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December 10, 1991



DOMESTIC FACILITIES DIVISION SATELLITE RADIO BRANCH

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Ms. Donna R. Searcy Secretary Federal Communications Commission 1919 M Street, N.W. Washington, D.C. 20554

Federal Communications Commission Office of the Secretary

Norris Satellite Communications, Inc., File Nos. 54-DSS-P/L-90 and 55-DSS-P-90

Dear Ms. Searcy:

TELEPHONE (202) 857-2500

MITCHELL F. BRECHER

DIRECT DIAL NO.

857-2835

Transmitted herewith for filing on behalf of GTE Spacenet Corporation are an original and the requisite number of copies of its comments in response to Norris Satellite Communications, Inc.'s further response in the above-captioned matter.

If there are any questions, kindly communicate directly with the undersigned.

Sincerely,

Mitchell F. Brecher

MFB/hcg

Enclosures

DEC 1 0 1991

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

Federal Communications Commission
Office of the Secretary

In the Matter of

NORRIS SATELLITE COMMUNICATIONS, INC.

Application for Authority to Construct and Operate Communications Satellites in the Domestic Fixed-Satellite Service File Nos. 54-DSS-P/L-90 55-DSS-P-90

COMMENTS OF GTE SPACENET CORPORATION

On November 7, 1991, Norris Satellite Communications,
Inc. ("Norris") filed with the Commission a further response to
the petition to deny its above-captioned application filed by GTE
Spacenet Corporation ("GTE Spacenet") as well as to comments on
Norris's application filed by American Mobile Satellite
Corporation, Motorola Satellite Communications, Inc. and Geostar
Messaging Corporation. GTE Spacenet hereby submits its comments
on that further response.

I. <u>INTRODUCTION</u>

In its application as initially filed, Norris proposes to construct, launch and operate satellites in the so-called Kaband (30/20 GHz). Although those frequencies are currently allocated on a primary basis in the Commission's Table of Frequency Assignments ^{1/2} to the Fixed-Satellite Service ("FSS"),

^{1/ 47} C.F.R. § 2.106.

Norris has proposed to provide a variety of FSS, mobile satellite ("MSS") and direct broadcast satellite ("DBS") services and has petitioned the Commission to reallocate those frequencies from the Fixed-Satellite Service to a generic allocation which Norris calls the "General Satellite Service."²/

By its further response, Norris asks the Commission to limit its consideration to the fixed-satellite portion of its application subject to revision at some later time -- presumably after the Commission has addressed Norris's frequency reallocation proposal. In addition, Norris's further response attempts to cure inadequacies in its financial and technical qualification showings by inclusion of new financial and technical exhibits to its application.

application to provide FSS services, provided that Norris is able to demonstrate compliance with the qualification and operational standards applicable to FSS licensees. However, it reiterates its hope and expectation that the Commission will evaluate all applicants for FSS authorizations in a consistent and evenhanded manner. For reasons discussed in these comments, Norris has not yet demonstrated that it is either financially or

<u>2/ See</u>, Petition for Rulemaking and Request for Pioneer's Preference filed by Norris Satellite Communications, Inc. July 16, 1990, Rm-7511.

technically qualified in accordance with the Commission's requirements for FSS applicants. 3/

II. NORRIS'S REVISED EXHIBIT I-E DOES NOT DEMONSTRATE
THAT NORRIS HAS MET THE COMMISSION'S FINANCIAL
OUALIFICATIONS STANDARD FOR FSS APPLICANTS

In its petition to deny, GTE Spacenet demonstrated that Norris has not met the financial qualification standard for Fixed-Satellite Service applicants established by the Commission in 1985⁴ and codified at Section 25.391 of the Commission's rules. That standard, based upon the Commission's Ultravision standard, or requires that applicants demonstrate and document the

