

Exhibit 1

ITRON, Inc. ("ITRON") herein requests modification of its license for an Experimental Radio station (Call Sign KA2XMJH, File No. 3280-EX-ML-92) to support its use of second-generation technology, as explained below.

ITRON manufactures and markets radio-based, off-site meter reading ("OMR") systems. ITRON's Data Cap PN device is carried or driven by utility meter readers, walking meter reading routes on streets adjacent to buildings equipped with ITRON's meter modules. The meter modules are certified under Part 15, and operate in the 902-928 MHz band. ITRON's existing experimental license enables it to test and demonstrate its OMR product.

ITRON is developing a second-generation OMR system, which operates in a fixed grid configuration. In this system, a central control unit ("CCU") device (similar to the Data Cap PN device) is mounted on a utility pole. Each CCU device collects information from the meter modules it controls, and relays that information to a central network control node.

In order to test and demonstrate this second-generation technology, ITRON is requesting that its experimental authorization be modified in the following respects:¹

- ITRON needs to add authority to operate fixed facilities within its network. ITRON already has authority to operate mobile facilities within the continental United States, but ITRON also needs authority to operate fixed stations within the continental United States, because its second-generation equipment functions within a network of fixed facilities. A schematic diagram of ITRON's fixed network is included as Attachment A to this Exhibit.
- ITRON's present license specifies a carrier at 952 MHz, operating with an authorized power not to exceed 3400 microvolts/meter measured at 3 meters. ITRON requests authority herein to increase the authorized power to 1 watt (ERP).

¹ Itron has been granted special temporary authority to conduct operations that are similar to what is proposed in this modification application. See FCC File No. 3280-EX-ML-92.

- To support expanded operations, ITRON needs to add eight carriers to its authorization:

<u>Frequency</u>	<u>Authorized Power</u>	<u>Emission</u>
928 MHz	20 watts	12K5F2D
952 MHz	20 watts	12K5F2D
952 MHz	1 watt	1K21A2D
952 MHz	1 watt	2K00A2D
956 MHz	1 watt	1K21A2D
956 MHz	1 watt	2K00A2D
959 MHz	1 watt	2K00A2D
959 MHz	1 watt	1K21A2D

ITRON needs the wider bandwidth at 928 MHz because 928 MHz will be used to transmit to the network control node information that a CCU has collected from multiple meter modules. Similarly, ITRON needs the wider bandwidth at 952 MHz because the network control node will use 952 MHz to interrogate the numerous CCUs it controls (there are only 1-3 network control nodes in an entire system). By way of contrast, the operation covered by the already-authorized 100HA2D emission designator is used simply to interrogate meter modules one by one.

ITRON needs the additional channels at 959 MHz to provide it flexibility in system design when testing use of its equipment in spectrum-congested metropolitan areas.

Exhibit 2

ITRON herein seeks modification of its Experimental Radio authorization to support ITRON's testing and demonstration of new, second-generation off-site meter reading technology.

Expanding ITRON's authority to include its new technology in its technical evaluation, field testing, and demonstrations 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 system applies 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 second-generation 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.