

XM-3 serves as one of XM Radio's two primary operational spacecraft for delivering SDARS programming.⁵ The spacecraft remains capable of fulfilling that function throughout the term sought in this extension request. Specifically, XM Radio calculates that ample fuel is onboard the XM-3 spacecraft for the spacecraft to continue providing reliable service through April 2026. In making these calculations, XM Radio assumes that XM-3 will remain at the nominal 85° W.L. orbital location⁶ and that standard stationkeeping maneuvers will be performed to maintain the spacecraft within its existing east-west and north-south stationkeeping tolerances.⁷

As discussed in the attached technical certification, the XM-3 satellite's overall health is good, and there are no material issues with the spacecraft. XM Radio proposes no change in XM-3'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. XM Radio 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.

⁵ The SXM-7 satellite launched in December of 2020 was intended to serve as a replacement for XM-3. *See* Sirius XM Radio Inc., Call Sign S3033, File No. SAT-RPL-20180430-00033, granted Oct. 3, 2018. However, due to failures of certain SXM-7 payload units that occurred during testing of the satellite, the satellite's future role is currently being evaluated.

⁶ In the event future plans involve relocating XM-3 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.

⁷ Thus, the calculations do not assume that the spacecraft will be placed into inclined orbit during the requested renewal period.

Renewing the license for XM-3 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.

For the foregoing reasons, XM Radio hereby respectfully requests that the Commission extend the license for XM-3 through April 20, 2026.

Respectfully submitted,

XM Radio LLC

/s/ Patrick L. Donnelly

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Technical Certification

In support of the foregoing request for extension of the XM-3 license for an additional five-year term, I hereby certify that:

1. The estimated total remaining space station lifetime for XM-3 is March 2029.
2. XM-3 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 XM-3 are adequate to complete de-orbit as planned.
4. The XM-3 telemetry, tracking, and command links are fully functional.

/s/

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