In its further response, Norris has asked the Commission to utilize the 10 day comment period contained at Section 1.45 of the Commission's Rules. However, that rule is inapplicable. is not clear whether Norris's further response is intended to be a pleading or an amendment to its application. If it is a pleading, it is an unauthorized pleading. Section 1.45 contemplates oppositions to petitions and replies to oppositions. Section 1.45(c) permits additional pleadings only when requested or authorized by the Commission. Since Norris's further response neither has been requested nor authorized, it is not a pleading permitted by the Commission's rules. Therefore, the 10 day Although there is no rule response period is inapplicable. governing responses to unauthorized pleadings, GTE Spacenet is submitting its comments now so as not to delay Commission consideration of the FSS portion of Norris's application. Spacenet takes no position with respect to whether Norris's further response should be treated as an amendment to its application or what impact, if any, it should have on the further processing and consideration of the application.

<u>4/ Licensing of Space Stations in the Domestic Fixed-Satellite Service</u>, 50 Fed. Reg. 36071 (September 5, 1985).

^{5/ 47} C.F.R. § 25.391.

^{6/ &}lt;u>Ultravision Broadcasting</u>, 1 FCC2d 544 (1965).

availability of firmly committed debt or equity financing, sufficient to meet estimated costs of the proposed system and of its initial year of operation.

Norris indicated in its application that it intends to rely upon anticipated revenues from future sales of transponder capacity to fund its proposal. However, as GTE Spacenet noted in its petition, reliance upon prospective sales and leases of transponders to demonstrate a Fixed-Satellite applicant's financial qualifications is prohibited by Section 25.391(d). Only revenues from executed transponder contracts may be used in support of an applicant's financial qualifications.

Norris's revised Exhibit I-E, Income Statement, is merely a projection of what Norris hopes will be its revenues between 1993 and 1999. Norris has not even identified the purchasers/lessees of its satellite capacity, let alone submitted executed contracts. Nor has Norris provided any explanation or underlying assumptions for its projected income statement. In short, the revised Exhibit I-E does not contain information which would enable the Commission to conclude that Norris has complied with the financial qualifications requirements set forth at Section 25.391 -- requirements that are applicable to all applicants for licenses to operate satellites in the Domestic Fixed-Satellite Service, irrespective of the applicants' proposed frequency bands.

In its reply to Norris's opposition, GTE Spacenet recognized that Norris proposes to operate its satellites in a currently-unused frequency band. For that reason, GTE Spacenet stated that it would not object to the Commission subjecting Norris to a somewhat more relaxed financial qualification standard than that normally applicable to other Fixed-Satellite applicants. However, Norris should be required to demonstrate to the Commission that it will be able to construct within a reasonable time and that Norris should be required to provide the Commission with periodic reports on its capital raising and construction efforts.

Norris's further response neither complies with the Commission's requirements for Fixed-Satellite applicants nor with the two conditions suggested by GTE Spacenet. GTE Spacenet reiterates that it has no objection to a somewhat relaxed financial qualification standard for Norris. However, it urges the Commission to be mindful not to abandon its financial qualification requirements in a manner which will erode the standard currently-applicable for Fixed-Satellite applicants -- a standard which has served the public interest by promoting development of Fixed-Satellite systems and delivery of innovative satellite-based services by multiple well-managed, financially qualified firms.

 $[\]underline{7/}$ See, Reply to Opposition to Petition to Deny, filed by GTE Spacenet January 22, 1991, at 11.

III. NORRIS'S REVISED INTERFERENCE ANALYSIS DOES NOT DEMONSTRATE THAT NORRIS WILL BE ABLE TO COMPLY WITH TWO DEGREE SPACING REQUIRED FOR ALL FIXED-SATELLITES

In its petition to deny Norris's application, GTE

Spacenet noted that Norris had submitted an interference analysis
based upon ten degree spacing between satellites. While ten
degree spacing (or at least nine degree spacing) might have been
necessary to accommodate Norris's proposal to provide DBS, its
ten degree spacing assumption was plainly violative of the
Commission's requirement that FSS applicants submit with their
applications interference analyses based upon two degree spacing.
That two degree spacing interference analysis requirement is
articulated in the Commission's 1983 Processing Order. BY It is
applicable to all FSS applications, including those for C-band,
Ku-band and Ka-band.

