

ORIGINAL

BEFORE THE
Federal Communications Commission

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In Re

Application of
Maritime Telecommunications Network Inc.
For Renewal of Experimental Authorization,
Call Sign K12XEE

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)FCC File No. 0100-EX-RR-1999
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To: The Commission

INFORMAL PETITION TO DENY APPLICATION

The American Petroleum Institute ("API"), by its attorneys and pursuant to Section 1.41 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission"), 47 C.F.R. 1.41, hereby requests the Commission to deny the above-captioned renewal application of Maritime Telecommunications Network, Inc. ("MTN") filed on January 22, 1999 that seeks renewal of the authorization for Experimental Radio Service station K12XEE.

I. BACKGROUND

1. API is a national trade association representing approximately 350 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing, and transportation of petroleum.

petroleum products and natural gas. Among its many activities, API acts on behalf of its members as spokesperson before federal and state regulatory agencies. The API Telecommunications Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the petroleum and natural gas industries.

2. Many API members are authorized by the FCC to operate facilities in the Fixed Microwave Service that use frequency assignments from the 5925-6875 MHz ("6 GHz") band. Most of these licensees operate multiple links in the 6 GHz band. These links comprise both "backbone" systems and spurs off of long-haul microwave systems. Thus, a pipeline licensee that utilizes a 6 GHz long-haul system may also employ 6 GHz links from its backbone to a field office, refinery, central production facility, or city gate. As a result, these 6 GHz links form an integral part of the telecommunications infrastructures that support the overall production, refining and transportation processes used in day-to-day operations. During an emergency (such as a pipeline rupture), these communications facilities potentially play a vital role in alerting public safety officials, coordinating response activities, and minimizing the impact of an incident upon workers and the general public.

3. The communications systems operated by API members are capable of monitoring and controlling a host of important variables, including pipeline pressures, temperatures, flow rates, volume and alarm sensors. These systems are designed to detect abnormalities and permit remote control of valve settings and compressors, thereby maintaining safe operating conditions. These critical safety features are employed throughout tens of thousands of miles of pipeline in this nation. Operational information from these Supervisory Control and Data Acquisition ("SCADA") systems, widely deployed throughout the industry, is transmitted over a variety of communications circuits, including 6 GHz microwave links. Such timely and reliable information promotes the efficient operation of pipelines and dramatically decreases the likelihood and/or impact of pipeline ruptures. Without this information, API members would be severely hampered in their ability to conduct their operations in a manner that best protects public health and safety and preserves the integrity of the natural environment.

4. MTN seeks renewal of its experimental authorization for the band 5925-6425 MHz so that its customers can continue to operate shipboard earth stations ("SESS") in the same spectrum and in the vicinity of the port and coastal areas where API members operate critical 6 GHz microwave systems. API asks the Commission to take official notice of its own records that reflect the many Fixed Microwave Service ("FS") stations authorized to petroleum and natural gas industry companies in the vicinity of the areas in which MTN's SES-equipped vessels operate.

5. API has already filed petitions to deny MTN's 32 applications for permanent authority for "Fixed" SES operation at dockside locations in 17 port cities in the U.S.^{1/} This Petition reiterates the same deep concerns explained in those pleadings.

II. PETITION TO DENY

A. MTN Has Failed to Provide Operational Information so That FS Stations Can Determine the Cause of Outages

6. API joins and supports the American Association of Railroads ("AAR") and other 6 GHz FS licensees in opposing renewal of MTN's experimental license. API believes that MTN has failed to comply with requirements and conditions of its initial license grant.^{2/} The experimental authorization requires MTN to "cooperate in establishing interference assessment and prevention procedures."^{3/} MTN has demonstrated a lack of willingness to cooperate by refusing to provide routing and operational details so that potential FS outages can be correlated with, or ruled out as resulting from, SES operations. In its Consolidated Opposition to Petitions to Deny

^{1/} API filed Petitions to Dismiss or Deny the Applications of MTN for permanent authorization on December 18, 1998 and March 5, 1999 (File Nos. SES-LIC-19980911-01272, et seq.).

^{2/} *Order*, released April 29, 1996, 11 FCC Rcd 10944 (OET, IB 1996)("Crescomm").

^{3/} *Crescomm* at 10949.

applications for permanent authorization, MTN states that it would be “excessively burdensome” to provide routing information.^{4/} API knows of no other reasonable way to evaluate outages potentially caused by MTN’s mobile satellite transmitters. MTN’s promise that it will investigate outages is therefore hollow and meaningless.

