivity other than that it may attract more subscribers, which is exactly what Dr. Pelcovits was exploring. Any value of exclusivity, therefore, is accounted for in the analysis.

426. Finally, as SoundExchange pointed out in its proposed findings of fact, it simply is not true that there is no exclusivity value that attaches to the sound recordings broadcast by the SDARS. SX FOF at ¶¶ 455-460. The SDARS can and do broadcast over 60 channels of music each – far more than is available over terrestrial radio in even the largest markets. The practical reality is that the SDARS broadcast genres of music that are not available in most, if any terrestrial radio markets, and obtain the benefits of exclusivity as a result. SX FOF at ¶ 458. The SDARS themselves make the same point. SDARS FOF at Section V.B.2. It does not matter, as the SDARS assert, that there is no legal bar preventing terrestrial radio stations from playing any particular sound recording. It is equally true that there is no legal bar that prevents the NFL from licensing to terrestrial radio stations the right to broadcast every single NFL game in every single radio market, yet the SDARS consider the NFL exclusive content because as a practical matter

terrestrial radio stations will only broadcast the games of local teams. SX FOF at ¶ 461. The same practical exclusivity applies in the case of music.

427. Moreover, as discussed in more detail in SX FOF at Section IV.H (discussing "branding" analyses), the SDARS's claim of exclusivity is overblown. Many of their content providers also disseminate content over television, terrestrial radio, the Internet, and cellular carriers. Indeed, they go to great lengths to emphasize that their content is not exclusive because it is available on many other platforms. SX Trial Ex. 106 at Ex. A ¶ 53; SX Ex. 120 DR, at 18 (XM analysis showing aggressive efforts by content providers on cellular and other transmission media).

c. Branding and Promotion

428. The SDARS make much of the supposed value from the Stern contract as a result of his promotional activities and the value of the Stern "brand." But as SoundExchange shows above, Stern's benefit as a brand and a promoter is suspect in view of the fact that most people do not like him. *See, e.g.* SX Trial Ex. 83 at 11-13.

429. In any event, like the alleged value of exclusivity, the benefit of brands and promotion, ultimately, lie in the degree to which they cause consumers to subscribe to satellite radio. Simply having Howard Stern mention Sirius in a newspaper or television interview, or advertising using the Howard Stern logo, produces no tangible benefit for Sirius and adds no revenue to the bottom line unless consumers are induced to subscribe as a result. Once again, therefore, the value of branding and promotion is measured by how many new subscribers were added to the Sirius subscriber rolls as a result of the Howard Stern agreement. 7/9/07 Tr. 55:9-56:3 (Pelcovits). Assuming Dr. Pelcovits correctly calculated the number of Stern subscribers –

and he did – the benefits from branding and promotion were captured by his analysis. SX FOF at Section IV.D.

d. Opportunity Costs

430. Finally, the SDARS claim that Stern is distinguishable from sound recordings because the price of the Stern contract was driven by Stern's opportunity costs. That is, in signing with Sirius, Stern gave up the right to sign with others, and the price of his contract with Sirius necessarily had to cover the revenue he gave up. But Stern's previous contract with broadcast radio was for $67 million over five years. 8/16/07 Tr. 205:6-8 (Noll). His contract with Sirius is a multiple of that amount. The payment by Sirius to Stern was so far in excess of his opportunity cost with terrestrial radio that opportunity costs do not explain the deal. Opportunity costs do not explain why Howard Stern is paid what he is by Sirius.

431. In any event, the assumption of the SDARS is that there are no opportunity costs for the copyright owners is not correct. As SoundExchange has shown, subscribers to the SDARS purchase fewer CDs and downloads as a result of their subscription, costing the record companies approximately $1.29 per subscriber per month. SX FOF at ¶¶ 720-722. Even if opportunity costs played a role in the formulation of the Stern contract – and the only evidence on that point leads to the conclusion that they did not – opportunity costs similarly should increase the cost of the sound recording royalty.

2. Dr. Pelcovits Correctly Analyzed the Stern Benchmark

a. Revenues Attributable to Stern

432. The SDARS claim that even if the Stern deal can be used as a benchmark, Dr. Pelcovits failed to correctly assess the revenues associated with the Stern contract. If anything,

however, Dr. Pelcovits overestimated the subscribers and revenues attributed to Howard Stern for the purposes of his analysis.

433. Dr. Pelcovits calculated the Stern benchmark rate based on a determination that Stern brought approximately 2 million new subscribers to Sirius (Pelcovits Amended WDT at 7-8, SX Trial Ex. 70, each of whom remained a subscriber for the entire term of the Stern contract. 7/09/07 Tr. 67:5-68:5 (Pelcovits). The SDARS contend that Dr. Pelcovits should have credited Stern with a higher number of subscribers. The SDARS' own evidence, however, shows that Dr. Pelcovits' estimate was, if anything, too high, not too low.

434. As the SDARS agree, what is important for the purposes of this analysis is the costs and revenues that Sirius expected from the Stern contract at the time Sirius committed to it. SDARS FOF at ¶ 1113. Although Dr. Pelcovits used a figure of 2 million Stern subscribers for his analysis, at the time Sirius agreed to the contract with Stern, its Board of Directors was told to expect only 900,000 new subscribers from the deal. Specifically, a study presented to the Sirius Board in connection with its approval of the Stern contract found that [ ] SX Trial Ex. 83 at 35; *see also* SX Trial Ex. 70 at SX Exhibit 144 DR, p. 5. Another study commissioned by Sirius predicted that less than 900,000 additional subscribers would be driven to subscribe because of Stern. SX Trial Ex. 82 at 8-9.

435. The surveys described above are the only ones conducted by Sirius that reflect what the expectations of Sirius were around the time of the contract. If Dr. Pelcovits is to be faulted, therefore, it is because he erred in Sirius's favor by using the 2 million subscriber figure.

b. Costs Attributable to Stern

436. The SDARS likewise contend that Dr. Pelcovits overestimated the costs of the Stern contract. In particular, they argue that he ignored advertising revenues. SDARS FOF at ¶ 1115. That is not correct. In fact, Dr. Pelcovits calculated the advertising revenues attributable to Mr. Stern, and included them in his analysis.

437. Contrary to the SDARS arguments, Dr. Pelcovits' treatment of advertising revenues was appropriate. He included those revenues as part of the total incremental revenues attributable to Howard Stern, rather than an offset to the Stern costs. Pelcovits AWDT at 5-6, SX Trial Ex. 70. Such treatment is correct for the reasons explained below, *infra* Section VII.C.1, and in SoundExchange's proposed findings of fact, SX FOF at ¶¶ 584-586.

438. Indeed, the Stern analysis provides a particularly good illustration of why the SDARS' argument that advertising revenues should be singled out and treated not as revenues but as a deduction to costs makes no sense. The point of Dr. Pelcovits' examination of the Stern costs and revenues was to determine how much Stern is being paid as a percentage of the incremental revenues that he brings to Sirius. The incremental Stern revenues consist of both subscriber revenue and advertising revenue. There is no principled basis to say, as the SDARS do, that subscriber revenue is revenue, but advertising revenue is an offset to costs. One could just as easily argue that subscriber revenue should be treated as an offset to costs. Revenue is revenue, regardless of who pays it or how it is earned, and there is no reason to treat one type of revenue differently than another.

c. The Relative Value of Music and Non-Music Content

439. As their parting shot, the SDARS challenge Dr. Pelcovits' calculation of the relative values of music and non-music content. As Dr. Pelcovits explained in his testimony, once he determined that Howard Stern was paid approximately 50% of the incremental revenues Stern brought to Sirius, Dr. Pelcovits needed to adjust that number so that it could be applied to the SDARS total revenues. Pelcovits WDT at 13-14, SX Trial Ex. 68. In other words, in order to determine a rate that would pay the copyright owners and artists the same percentage of the incremental revenues attributable to music as is paid to Howard Stern for the incremental revenues attributable to Stern, Dr. Pelcovits needed to determine the level of incremental revenue attributable to music. *Id.*

440. Dr. Pelcovits used data from the Wind study to reach a conclusion that 56% of the SDARS revenues are attributable to music. Thus, he multiplied 50% (percentage of incremental Stern revenue that is paid to Howard Stern) times 56% (the percentage of total SDARS revenues attributable to music) to arrive at a proposed royalty rate for music of 28% (less certain deductions for musical works costs and music programming costs).

