

**FEDERAL TRADE COMMISSION**

**16 CFR Part 432**

**TRADE REGULATION RULE RELATING TO POWER OUTPUT CLAIMS FOR  
AMPLIFIERS UTILIZED IN HOME ENTERTAINMENT PRODUCTS**

**AGENCY:** Federal Trade Commission.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Federal Trade Commission (“FTC” or “Commission”) seeks public comment on proposed amendments to the Trade Regulation Rule Relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products (“Amplifier Rule” or “Rule”). The proposal requires sellers making power-related claims to calculate power output using uniform testing methods to allow consumers to easily compare amplifier sound quality. Additionally, the Commission seeks comment on the normal usage of multichannel home theater amplifiers.

**DATES:** Written comments must be received on or before [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. Parties interested in an opportunity to present views orally should submit a request to do so as explained below, and such requests must be received on or before [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Interested parties may file a comment online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Write “Amplifier Rule Review (16 CFR Part 432) (Project No. P974222)” on

your comment, and file your comment online through <https://www.regulations.gov>. If you prefer to file your comment on paper, mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC-5610 (Annex A), Washington, DC 20580, or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610 (Annex B), Washington, DC 20024.

**FOR FURTHER INFORMATION CONTACT:** Jock Chung, Attorney, (202) 326-2984, [jchung@ftc.gov](mailto:jchung@ftc.gov), Division of Enforcement, Bureau of Consumer Protection, Federal Trade Commission, 600 Pennsylvania Avenue, NW, Washington, DC 20580.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Commission promulgated the Amplifier Rule in 1974 to address sellers' failure to provide essential pre-purchase information.<sup>1</sup> Specifically, manufacturers of home entertainment amplifiers described their products' performance through power output claims (*e.g.*, "25 Watts."). However, because manufacturers tested amplifiers under a variety of conditions, and used incompatible procedures, consumers could not effectively use the wattage claims to compare the power characteristics of different brands or determine how individual amplifiers would perform. The Commission noted "[s]ince the mid-50's the [audio] industry" had failed "to agree upon a single industry standard which is meaningful to the consumer."<sup>2</sup> Accordingly, the Rule standardized the measurement and disclosure of some, but not all, performance

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<sup>1</sup> 39 FR 15387 (May 3, 1974).

<sup>2</sup> 39 FR at 15388.

characteristics of power amplification equipment to permit consumers to “assure that all performance characteristics are based upon conditions of normal use by the consumer, *i.e.*, conditions which are encountered in the home.”<sup>3</sup>

Under the Rule, sellers making certain power claims (*i.e.*, for power output, power band or power frequency response, or distortion characteristics) must disclose power output measured under specified test conditions; for example, amplifiers must be tested at an ambient air temperature of at least 77 °F (25 °C).<sup>4</sup> The Rule, however, does not specify values for three test conditions that strongly affect power output measurements: load impedance,<sup>5</sup> rated power band or power frequency response,<sup>6</sup> and Total Harmonic Distortion (THD).<sup>7</sup> Instead, it requires sellers to disclose these conditions when making certain power claims in product brochures and manufacturer specification sheets.<sup>8</sup> The original Rule required these disclosures wherever sellers

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<sup>3</sup>39 FR at 15392. Merely testing amplifiers under identical test conditions will not produce useful consumer information if the test conditions differ significantly from normal use conditions.

<sup>4</sup> This requirement prevents testing with cooling equipment while driving amplifiers to high power outputs that would overheat amplifiers during normal use. 16 CFR 432.3(d).

<sup>5</sup> The current Rule, as amended, sets a default load impedance of 8 ohms for measuring power output, but permits measurement at a different load impedance if the amplifier is designed primarily for that impedance. 16 CFR 432.2(a). “[T]he lower the load impedance utilized in testing ... equipment, the higher the output of the amplifier.” 39 FR 15387, 15390 (May 3, 1974). For example, an amplifier that outputs 550 watts into 2 ohms might only output 350 watts into 4 ohms and 215 watts into 8 ohms. See <https://geoffthegreygeek.com/speaker-impedance-changes-amplifier-power/>.

<sup>6</sup> High quality amplifiers can output a broad range of frequencies, such as the sounds of all the instruments in an orchestra, at high power. Lower quality amplifiers can only output certain frequencies, such as 1 kHz (*e.g.*, the sound of a trumpet), at high power, and output lower frequencies (*e.g.*, a timpani or bass) or higher frequencies (*e.g.*, a piccolo) at lower power. Power output measurements made at a single frequency or over a limited power band do not permit consumers to distinguish such amplifiers. The Commission has stated “a measurement [on a 1 kHz test signal] is inherently deceptive to the consumer who expects that a piece of equipment represented as being capable of a stated power output will deliver that power output across its full audio range.” 39 FR 15387, 15390 (May 3, 1974).

