DOCKET FILE COPY ORIGINAL

Bay State Gas
A NiSource Company

Kenneth M. Margossian
*Executive Vice President and*
*Chief Operating Officer*

300 Friberg Parkway
Westborough, MA 01581
(508) 836.7302
Fax: (508) 836.7075
kmargossian@nisource.com

RECEIVED
FEB 2 2 2001
FCC MAIL ROOM

February 21, 2001

00-221

VIA FEDEX OVERNIGHT

Magalie Salas, Secretary
Federal Communications Commission
The Portals
445 12th Street,SW
Washington, DC 20554

SUBJECT: Access to 1.4 GHz spectrum

Dear Ms. Salas:

The issue of access to the 1.4 GHz spectrum is detailed in the enclosed comment letter. Bay State Gas Company has made a substantial investment in technology based on an expected spectrum of frequencies being available.

We strongly support the adoption of Option 2 as detailed in our comments. Thank you.

Sincerely,

Kenneth M. Margossian

Kenneth M. Margossian
Executive Vice President and
Chief Operating Officer

KMM:jl
Enclosure

No. of Copies rec'd 0
List A B C D E

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

RECEIVED
FEB 2 2 2001
FCC MAIL ROOM

| | | |
|---|---|---|
| In the Matter of | ) | |
| Reallocation of the 216-220 MHz, | ) | |
| 1390-1395 MHz, 1427-1429 MHz, | ) | ET Dkt. No. 00-221 |
| 1429-1432 MHz, 1432-1435 MHz, | ) | RM-9854 |
| 1670-1675 MHz, and 2385-2390 MHz | ) | |
| Government Transfer Bands | ) | |

## COMMENTS OF BAY STATE GAS COMPANY

Bay State Gas Company files these comment to urge the Federal Communications Commission to allocate the 1427-1429 MHz band, on a primary basis, for utility telemetry operations, including automatic meter reading ("AMR"), and to allow utility telemetry and AMR operations to share the 1429-1432 MHz band on a co-primary basis with the medical telemetry service, as described in Option 2 of the Commission's notice of proposed rulemaking ("*NPRM*") in the above-referenced proceeding.

### DISCUSSION

Bay State Gas Company with local headquarters in Westborough, Massachusetts, serves more than 300,000 customers in more than 100 communities in Massachusetts and, through its Northern Utilities, Inc. subsidiary, New Hampshire and Maine. Bay State Gas Company is a subsidiary of NiSource Inc. (NYSE: NI). NiSource is a holding company with headquarters in Merrillville, Indiana, whose operating companies engage in virtually all phases of the natural gas business from exploration and production to transmission, storage and distribution, as well as electric generation, transmission and distribution. As the second largest natural gas distributor in the U.S., NiSource companies serve a high-growth energy corridor from the Gulf of Mexico to the Midwest to New England. NiSource

distribution companies serve 3.6 million gas and electric customers primarily in nine states.

In 1992, Congress directed the federal government to foster the development of new and innovative AMR technologies believing that such technologies would lead to efficient energy use and would protect the public health and safety.[1] Since that time the Commission has authorized use of the 1427-1432 MHz ("1.4 GHz") frequency bands for AMR service on a nationwide basis. Now the FCC has received a petition from Itron, Inc. ("Itron") requesting a formal allocation of the 1427-1432 MHz band for utility telemetry and AMR. Several other parties filed petitions for rulemaking requesting allocation of certain of the 1.4 GHz band for various other uses, some of which are incompatible with using the band for utility telemetry and AMR.

In its *NPRM*, the FCC proposes three options for allocation of the 1.4 GHz spectrum. Bay State Gas Company urges the Commission to adopt Option 2, which would allocate the 1427-1429 MHz band on a primary basis exclusively for telemetry operations and the 1429-1432 MHz band on a co-primary basis to utility and medical telemetry. Adopting Option 2 would continue the Commission's policies, serve the substantial public interest in providing a "home" for AMR, and protect the substantial investment made by utilities and other critical infrastructure companies who are deploying telemetry services.

Use of the 1.4 GHz band for AMR helps to support critical infrastructure industries, who need wireless technologies to monitor systems remotely and to collect data from distant and widely dispersed locations in a timely and cost-effective manner. AMR technologies enhance utility productivity and efficiency and speed responses to natural disasters or other system anomalies that may pose a threat to public health or safety. In addition:

---

[1] *Telephone and Dispute Resolution Act*, Pub. L. No. 102-556, 106 Stat. 4181 (1992). Congress remains concerned about the use of spectrum for utility use including recommending that NTIA conduct a study on energy, water, and railroad spectrum use in one of its appropriations bills and directing the FCC to issue a report regarding the same. H.R. Rep. No. 106-1005, at 114-115 (2000).

- AMR increases utility productivity and efficiency, making it possible for a meter reader to increase by a factor of ten, twenty, or more the number of meters that can be read in an eight-hour shift; obviates the need for estimated bills and multiple trips to customer homes; and improves a utility's ability to detect meter tampering and theft of services.

- AMR establishes a direct link between a utility and its customer premises utility meters, enabling the utility to offer its customers a variety of strategies to reduce peak demand and shift usage to off-peak hours, as well as encourage conservation by providing customers with detailed, real-time price and consumption data.

- AMR is a necessity in a deregulated utility environment in which separate entities may be competing in the generation, transmission, wholesaling, and distribution to end users of energy. Reconciling the multiple, overlapping transactions involving these service providers requires consumption information on a daily basis, and in some cases more frequently.

Because of such benefits, AMR use is increasing and will continue to do so in the future. Bay State Gas Company, with its substantial customer base in New England, is evaluating a fixed network meter reading and information system. This expanded role for the current AMR system will operate on a fixed network operating in the 1.4 GHz frequency range. We also plan to use AMR to read meters for our customers. The total investment in this technology and system will be approximately $20 million. In addition, we plan to use AMR to be the foundation for a fixed network system.

Utilities have invested many millions of dollars in AMR networks at 1.4 GHz. Neither Option 1 nor Option 3 would allow AMR services to continue to use the complete spectrum range in which AMR investments are currently used. There is no benefit to providing utilities access to other frequency bands for AMR, as set out in Option 1. The AMR installed base and all equipment development is in the 1427-1432 MHz band. In addition, the benefits to utilities from having access to 2 MHz of paired frequencies, as provided in Option 1, would not make up for the loss of the benefits of AMR and other telemetry.

- Utilities would not have exclusive access to the paired frequencies, since they would be available for licensing to all businesses and other entities.
- Any service that is granted access to the 1427-29 MHz band will have to protect essential military operations through 2004 and will have to protect radio astronomy operations indefinitely. These constraints will substantially limit deployment of general purpose mobile and fixed radio services by utilities, while AMR has a proven record of compatibility with military and radio astronomy uses of the spectrum.

Under Option 3, AMR service users lose the use of the 1430-1432 MHz band to Little LEOs and PMRS while obtaining the 1427-1430 MHz band for use on a co-primary basis with WMTS. Either of these two options would cause AMR service users to lose spectrum and would prove costly, disruptive, and inefficient. Neither option upgrades AMR status throughout the entire spectrum band in which AMR currently operates, as would be provided for by Option 2.

Finally, allocating the 1427-1432 MHz band for AMR and utility telemetry would be spectrum efficient and would harmonize spectrum use for these purposes with Canada, thereby easing the need for cross-border frequency coordination and giving U.S. manufacturers and service providers a wider market opportunity.

For all of these reasons, Bay State Gas Company urges the Commission to adopt Option 2.

Respectfully,

Kenneth M. Margossian
Executive Vice President and
Chief Operating Officer