441. The SDARS challenge Dr. Pelcovits' use of the Wind data on the grounds that the Wind survey was flawed. SDARS FOF at ¶¶ 1117-1123. SoundExchange has responded to those arguments elsewhere. *See* SX FOF at ¶¶ 407-418. Quite apart from the fact that their critique of the Wind study is misguided, the SDARS studiously ignore the fact that their own expert – Dr. Woodbury – undertook precisely the same calculations and reached almost the same conclusions drawn by Dr. Pelcovits. *See* Woodbury WDT at 33-34, XM Trial Ex. 8.

442. In Dr. Woodbury's analysis of the PSS rate, he confronted the same issue addressed by Dr. Pelcovits. That is, Dr. Woodbury calculated a percentage of revenue rate that

he believed could be applied to the SDARS total revenues, provided it was adjusted to account for the fact that some of those revenues were attributable to non-music content. Dr. Woodbury therefore undertook an analysis of the relative contributions of music content and non-music content.

443. Using Sirius internal survey data, Dr. Woodbury concluded that music is responsible for [redacted] of Sirius's revenues, and [redacted] of XM's revenues. Woodbury WDT at 33-34, XM Trial Ex. 8. A straight average of those two figures would credit music with [redacted] of the revenues for the two SDARS, while a revenue-weighted average would result in a higher percentage (since XM's revenues are higher than those of Sirius).

444. In short, the figure used by Dr. Woodbury to calculate a percentage of revenue rate based on the revenue contribution of sound recordings is almost exactly the same – albeit somewhat higher – than the figure used by Dr. Pelcovits. Under these circumstances, the SDARS' vociferous criticism of Dr. Pelcovits and Dr. Wind, whose data virtually mirrors that of the SDARS' own internal surveys as analyzed by their own expert, is difficult to fathom.

C. The SDARS' Aggregate Non-Music Content Agreements Support the SoundExchange Rate Proposal

1. The Objections to Non-Music Content as a Benchmark Are Unfounded

445. As a supplement to his Howard Stern benchmark, Dr. Pelcovits reviewed the SDARS' non-music content costs in the aggregate, comparing those costs to total revenues in order to calculate a comparable sound recording royalty. Pelcovits AWDT at 8-11, SX Trial Ex. 70.

446. The SDARS raise largely the same objections to the non-music analysis that they raised with respect to the Howard Stern benchmark. *See* SDARS FOF Section VII. D.

447. As they did with the Howard Stern benchmark, the SDARS complain that the non-music content agreements cannot be used as a basis to determine a reasonable sound recording royalty because the opportunity costs for non-music content are different, SDARS FOF at ¶ 1134, the supply is different, and the substitutes are different. SDARS FOF at ¶¶ 1135-1136. In reality, the SDARS know nothing about the opportunity costs of non-music content, not having conducted any empirical research into the subject. 8/20/07 Tr. 182:13-20 (Benston). Neither do they know whether the supply of music and non-music content is different or whether the substitutes are different, not having studied that either. 8/20/07 Tr. 187:19-188:10 (Benston).

448. Instead, the SDARS rely on a simplistic analogy to support these arguments. Music is like water, they say – important but easily and endlessly available. Non-music content is like diamonds, rare and therefore expensive. SDARS FOF at ¶¶ 1136-1137. Apart from the fact that no evidence supports these assertions, the analogy is inapt on its face. Music may well be like water, in the sense that it is essential to the SDARS. Their own witnesses admit as much. Joachimsthaler WRT at 11, SDARS Trial Ex. 73. But unlike water, music is copyrighted and scarce. Popular music – the music people will pay money to hear – cannot be obtained just anywhere. And, as Dr. Benston admitted, he has no reason to think that the supply of the talented artists who create these copyrighted sound recordings is any different from the supply of talk show hosts and entertainment personalities. 8/20/07 Tr. 187:19-188:10 (Benston).

449. The SDARS also claim that non-music content represents a poor benchmark because it involves different rights than those at issue in this case. SDARS FOF at ¶ 1139. But the SDARS cannot deny that, from an economic standpoint, music content and non-music content serve the same purpose. They are substitutable inputs into the SDARS' product – audio

entertainment for consumers. Pelcovits WDT at 9-10, SX Trial Ex. 68; 7/9/07 Tr. 299:19-300:3 (Pelcovits). Dr. Benston effectively admits this. 8/20/07 Tr. 193:14-194-6 (Bentson).

450. Exclusivity is another way the SDARS attempt to distinguish music content and non-music content. SoundExchange has already addressed this point elsewhere. *See* SX FOF at ¶¶ 455-464. It will suffice for here to say that even the SDARS' own experts admit that non-music content that the SDARS describe as exclusive is in fact available through other media (8/20/07 Tr. 94:15-95:12 (Benston)), and music, conversely, has attributes of exclusivity given the SDARS ability to broadcast niche genres unavailable on terrestrial radio. 8/20/07 Tr. 100:15-16, 101:6-11, 105:5-13 (Benston). The SDARS even proclaim it in their findings of fact, noting that "The SDARS Play Music Not Heard Elsewhere (SDARS FOF at p. 78), and describing how the SDARS "provide more music channels, spanning more diverse genres, than are found in even the largest terrestrial radio markets ...." SDARS FOF at ¶ 141.

451. The SDARS, in fact, are fully aware of the practical reality that they offer music terrestrial radio does not and cannot offer. XM's internal strategy documents describe [redacted].] SX Trial Ex. 2 at 24, 27. It is part and parcel of XM's marketing strategy to take full advantage of its ability to offer niches of music terrestrial radio does not. XM, in that respect, obtains the same benefits from music that it obtains from exclusive non-music content.

452. The SDARS also repeat the refrain that Dr. Pelcovits's analysis of non-music content did not take into account the benefits the SDARS claim they receive from their non-music content agreements, such as association with well-known brands, publicity and endorsements. SDARS FOF at ¶¶ 1160-1167. In order to make this argument, the SDARS first

try to persuade the Court that whether content attracts subscribers should not be the test of the content's value. *Id.* at ¶ 1162. The SDARS have to make this argument, of course, because they recognize that survey after survey proves that music, far more than anything else, brings subscribers and subscription revenue to the SDARS. *See* SX FOF Section IV. Consequently, they argue that it was wrong for Dr. Pelcovits to "rely[] on surveys that consider what listeners say as the basis for assessing the value of non-music programming deals." SDARS FOF at ¶ 1162.

453. The SDARS necessarily admit, however, that "subscriber revenue is the ultimate primary goal for both SDARS." SDARS FOF at ¶ 1162. And the SDARS cannot deny that no other content is as effective as music at generating subscriber revenue. *See* SX FOF Section IV. In effect, then, what the SDARS are claiming is that this Court should ignore empirical evidence from scientific studies regarding the effect of content on generating the revenue that is their "ultimate primary goal." Instead, say the SDARS, opinions offered by their witnesses that brand identity and endorsements and promotional considerations, quantified in thoroughly unreliable ways, really provide a better measure of the value of non-music content. SX FOF at Section IV.D.

454. This, of course, makes no sense. Brand identity and promotion and endorsements are all means to an end. The end is to generate subscriber revenue. *See* 6/7/07 Tr. 224:17-18 (Coleman) ("[T]he overall goal of everything we do is to drive subscribers."). And Dr. Pelcovits measured, in the most direct fashion possible, which types of content are responsible for generating subscriber revenue. 7/9/07 Tr. 54:18-57:10 (Pelcovits). He relied on survey data that determined what motivated consumers to subscribe. Pelcovits WDT at 13-14, SX Trial Ex. 68. It simply is not true, then, that Dr. Pelcovits's analysis did not capture the true value of non-

music content. If Sirius's deal with the NFL brought subscribers, whether because of the broadcasts of games, the association with the NFL brand, or promotional appearances and endorsements by NFL stars, one would expect the survey data to reveal that consumers were motivated to subscribe because of the availability of NFL programming. Far from being erroneous, relying on survey data was the best way to assess all of the value that any non-music content deal brought to the SDARS.

455. While the foregoing should completely answer the contention that Dr. Pelcovits underestimated the value of non-music content because he did not separately consider the value of brands, promotions and endorsements, it should also be said that the SDARS grossly overestimate the impact of such considerations.

