

Question 7, Purpose of Experiment

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 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. Using these products, utility companies have automated their meter reading activities, thereby increasing efficiency and reducing administrative costs. Itron continues to develop new products, improve existing products and its networks to take advantage of new technology. As part of its normal product development processes, Itron would like to test out proposed network technologies in the field to evaluate performance of its networks under “real world” conditions.

Experiment

This experiment will include transceiver devices on selected water and gas meters communicating to centralized routers that are connected to the cellular network. The objective is further verification on Itron network performance in the field to improve a utility’s metering operation.

Public Interest

Itron herein seeks an experimental radio authorization to support Itron’s testing, development, and demonstration of an AMR network. Itron’s AMR systems apply a high-technology communications methodology to solve persistent problems of utility energy consumption for example emergency shutoffs, leak detection, etc.

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 and control systems in the 915 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 and routers;
- test an alternative modulation;

Determining the degree to which utilities in various situations find Itron’s data collection and meter control solutions useful in solving problems associated utility operations including disaster response, will aid Itron in tailoring the system before the final product design and commercial rollout.