<sup>7</sup> The output of an amplifier driven to higher power will distort and sound different from the original performance. When the Commission promulgated the Rule, it received evidence that distortion limits during testing affect power output measurements; for example, the same amplifier might output 20 watts if driven only until the output reached 0.5% THD, and output 30 watts when driven to 5% THD. The Rule requires disclosure of the THD during testing so consumers can determine the value of power output measurements. 39 FR 15387, 15391-92 (May 3, 1974).

<sup>8</sup> 16 CFR 432.2(b).

made these claims;<sup>9</sup> however, in 2000, the Commission eliminated disclosure requirements in “media advertising.”<sup>10</sup>

Additionally, the Rule requires manufacturers to fully drive all “associated” channels to the rated per channel power when measuring the power output of sound amplification equipment designed to amplify two or more channels simultaneously.<sup>11</sup> When the Commission established the Rule, stereo amplifiers were the only equipment subject to this requirement, and, importantly, normal consumer use drove both “associated” channels equally. This requirement prevented manufacturers from deceiving consumers by driving only one channel in testing, and thus inflating power output.<sup>12</sup>

The introduction of “home theater” equipment with five or more channels improved consumer amplification choices but raised questions regarding which of these new channels were “associated” under the Rule.<sup>13</sup> Consequently, in 2000 the Commission issued a Supplemental Notice of Proposed Rulemaking (“SNPR”) soliciting evidence on which channels multichannel amplifiers fully drive during normal usage.<sup>14</sup> The Commission also sought comment on its proposal to amend the definition of “associated channels” to reflect real-world use. The

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<sup>9</sup> 16 CFR 432.2 (1974).

<sup>10</sup> 65 FR 81232 (Dec. 22, 2000).

<sup>11</sup> Associated channels are channels that are driven continuously during normal consumer usage, so measuring power output with associated channels fully driven reflects normal consumer usage. 65 FR 81232, 81236 (Dec. 22, 2000).

<sup>12</sup> Most amplifiers distribute power from one power supply to all channels being driven (playing sound) at a particular moment, so that the total power output of multiple channels is limited by that power supply. A stereo amplifier tested with one channel fully driven would distribute all of the power from its power supply to that one channel. The power supply would not be able to direct twice as much power to two channels, as consumers might expect from a measurement made on only one channel.

<sup>13</sup> When the Commission promulgated the Rule, it noted the possibility of amplifiers with more than two channels and the importance of testing such amplifiers appropriately. It stated “4-channel sound systems have been introduced which, if rated according to their total power output, would, in the Commission’s view, have an even greater tendency to deceive the average consumer.” 39 FR 15388, 15390 (May 3, 1974).

<sup>14</sup> 65 FR 80798 (Dec. 22, 2000).

Commission received only one comment in response. The Consumer Electronics Association (“CEA”) noted there was no industry consensus regarding measuring power output of multichannel amplifiers.

On January 15, 2002, at CEA’s request, the Commission deferred action to allow industry to form a consensus on procedures for testing multichannel amplifiers.<sup>15</sup> Although CEA subsequently issued a standard, designated EIA/CEA-490-A, “Test Methods of Measurement for Audio Amplifiers,” the Commission did not find widespread adoption of this standard. With no industry standard in place and only CEA’s comment on the record, the Commission decided not to amend the Rule. 72 FR 13052 (March 20, 2007).

On February 27, 2008, the Commission published a *Federal Register* notice seeking comment on the Amplifier Rule as part of its periodic review of the Rule to determine its effectiveness and impact.<sup>16</sup> Sony Electronics Inc. (“Sony”) urged the Commission not to amend the Rule to define all channels of a multichannel home theater system as “associated.” Sony explained “the additional channels in today’s 5.1 and 7.1 home theater systems are designed to carry vastly different sounds at vastly different levels.” Thus, Sony asserted driving all channels simultaneously during testing would not represent actual use and would drive up consumer prices.<sup>17</sup> On January 26, 2010, based on the record at that time, the Commission again retained the Rule in its current form, finding a continuing need for the Rule and that it imposed minimal costs on industry. Although the Commission did not amend the test procedures for multichannel amplifiers, it provided guidance confirming that it would be a violation of the Rule to make

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<sup>15</sup> 67 FR 1915 (Jan. 15, 2002).

<sup>16</sup> 73 FR 10403 (Feb. 27, 2008).

<sup>17</sup> Sony, <https://www.ftc.gov/policy/public-comments/comment-534789-00003>.

power output claims for multichannel amplifiers utilized in home entertainment products unless those representations are substantiated by measurements made with, at a minimum, the left front and right front channels driven to full rated power.<sup>18</sup>

Pursuant to its ongoing regulatory review schedule, on December 18, 2020, the Commission published an Advance Notice of Proposed Rulemaking (ANPR) seeking comment on the Amplifier Rule. 85 FR 82391 (Dec. 18, 2020). The ANPR sought comments regarding possible Rule improvements, its continuing need, its costs and benefits, and whether, and how, technological or economic changes have affected the Rule.