456. For example, the SDARS claim that the Sirius agreement with the NFL provides valuable brand and promotional benefits. SDARS FOF at ¶¶ 1176, 1188. In an email sent in late 2004, however, Sirius CEO Mel Karmazin asked "what info if any do we have on the impact of having and promoting the NFL for adding subs." SX Trial Ex. 29. In response, Mr. Karmazin was told that Sirius had heavily promoted its connection with the NFL. The NFL was the "the primary focus of about 90% of [Sirius's] marketing." Sirius's largest media spend was devoted to Monday Night Football. Sirius's lead product in retail stores had "the NFL logo all over it." And the result of all of that hype involving the NFL and its vaunted brand was this: "In quantitative research against people exiting Best Buy stores this fall, the primary reason for considering and buying satellite radio are 'variety of music channels, commercial free music, and receiver features.'" *Id.*

457. In the same email, Mr. Karmazin was told that Sirius created two different commercials featuring former NFL stars, Howie Long and Terry Bradshaw. SX Trial Ex. 29. In

one commercial, the two NFL legends talked about "getting there [sic] favorite games." In the second version of the commercial, Long and Bradshaw talked about Sirius's music offerings. The latter version of the commercial "had greater appeal, quantitatively, among consumers, even NFL Fans." *Id.*

458. Similar results occurred when XM explored the importance of NASCAR programming to NASCAR fans. In focus groups made up of NASCAR fans, XM learned that "Diversity of music is the primary reason that the participants report getting XM." SX Trial Ex. 8 at 12.

459. The fact is that the SDARS' own documents, prepared for internal business purposes rather than litigation purposes, clearly reveal that music trumps non-music brands and endorsements every time. In any event, the survey research relied upon by Dr. Pelcovits would have measured the degree to which consumers were impelled to subscribe by the SDARS' association with non-music brands and personalities, and those supposed benefits therefore were captured in Dr. Pelcovits' analysis.

2. Dr. Pelcovits' Methodology is Sound

460. Challenging Dr. Pelcovits's methodology for calculating a sound recording royalty based on non-music content, the SDARS first argue that Dr. Pelcovits was wrong to use data from 2006. SDARS FOF at ¶¶ 1143-1150. He did so, however, because that was the latest year for which there was actual data. Dr. Pelcovits's approach in this case – and SoundExchange's – was to look at a variety of different benchmarks and methods of economic analysis, since each has strengths and weaknesses. Dr. Pelcovits's surplus analysis, for example, estimated royalty rates in 2012 based on projections of the SDARS' costs and revenues at that time. Pelcovits WDT at 14, SX Trial Ex. 68. The SDARS predictably take issue with the

projections, and indeed with any analysis that relies on projections. SDARS FOF at ¶¶ 957, 960, 966. Dr. Pelcovits therefore conducted the non-music content analysis using actual 2006 data, and naturally the SDARS now fault him for *not* using projections of the non-music costs and revenues in future years.

461. In any event, the time period of the analysis matters far less than the SDARS claim. As SoundExchange demonstrated in its proposed findings of fact, and contrary to the SDARS' claims, the same analysis for the years 2006 through 2012 suggests a sound recording royalty of approximately 16%. SX FOF at ¶¶ 580-588.

462. The SDARS also argue, as they did with the Howard Stern benchmark, that Dr. Pelcovits should have treated advertising revenues as an offset to costs, instead of as revenue. SDARS FOF at ¶¶ 1151-1154. Or, more accurately, the SDARS apparently believe that Dr. Pelcovits should have counted advertising revenue twice – once as an addition to total revenue and once as a deduction for non-music programming costs – as Dr. Benston did. For the reasons stated in SoundExchange's proposed findings of fact, the accounting treatment advocated by the SDARS is erroneous and leads to absurd results. *See* SX FOF at ¶¶ 584-586.

463. The SDARS offer no real explanation of why advertising revenues should be treated differently than subscription revenues. For example, the SDARS claim that they obtain advertising revenue from their non-music content agreements, and "do not obtain a corresponding benefit from their music programming . . . ." SDARS FOF at ¶ 1152. But, of course, the SDARS *do* obtain a corresponding benefit from music programming – subscription revenue. There is no reason why a dollar of advertising revenue is any different than a dollar of subscription revenue. And if one were to deduct advertising revenues attributable to a non-music content from non-music programming costs, then logically one should also deduct subscriber

revenues attributable to music content from music programming costs. In reality, neither deduction makes sense. Revenue should be treated as revenue, not as an offset to costs. That is how Dr. Pelcovits did it, and that is how the SDARS do it in their financial statements.[22] The only reason to treat advertising revenue and subscription revenue inconsistently is to skew the calculations in the SDARS' favor.

464. Nor is it right that non-music content is solely responsible for advertising revenues, even if the advertising runs on non-music channels. To the extent that music grows the subscriber base, and those subscribers listen to non-music channels as well as music channels, the larger base of potential listeners helps attract advertisers. Thus, as Dr. Pelcovits noted, XM claimed in a website directed at potential advertisers that its audience listens "for an average of 24 hours per week." Pelcovits WRT at App. A, p. 2, SX Trial Ex. 124. That statistic represents all listening time, *id.* at App. A, p. 1, not just listening time on non-music channels. XM recognizes that the larger its audience overall, the more attractive it is to subscribers. It cannot be said that those who subscribed for the music are irrelevant to the SDARS when it comes to generating advertising revenues, even if the ads do not run on music channels.

465. The SDARS have only one valid point to make with respect to the non-music content analysis. Dr. Pelcovits removed the costs of the Howard Stern contract when he calculated Sirius' non-music content costs for 2006, because a substantial portion of the costs of Stern's multi-year contract were front-loaded into that year. Pelcovits Amended WDT at 10, SX

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[22] Dr. Pelcovits treated advertising revenues the way the SDARS treat such revenues on their financial statements and in their SEC reporting – revenues from advertising are reported as a component of total revenues, and the share of advertising revenues that are paid to the content provider are treated as costs. *See* SIR Trial Ex. 62 at SIR Ex. 47, p. 28 (Sirius 2006 10-K) ("Advertising revenue share payments are recorded to programming and content expense during the period in which the advertising is broadcast").

Trial Ex. 70. As the SDARS observe, the Stern costs for 2006 were higher than Dr. Pelcovits realized, and deducting the additional Stern costs from that year would reduce the implied sound recording royalty to 13%. SDARS FOF at ¶¶ 1158-1159. As SoundExchange pointed out in its proposed findings of fact, however, including a pro rata share of the Stern costs in 2006 would increase the implied sound recording royalty to 22%. *See* SX FOF at ¶ 578.

466. Dr. Pelcovits' discussion of non-music content, therefore, whether focused on Howard Stern or inclusive of all non-music content, was properly analyzed and provides very useful information with respect to an appropriate rate for music.

D. The Record Companies' Digital Distribution Contracts Collectively Provide Excellent Benchmarks

467. Unlike the webcasting case, here there is no one perfect benchmark that with only a few appropriate available adjustments fully captures the price that the sound recording license would obtain in a hypothetical market transaction between a record company and an SDARS. SoundExchange, through its economic experts, therefore reviewed multiple benchmarks, some better at capturing some aspects of the hypothetical SDARS market transaction, some better at capturing other aspects. Ordover WDT 36, SX Trial Ex. 61. What SoundExchange found when it undertook this analysis is that though the relevant benchmarks did not produce identical results, the results fell within a useful range. Taken collectively, the benchmarks provided a highly reliable indication of the range of rates one would expect to find in the hypothetical target market. Ordover WDT at 52, SX Trial Ex. 61; Pelcovits WDT at 8-9, SX Trial Ex. 18.

468. Among the benchmarks examined were several markets in which Internet music services distribute sound recordings licensed from the record companies. The SDARS challenge

the analysis of these markets, conducted by Dr. Ordover, on a variety of grounds. All of these challenges miss the mark.

469. The SDARS begin by pointing out that as a legal matter the royalty here is a "performance" right under section 114, while as a legal matter the royalties in the digital benchmark markets are "reproduction" rights. SDARS FOF at ¶¶1257-1260. But as Dr. Ordover explained, the fact that the benchmark market rates were not set in the shadow of a Section 801(b) judicial determination is an advantage, not a disadvantage. 6/21/07 Tr. 215:5-216:12 (Ordover). Moreover, the label applied to the legal right is as a matter of economics irrelevant. 8/27/07 Tr. 56:6-58:1 (Ordover). What is significant is what the customer is receiving and paying for. In all cases with the digital services and the SDARS services what the customer is receiving and paying for is the right to listen to music. Ordover WDT at 45-46, SX Trial Ex. 61.

