

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of Application by	)	
	)	
Satellite CD Radio LLC	)	File No. SAT-MOD-_____
	)	Call Sign S2812
For Renewal of the FM-6 License	)	

APPLICATION OF SATELLITE CD RADIO LLC

Satellite CD Radio LLC, a satellite digital audio radio service (“SDARS”) licensee and wholly-owned subsidiary of Sirius XM Radio Inc. (“Sirius XM”), hereby applies to renew its license for the FM-6 spacecraft, call sign S2812, for an additional 8-year term through November 25, 2030. A completed FCC Form 312 is attached, and Sirius XM incorporates by reference the technical information previously provided regarding operations of FM-6.¹ Granting the requested authority will serve the public interest by permitting continued operation of the FM-6 satellite in Sirius XM’s SDARS network.

FM-6 commenced operations at the nominal 116° W.L. orbital location on November 25, 2014, with an initial eight-year license term.² In conjunction with FM-5, FM-6 supplemented and eventually replaced Sirius XM’s non-geostationary orbit SDARS constellation.

The FM-6 spacecraft remains capable of delivering SDARS programming throughout the term sought in this license renewal application. Specifically, Sirius XM

¹ The most recent technical information submitted relating to FM-6 is found in File No. SAT-MOD-20110525-00099, granted August 26, 2011.

² See *Satellite CD Radio LLC*, File Nos. SAT-LOA-20100409-00072, granted February 4, 2011; File No. SAT-MOD-20110525-00099, granted August 26, 2011.

calculates that ample fuel is onboard the FM-6 spacecraft for the spacecraft to continue providing reliable service through November 2030. In making these calculations, Sirius XM assumes that FM-6 will remain at the nominal 116° W.L. orbital location³ and that standard stationkeeping maneuvers will be performed to maintain the spacecraft within its existing east-west and north-south stationkeeping tolerances.⁴

As discussed in the attached technical certification, the FM-6 satellite's overall health is good, and there are no material issues with the spacecraft. Sirius XM proposes no change in FM-6's operations, which will continue to conform to the technical parameters on file with the Commission. Nor does the proposed extension require any alteration in the orbital debris mitigation plans regarding the spacecraft. Sirius XM has confirmed that at the conclusion of the requested renewal period, the spacecraft will have sufficient fuel to be placed into disposal orbit at the altitude previously submitted, which complies with the IADC standard.

Renewing the license for FM-6 will serve the public interest by allowing the spacecraft to continue to provide Sirius XM's satellite radio service. In addition, granting the license renewal will promote the efficient use of orbital resources.

³ In the event future plans involve relocating FM-6 to another orbital location, the impact of such relocation on the fuel end-of-life for the spacecraft will depend on the parameters of the relocation, including the distance and speed of the move.

⁴ Thus, the calculations do not assume that the spacecraft will be placed into inclined orbit during the requested renewal period.

For the foregoing reasons, Sirius XM hereby respectfully requests that the Commission extend the license for FM-6 through November 25, 2030.

Respectfully submitted,

Satellite CD Radio LLC

/s/ Patrick L. Donnelly

Patrick L. Donnelly

Secretary

Satellite CD Radio LLC

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Dated: August 19, 2022

Technical Certification

In support of the foregoing request for renewal of the FM-6 license for an additional 8-year term, I hereby certify that:

1. The estimated total remaining space station lifetime for FM-6 is June 2031.
2. FM-6 has no single points of failure or other malfunctions, defects, or anomalies during the space station operation that should affect its ability to conduct end-of-life procedures as planned.
3. Remaining fuel reserves on FM-6 are adequate to complete de-orbit as planned.
4. The FM-6 telemetry, tracking, and command links are fully functional.

_____/s/

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Dated: August 19, 2022