




## SALT RIVER ELECTRIC

A Touchstone Energy Cooperative 

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JAN 28 2020

PUBLIC SERVICE  
COMMISSION

January 21, 2020

Ms. Gwen R. Pinson  
Executive Director  
KY Public Service Commission  
PO Box 615  
Frankfort KY 40602-0615

Re: Case No. 2019-00399

Dear Ms. Pinson:

Enclosed are the original and ten (10) copies of Salt River Electric's response to Commission Staff's Second Request for Information for In the Matter of Application of Salt River Electric Corporation for an Order Issuing a Certificate of Public Convenience and Necessity to Construct an Advanced Metering Infrastructure System (AMI) by Order dated January 10, 2020. Also included are attachments for confidential treatment of certain information contained in entirety as the Appendix. Accordingly, 10 copies of the application with the confidential information redacted are included, and one copy in a separate envelope marked "confidential" with the confidential information highlighted in yellow and/or marked confidential is also included.

If you have any questions, please contact this office.

Sincerely,



Tim Sharp  
President and CEO

Enclosure

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JAN 28 2020

PUBLIC SERVICE  
COMMISSION


COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF SALT RIVER ELECTRIC  
COOPERATIVE CORPORATION FOR AN  
ORDER ISSUING A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY TO  
CONSTRUCT AN ADVANCED METERING  
INFRASTRUCTURE SYSTEM (AMI) PURSUANT  
TO 807 KAR 5:001 AND KRS 278.020

CASE NO.  
2019-00399

SALT RIVER ELECTRIC COOPERATIVE CORPORATION RESPONSE TO SECOND  
REQUEST FOR INFORMATION TO THE PUBLIC SERVICE COMMISSION

 Salt River Electric Cooperative Corporation  
111 West Brashear Avenue  
Bardstown KY 40004  
Tel. (502) 348-3931

1. Refer to the application, Exhibit 2, which states that the 48-month installation was chosen because it balances cash and work flow.

a. State whether Salt River performed a quantitative cost-benefit analysis to support the four-year installation period and, if performed, provide a copy.

**Response:**

Salt River Electric did not perform a quantitative cost-benefit analysis to support the four-year installation period.

*(Response prepared by Tim Sharp)*

b. If a cost-benefit analysis for the proposed four-year installation period was not performed, explain in specific detail why installing the proposed advance metering infrastructure (AMI) system over a four-year period is cost-effective and prudent.

**Response:**

Replacement of the current system is being undertaken because of continuing part failures in the existing system and the discontinuation of replacement parts and software support for this system going forward.

Although the current system is operating, we are experiencing approximately 125 meter failures per month. This trend is expected to accelerate as these devices age. We believe that along with replacing these failed meters, we can also change around 50 additional meters per day with our current employees. To undertake the installation of more meters would require addition of employees or

contractors and add significant cost. Using these numbers as a guide, it is then estimated that we will replace approximately 1125 meters/ month or 13, 500 per/year. Our current customer count is just under 53,000, hence the conclusion of a 4 year time frame for replacement without using outside resources and incurring undo costs.

*(Response prepared by Tim Sharp)*

c. Provide a net cost-benefit analysis of installing the AMI system over a two-year period and a three-year period, rather than a four-year period.

**Response:**

Using the methodology describe in b. above, to accomplish a 2 year replacement, we would need to contract out the replacements of approximately 26,000 meters. The current estimate for replacing meters is \$12-16 per location resulting in an additional cost of \$312,000-\$416,000 for the project. Using the same method for a 3 year replacement results in an additional cost of \$150,000-\$200,000.

Most of the quantifiable benefits for making the system change are savings resulting from not having to manage or replace meters that are not communicating or have failed. These known meters will be addressed with the initial rollout in year one and subsequently any that are found after that will be handled accordingly. Therefore, meters that are left in years 3 and 4 are expected to be meters that are not causing as many difficulties in maintaining.



Other less tangible benefits were not addressed directly since these were not the motivation for the replacement project. We do believe that having a newer more robust system will allow for more flexibility in our operations. Although real, those types of soft benefits have not been quantified as part of this process.