470. The SDARS are on firmer ground when they assert that benchmarks should be adjusted to account for different functionalities in the services that consumers value differently, SDARS FOF at ¶¶ 1261-1264, although that claim is flatly inconsistent with Dr. Woodbury's argument that sound recordings are commodity items that have an absolute value *apart from* the particular value associated with the services which provide the music. *See, e.g.*, 8/23/07 Tr. 132:21-134:5 (Woodbury) But Dr. Ordover accounted for different functionality of the services in his digital benchmarks. Oddly, the functionality the SDARS point to that they claim needs to be adjusted for is interactivity. *Id.* This is odd because Dr. Ordover specifically accounted for interactivity, SX FOF at ¶¶ 630-32, and it is odd because interactivity is the one kind of functionality that the Court has already concluded can fairly be accounted for, as that was the

sole significant difference between the benchmark and target markets that the Court adopted in the Webcasting case. *Webcasting II*, 72 Fed. Reg. at 24092 The SDARS ignore these facts.

471. The SDARS next complain that Dr. Ordover did not account for the fact that the SDARS is a higher cost service than the Internet-based services he used as benchmarks. SDARS FOF at ¶ 1265. But Dr. Ordover concluded (in testimony that was not disputed) that while it was possible in theory that cost differences might result in some difference in price, because of the cross-elasticities of demand, those differences should not be over-exaggerated. In an arms-length transactions the record companies would not give the SDARS a better deal than they would give competing internet services because the SDARS are a relatively-high cost service. Such behavior would undercut profits from the more efficient, lower-cost services. Ordover WDT at 31, SX Trial Ex. 61.

472. Moreover, Dr. Ordover's inability to address what if any small effect these cost differences might have exemplifies the wisdom of looking at more than one benchmark. Here, SoundExchange provided four benchmarks involving services with identical or similar costs to the SDARS. What it found were rates that were within the same range of rates reflected in the digital distribution benchmarks, establishing that the effect of not accounting for costs in these Internet benchmarks evidently was not substantial, if there was any effect at all. Specifically, as just discussed, Dr. Pelcovits provided two benchmarks derived from the SDARS' own non-music content deals – deals where the service was the SDARS themselves, so there was no service cost differential to consider. And, as discussed in what follows, Dr. Ordover provided two benchmarks involving satellite television, a market he analyzed precisely because the satellite television market has a similar capital structure to the satellite radio market. Ordover WDT at 38-40, SX Trial Ex. 61.

473. Invoking their general attack on the use of any benchmarks, the SDARS next accuse Dr. Ordover of failing to take "account of the SDARS' unique mix of capital investment, cost, risk and creative contribution," SDARS FOF at ¶ 1271. But the point of benchmarking to rates from operating markets is to take account of these things, as they are reflected in market dynamics, and the SDARS' own benchmarks do a far worse job on this score than the many benchmark examples provided by SoundExchange. What is notably missing from the SDARS' criticism of Dr. Ordover's benchmark analyses is even any *mention* of the extensive justification and analysis he provided explaining the economic foundation for undertaking a benchmark analysis in the context of a section 801(b) proceeding. *See, e.g.,* Ordover WDT at 5-38, SX Trial Ex. 61. Moreover, after having concluded its extensive benchmark analysis, SoundExchange proceeded to give exhaustive consideration to each of the four statutory factors. *See* SX FOF at Section VI. The SDARS do not explain what more SoundExchange could have done.

474. Next, the SDARS offer a frivolous argument that the agreements Dr. Ordover reviewed were not representative. The initial data Dr. Ordover reviewed was based on testimony from knowledgeable Sony and Universal witnesses who testified that the data reflected all of the recent contracts entered into by these two large companies. 8/27/07 Tr. 51:17-21; 52:5-11 (Ordover). Not content to leave it at that, Dr. Ordover then directed his staff to collect and review *all* contracts from all four major record companies entered into after June 2005 in the benchmark categories, as well as a great many other contracts that Dr. Ordover ultimately concluded did not make appropriate benchmarks (for example, ring tone contracts and custom radio contracts). *Id.* TR 51:21-52:19 (Ordover). The results of that analysis are reported at Ordover WRT at 9, Table 1, SX Trial Ex. 119. These results reflect that within a few pennies the averages provided by Sony and Universal applied fully to all four major record labels. In discovery the SDARS then

were given comprehensive lists of all of these contracts, including the rate terms that were averaged by Dr. Ordover to produce the results. *See* 8/27/07 Tr. at 53:7; 54:8-11; 66:1-3. The SDARS claim that Dr. Ordover was not personally familiar enough with each of the 500 contracts he relied upon, since he testified that "I don't believe that my main role in this proceeding is to memorize any of these 500 contracts," 8/27/07 Tr. 54:5-12, and testified that he did not personally read each contract, but relied on his staff to do that work under his supervision. But Dr. Ordover testified that he closely supervised his staff and told them how to review the contracts and what information he wished to have summarized. *Id.* Tr. 52: 15-19.

475. After the SDARS reviewed hundreds of thousands of pages of contracts and contract negotiating documents, they do not suggest that Dr. Ordover's data summaries are in any way inaccurate. Indeed, Dr. Ordover expressly invited opposing counsel to discuss with him any of the contracts upon which he relied in his analysis, and invited counsel to ask him any questions about the spreadsheets provided summarizing those contracts and used to develop the summary data contained in his rebuttal report. 8/27/07 Tr. 54:8-12 (Ordover). Counsel notably refused to ask a single question about a single one of the hundreds of contracts upon which Dr. Ordover relied.

476. Instead the SDARS point to a grand total of three contracts that were not among the extensive number of contracts upon which Dr. Ordover relied, because they were entered into after Dr. Ordover completed his rebuttal testimony. As Dr. Ordover said, "we have to freeze the analysis at some point in time." 8/27/07 Tr. 105:9-10 (Ordover). In any event, SDARS' counsel claims that these three contracts, from among the many recent contracts provided to counsel, have lower than average rate terms. SDARS FOF at ¶¶ 1275, 1276. As Judge Wisniewski pointed out at the hearing when these same contracts were shown to Dr. Ordover, the SDARS

misrepresent the content of the contracts. 8/27/07 Tr. 84:1-86:6 (Ordover) But the larger point is that an average figure is just that – an average made up of contract terms that are above the average, and contract terms that are below the average. As Dr. Ordover pointed out at trial, we are not at Lake Wobegon, "where everybody is above average." 6/21/07 Tr. 253:12-13 (Ordover). Pointing to three out of hundreds of contracts that are (wrongly) claimed to be below the average proves nothing.

477. Next the SDARS point to the fact that Dr. Ordover acknowledged that markets constantly change, and that therefore the contract data shifts over time. SDARS FOF at ¶¶ 1279-1281. That will always be the case; it is one reason why it makes sense here to rely on more than one benchmark. It is no reason to discount the benchmark evidence.

478. Similarly, the SDARS accuse Dr. Ordover of "completely ignor[ing]" so called "custom radio" agreements. SDARS FOF at ¶ 1300-1301. But Dr. Ordover did not ignore these agreements. He reviewed them, considered them, and concluded they would make poor benchmarks. Specifically, he concluded that:

> The rates imposed by the predecessors to this Court are not relevant benchmarks since these do not reflect marketplace (*i.e.*, voluntary) license terms. Neither do I regard as probative the rates negotiated in the shadow of a statutory license proceeding, insofar as these rates are more indicative of what the parties believed would be the result of a rate case than they reflect a marketplace dynamic. Among the rates I did not consider for this reason are rates that were set for services directly subject to a statutory license, or negotiated rates for services such as "custom radio," where the parties still dispute whether or not the service is subject to a statutory license. In particular, the rate set for "custom radio" plausibly reflects the record companies' aversion to taking the risk that the license dispute would be unfavorably resolved. Here too, the dynamic at work in these contractual negotiations is simply too bound up in regulatory considerations and judgments to be a useful indication of market rates."

Ordover DWT at 43 n.38.

The SDARS do not attempt to rebut this criticism.

479. The SDARS specifically object to Dr. Ordover's use of the interactive subscription services as a benchmark. To make use that that benchmark, Dr. Ordover accounted for the two principal differences between the target and benchmark markets – the fact that the benchmark market involves an interactive service while the SDARS are not interactive, and the fact that to make use of the portability feature of the digital interactive services requires a two-step process (downloading to a computer and uploading to an iPod), while the SDARS offer immediate access. SX FOF at ¶¶ 626-637. The SDARS claim that Dr. Ordover's adjustments for these two differences were not made with adequate precision.