## **II. Comments Received in Response to the ANPR**

The Commission received 530 unique comments in response to its ANPR.<sup>19</sup> The commenters primarily consisted of amplifier and speaker manufacturers, amplifier sellers and purchasers, and engineers or journalists in the audio field.

### **A. Support for Retaining the Rule**

All but one commenter supported retaining the Rule.<sup>20</sup> Commenters explained the Rule enables consumers to make informed, “apples-to-apples” comparisons, and creates incentives for manufacturers to produce superior amplifiers.<sup>21</sup> Commenters further asserted if the Commission

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<sup>18</sup> 75 FR 3985, 3987 (Jan. 26, 2010).

<sup>19</sup> These comments are available at <https://www.regulations.gov/document/FTC-2020-0087-0001/comment>. In this notice, commenters are referred to by name and the number assigned to each comment; for example, the comment from Garry Grube, assigned ID FTC-2020-0087-0187 on [www.regulations.gov](http://www.regulations.gov), is referred to as “Garry Grube (187).”

<sup>20</sup> The one commenter did not provide a substantive comment.

<sup>21</sup> *See, e.g.*, Norman Parks (105) (“Without these FTC guidelines in effect, consumers have no possible way of honestly comparing products at time of purchase. In addition, retailers and manufacturers are not able to present products fairly to consumers, and might be inclined to sell inferior products with inflated specifications, harming consumers.”) and John Richardson (524) (“In 1974 the FTC dragged all manufacturers, the world over, kicking and screaming, to the honesty table. No longer could they brazenly advertise fictitious and deceptive power output and other claims if they were to sell their products in the US. ... [C]onsumers the world over benefitted from that Gold

were to rescind the Rule, the audio amplifier marketplace would return to the “Wild West” conditions that initially led to its promulgation.<sup>22</sup> Additionally, commenters noted the Rule imposes insignificant or no costs on industry.<sup>23</sup> Commenters noted changes in the audio marketplace have increased the need for the Rule. For example, Garry Grube (187) stated the shift from purchases in stores, where consumers could listen to amplifiers, to online purchases increases consumers’ reliance on power output measurements. David R. (424) stated larger modern living spaces require more powerful amplifiers, increasing the importance of reliable power output ratings. Based on this near universal support, the Commission concludes there is a continuing need for the Rule.

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Standard in truth. A golden age of quality products were [*sic*] built and marketed, which still stand the test of time and remain highly coveted by collectors and people interested in sustainable, high performance electronics. The 1974 Amplifier rule created a level playing field for manufacturers and a requirement to comply with straightforward, easily understood and meaningful set of parameters.”).

<sup>22</sup> See, e.g., Richard Swerdlow (15) (“At present, buyers of these products can only compare their power output because they are rated by the same method. If that is abandoned, there would be no standard method.

Manufacturers would be free to invent their own rating methods. Buyers would be unable to compare products from different manufacturers, and they would be easily misled by advertising exaggerations.”) and Thomas Estell (128) (“As someone who was a consumer of home entertainment products in the 1960s and 1970s, I urge you to renew this consumer protection rule and avoid the ‘Wild West’ marketplace that created this rule.”).

<sup>23</sup> See, e.g., comment from Toby Montezuma (549) (“[T]his Rule itself does of course impose some additional cost compared to simply making up big numbers in the marketing department. However, the costs of equipment and time to make simple power tests are quite minimal and indeed are inherent in the process of designing amplifiers, so we can say there is really no additional cost at all.”).

## **B. Recommended Amendments**

Although commenters overwhelmingly supported the Rule, some recommended amendments. Specifically, commenters asked the Commission to specify values for load impedance, power band, and THD during testing; and to define the associated channels in multichannel amplifiers used for home theaters.

### **a. Comments Recommending Specifying Test Conditions**

Numerous commenters urged the Commission to require uniform power band, load impedance, and THD limits for measuring amplifier power output. Specifically, one hundred and seventy three commenters proposed standardizing testing with at least one of the following specifications: a load impedance of 8 ohms, a power band of 20 Hz to 20 kHz, and a THD limit of less than 0.1%.<sup>24</sup> These commenters generally asserted that uniform test conditions would address consumer confusion resulting from advertising of unrealistic power outputs.<sup>25</sup> For example, commenter David Rich (548) noted “online product literature is showing values up to twice the power” compared to tests conducted under conditions that reflect normal consumer usage.

