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NARRATIVE STATEMENT

I. Introduction and Background

Pursuant to Section 5.51 of the Commission's rules, 47 C.F.R. § 5.51 (2007), Sirius XM Radio, Inc., hereby respectfully requests special temporary authority ("STA") for a three-month period, from **February 20, 2009 through May 20, 2009,** to test the design and functionality of prototype FM modulators operating in the 88-108 MHz band. The following information is provided in support of this request:

II. <u>Purpose of Experimentation and Justification for Nationwide Authority</u>

As a provider of satellite radio services in the United States, Sirius XM is continually involved in designing, developing and testing new devices and applications intended to improve consumers' reception of its service. By this request for STA, Sirius XM seeks to test the functionality and acceptability of a prototype FM modulator designed to advance the technologies and applications of its satellite services. These prototype FM modulators are devices for which Sirius XM intends to seek certification under Part 15 of the Commission's Rules for purposes of coupling audio from Sirius XM receivers to automobile FM broadcast receivers. Sirius XM's research and development of this product has reached a stage that now requires "real-world" field tests, operational trials, and proof of concept evaluations

Sirius XM proposes to operate the prototype devices initially near its engineering facilities in Deerfield Beach, Florida. To obtain statistically valid engineering results, however, it must also test the products operations at other locations within the United States, including residential locations. The nature of the service and the devices associated with the service typically involve such usage and therefore should be authorized under the requested STA.

Also because of the nature and use of such devices, Sirius XM cannot at this time determine the specific locations of the proposed tests. Thus, it believes that an approach requiring it to obtain a regular experimental or special temporary authority for each unit or experiment before it conducts research and development of these devices would be impracticable under these circumstances. Consequently, Sirius XM respectfully seeks a nationwide experimental license to test and operate prototype products at unspecified temporary locations in the United States (within the United States and its territories). Such a request is fully consistent with the FCC's rule changes regarding blanket licenses in ET Docket No. 96-256. *See Amendment of Part 5 of the Commission's Rules to Revise the Experimental Radio Service Regulations*, ET Docket No. 96-256, Report and Order, 13 FCC Rcd 21391 (1998)("*ERS Streamlining Order*").

Sirius XM does not propose to market, sell, or lease prototype equipment to end users or conduct a market study in conjunction with this test, although employees and other persons working under the control and supervision of Sirius XM would be involved in evaluating the devices for customer acceptability. Moreover, upon completion of the tests, all unapproved devices will be returned to Sirius XM for disposal as required by FCC rules.

Sirius XM submits that the public interest, necessity and convenience are served by the grant of a nationwide license under these circumstances. As noted at paragraph 12 of the *ERS Streamlining Order*, such action would enhance the company's ability to obtain information needed to ensure that the products it designs and deploys will accommodate and promote new technologies associated with its services.

III. <u>Technical Specifications</u>

Bandwidth / Emissions Designators:

The devices are designed to operate with a bandwidth of 200 kHz in the 88-108 MHz band. The emission designator for the units is 200KF3E. Sirius XM might employ various other modes of modulation and bandwidth but all devices would be designed to comply with the bandwidth and signal strength limits of Section 15.239 of the FCC Rules. None of these modes of operation would extend beyond the limits set forth for the 88-108 MHz band.

Power Levels:

The power levels of the units have been designed to conform with limits specified under Part 15 of the FCC's rules, in particular Section 15.239, 47 C.F.R. § 15.239 (2007). Specifically, the output power of the units will not exceed -30 dBm output power and the radiated field strength limits would comply with Section 15.239. For purposes of completing the required fields in the FCC application, it has calculated the output power and effective radiated power in watts as less than 1.0 uW.

IV. Number of Units and Operational Safeguards

As discussed above, Sirius XM seeks to obtain accurate "real-world" engineering data regarding the performance, functionality, and acceptability of these prototype devices. Thus, it must deploy a sufficient number of units, at a sufficient number of locations, and under a variety of operating conditions during its studies to simulate actual usage. Sirius XM anticipates that it will be able to conduct such tests with a maximum of 500 units, but will use the minimum number necessary. This quantity will allow for evaluation in a wide variety of RF environments. Because FM modulators are allowed to operate only on a noninterference basis, Sirius XM needs to test the units in situations ranging from highly congested to relatively open.

Sirius XM understands that the number of test units it has requested might be higher than the number typically approved by the FCC for such purposes. To facilitate action on this request, however, Sirius XM would agree to appropriate conditions on its authorization to reflect the limitations specified in this narrative as well as any other safeguards deemed necessary by the FCC in this matter.

Sirius XM also recognizes that the operation of any unapproved devices must not cause harmful interference to authorized facilities. It does not anticipate that such interference will occur, as the prototype equipment is designed to operate at the low signal strength levels set forth in Part 15 of the FCC's rules. Should interference occur, however, Sirius XM will immediately take reasonable steps to resolve the interference, including if necessary discontinuing operation under the STA. To that end, Sirius XM would advise persons evaluating the devices that permission to operate the equipment has been granted under experimental authority issued to Sirius XM by the Commission, is strictly temporary and may be canceled at any time. Specifically, Sirius XM proposes to label the equipment or user information conspicuously as follows:

FCC STATEMENT

Permission to operate this device has been granted under experimental authority issued by the Federal Communications Commission to Sirius XM Radio, Inc., is strictly temporary, and may be canceled at any time.

This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained. This device remains the property of Sirius XM and is to be returned upon completion of the tests for which it was provided.

V. <u>Conclusion</u>

Sirius XM submits that grant of the requested STA on a nationwide basis would serve the public interest, convenience and necessity, as it would allow the company to enhance its ability to continue its on-going efforts to develop innovative products and services associated with the provision of satellite services to the public.

VI. Contacts for Inquiries

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