480. Principally the SDARS object to the interactivity adjustment (just as they unsuccessfully objected to the similar interactivity adjustment in the Webcasting case). They observe that the adjustment was drawn from video contracts, and Dr. Ordover did not establish that video contracts are an appropriate analog. SDARS FOF at ¶ 1286. As to that, they point out that the video agreements do not reflect section 801 concerns, though they do not explain what that has to do with the accuracy of the interactivity adjustment. *Id.* They do not suggest any reason why the relative value of interactivity would be different between video and audio services. *Id.* They point to two contracts that were too recent to be included in Dr. Ordover's analysis, and that were not discussed by any witness on either side at trial. They claim that these two contracts establish some higher ratio than the [■] ratio Dr. Ordover derived from the average of the video agreements he reviewed. SDARS FOF at ¶¶ 1292-1293. But the Court should not rely on these contracts, which, to repeat, were never addressed by Dr. Ordover, the record company witnesses, or any other witness. They do not on their face establish that the

ratio that was derived from an average of multiple contracts and described by record company witnesses was inaccurate.

481. In fact, SDARS counsel flatly misrepresents the price terms of these two agreements in their findings of fact. For example, the contract at SDARS Trial Ex. 87 does *not* reflect that interactive pricing is[ ] higher than non-interactive pricing, as the SDARS erroneously allege. *See* SDARS FOF at ¶ 1292.

482. The SDARS claim that the rate for interactive services in this contract is [ ], and that the non-interactive rate is [ ]. *Id.* They are wrong on both counts. The price provision of Tier 3 (interactive) reads:

[ ] SDARS Trial Ex. 87 at SE-REB0028156.

483. The price provision of Tier 4 (interactive) reads:

[ ]

SDARS Trial Ex. 87 at SE-REB0028157 (emphasis added).

484. As this language reflects, both contracts have a "greater of rate" structure, and the ratio of the rates set out in two out of the three of the "greater of" possibilities is not [10 to 1]. Counsel attempted to engage in a similar misrepresentation (identified by Judge Wisniewski, *see* 8/27/07 Tr. 84:1-86:6 (Ordover)) concerning yet another contract that was too recent to have

been considered by Dr. Ordover, when SDARS counsel falsely claimed that the new contract established that the so-called "portability premium" been eliminated. In fact it had not, as Dr. Ordover explained: "clearly, because we are in the greater of A, B. or C, it is still entirely possible that while the per-listener rate is the same, the aggregate payment will be [different]." *Id.* Tr. 87:10-14.

485. But in their findings of fact the misrepresentation is even more egregious than that. In this case, the two contract provisions are not even parallel; the non-interactive rate, even if the per play alternative constituted the highest price, would not be the only charge applied. Instead, the [redacted] provision has an additional component that applies in every case for non-interactive services that is not part of pricing for interactive services, a gross revenue amount set out in bold above.

486. In sum, the SDARS have misrepresented the contract terms. Exactly the same thing is true of the other new contract they rely on in their attempt to discredit Dr. Ordover's contract analysis. *See e.g.*, SDARS FOF at ¶ 1293 (misrepresenting SDARS Trial Ex. 88).

487. In any event, as Dr. Ordover explained when confronted with one of these new contracts that were too recent to be part of his analysis, if one were to undertake a new analysis that included these contracts, not only would one not misrepresent them as the SDARS have done, but "if we had these contracts at our disposal, then we would have to have averaged over all of the other contracts." 8/27/07 Tr. 89:1-3 (Ordover). It is not Dr. Ordover's credibility that is undermined by the SDARS' discussion of his benchmark contract rates.

488. The SDARS also wrongly attack the "immediacy" adjustment Dr. Ordover made to his "per play" benchmark. SDARS FOF at ¶¶ 1294-1295. At the rebuttal hearing, Dr. Ordover observed that because the video services are priced on a per-play basis, while the

benchmark rate was priced on a per-subscriber basis, it was appropriate to account for differences in the intensity of usage. Ordover WRT at 18 n.20, SX Trial Ex. 119. The undisputed record evidence from Mr. Eisenberg is that non-interactive services are used [[redacted]] as much as interactive services. Eisenberg WDT at 19, SX Trial Ex. 53. Dr. Ordover testified that "I found out that there was testimony on the record that suggests the differences in usage rates," 8/27/07 Tr. 101:6-7 (Ordover), and so he made this adjustment to his calculation. The SDARS ignore this testimony, as they ignore the record evidence, and instead make much of the fact that Dr. Ordover later forgot that he had obtained this information directly from the record and testified he obtained it first from counsel. SDARS FOF at ¶ 1290. On that basis, the SDARS now claim that the entire benchmark should be rejected as "admittedly inaccurate" and "hopelessly compromised." *Id.* at 1291.

489. But this is not a game of "gotcha." The record evidence is from Mr. Eisenberg, and it unambiguously supports Dr. Ordover's adjustment. Eisenberg WDT at 19, SX Trial Ex. 53. The fact that Dr. Ordover had conflicting memories of where he obtained this record information is besides the point.

490. Next, the SDARS point out that two recent contracts suggest that the premium identified in earlier contracts for immediate access may be disappearing. SDARS FOF at ¶ 1294-1295. *See* SX FOF at ¶¶ 633-637. Of course, the fact that two new contracts do not reflect the premium hardly suggests that Dr. Ordover's premium is "imploding." SDARS FOF at ¶ 1295. In any event, to be conservative, SoundExchange did not account for any such premium

in the use of its benchmark in its Proposed Findings of Facts, SX FOF at ¶ 637, mooting this criticism.[23]

491. Finally, the SDARS assert that Dr. Ordover was wrong to compare the SDARS to a portable service that can be played in the car or while walking with a portable player, and instead should have compared it to a service that can be listened to only while one is tethered to his or her computer. SDARS FOF at ¶ 1295. Dr. Ordover did not "change his tune" SDARS FOF at ¶ 1297, or "ignore the import of his own analysis," *id.* at ¶ 1298. It was consistently his view that satellite radio is not "fully portable" or fully non-portable. It can be listened to in the car or on a portable device. 6/21/07 Tr. 170:12-19; 176:11-20 (Ordover). Dr. Ordover's judgment is that in comparing satellite radio service's functionality to a digital service, the closest comparison is to a portable digital service, rather than one that can only be listened to while on the computer. Ordover WDT at 48, SX Trial Ex. 61. This is far more reasonable than the judgment of the lawyers who wrote the SDARS' proposed findings of fact and claim that listening to the SDARS is more like listening to a music service that can only be used while one is at his or her computer.

492. After incorrectly concluding that the closest comparison to satellite radio's functionality is a computer-tethered, non-portable service, the SDARS then go on to derive a rate not based on average contract prices, but based on the lowest-price non-portable contracts they

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[23] Similarly moot is the SDARS' claim that Dr. Ordover's retail rate calculation needs to be adjusted in light of recent changes to the retail rates. SDARS FOF at ¶ 1304. It was Dr. Ordover himself that brought these changes to the attention of the Court, Ordover WRT at 10 & SX Exhibit 210 RP, SX Trial Ex. 119, and in its findings of fact SoundExchange has made use of these more recent retail rates. SDARS FOF at ¶ 639 n.33.

could find among the hundreds produced in discovery. SDARS FOF at ¶ 1299. The Court should reject the results the SDARS' derive from these irrational assumptions.

E. The Satellite Television Benchmark Establishes that the SDARS' Claims About Failing to Take Account of Differences In Cost Do Not Undermine the Digital Contract Benchmarks

493. Dr. Ordover was candid about the strengths and weaknesses of the satellite television benchmark. In reward for his candor, the SDARS selectively quote back those portions of his testimony in which he explains the limitations of the benchmark, to leave the impression that he thought it was of no value at all. SDARS FOF at ¶¶ 1224-1253. If that were the case, he would not have offered the benchmark to the Court. It is not the case. The benchmarks provide highly valuable information, and there is no reason for the Court to ignore this evidence.

494. To correct the misrepresentations made by the SDARS, Dr. Ordover's testimony is that the satellite television companies have capital structures that are more similar to the SDARS' than those of the digital music services, so they allowed him to evaluate if differences in capital structures between the music services and the SDARS would be a significant impediment to using the information obtained from the music services' contracts. He concluded that review of the satellite television payments suggested that these cost differences did not result in greatly different content royalty payments. Ordover WDT at 37-38., SX Trial Ex. 61.

495. Dr. Ordover concluded that Satellite TV and satellite radio employ roughly similar business models and similar capital structure:

- Both rely on the delivery of content to subscribing customers by means of a satellite signal delivered to the subscriber's receiving unit (be it a television set or a radio);
- Both require significant upfront investments in satellites and satellite infrastructure;

- Both benefited from attracting "early adopters." For example, in the first two to three years after launch, the DBS firms attracted roughly four million subscribers;

- Both needed to subsidize hardware, offer rebates on installation, and provide discounts on programming package to stimulate additional subscriptions;

- Both utilize "big box" stores (*e.g.*, Best Buy, Circuit City, etc.) and electronics stores (*e.g.*, Radio Shack), as well as direct sales, to attract new subscribers; and

- Both rely extensively (or predominately) on subscriber revenues to cover the costs of programming and other variable costs (such as marketing) as well as generate a risk-adjusted competitive rate of return on the invested assets.