Consistent with these comments, FTC staff found this problem was ubiquitous in the marketplace. Specifically, staff found dozens of examples of the same equipment advertised

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<sup>24</sup> Twenty-seven commenters recommended specifying the load impedance; 36 recommended specifying the power band to be 20 Hz to 20 kHz; 26 recommended specifying a THD or requiring a low THD, and 159 recommended, in conjunction with a recommendation regarding multichannel amplifier testing, specifying values for all three test conditions.

<sup>25</sup> Alan Mcconnaughey *[sic]* (5) commented “[m]ore rules should be [enacted] to require 8 ohm ratings so everything is apples do *[sic]* apples.” Jim McCabe *[sic]* (378) commented that amplifiers should be tested “driven from 20 to 20k” to “stop the lying.” Danny Anonymous (4325) commented “[t]o eliminate confusion, just use Output Watts@1%THD.” *See also, e.g.*, comments from Dennis Murphy, Philharmonic Audio (525) and David Rich (548).



with significantly different power output (e.g., some sellers advertised a particular model with 45 watts output per channel, while others advertised the same model with 100 watts per channel<sup>26</sup>). Using specification sheets on manufacturers' websites, staff confirmed these widely divergent output claims result from different testing parameters.

Based on the comments and staff's review, the Commission finds consumers are unlikely to understand the complex power output disclosures marketers are making under the current Rule.<sup>27</sup> Specifically, FTC staff's review of advertisements shows that, in some cases, amplifiers are advertised with widely differing power outputs due to testing conditions. For example, FTC staff's reviewed advertisements for two amplifiers and found that – when tested under identical conditions<sup>28</sup> – Amplifier A (75 watts) had a higher power output than Amplifier B (45 watts).<sup>29</sup> However, staff's review found advertisements in which Amplifier B was advertised as outputting 100 watts because it was tested under more favorable conditions.<sup>30</sup> These types of confusing

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<sup>26</sup> See, e.g., [https://www.crutchfield.com/p\\_580TX8220/Onkyo-TX-8220.html](https://www.crutchfield.com/p_580TX8220/Onkyo-TX-8220.html) (viewed on Oct. 1, 2021); [https://www.amazon.com/Onkyo-TX-8220-Channel-Receiver-Bluetooth/dp/B075P831VY/ref=sr\\_1\\_1?dchild=1&keywords=Onkyo+TX-8220&qid=1633096775&sr=8-1](https://www.amazon.com/Onkyo-TX-8220-Channel-Receiver-Bluetooth/dp/B075P831VY/ref=sr_1_1?dchild=1&keywords=Onkyo+TX-8220&qid=1633096775&sr=8-1) (viewed on Oct. 1, 2021; advertisement subsequently revised).

<sup>27</sup> Staff has surveyed numerous academic articles finding that consumers are not able to effectively comprehend highly technical disclosures; no surveyed research found to the contrary. See, e.g., The Failure of Mandated Disclosure, Omri Ben-Shahar and Carl E. Schneider, University of Pennsylvania Law Review, Vol. 159, No. 3 (February 2011), pp. 647-749, <http://www.jstor.org/stable/41149884>. The Commission promulgated the Rule so consumers would not need to perform complex calculations to derive useful power ratings. It found that prior to the Rule, consumers had to “deduct 10 to 25 percent [from the “music power” ratings previously claimed] and divide by 2” to derive power ratings that reflected normal usage. 39 FR 15387, 15388 (May 3, 1974). Additionally, the Commission has previously concluded that “an insufficient number of consumers ... understand the meaning and significance of ... disclosures concerning power bandwidth and impedance” 63 FR 37238 (July 9, 1998).

<sup>28</sup> The manufacturer's specification sheets indicated that the testing conditions were 8 ohms, 20 Hz to 20 kHz, 0.08% THD, which several commenters have recommended as standard testing conditions the Commission should incorporate into the Rule.

<sup>29</sup> See Amplifier A, at <https://www.bestbuy.com/site/denon-avr-s650h-audio-video-receiver-5-2-channel-150w-x-5-4k-uhd-home-theater-surround-sound-2019--streaming-black/6333563.p?skuId=6333563> (viewed on Oct. 1, 2021; advertisement subsequently revised); Amplifier B specification sheet, at <https://www.onkyousa.com/product/tx-8220/> (viewed on Oct. 1, 2021).

<sup>30</sup> See Amplifier B, at <https://www.amazon.com/Onkyo-TX-8220-Channel-Receiver->

disclosures are likely to deceive many consumers who, when comparing two amplifiers, are likely to reasonably conclude that an amplifier advertised as outputting “75 watts” is less powerful than an amplifier advertised as outputting “100 watts.”

