

impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 71**

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<sup>1</sup> In accordance with section 18 of the FTC Act, 15 U.S.C. 57a, the Commission submitted this NPR to the Chairman of the Committee on Commerce, Science, and Transportation, United States Senate, and the Chairman of the Committee on Commerce, United States House of Representatives, 30 days prior to its publication in the **Federal Register**.

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<sup>2</sup>The commenters were: Consumer Electronics  
Manufacturers Association (CEMA)(1); Wass  
Audio=Digital (Wass)(2); Sonance (Sonance)(3); PHI

amplifiers that do generate appreciable levels of THD tend to be very expensive vacuum tube designs that are sold to a specialized group of consumers that may not consider THD specifications an important consideration in their purchase decisions. Thus, it would not appear that sales personnel at retailold to a

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<sup>8</sup> CEMA, (1), p. 3.

<sup>9</sup> Sonance, (3), p. 1.

<sup>10</sup> Velodyne, (5), p. 3.

<sup>11</sup> *Id.*

maximum continuous power demands simultaneously on both the subwoofer and satellite amplifiers at the crossover frequency. Rather, it is the Commission's understanding that such demands are more likely to occur in portions of the audio spectrum that would be assigned primarily either to the subwoofer amplifier or the satellite amplifier. In contrast, conventional stand-alone stereo amplifiers, which incorporate left and right-channel amplifiers that must reproduce signals covering the full musical frequency bandwidth, will more commonly be required to meet simultaneous continuous power demands that are present in both channels (such as might occur when a pipe organ play a sustained pedal tone in the deep bass).

In addition, a simultaneous power test of both the subwoofer and the satellite amplifiers would, from a practical standpoint, require a single test signal at the crossover frequency, or a single combination set of tones, such as the 60Hz-1,000Hz composite signal suggested by Velodyne. This would mean that the resulting power and THD specifications might not be valid over the full frequency range over which each amplifier was designed to operate.

Accordingly, the Commission proposed amendment 432.2(a)(2) of the Rule to include a clarifying note stating that, 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, only those channels dedicated to the same audio frequency spectrum need be fully driven to rated per channel power.

### 3. Proposed Amendment to the Amplifier Rule Preconditioning Requirement

#### a. Background

Section 432.3(c) of the Rule specifies that an amplifier must be preconditioned by simultaneously operating all channels at one-third of rated power output for one hour using a sinusoidal wave at a frequency of 1,000Hz. The ANPR sought comment on whether the Commission should amend the Rule to reduce the preconditioning power output requirement from one-third of rated power to a lower figure, such as one-eighth of rated power.

CEMA supported reducing the preconditioning power output requirement to below the current one-third power. CEMA stated that the current one-third power requirement is "beyond what can be expected through normal use in the home" and is "harsh

and unrealistic."<sup>12</sup> CEMA claimed that in order to meet the physical conditions presented by the Rule's existing preconditioning requirement, manufacturers must design and incorporate in amplifiers larger and costlier heat sinks.<sup>13</sup> CEMA listed several alternative solutions, including operation at idle during preconditioning, operation at a small fixed power representative of average power during typical in-home operation, or preconditioning at one-eighth power. CEMA went on to state that the one-eighth power option "has the virtue of being consistent with current industry and international testing specification."<sup>14</sup>

A second commenter, Velodyne, stated that a preconditioning period is not really necessary, but that the Commission should follow Underwriters Laboratories' ("UL") one-eighth power requirement if the preconditioning requirement is retained.<sup>15</sup> Velodyne did not provide any explanation for its conclusion that no preconditioning period of any kind was necessary under the Rule.