Ordover WDT at 38, SX Trial Ex. 61. While the SDARS complain that the two services have nothing relevant in common, SDARS FOF at ¶¶1228-1234, they do not dispute any of these facts and do not explain why they believe them to be irrelevant.

496. Dr. Ordover's principal satellite television benchmark involved an examination of DBS providers' programming costs as a percentage of revenues for premium networks only, since premium networks, like music programming on satellite radio, are commercial-free. Ordover WDT at 40, SX Trial Ex. 61. Dr. Ordover found that music is even a more essential feature of satellite radio than premium channels are to satellite television. 6/21/07 Tr. 261:7-262:2 (Ordover). Music over satellite radio is like premium content on satellite television in that it is advertising-free and supported by fees. *Id.* Tr. 262:20-22. The SDARS do not deny this. Instead, through Dr. Woodbury they repeat their standard refrain: the premium networks have only a few distributors (cable and satellite TV), so they "matter" to the content providers, while the record company has many different services distributing their product, so they don't. SDARS FOF at ¶¶ 1236.

497. While the SDARS take SoundExchange to task for not using cable television instead of satellite television as a benchmark, that would have eliminated the principal advantage

of the satellite television benchmark – it is a relatively young satellite-based entertainment business. And, when the SDARS claim that cable television pays a "substantially smaller share of revenues for content," SDARS FOF at ¶ 1237, that is not true for premium channel content, where both satellite and cable pay approximately 50% of the revenue to content. 8/16//07 Tr. 216:4-15 (Noll).

498. Nor is it true that premium channels are exclusive to one satellite system to a greater degree that a broad range of music is exclusive to the SDARS. SDARS FOF at ¶ 1238. Channels like HBO are available on virtually all cable systems and on all competing satellite systems.

499. Finally, Professor Noll claims that premium television channels are different than music channels on the SDARS because the premium channels bear none of the costs of the satellite infrastructure, all of which is borne by the basic channels, SDARS FOF at ¶ 1242, which must alone charge a price "sufficient to recover the satellite reception system." Noll WRT at 104, SDARS Trial Ex. 72. That is economically incoherent. Professor Noll has no basis for asserting that the satellite companies attribute all of their costs to the basic tier of programming and none to the premium tier, and it would be irrational if they did allocate costs in that way.

500. Dr. Ordover in his written testimony suggested that satellite retransmission rights would be a preferable benchmark, in part because both the music industry and the broadcast television industry need access to customers through the respective services, 8/16//07 Tr. 216:4-15 (Noll), and both "derive benefits from being included on satellite systems." Noll WRT at 105, SDARS Trial Ex. 72. *See also* SDARS FOF at ¶ 1244-1246. But in fact, as established previously, the music industry is harmed, not benefited, by appearing on satellite radio. In contrast, it is absolutely essential for the broadcast television stations to be available on satellite

and cable television networks. Moreover, as Dr. Noll acknowledged on cross examination, retransmission rights are typically given away almost for free because they are bundled with far more valuable network rights: "the nature of the bargain typically is just to give re-transmission rights to the network affiliate as part of a package that includes all the pay channels that are also constructed by the network." 8/16//07 Tr. 218:4-15 (Noll). Because they are priced as part of a bundled offering, retransmission rights obviously are not an useful benchmark.

F. The SDARS' Criticism of Dr. Pelcovits's Surplus Analysis is Unsound and Predicated on Their Misconstruction of the Statutory Factors.

501. In addition to SoundExchange's many benchmark analyses, Dr. Pelcovits also performed a bottom-up analysis of what an SDARS would be expected to pay for music content based on the SDARS' costs and revenues. Pelcovits WDT at 14-33, SX Trial Ex. 68. In conjunction with the benchmark analyses, this analysis provides highly useful information to the Court, as it provides data directly about the SDARS and their own specific financial situation, in comparison to a benchmark analysis, which by its very nature derives a rate from an analogous (but not the very same) market transaction. Thus the benchmark analyses and the surplus analysis are two different ways to derive a rate that are highly complementary. Pelcovits WDT at 33, SX Trial Ex. 68.

502. Most of the SDARS' criticisms of the surplus model start from the same set of faulty premises that infect their own affirmative case: that they have no money left to pay for music, so there is no surplus; that the rate should be based on the SDARS' situation in the past, when they spent far more than they earned because they were building up their business; and that the Court should make it its business to use the sound recording rate to assure that the SDARS recover their sunk costs. SDARS FOF Section VII.B. We address these criticisms in turn.

503. First, the SDARS point out that there is no "surplus," in the sense that the SDARS have accumulated deficits, so there is nothing left for the artists and the record companies to share. SDARS FOF at ¶ 951. SoundExchange have addressed the SDARS' faulty reliance on their accumulated deficits elsewhere. *See supra.* If they were right to rely on it here and in so many other places in their findings, there would be no reason for the Court to engage in any analysis at all; it could simply set the rate at zero and move on. But artists and record companies should not be forced to give away their service because the SDARS are building a business. And Dr. Noll's insistence to the contrary notwithstanding, SDARS FOF at ¶ 973, artists and record companies should not be rewarded with only what is left over after the SDARS have paid for all of their other content.

504. As Dr. Pelcovits explained, the surplus he analyzes is based on the amount of revenue the SDARS are expected to generate at a time when they are *not* spending far more than they are taking in to invest in the future. Pelcovits WDT at 14-15, SX Trial Ex. 68. This makes sense because the record companies are not co-owners of the SDARS, and do not take on the risks of failure, or the possible benefits of success, that the SDARS and their investors take on. The proof that Dr. Pelcovits' method is right in concept is that the SDARS have entered into a great many other deals for content, and none of them are at a zero or "near-zero" level on the theory that the SDARS have an accumulated deficit. To the contrary, one of the ways they are building for the future, and one of the reasons they have generated a deficit, is that they are signing up content that attracts listeners. In this respect, music is no different than any other content, except that it is more valuable.

505. The SDARS also complain that the 2012 data that Dr. Pelcovits relied upon in modeling the SDARS at a time when they are not taking in far more than they are collecting is

"inherently unreliable." SDARS FOF at ¶¶ 955-966. But the data upon which Dr. Pelcovits relied (derived from Mr. Butson's consensus models submitted in the rebuttal round of the case) is more conservative than the data that the SDARS themselves acknowledge they rely on, and is the same data that analysts provide to investors who invest billions of dollars based on these data, which are ultimately provided by the SDARS themselves to the investment community for just this purpose. SX FOF at ¶¶ 1093-1097.

506. It is true that Dr. Pelcovits used 2012 because it was the year within the rate term at which the SDARS were most like a mature business that was not spending on the future more than it was taking in in the present. SDARS FOF at ¶ 963-964. And it is true that more recent projections available in the Summer of 2007 made clear that by 2012 the SDARS were not going to be fully mature – they would still be making increasing amounts of profits in the years after 2012 by the SDARS own estimates. *Id.* But this makes Dr. Pelcovits' use of the 2012 data even more conservative – had he used data from 2020, at a time when the SDARS were far closer to an actual steady state, the surplus would have been substantially larger. On this point, the only thing that has an "Alice-in-Wonderland character," SDARS FOF at ¶ 965, is the SDARS' criticism of Dr. Pelcovits, which is that for all purposes except paying artists and record companies the world should treat the SDARS as growing businesses investing in their futures, which are increasingly rosy. For the artists and record companies, however, only the past matters, and the SDARS have spent all of their money and more and have nothing left to pay the artists and record companies that make their service possible.[24]

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[24] The SDARS claim that Dr. Pelcovits considered only the year 2012 in his analysis. SDARS FOF at ¶ 966. That claim is false. He also provided analysis that established that the SDARS received a full return over all of the years of the rate term. The claim that he did not

507. The SDARS claim that Dr. Pelcovits did not take account of sunk costs. SDARS FOF at ¶¶ 968-969. But as Dr. Pelcovits explained, his analysis properly considered "what it takes to run the business on an ongoing basis." 7/9/07 Tr. 210:13-14 (Pelcovits). What is relevant are forward-looking capital costs – the costs it will take to make the investments necessary to operate the business on a going-forward basis. 7/9/07 Tr. 212:9-13 (Pelcovits). Dr. Pelcovits calculated that each SDARS would spend in excess of $225 million a year on such costs. Pelcovits WRT at 38, SX Trial Ex. 124. He did not ignore these costs, and he explained in detail how he derived them. Pelcovits WDT at 17-21, SX Trial Ex. 68.