In the past, the Commission has attempted to rectify this problem by requiring sellers to disclose load impedance, rated power band or power frequency response, and Total Harmonic Distortion (THD). The Rule first required these disclosures in all “media advertising” and later just in brochures and specification sheets. However, returning to this stricter disclosure regime is unlikely to adequately address the problem in the modern marketplace. Specifically, given the technical nature of the disclosed terms, and the complex calculations needed to convert the disclosure into apples-to-apples comparisons of power output claims, these disclosures are unlikely to prevent most consumers from being deceived. The problem is amplified by the fact that consumers now shop online more frequently, providing fewer opportunities to listen to equipment before purchasing it.

Therefore, to eliminate widespread claims regarding power output that are likely to confuse or deceive consumers, the Commission proposes amending the Rule to simplify power output measurements by standardizing test parameters. Specifically, the Commission proposes requiring the following standard testing parameters: load impedance of 8 ohms, a power band of 20 Hz to 20 kHz, and a THD limit of less than 0.1%. Staff’s review found that amplifiers are

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[Bluetooth/dp/B075P831VY/ref=sr\\_1\\_1?dchild=1&keywords=Onkyo+TX-8220&qid=1633096775&sr=8-1](https://www.denon.com/en-us/product/av-receivers/avr-s650h?gclid=EAIaIQobChMI9L67n5ax8wIVweDICh3obgLAEEAYASAAEgLGafD_BwE) (viewed on Oct. 1, 2021; advertisement subsequently revised). Compare [https://www.denon.com/en-us/product/av-receivers/avr-s650h?gclid=EAIaIQobChMI9L67n5ax8wIVweDICh3obgLAEEAYASAAEgLGafD\\_BwE](https://www.denon.com/en-us/product/av-receivers/avr-s650h?gclid=EAIaIQobChMI9L67n5ax8wIVweDICh3obgLAEEAYASAAEgLGafD_BwE) (viewed on Oct. 4, 2021) with <https://www.onkyousa.com/product/tx-8220/> (viewed on Oct. 1, 2021). In this case, Amplifier A was measured with a load impedance of 8 ohms, a power band of 20 Hz to 20 kHz, and a Total Harmonic Distortion limit of 0.08%, while Amplifier B was measured as outputting 100 watts with a load impedance of 6 ohms, a power band of 1 kHz, and a THD limit of 10%. However, Amplifier B outputs only 45 watts when measured under the same conditions as Amplifier A (8 ohms 20 Hz to 20 kHz,, 0.08% THD).

generally designed to drive a nominal load impedance of 8 ohms; 20 Hz to 20 kHz covers the normal range of human hearing;<sup>31</sup> and 0.1% THD does not audibly distort a signal. Several commenters suggested these parameters, and many manufacturers' specification sheets already disclose power outputs tested at 8 ohms, 20 Hz to 20 kHz, and at THD limits of or slightly below 0.1%, *e.g.*, at 0.08%.

**b. Comments Recommending Amending the Definition of Associated Channels for Testing Multichannel Home Theater Amplifiers**

Numerous commenters recommended amending the Rule to clarify which channels are associated for testing multichannel home theater amplifiers. Several commenters recommended defining all channels of a multichannel amplifier as associated., *i.e.*, testing with all channels fully driven.<sup>32</sup> However, they failed to explain how fully driving all channels related to normal usage.<sup>33</sup> As noted above, in 2010, the Commission considered and rejected a similar amendment because home theater systems are designed to carry different sounds at different levels on different channels. Therefore, driving all channels simultaneously during testing would not

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<sup>31</sup> The Commission further proposes to exclude amplifiers in self-powered subwoofers used in systems that employ two or more amplifiers dedicated to different portions of the audio frequency spectrum from being tested over a power band of 20 Hz to 20 kHz. The Commission has previously recognized that while “stand-alone . . . amplifiers . . . must reproduce signals covering the full musical frequency bandwidth,” “self-powered subwoofer systems . . . incorporate crossover circuitry that filters out frequencies above the bass range,” and the amplifiers in self-powered subwoofer systems only amplify bass frequencies. 64 FR 38610, 38613-4 (July 19, 1999). Consequently, the Commission proposes to limit the power band for testing self-powered subwoofer amplifiers to the frequencies within those amplifiers' intended operating bandwidth. The proposed amendments would require testing amplifiers in self-powered full-range loudspeakers, such as full-range Bluetooth speakers that output more than two watts, over a power band of 20 Hz to 20 kHz.

<sup>32</sup> Forty-six commenters recommended defining all channels of a multichannel amplifier as associated.

