

d) The "New 3PH AMI Meters (601)" section shows that Licking Valley proposes to purchase 22 new meters at a total cost of \$14,092, for an average cost of approximately \$640 per meter. State the type of meters Licking Valley is proposing to purchase.

Response:

New three-phase meters are a Landis & Gyr AXS4 type polyphase meter.

e) The "Retrofit 3PH AMI Meters (601)" section shows that Licking Valley proposes to purchase 10 new meters at a total cost of \$8,468, for an average cost of approximately \$847 per meter retrofit. State the type of meters Licking Valley will purchase and explain why Licking Valley is proposing to retrofit rather than replace the meters, given that the cost to replace the meters appears to be less than the cost to retrofit.

Response:

In a similar fashion to the single-phase meters, as explained in 7b, a TS2 communications module will be added to any functioning, existing polyphase-phase meter that requires information provided by TS2. Licking Valley chooses to retrofit because they do not want to prematurely dispose of functional meters.

Question:

In Section IV-C of the Application, page 1, RUS Code 601, Licking Valley states that it will be converting its AMI metering system from Turtle 1 AMR System ("TS1") to the Turtle 2 System ("TS2").

a) State the total number of meters on Licking Valley's system identified by type, i.e., mechanical or digital. State the number of Licking Valley's digital meters that are TS1 and the number that are TS2.

Response:

LVRECC has 20,400 meters installed in the field and inventory. 15,000 of these are electro-mechanical and the remaining are digital. There are 2,000 meters that are presently TS2 capable; the remaining meters are TS1.

b) What AMR/AMI systems, other than the TS2, were considered? Provide the reason they were rejected and their estimated costs.

Response:

No other AMI systems were considered. Two-way communications to meters became a requirement to provide Demand-Side Management functionality to members requesting that service. Therefore LVRECC needed a system where meters could be changed out on an as-needed basis to provide that functionality. Since the TS1 system was already in place, converting to TS2 would allow LVRECC to replace meters only as-needed. A conversion to any other AMI system would require a full-scale replacement of all meters which would have been more costly.

c) Provide Licking Valley's feasibility study related to the upgrade to a TS2.

Response:

A formal feasibility study was not conducted. The offering of Demand-Side Management dictated that two-way communication was required. Since the Hunt Technology TS2 system provided that functionality, and could still use the existing TS1 meters for members not requiring DSM; the conversion to TS2 was justified as the least-cost, most simplistic option.

d) Provide the reason Licking Valley decided to install the TS2. Include in your response the functions provided by the TS2 that are not provided by the TS1 and why those additional functions are needed for Licking Valley's system.

Response:

See b and c above for the reason for implementation of the TS2 system. The TS2 system will allow for two-way communication to meters on the LVRECC system to allow for Demand-Side Management opportunities. Additional benefits of the TS2 meters include outage restoration validation, voltage readings and load profiles. The two-way communication is needed for Demand-Side Management, which is the primary requirement for the TS2 meter. The added benefits of voltage readings, load profile, and outage restoration validation aren't requirements for LVRECC, but will be beneficial for system planning and outage restoration.