508. Dr. Noll criticizes Dr. Pelcovits for understating those forward-looking costs, SDARS FOF at ¶¶ 970-981, but it is Dr. Noll's analysis, not Dr. Pelcovits's, that is faulty. Thus Dr. Noll takes Dr. Pelcovits to task for using financial data from the SDARS' books as recorded under generally accepted accounting principles. According to Dr. Noll, the accounting rules (and the SDARS own books) misstate the value of the SDARS business, because some expenses that accounting rules do not treat as capital expenses accrue to the benefit of the SDARS in future years, and should really be 'capitalized.' SDARS FOF at ¶ 971. One example Dr. Noll gives is the legal fees necessary for the SDARS to obtain their FCC licenses in the 1990s, *id.* at ¶ 971; another is the cash losses accrued since their inception, *id.* at ¶ 972.

509. But this is just an overly-complicated way of saying again that the record industry should be taxed to recover the SDARS' sunk costs, including all of their accumulated deficits. If Dr. Noll believes that the SDARS have not properly characterized their capital

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"present any such analysis to the Court," *id.* at ¶ 966, is false as well. That analysis is presented at Pelcovits WDT at 32, SX Trial Ex. 68, and is described in detail at Pelcovits WDT App. IV. He repeated the same analysis with the updated rebuttal financial data. *See* Pelcovits WRT at 39, SX Trial Ex. 124.

expenses on their books, or that accounting rules do not allow them to do so, he should take that up with the SDARS or with the SEC. It is not a criticism of Dr. Pelcovits or his method of calculating capital costs.

510. The SDARS appear to believe that it is helpful for them to argue that any royalty that does not allow the SDARS to recover what they call their "correctly" calculated forward looking costs "will put the SDARS operators out of business," Noll WRT at 36, SDARS Trial Ex. 72, and that the "right" way to look at forward-looking costs establishes that the SDARS will be $2.2 billion short of remaining in business even if the rate is set at zero. SDARS FOF at ¶ 980 & App C. But all this shows is that there is something very wrong with what the SDARS believe to be the "right" way to calculate capital costs. Perhaps it is the case that the generally accepted accounting principles adopted by Dr. Pelcovits have more to recommend them than Dr. Noll's radical revisions of what constitutes a capital cost.

511. The SDARS' attack on the Shapley division of the surplus is every bit as wrong-headed as their attack on the surplus itself. Their principal attack on the Shapley division is conceptual. According to Dr. Noll, who cites nobody and refers to nothing other than himself, a non-cooperative model would have been a better model for dividing the surplus than a cooperative model. SDARS FOF at ¶ 982-983, 985-993. But Dr. Pelcovits – who in contrast cited authority in support (Pelcovits WDT at 23-24, SX Trial Ex. 68) – established to the contrary that the Shapley model was a far better fit because it adopted fairness principles closely associated with the second statutory factor and has been used in the past for dividing surplus in a contractual bargaining setting to identify market prices. Pelcovits WDT at 21-24, SX Trial Ex. 68.

512. Many of Dr. Noll's other criticisms are simply that the Shapley model is a model – it is not how surplus is allocated in the real world, its assumptions about the random nature of the order in which parties add value to the "game" is counterfactual and "ignores reality," and Dr. Pelcovits employed stylized assumptions in his construction of the model. *E.g.* SDARS FOF at ¶¶ 984-1004; ¶ 1013-1019 (treating as a given all costs except content costs). But models by their very nature are abstractions, and Dr. Noll does not in the end dispute that a game theory model is the most appropriate way to divide the surplus in this case. Nor could he. The SDARS themselves, in their merger advocacy, rely on the very same type of model -- derived from the Nash bargaining solution – the very same purpose for which Dr. Pelcovits uses game theory models here. SX Trial Ex. 106 at Appendix A, App. B.

513. Thus, for example, the SDARS correctly observe that "of course, in the real world, even if the sound recording performance fee were determined in a cooperative manner, the order would not be random." SDARS FOF at ¶ 989. As the SDARS would have it, the artists and record companies come *last* and are only entitled to whatever surplus is left after the SDARS have fully compensated not only their own shareholders, but also all other content providers. In that world, as the SDARS incessantly repeat, there is simply nothing left for the artists and record companies.

514. But Dr. Pelcovits explained that that way of dividing the surplus is not fair, and neither does it replicate market outcomes – Howard Stern, the NFL, and Major League Baseball did not take "near zero" rates because "the SDARS came first, and made all of the necessary investments necessary to operate their services." SDARS FOF at ¶ 989. *See* Pelcovits WDT at 15-16, SX Trial Ex. 68.

515. Dr. Noll acknowledges that fairness is one of the principal axioms used in the Shapley model, but he proposes a different standard of fairness – "income distribution." Noll WRT at 82, SDARS Trial Ex. 72; SDARS FOF at ¶¶ 994 & n.36; 998. In other words, because the record companies are, in Dr. Noll's counterfactual assumption, rich, and because the SDARS have an accumulated deficit, it is fair that the royalty be "near zero." This is not a criticism of the Shapley model or of Dr. Pelcovits; it is just another iteration of the SDARS' theme that they are entitled to a hand-out.

516. In the same way, the claim that Dr. Pelcovits failed to include sunk costs among the costs he used in calculating his surplus, SDARS FOF at ¶¶ 1001-1004, is not a criticism of Shapley, but simply a repetition of the identical groundless argument they made concerning the way in which Dr. Pelcovits generated the surplus. *See supra* Section VII.C.2.

517. After criticizing Dr. Pelcovits for relying on a model that by its very nature involves assumptions, the SDARS inconsistently make highly abstract challenges to what are very concrete and realistic assumptions in the model. Thus, the SDARS object to Dr. Pelcovits's assumption that the SDARS need a blanket license for at least 75% of recorded music to operate successfully. SDARS FOF at ¶¶ 1005-1010. But after all of their complaining that the model is too abstract, they do not actually challenge the factual basis of this assumption, which is sound. Pelcovits WDT at 27, SX Trial Ex. 68. And the reason Dr. Pelcovits makes "no such assumption regarding other content," SDARS FOF at ¶ 1009, is that it is not in fact that case that the SDARS need any minimum amount of other content in order to survive. To acknowledge the importance of music to the SDARS is not to "rig[]" the Shapley model, *id.*, but simply construct it to reflect reality.

518. In the same way, the SDARS claim that Dr. Pelcovits should have factored in the opportunity costs of other content providers. SDARS FOF at ¶¶ 1020-1021. But as the SDARS elsewhere acknowledge, opportunity costs create a floor that is the minimum amount a content provider would demand to be paid. Noll WRT at 27, SDARS Trial Ex. 72. And the SDARS never suggest that the amounts allocated to content providers under the Shapley model are in fact below that opportunity cost floor, SDARS FOF at ¶¶ 1020-1021, and Dr. Pelcovits testified that, with the exception of Howard Stern, "[m]ost of the other content in my opinion would have very [little] opportunity costs in the sense that this is not replacing other forms of broadcast," 7/9/07 Tr. 230:8-12 (Pelcovits).

519. In sum, the surplus analysis provides the Court useful information to be taken in conjunction with the benchmark analyses. None of the SDARS' scattershot attacks on the analysis prove otherwise.

VIII. THE SDARS' OBJECTIONS TO SOUNDEXCHANGE'S PROPOSED TERMS ARE UNFOUNDED.

520. Section 114(f)(1)(B) of the Copyright Act requires the Copyright Royalty Judges to establish both rates and terms. As the CRJs have explained, "it is our obligation to adopt royalty payment and distribution terms that are practical and efficient." *Final Determination of Rates and Terms*, Docket No. 2005-1 CRB DTRA, 72 Fed. Reg. at 24102 (May 1, 2007). The parties have exchanged proposals on stipulated terms and will continue to work toward an agreed submission to the Court. In their proposed findings of fact, the SDARS take issue with several of the terms proposed by SoundExchange. The SDARS' objections are supported by neither the record, nor common sense.

A. Late Fees

1. Late Payments

521. The SDARS decry SoundExchange's proposed 1.5% fee for late payments as "extortionate." SDARS FOF at ¶ 1307. That is surprisingly harsh language given that 1.5% is the late fee in the regulations currently governing the PSS services, 37 C.F.R. § 260.2(d), and in the regulations recently set by this Court for webcasters, 37 C.F.R. § 380.4(e); 72 Fed. Reg. at 24107. The SDARS have offered no valid reason why they deserve special and more favorable treatment.