<sup>33</sup> For example, Jayanath Gomes (140) commented “[a]ll Channels driven simultaneously is the best measure for multi-channel AV receivers or Multi-Channel amplifiers.” Larry Hyvonen (507) commented the proposed amendment would let consumers “know the true power output of all channels driven continually.” Dennis Dugger (448) commented that amending the Rule to require all channels driven would stop manufacturers from “making false and misleading output claims.”

represent normal use, potentially incentivizing manufacturers to overbuild systems and raise prices without any consumer benefit.<sup>34</sup>

Other commenters recommended driving the three front channels to full rated power and all other channels to one-eighth rated power.<sup>35</sup> Again, however, these comments did not provide evidence that these parameters approximated normal use.

Accordingly, the Commission seeks evidence regarding:

- 1) Which channels multichannel amplifiers fully drive simultaneously during normal usage?
- 2) Which channels multichannel amplifiers partially drive during normal usage, and how hard such amplifiers drive these channels?
- 3) What test procedures would best measure multichannel amplifier power output during normal usage?<sup>36</sup>

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<sup>34</sup> Sony commented during the earlier rule review that “to maintain the same power ratings if it were necessary to drive all channels simultaneously during testing, virtually all manufacturers would have to change the sound platform of their amplifiers and receivers to be able to sustain such output,” which “would drive up the costs of production considerably, [and] in turn drive up the ultimate cost to consumers.” 75 FR 3985, 3987 (Jan. 26, 2010).

<sup>35</sup> One hundred fifty-nine commenters recommended this specification. For example, Jason Hines (18) stated “I wish the FTC to . . . amend the rule for today’s multi-channel amplifier products with the following measurement: 3CH driven, full power bandwidth, 8 ohms, at specified % THD+N (max 0.1% THD+N) with remaining channels driven at 1/8th power.”

<sup>36</sup> The Commission has stated “[t]he controlling consideration in determining the proper interpretation of ‘associated channels’ is whether audio/video receivers and amplifiers would, when operated by consumers in the home at high playback volume, be required to deliver full rated power output in all channels simultaneously, or whether such maximum stress conditions would more likely be restricted at any given moment of time to certain sub-groupings of available channels.” 65 FR 80798, 80800 (Dec. 22, 2000). In that notice, the Commission tentatively proposed three designations for “associated channels” and stated that any Rule amendment would be based upon a determination by the Commission of which channels multichannel home theater amplifiers drive to full rated power simultaneously when reproducing multichannel program material in the home at high playback volume.

## **XI. Request for Comments**

The Commission seeks comments on all aspects of the proposed requirements, including the likely effectiveness of the proposed Rule amendments in helping the Commission combat unfair or deceptive practices in the marketing of amplifiers utilized in home entertainment equipment. The Commission also seeks comment on various alternatives to the proposed regulation, to further address disclosures. It also seeks comment on other approaches, such as the publication of additional consumer and business education. The Commission seeks any suggestions or alternative methods for improving current requirements. Commenters should provide any available evidence and data that supports their position, such as empirical data, consumer perception studies, and consumer complaints.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before **[INSERT DATE 60 DAYS FROM DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Include “Amplifier Rule Review (16 CFR Part 432) (Project No. P974222)” on your comment. Your comment, including your name and your state, will be placed on the public record of this proceeding, including, to the extent practicable, on the <https://www.regulations.gov> website.

Because of the public health emergency in response to the COVID-19 outbreak and the agency’s heightened security screening, postal mail addressed to the Commission will be subject to delay. We strongly encourage you to submit your comments online through the <https://www.regulations.gov> website. To ensure that the Commission considers your online comment, please follow the instructions on the web-based form.

If you file your comment on paper, write “Amplifier Rule Review (16 CFR Part 432) (Project No. P974222)” on your comment and on the envelope, and mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue, NW, Suite CC-5610 (Annex A), Washington, DC 20580, or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610, Washington, DC 20024. If possible, please submit your paper comment to the Commission by courier or overnight service.

Because your comment will be placed on the publicly accessible website, <https://www.regulations.gov>, you are solely responsible for making sure that your comment does not include any sensitive or confidential information. In particular, your comment should not include any sensitive personal information such as your or anyone’s Social Security number, date of birth, driver’s license number or other state identification number or foreign country equivalent, passport number, financial account number, or credit or debit card number. You are also solely responsible for making sure that your comment does not include any sensitive health information, such as medical records or other individually identifiable health information. In addition, your comment should not include any “[t]rade secret or any commercial or financial information which . . . is privileged or confidential” – as provided in section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2) – including in particular competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

Comments containing material for which confidential treatment is requested must be filed in paper form, must be clearly labeled “Confidential,” and must comply with FTC Rule 4.9(c).

In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. *See* FTC Rule 4.9(c). Your comment will be kept confidential only if the General Counsel grants your request in accordance with the law and the public interest. Once your comment has been posted publicly at [www.regulations.gov](http://www.regulations.gov) – as legally required by FTC Rule 4.9(b) – we cannot redact or remove your comment, unless you submit a confidentiality request that meets the requirements for such treatment under FTC Rule 4.9(c), and the General Counsel grants that request.

