

Description of Application

Itron, Inc. ("Itron") holds an experimental license pursuant to Part 5 of the FCC's Rules (FCC File No. 4538-EX-ML-94, Call Sign KA2XMJ), which authorizes Itron to test electronic meter reading systems on 928 MHz, 952 MHz, 956 MHz and 959 MHz. Itron herein seeks modification of the subject license to include operations over the 902-928 MHz band, in addition to the frequencies for which it is already authorized. As is explained in greater detail below, Itron needs access to the 902-928 MHz band in order to develop and test new and innovative meter reading technologies and products.

As the Commission is aware, Itron manufactures and markets radio-based, off-site meter reading ("OMR") systems that operate pursuant to Parts 15 and 101 of the FCC's Rules. Through the use of Itron's products, utility companies across the United States have automated their meter reading activities, thereby increasing efficiency and reducing administrative costs. Itron continues to develop new products -- and improve existing products -- to take advantage of new technologies. For example, Itron has developed a new OMR product for use in situations where the utility meter is located below ground level.¹ As part of its normal product development process, Itron needs to deploy test units in the field to study the performance of its OMR units under "real world" conditions. Accordingly, Itron herein requests expansion of the frequency band authorized by the subject license -- to include the 902-928 MHz band -- so that it can test the performance of its OMR products that operate in that band. Itron additionally requests an effective radiated power of 1 mW, so that it can test its 902-928 MHz products at power levels that are consistent with Section 15.247.

Itron's current authorization permits operation of OMR devices at both fixed and mobile locations throughout the United States. Itron requests similar authority with respect to those units that will operate in the 902-928 MHz band. All antennas associated with such units will be less than 6.1 meters (20 feet) above ground level or above an existing structure (other than an antenna structure).

¹ Itron was granted Special Temporary Authority (FCC File No. S-2566-EX-96) to test the performance of this OMR product on August 12, 1996.

Public Interest

Itron herein seeks modification of its Experimental Radio authorization to support Itron's testing, development and demonstration of OMR products operating in the 902-928 MHz band.

Expanding Itron's authority to include the 902-928 MHz band will help Itron understand how its OMR system can improve the operations of energy utility companies in the United States. The traditional method of manually reading meters is an inefficient means to collect data. Itron's OMR systems apply a high-technology communications methodology to persistent problems of utility efficiency, which problems have led to higher rates to consumers, excessive energy consumption, and unnecessary facility construction.

Specifically, Itron's technical evaluation, field testing, and demonstrations for which modified authority is requested herein will allow Itron to:

- test the performance of its meter reading system on the different types of meters used for different types of utility customers;
- test the new technology's ability to overcome difficulties associated with the varying placement of the utilities' meters;
- potentially improve a utility's ability to read hard-to-reach meters such as those located in high-crime areas, inside homes, in locked basements, and other areas that traditionally have posed problems for manual meter reading techniques;
- test the demand for various ancillary data collection services; and
- evaluate the performance of the new equipment in very cold, very hot, very humid and vary saline-rich environments.

Determining the degree to which utilities in various situations, as described in this application, find Itron's OMR technology useful in solving these problems, and are willing to purchase accordingly, will aid Itron in tailoring the system before final product design and commercial rollout.