522. First, they claim that a late fee consistent with the other statutory services would be horribly unjust because the SDARS pay on a timely basis. The SDARS' own record evidence shows, however, that the SDARS have, in the past, been untimely with payments and have been assessed (and have paid) late fees. SDARS Trial Ex. 28 (noting five late payments from Sirius); SDARS Trial Ex. 29 (noting two late payments from XM); *see also* 6/19/07 Tr. 91:10-12; 94:14-16; 95:2-5 (Kessler). It does not matter if the SDARS typically are late only by a few days or a week. If they pay late, they should be subject to the standard 1.5% fee. And, of course, late fees will not impose any burden on the SDARS at all so long as they timely pay SoundExchange for their use of sound recordings as they indignantly claim they always have (despite the evidence) and always will.[25] Kessler WRT at 2, SX Trial Ex. 127.

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[25] The SDARS repeatedly insist that if all of SoundExchange's proposed late fees are added up, they total 54% per year. But the SDARS would be subject to such a fee only if they made no payments at all and filed no statements or account or reports of use for an entire year. Such blatantly unlawful behavior – which could only be intentional – hardly warrants sympathy dictating a lower fee.

523. Second, the SDARS claim that none of the market place agreements in the record supports imposition of a 1.5% fee for late payments. Even if this were true, it would not be surprising. In a negotiated license, a record company can simply terminate the license if the licensee habitually pays late. In the context of a statutory license, however, termination is not an option. Rather, as Ms. Kessler explained, late fees are the only remedy available to combat late payments other than infringement actions. Kessler WRT at 2, SX Trial Ex. 127.

524. In any event, it is not true that none of the market place agreements in the record supports imposition of a 1.5% fee for late payments. As this Court found in the webcasting proceeding, marketplace agreements "establishing a range [of late fees] of 1.0% to 2.0%, with the majority of the agreements containing the 1.5% figure." 72 Fed. Reg. at 24107. Agreements in the record in this proceeding similarly establish that a late fee of 1.5% is well within the range that parties agree to in the marketplace. SX FOF at Section IV.C. For example, EMI's standard terms require licenses to pay late fees equal to [[redacted]]. SDARS Trial Ex. 86 at SE-REB0025070 (§ 7.2) ([[redacted]]). The [[redacted]] agreement for streaming requires the licensee to late fees equal to [[redacted]]. Others are higher. *See* SDARS Trial Ex. 87 at SE-REB 0028157 (§ 7(e)) ([[redacted]]).

525. The SDARS' claim that numerous license agreements in the record have no late fee at all is deceptive. The SDARS cite mainly to amendments to prior agreements (which themselves had late fee provisions which remain operative) or to so-called "short-form" agreements that reflect a basic agreement as to royalty rates with agreement on terms to be followed upon execution of a "definitive agreement." SDARS FOF at ¶ 1312; SDARS Ex. 256

("short form" agreement and specifically referencing as-yet unfinished "definitive agreement"); SDARS Ex. 257 (same); SDARS Ex. 258 (same); SDARS Ex. 253 (amendment to prior agreement not submitted by the SDARS); SDARS Ex. 254 (amendment to prior agreement not submitted by the SDARS). That the bulk of the agreements cherry-picked by the SDARS do not express a specific late fee provision simply means that the applicable late fees are expressed in a past agreement (not submitted by the SDARS) or a subsequent, long-form "definitive" agreement.

526. Removing those agreements from the analysis, the record shows that [ ] of the major record companies routinely obtain late fee provisions between 1% and 2% per month, with most at [ ]), and [ ] major record company generally requires late fees of between [ ]. Given that SoundExchange does not have the power to terminate the license at issue here, the record fully supports the late fees sought by SoundExchange.

2. Late Statements and Reports

527. The SDARS object with equal vigor to SoundExchange's proposed fee for late statements of account and reports of use. SDARS FOF at ¶¶ 1316-1324. Without a statement of account, SoundExchange cannot distribute a licensee's royalty payments, even if full payment has been made. Late fees imposed where services fail to submit valid reports in a timely manner would create a financial incentive for licensees to comply with regulations. SX Trial Ex. 56 at 29-30 (Designated Written Direct Testimony of Barrie Kessler, 2005-1 CRB DTRA). But as this Court observed in the webcasting proceeding when it adopted late fees for late statements of account, "timely submission of a statement of account is critical to the quick and efficient

distribution of royalties." Kessler WRT at 3, SX Trial Ex. 127 (quoting 72 Fed. Reg. at 24107-08). There is nothing in the record in this proceeding that supports reaching a different conclusion here. To the contrary, for the same reasons as Ms. Kessler testified with respect to late payments, late fees of 1.5% on statements of account are appropriate. Kessler WRT at 3, SX Trial Ex. 127.

528. Likewise, timely, accurate and complete reporting is essential to SoundExchange's ability to distribute royalties. Kessler WRT at 3, SX Trial Ex. 127. The evidence establishes that licensees routinely fail to submit timely or accurate reports of use. 6/19/07 Tr. 44: 15-45:6 (Kessler). Late fees on reports of use are necessary for the same reasons this Court articulated with respect to statements of account. Late and inaccurate reports of use can delay the distribution of royalties, and late fees are an appropriate incentive to ensure timely submission. Kessler WRT at 3, SX Trial Ex. 127. And, once again, if, as the SDARS insist, they will submit timely statements and reports, then one must wonder why their concern over the proposed late fees is so pronounced.

B. Confidentiality

529. The SDARS object to SoundExchange's proposed confidentiality provisions – the same provisions adopted by this Court in the webcasting proceeding – based on a misreading (or at least an incomplete reading) of the record. They claim that SoundExchange supported its proposal by assuming that the SDARS are not complying with their obligations. SDARS FOF at ¶ 1327. In turn, they claim that the same confidentiality provisions applied to other services should not be applied to them because they "largely" have been compliant with their obligations. *Id.* There was more, however, to SoundExchange's argument, which the SDARS ignore and to which they have no response.

530. As Ms. Kessler explained, because the SoundExchange Board is composed exclusively of copyright owners and performers, the confidentiality of statements of account impedes the SoundExchange Board's policy, budgetary and operational decisions. SX Trial Ex. 56 at 33 (Designated Written Direct Testimony of Barrie Kessler, 2005-1 CRB DTRA).

531. As she further explained, Licensor copyright owners and performers need to have access to the payment information in the statements of account in order to make informed decisions about how much in royalties a given service may owe. *Id.* at 31. Copyright owners also request payment information from SoundExchange for budget purposes. *Id.* They want to include estimates of incoming royalties in their revenue projections. *Id.* And they need this information when they are negotiating collectively with licensees. *Id.*. The SDARS have no response as to why these reasons do not justify the same confidentiality terms that the Court found should apply in the webcasting context.

C. Reporting Requirements

532. The SDARS next object to having to report performances for existing third-party programming and for incidental, directly licensed or non-copyrighted performances.

533. With respect to third-party programming, the SDARS already have to report all third-party programmed performances on their webcasting services. 37 C.F.R. Part 370. Thus, their contention that it is not commercially reasonable to require the SDARS to report to SoundExchange the same information they are reporting to other licensors rings hollow. If instead, the SDARS are saying that they are not complying with their reporting obligations for their webcasting services, they have offered no evidence and have not even argued that the information could not be readily obtained from the third-party programmer. In short, there is no reason to deny SoundExchange's request.

534. Similarly, other than lawyers' arguments, they have offered no record evidence whatsoever why they should not be reasonably required to report all performances including incidental, directly licensed or non-copyrighted performances. Such information can be invaluable in assuring meaningful audits and minimizing the burden of such audits.

D. Third Party Records

535. Finally, the SDARS object to having to use commercially reasonable efforts to obtain or provide access to relevant audit materials maintained by third parties. SDARS FOF at ¶ 1335-36. The SDARS have not offered any reason why they could not obtain such materials simply by asking their third party contacts. *Id.* Moreover, SoundExchange's proposal is only that the SDARS use commercially reasonable efforts. Audits serve a critical function under the statutory scheme. The SDARS have not begun to explain why they should not have to make only reasonable efforts to enable those audits to be as thorough and accurate as possible.

IX. CONCLUSION

536. For the reasons set forth above and in SoundExchange's Reply Proposed Conclusions of Law, as well as the reasons set forth in SoundExchange's initial Proposed Findings of Fact and Conclusions of Law, this Court should adopt SoundExchange's proposed Rates and Terms and reject the Rates and Terms offered by the SDARS.

Respectfully submitted,

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CERTIFICATE OF SERVICE

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