Visit the FTC website to read this request for comment and the news release describing it. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before **[INSERT DATE 60 DAYS FROM DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. For information on the Commission’s privacy policy, including routine uses permitted by the Privacy Act, see <https://www.ftc.gov/site-information/privacy-policy>.

## **XII. Rulemaking Procedures**

The Commission finds that using expedited procedures in this rulemaking will serve the public interest. Expedited procedures will support the Commission’s goals of clarifying and updating existing regulations without undue expenditure of resources, while ensuring that the public has an opportunity to submit data, views, and arguments on whether the Commission should amend the Rule. Pursuant to 16 CFR 1.20, the Commission will use the following procedures: (1) publishing this Notice of Proposed Rulemaking; (2) soliciting written comments

on the Commission's proposals to amend the Rule; (3) holding an informal hearing, if requested by interested parties; and (4) announcing final Commission action in a document published in the Federal Register.

The Commission, in its discretion, has not chosen to schedule an informal hearing and has not made any initial designations of disputed issues of material fact necessary to be resolved at an informal hearing. Interested persons who wish to make an oral submission at an informal hearing must file a comment in response to this notice and submit a statement identifying their interests in the proceeding and describing any proposals regarding the designation of disputed issues of material fact to be resolved at the informal hearing, on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. 16 CFR 1.11. Such requests, and any other motions or petitions in connection with this proceeding, must be filed with the Secretary of the Commission.

### **XIII. Preliminary Regulatory Analysis and Regulatory Flexibility Act Requirements**

Under Section 22 of the FTC Act, 15 U.S.C. 57b-3, the Commission must issue a preliminary regulatory analysis for a proceeding to amend a rule if the Commission: (1) estimates that the amendment will have an annual effect on the national economy of \$100 million or more; (2) estimates that the amendment will cause a substantial change in the cost or price of certain categories of goods or services; or (3) otherwise determines that the amendment will have a significant effect upon covered entities or upon consumers. The Commission has preliminarily determined that the proposed amendments to the Rule will not have such effects on the national economy, on the cost of sound amplification equipment, or on covered businesses or consumers. In developing these proposals, the Commission has sought to minimize prescriptive



requirements and provide flexibility to sellers in meeting the Rule's objectives. The Commission, however, requests comment on the economic effects of the proposed amendments.

The Regulatory Flexibility Act ("RFA"), 5 U.S.C. 601-612, requires that the Commission conduct an analysis of the anticipated economic impact of the proposed amendment on small entities. The purpose of a regulatory flexibility analysis is to ensure that an agency considers potential impacts on small entities and examines regulatory alternatives that could achieve the regulatory purpose while minimizing burdens on small entities. The RFA requires that the Commission provide an Initial Regulatory Flexibility Analysis ("IRFA") with a proposed rule and a Final Regulatory Flexibility Analysis ("FRFA") with a final rule, if any, unless the Commission certifies that the rule will not have a significant economic impact on a substantial number of small entities.

The Commission believes that the proposed amendment would not have a significant economic impact upon small entities, although it may affect a substantial number of small businesses. Specifically, the proposed change in the disclosure requirements should not significantly increase the costs of small entities that manufacturer or import power amplification equipment for use in the home. Therefore, based on available information, the Commission certifies that amending the Rule as proposed will not have a significant economic impact on a substantial number of small businesses. Although the Commission certifies under the RFA that the proposed amendment would not, if promulgated, have a significant impact on a substantial number of small entities, the Commission has determined, nonetheless, that it is appropriate to publish an IRFA to inquire into the impact of the proposed amendment on small entities.

Therefore, the Commission has prepared the following analysis:

### **A. Description of the Reasons That Action by the Agency Is Being Taken**

The Commission proposes amending the Rule to standardize testing parameters to assist consumers in understanding power output disclosures for amplifiers and to eliminate claims regarding power output that are likely to deceive consumers.

### **B. Statement of the Objectives of, and Legal Basis for, the Proposed Amendment**

The Commission promulgated the Rule pursuant to Section 18 of the FTC Act, 15 U.S.C. 57a. The proposed amendment would standardize testing parameters for amplifiers to prevent deceptive claims regarding power output and assist consumers in understanding power output disclosures.

### **C. Small Entities to Which the Proposed Amendments Will Apply**

The Rule covers manufacturers and importers of power amplification equipment for use in the home. Under the Small Business Size Standards issued by the Small Business Administration, audio and video equipment manufacturers qualify as small businesses if they have 750 or fewer employees.<sup>37</sup> The Commission's staff estimates that a substantial number of the entities covered by the Rule likely qualify as small businesses.