A third commenter, Wass, concluded from a series of calculations that reducing the preconditioning requirement from one-third to one-eighth power would reduce the thermal stress (expressed in "watts of heat" delivered to an amplifier's heatsink) by approximately 24 percent.<sup>16</sup> Wass, however, opposed amending the Rule to provide such a reduction in specified preconditioning power output because the consumer would get "a poorer unit."<sup>17</sup> Wass did not provide any evidence, however, that would allow the Commission to compare the magnitude of the alleged reduction in amplifier quality with the magnitude of the associated reduction in manufacturing costs resulting from the one-eighth power preconditioning standard.

Finally, a fourth commenter, Sonance, evidence, hlud17om tthed allowt techn powe Coblemation."

<sup>12</sup> CEMA, (1), p. 2

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> Velodyne, (5), p. 1.

<sup>16</sup> Wass, (2), p. 2.

<sup>17</sup> *Id.*

<sup>18</sup> Sonance, (3), p. 1.

<sup>19</sup> *Id.*

steepness of the crossover slope, such crossover circuitry may severely attenuate a test tone of 1,000Hz and prevent the subwoofer amplifier from being driven to one-third of rated power (as currently required by the Rule), or even to one-eighth of rated power (as specified in the proposed amendment). Thus, it would appear that testers of self-powered subwoofers would need to select a preconditioning frequency considerably lower than 1,000Hz.

The Commission, therefore, has tentatively concluded that the Rule should be amended to clarify the preconditioning procedure for self-powered subwoofers. The Commission does not currently believe, however, that any such amendment should specify the precise frequency of the test tone that is to be used in preconditioning powered subwoofers. Powered subwoofers may differ widely in the portion of the bass spectrum over which they are designed to operate, and, consequently, there may not be a single preconditioning frequency that is appropriate for all powered subwoofers. The Commission has tentatively concluded, therefore, the testers of powered subwoofers should have the flexibility to choose for the sinusoidal preconditioning signal any frequency (within the intended operating bandwidth of the subwoofer amplifier) that will allow the amplifier to be driven for one hour to the required proportion of rated power output.

Accordingly, the Commission proposes amending § 432.3(c) of the Rule by adding an explanatory note stating that for amplifiers utilized as a component in a self-powered subwoofer system, the sinusoidal wave used as a preconditioning signal may be any frequency within the amplifier's intended operating bandwidth that will allow the amplifier to be driven to one-eighth of rated power for one hour.

#### **Part C—Rulemaking Procedures**

The Commission finds that the public interest will be served by using expedited procedures in this proceeding. Using expedited procedures will support the Commission's goals of clarifying existing regulations, when necessary, and eliminating obsolete or unnecessary regulation without an 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.

The Commission, therefore, has determined, pursuant to 16 CFR 1.20, to use the procedures set forth in this notice. These procedures include: (1) Publishing this Notice of Proposed

Rulemaking; (2) soliciting written comments on the Commission's proposals to amend the Rule; (3)

home, the Commission believes that any amendment to the Rule may affect a substantial number of small businesses. Nevertheless, the proposed amendments would not appear to have a significant economic impact upon such entities. Specifically, the proposed change in the preconditioning protocol and the proposed exemption of disclosure of THD, bandwidth, and impedance specifications in media advertising should allow a moderate reduction in amplifier manufacturing and advertising costs that should benefit both small and larger businesses. The proposed clarification of testing procedures for combination subwoofer-satellite self-powered loudspeaker systems is the least burdensome application of the Rule among the alternative proposals suggested by commenters, and should not have a significant disproportionate impact on the testing costs of small manufacturers of such power amplification equipment.

Based on available information, therefore, the Commission certifies that amending the Amplifier Rule as proposed will not have a significant economic impact on a substantial number of small businesses. To ensure that no significant economic impact is being overlooked, however, the Commission requests comments on this issue. The Commission also seeks comments on possible alternatives to the proposed amendments to accomplish the stated objectives. After reviewing any comments received, the Commission will determine whether a final regulatory flexibility analysis is appropriate.

