

## **Description of Application**

Itron, Inc. (“Itron”) requests an experimental license pursuant to Part 5 of the FCC’s Rules to authorize Itron to test electronic meter reading systems in the 928 MHz, 952 MHz, 956 MHz, 959 MHz and 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 products 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.

## Public Interest

Itron herein seeks an 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.