### **D. Projected Reporting, Recordkeeping, and Other Compliance Requirements**

The Commission is proposing amendments designed to simplify the Rule and provide clearer amplifier power output measurements for consumers to use to compare products. While the amendments modify the Rule's testing requirements, FTC staff do not anticipate that these changes will result in higher costs for covered entities because manufacturers already test power

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<sup>37</sup> U.S. Small Business Administration, Table of Size Standards (Eff. Aug. 19, 2019).

output for their amplifiers, in many cases testing amplifiers under the conditions specified by the proposed amendments.

#### E. Duplicative, Overlapping, or Conflicting Federal Rules

The Commission has not identified any other federal statutes, rules, or policies that would duplicate, overlap, or conflict with the proposed amendment.

#### F. Significant Alternatives to the Proposed Amendment

The Commission has not proposed any specific small entity exemption or other significant alternatives because the proposed amendment would not impose any new requirements or compliance costs.

### **XIV. Paperwork Reduction Act**

The current Rule contains various provisions that constitute information collection requirements as defined by 5 CFR 1320.3(c), the definitional provision within the Office of Management and Budget (“OMB”) regulations implementing the Paperwork Reduction Act (“PRA”). OMB has approved the Rule’s existing information collection requirements through April 30, 2024 (OMB Control No. 3084-0105). As described above, the Commission is proposing amendments to simplify power output measurements by standardizing test parameters. The amendments do not change the frequency of the testing or disclosure requirements specified under the Rule. Accordingly, FTC staff do not anticipate that this change will result in additional burden hours or higher costs for manufacturers who already test power output for their amplifiers, in many cases testing amplifiers under the conditions specified by the proposed amendments. Therefore, the amendments do not require further OMB clearance.

### **XVI. Communications by Outside Parties to the Commissioners or Their Advisors**

Pursuant to FTC Rule 1.18(c)(1), the Commission has determined that communications with respect to the merits of this proceeding from any outside party to any Commissioner or Commissioner’s advisor shall be subject to the following treatment. Written communications and summaries or transcripts of oral communications shall be placed on the rulemaking record if the communication is received before the end of the comment period. They shall be placed on the public record if the communication is received later. Unless the outside party making an oral communication is a member of Congress, such communications are permitted only if advance notice is published in the Weekly Calendar and Notice of “Sunshine” Meetings.<sup>38</sup>

#### **List of Subjects in 16 CFR Part 432**

Amplifiers, Home entertainment products, Trade practices.

For the reasons stated above, the Commission proposes to amend part 432 of title 16 of the Code of Federal Regulations as follows

#### **PART 432— POWER OUTPUT CLAIMS FOR AMPLIFIERS UTILIZED IN HOME ENTERTAINMENT PRODUCTS**

1. The authority citation for part 432 continues to read:

Authority: 38 Stat. 717, as amended; (15 U.S.C. 41-58).

2. Revise § 432.2 to read as follows:

§ 432.2 Required disclosures.

Whenever any direct or indirect representation is made of the power output, power band or power frequency response, or distortion characteristics of sound power amplification

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<sup>38</sup> See 15 U.S.C. 57a(i)(2)(A); 16 CFR 1.18(c).

equipment, the following disclosure shall be made clearly, conspicuously, and more prominently than any other representations or disclosures permitted under this part: The manufacturer's rated minimum sine wave continuous average power output, in watts, per channel (if the equipment is designed to amplify two or more channels simultaneously) at an impedance of 8 ohms, measured with all associated channels fully driven to rated per channel power. Provided, however, when measuring maximum per channel output of self-powered combination speaker systems that employ two or more amplifiers dedicated to different portions of the audio frequency spectrum, such as those incorporated into combination subwoofer-satellite speaker systems, only those channels dedicated to the same audio frequency spectrum should be considered associated channels that need be fully driven simultaneously to rated per channel power.

3. Revise § 432.3(e) to read as follows:

§ 432.3 Standard test conditions.

\* \* \* \* \*

(e) Rated power shall be obtainable at all frequencies within the rated power band of 20 Hz to 20 kHz without exceeding 0.1% of total harmonic distortion after input signals at said frequencies have been continuously applied at full rated power for not less than five (5) minutes at the amplifier's auxiliary input, or if not provided, at the phono input. Provided, however, that for amplifiers utilized as a component in a self-powered subwoofer in a self-powered subwoofer-satellite speaker system that employs two or more amplifiers dedicated to different portions of the audio frequency spectrum, the rated power shall be obtainable at all frequencies within the subwoofer amplifier's intended operating bandwidth without exceeding 0.1% of total harmonic distortion after input signals at said frequencies have been continuously applied at full rated

power for not less than five (5) minutes at the amplifier's auxiliary input, or if not provided, at the phono input.

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By direction of the Commission.

April J. Tabor,

Secretary