#### Part G—Paperwork Reduction Act

The Amplifier Rule contains various information collection requirements for which the Commission has obtained clearance under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, Office of Management and Budget (“OMB”) Control Number 3084–0105. As noted above, for purposes of performing the tests necessary for affected entities to make the disclosures required under the Rule, § 432.3(c) of the Rules requires that an amplifier be preconditioned by simultaneously operating all channels at one-third of rated power output for one hour using a sinusoidal wave at a frequency of 1,000Hz. In addition, § 432.2 of the Rules requires disclosure of the manufacturer’s rated minimum sine wave continuous average power output, in watts per channel, maximum rated total harmonic distortion, power bandwidth, and impedance whenever a power claim is made in advertising, including advertising by retail stores,

direct mail merchants, and manufacturers.

The proposed amendments would not increase the paperwork burden associated with the aforementioned paperwork requirements. Three of the amendments proposed by the Commission would not increase or alter the Rule’s paperwork requirements, and one amendment proposed by the Commission would reduce the paperwork burden for businesses. Consequently, there are no additional “collection of information” requirements included in the proposed amendments to submit to OMB for clearance under the Paperwork Reduction Act. A separate Notice soliciting public comment on extending the OMB clearance for the Rule through March 31, 2002, was published in the **Federal Register** on January 8, 1999 (64 FR 1203). If, as expected, OMB extends clearance for the Rule as presently written, any reduction of the paperwork burden associated with the Rule’s requirements that may result from this proceeding will be reflected in subsequent reviews of the Rule for OMB clearance.

The Commission’s proposed amendment to reduce the specified per-channel power output of amplifiers during preconditioning from one-third of rated power output for one hour to one-eighth of rated power output for one hour would not alter or increase the paperwork burden associated with this requirement because amplifiers must continue to be preconditioned for one hour. Also, with respect to preconditioning, the proposed amendment to add a note to the Rule stating that, for amplifiers utilized as a component in a self-powered subwoofer system, the sinusoidal wave used as a preconditioning signal may be any frequency within the amplifier’s intended operating bandwidth that will allow the amplifier to be driven to one-eighth of rated power for one hour, would not increase the Rule’s paperwork burden. The note would not change the Rule’s requirements, but merely would clarify the preconditioning procedure for self-powered subwoofers.

Similarly, the proposed amendment to add a note to the Rule stating that, for self-powered combination speaker systems that employ two or more amplifiers dedicated to different portions of the audio frequency spectrum, only those channels dedicated to the same audio frequency spectrum need be fully driven to rated per channel power also would not increase the Rule’s paperwork burden. The note would not alter the Rule’s

requirements, but merely would clarify the test procedure that should be followed in applying the Rule’s continuous power rating protocol to self-powered subwoofer-satellite combination speaker systems that employ two or more power amplifiers sharing a common power supply.

The proposed amendment of the Rule to exempt from media advertising, including advertising on the Internet, disclosure of an amplifier’s total rated harmonic distortion and the associated power bandwidth and impedance ratings when a power output claim for an amplifier is made would result in reducing the Rule’s paperwork burden. Although the exemption for media advertising would be conditioned on the requirement that the amplifier’s primary power output specification continue to be disclosed in any media advertising, the net effect of the proposed amendment would be to reduce the Rule’s paperwork burden for businesses.

Thus, the Commission concludes that the proposed amendments would not increase the paperwork burden associated with compliance with the Rule. To ensure that no significant paperwork burden is being overlooked, however, the Commission requests comments on this issue.

#### Part H—Additional Information for Interested Persons

##### 1. Motions or Petitions

Any motions or petitions in connection with this proceeding must be filed with the Secretary of the Commission.

##### 2. Communications by Outside Parties to Commissioners or Their Advisors

Pursuant to Commission Rule 1.18(c)(1), 16 CFR 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 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>20</sup>

<sup>20</sup> See 15 U.S.C. 57a(i)(2)(A); 45 FR 50814 (1980); 45 FR 78626 (1980).

