

P.S.C.U. Docket No. 19-057-03
DPU Data Request No. 1.13
Requested by Division of Public Utilities
Date of DEU Response 3/6/2019

DPU 1.13: Page III-6 of Exhibit 1.2 states that “the Itron transponders are expected to have an average service life of approximately 15 to 20 years.” Please provide the documentation from the manufacturers that supports this average service life of approximately 15 to 20 years.

Answer:

The 100G DL, 100G DLN, and 100G DLS ERT modules use Li-SOCI2 technology for their power source/battery. These modules will operate for 20 years on a single ‘A’ cell (3.65Ah), while the 100G ERT module required two cells for a 20-year battery life. Many efficiency gains were made to accomplish this, most notably changing the RFIC. The technology inherent to the 100G DLN and 100G DLS ERT modules bring with them added messaging for fixed network support. When these messages are used, the endpoint will maintain a 20-year battery life.

There are configurations involving higher output power for additional range that would reduce the expected life of the battery but provide additional benefits of consistent reading and this may be used in some circumstances. It reduces battery life expectancy to 13 years.

The contents of this document from the manufacturer are proprietary and highly confidential. They can be viewed at the Company’s offices. Please refer to DPU 1.13 Attachment 1.

Prepared by: Jason Holmes, Manager Gas Operations, Dominion Energy Utah



100G Single-Battery ERT[®] Modules: Achieving a 20-Year Battery Life

Fixed Network AMI Solutions

Satish D. Bhakto, Ph.D
Hardware Engineering Advisor

Jonathan Mueller
Itron R&D Engineering Manager

NOTICE OF PROPRIETARY INFORMATION

Information contained herein is proprietary and is property of **ITRON, Inc.** where furnished with a proposal, the recipient shall use it solely to evaluate the proposal. Where furnished to a customer it shall be used solely for the purposes of inspection, installation, or maintenance. Where furnished to a supplier, it shall be used solely in the performance of work contracted for this company. The information shall not be used or disclosed by the recipient for any other purpose whatsoever.

P.S.C.U. Docket No. 19-057-03
DPU Data Request No. 5.03
Requested by Division of Public Utilities
Date of DEU Response May 8, 2019

DPU 5.03: The response to DPU Data Request No. 1.13 it states: “There are configurations involving higher output power for additional range that would reduce the expected life of the battery but provide additional benefits of consistent reading and this may be used in some circumstances. It reduces battery life expectancy to 13 years.”

- a) Will all of the Itron transponders need to be configured for additional range? If yes, please explain what all of the Itron transponders need to be configured for additional range in the service territory.
- b) What percent of the Itron transponders will be configured for additional range?

Answer:

- a) No, not all of the transponders need to be configured for additional range. Just difficult to access meters will need additional range.
- b) Less than 1% will need to be configured for additional range.

Prepared by: Jason Holmes, Manager Gas Operations, Dominion Energy