Although Norris, in its opposition to GTE Spacenet's petition, alleged that its proposed Ka-band satellites could operate "quite satisfactorily" at two degree spacing, ⁹ it has not until now submitted an interference analysis which purports to support that conclusion. Now, nearly sixteen months after filing its application, Norris has, for the first time, submitted

^{8/} Filing of Applications for New Space Stations in the Domestic Fixed-Satellite Service, 93 FCC2d 1260, 1266 (Appendix B, Paragraph F) (1983).

^{9/} Norris Satellite Communications, Inc. Opposition to Petition to Deny and Reply to Comments, filed January 7, 1991, at 13.

an interference analysis based upon two degree spacing. However, Norris's latest interference analysis is based upon several assumptions that are inconsistent with the application itself. As a result of these inconsistent assumptions, the interference analysis appended to Norris's further response does not demonstrate that Norris's proposed FSS satellites will be able to operate compatibly with other FSS satellites in a two degree spacing environment.

The first inconsistent assumption involves the proposed bandwidth of the satellite transponders. As proposed in Norris's application, the nominal bandwidth of Norris's transponders is to be 24 MHz. However, the two degree interference analysis indicates FM/TV bandwidths of 24 MHz, 26 MHz and 30 MHz. Of these, only the 24 MHz carriers will be feasible with the transponder configuration proposed in Norris's application. In addition, the revised analysis indicates a 54 MHz CFDM/FM carrier and a 45.7 MHz QPSK (80 Mbps) carrier which also could not be transmitted using the 24 MHz transponders proposed by Norris.

Another inconsistent aspect of Norris's revised interference analysis is its inclusion of traffic characteristics for four carrier types taken from a comparable Ku-band satellite. (See Norris Interference Analysis Section 1.0-Introduction). The carrier signal levels should have been increased to compensate for the increased rain fade at Ka-band.

Another inconsistency between Norris's application and its revised interference analysis involves antenna polarization. According to Norris's application, "Norstar spacecraft are planned to transmit 24 circularly-polarized channels" However, this proposed circular polarization is contradicted by the link parameter tables in the revised interference analysis which are based upon assumed linear polarization. The difference between circular and linear polarization would result in different interference margins.

As a consequence of these inconsistencies between Norris's application proposal and its interference analysis, Norris has not shown that two Ka-band satellites located two degrees apart could be used to provide FSS services without causing harmful interference to each other. As it has stated on several occasions throughout this proceeding, GTE Spacenet has no objection to grant of Norris's application provided that its proposal complies with appropriate qualification criteria established by the Commission for FSS operations. Clearly, compliance with two degree spacing is an important aspect of those criteria. GTE Spacenet respectfully urges the Commission to direct Norris to submit an interference analysis which demonstrates that its proposed satellites could operate without causing harmful interference in a two degree spacing environment.

CONCLUSION

For the reasons contained herein, Norris has not yet demonstrated that it is financially qualified to construct and operate its proposed Ka-band FSS system nor has it shown that it will be able to operate its proposed satellites without causing interference to the operations of other FSS satellites located two degrees away. If the Commission elects to subject Norris's application to somewhat modified financial and technical qualification requirements, any such modifications should not undermine the Commission's paramount responsibilities of ensuring that only financially responsible entities be authorized to construct and operate FSS systems and of preventing harmful interference with the operations of other FSS systems.

Respectfully submitted,
GTE SPACENET CORPORATION

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December 10, 1991

CERTIFICATE OF SERVICE

I, Hilarie Gaylin, certify that on this 10th day of December, 1991, I caused to be delivered by hand delivery or first class mail copies of GTE Spacenet Corporation's Comments in response to Norris Satellite Communications, Inc.'s further response in the matter of Norris Satellite Communications, Inc.'s Application for Authority to Construct, File Nos. 54-DSS-P/L-90 and 55-DSS-P-90 to the following:

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