7. Section 5.163 of the Commission’s rules requires experimental licensees to collect the following information:

(1) Dates and hours of operation.

(2) All measurements of the frequency(s), including the name of the person making the measurements, the exact frequency measured or the observed deviations from the assigned frequency(s) expressed in Hertz, kilohertz or percent plus or minus, and a statement of any corrective action taken.

(3) Power.

(4) Types of emission.

^{4/} See *Consolidated Opposition to Petitions to Deny, In the Matter of Applications of Maritime Telecommunications Network, Inc. For Authority to Operate Shipboard Satellite Earth Stations*, File Nos. SES-LIC-199980911-01272, et seq., filed March 18, 1999 (“Opposition”) at 28.

(5) Chronological record of experimentation conducted.

(6) The name of the operator on duty.

Given these requirements, it is unreasonable for MTN to now argue that it has an undue burden in providing the information FS licensees have requested on routing and operation. Since the reporting of such information is a requirement of MTN's experimental license, it should be made available to FS licensees in advance of actual transmission in the 6 GHz band.

B. The Standard for Interference Protection Is Inadequate to Prevent Interference With Primary Users

8. MTN's stations have the potential for causing serious degradation in the reliability of 6 GHz microwave systems located along the U.S. coasts and in the vicinity of marine ports. Consequently, MTN's renewal application should be denied, at least until it can be demonstrated that the potential for interference into existing FS systems is minimized to an acceptable level.

9. The 100 km coordination distance established in paragraph 11 of the *Crescomm* decision is both arbitrary and inadequate for protecting FS receivers. Coordination distances should be sufficiently long to screen out only those cases where

the potential for interference is essentially non-existent based on absolute "worst case" operating parameters. Limiting the coordination distance to 100 km would undoubtedly exclude many potential interference cases from the coordination process. Once the "list" of potential interference cases is narrowed by elimination of those cases beyond the coordination distance, the coordination process itself should further eliminate potential interference cases based on the interference analysis of actual operating parameters.

10. Since coordination of "in motion" earth stations is a novel idea and there is little experience with the validity of the "Critical Contour Point" methodology, until actual empirical evidence is available, initial in-motion coordination should be somewhat more conservative than the established coordination between two fixed stations. This "cautious" approach should include both coordination distances and interference criteria, particularly when such coordination includes operations over water where ducting frequently occurs.

11. Moreover, the criteria for coordination of systems authorized on a secondary basis should be more stringent than the criteria for coordination between two primary operators. Normal coordination criteria between two primary users allows for certain predicted levels of interference on both long-term and short-term bases. Primary operators acknowledge that, on occasion, they may receive interference from other primary users. If such levels of interference were not allowed, it would be more difficult

to coordinate a larger number of systems within a given geographical area, and full utilization of scarce spectrum would not be achieved.

12. However, secondary operations are premised on "not causing interference into a primary system" and they must "accept interference from primary systems." In order to reduce the level of potential interference from secondary users, API recommends that the interference criteria be 10 dB lower when coordinating secondary operations with primary operations. This will ensure that secondary operations do not cause interference into primary systems. It is expected that the Commission will face the same issue when 2 GHz microwave operations become secondary in PCS spectrum after the end of the sunset period. It is unlikely that primary PCS licensees will tolerate interference from secondary FS licensees, just as 6 GHz FS licensees cannot tolerate interference from MTN operations.

III. CONCLUSION

13. The grant of MTN's renewal application and the continued use by MTN of in-motion Earth Stations creates an unacceptable risk of harmful interference to FS operations on these frequencies within the general vicinity of SES operations. Contrary to MTN's assertion, it is possible that MTN's operations have already caused interference into FS systems and the FS community is not aware of it. Because MTN has refused to

to coordinate a larger number of systems within a given geographical area, and full utilization of scarce spectrum would not be achieved.

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provide the FS community with the information necessary to enable detection and prevention of interference from its SES operations, and because of the inadequacy of the 100 km offshore restriction imposed as part of MTN's original experimental license, MTN's renewal application should be denied.

WHEREFORE, THE PREMISES CONSIDERED, the American Petroleum Institute respectfully urges the Federal Communications Commission to deny renewal of the license for the Maritime Telecommunications Network, Inc. Experimental Radio Service station K12XEE.

Respectfully submitted,

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Dated: April 27, 1999

CERTIFICATE OF SERVICE

I, Patt Meyer, a secretary for the law firm of Keller and Heckman LLP, hereby certify that I have this 27th day of April 1999, caused a copy of the foregoing PETITION TO DENY to be sent, via First Class, United States Mail, postage prepaid to each of the following:

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