

Description of Application

Itron, Inc. (“Itron”) holds an experimental license pursuant to Part 5 of the FCC’s Rules (call sign KA2XMJ – latest action file No. 0163-EX-RR-2000), which authorizes Itron to test electronic meter reading systems in the 928 MHz, 952 MHz, 956 MHz, 959 MHz and 902-928 MHz band. Itron herein seeks modification of the license to increase the effective radiated power and emission bandwidth of the 902-928 MHz band.

Background

Itron manufactures and markets radio-based, automatic meter reading (“AMR”) systems that operate pursuant to Part 15, Part 90 and Part 101 of the FCC’s Rules. Through the use of these products, utility companies have automated their meter reading activities, thereby increasing efficiency and reducing administrative costs. Itron continues to develop new and improve existing products to take advantage of new technology. As part of its normal product development processes, Itron must test these devices within its manufacturing facility and in the field to study performance of its AMR products under real world conditions.

Modification to 902 – 928 MHz Band

Itron is currently authorized under KA2XMJ to operate with a 5 MHz emission bandwidth. The instant application request modification of the emission bandwidth to 15 MHz to facilitate the development of spread spectrum technologies to operate in this band in the US and Canada. Itron also requests to increase the effective radiate power to one (1) watt.

Public Interest

Itron herein seeks modification of its experimental radio authorization to support Itron’s testing, development, and demonstration of AMR products for nationwide markets. Itron’s AMR systems apply a high-technology communications methodology to persistent problems of utility 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 systems in different types of meters to ensure device compatibility;
- test the performance of its meter reading systems in the 900 MHz band (Itron will test propagation characteristics and develop operational guidelines);
- test the new technology’s ability to overcome difficulties associated with the varying placement of utility meters;
- test alternative modulation techniques including direct sequence spread spectrum;

- test the viability and demand for various ancillary data collection services;
- evaluate the performance of new equipment in extreme environmental conditions;
and
- test outage detection and related services to identify emergency situations critical to the utility industry.

Determining the degree to which utilities in various situations (such as described in this application) find Itron's meter reading solutions useful in solving problems associated with data collection, and are willing to purchase accordingly, will aid Itron in tailoring the system before the final product design and commercial rollout.