*(Response prepared by Tim Sharp)*

2. Refer to the application, Exhibit 4, which contains a brief narrative summary of expected benefits of the proposed AMI system.

a. State whether Salt River performed a quantitative cost-benefit analysis for the proposed AMI system and, if one was performed, provide a copy.

**Response:**

No

*(Response prepared by Tim Sharp)*

b. If a cost-benefit analysis for the proposed AMI system was not performed, explain why not and describe in specific detail the basis upon which Salt River made its decision to award the project to Aclara.

**Response:**

Salt River Electric has accepted that the current system is being phased out and replacement parts are not readily available. In moving forward, it seems impractical to go back to a system that is not automated and as stated in other responses would result in an additional estimated \$750,000/year in personnel costs alone. The yearly personnel cost along with additional meter costs make this option seem a poor choice.

Salt River Electric then embarked on a proposal process that solicited the 5 major systems/vendors in the cooperative market that provide AMI systems. These systems were evaluated by our staff on the basis of performance and how we best felt that it would operate within our current operational model. A determination was made without cost as a factor as to which system we believed was the best fit for Salt River Electric. Aclara was determined to be the best system for our

needs.

At this point in the process, the systems were compared and price was taken into account. With Aclara being the lowest price and also the best fit for our system needs, there was no reason to continue the analysis of each individual system for cost benefit.

*(Response prepared by Tim Sharp)*

3. Refer to Salt River's response to Commission Staff's First Request for Information (Staff's First Request), Item 1, which states that Landis & Gyr will end support of TS2 software system at the end of 2022. Explain how Salt River will address TS2 software issues after 2022 given that the installation of the proposed AMI system will not be completed before Landis & Gyr ends its support for TS2 software.

**Response:**

Salt River will not receive any software updates following the 2022 date. The software will still operate with the same functionality as it did prior to that date.

*(Response prepared by Melissa Hite)*

4. Refer to Salt River's response to Staff's First Request, Item 2, which provided a blank copy of the AMI system questionnaire provided to vendors who bid on the proposed AMI project. Provide a copy of the AMI system questionnaires that were completed by each vendor and then submitted to Salt River for the proposed AMI project.

**Response:**

Responses are attached in the appendix. These responses are proprietary and confidential as agreed to by both parties when submitted. Responses were only requested from the top three.

*(Response prepared by Melissa Hite)*

5. Refer to Salt River's response to Staff's First Request, Item 4, which states that Salt River made telephone calls and site visits to existing customers of each of the five meter vendors whose systems were under consideration by Salt River for the proposed AMI system. Identify the utilities that Salt River spoke to regarding each of the five vendors, and indicate whether any utility was a reference for the vendor or whether Salt River independently identified the utility as an existing customer of the vendor.

**Response:**

Salt River had discussions with South Kentucky RECC, Fleming Mason, Bluegrass Energy, Cumberland Valley, and Pentex Energy. These were a combination of vendor suggested contacts and Salt River identified contacts.

*(Response prepared by Melissa Hite)*

6. Refer to Salt River's response to Staff's First Request, Item 5.b., which states that Salt River will determine when to use RUS loan funds based on cash flows implementing its equity management policy. Explain in specific detail what the equity management policy is and what the thresholds are for determining when to use RUS loan funds.

**Response:**

Salt River Electric's equity management plan is the financial management of the Cooperative to provide for adequate working capital and reserve funds approved by the board of directors. The plan states that all additions to the distribution plant shall be financed with loan funds and that these funds will be drawn to maintain adequate working capital. The Cooperative must maintain sufficient working capital and reserve funds to meet its operating cost, taxes, debt service payments, routine construction and replacement costs and contingencies. In addition, the Cooperative must maintain a 1.25 TIER and 1.10 OTIER per RUS loan compliance guidelines.

*(Response prepared by Mechonda O'Brien)*

7. Refer to Salt River's response to Staff's First Request, Item 7, which discusses Salt River's plan to recondition and deploy TS2 meters until the proposed Aclara AMI system four-year installation is completed.

a. Explain the order in which Salt River will replace TS2 meters with the proposed Aclara AMI meters. For example, whether replacement will be by circuit or oldest meters first.

**Response:**

Once deployed, Aclara's point to multi-point communication infrastructure will allow for any meter to be replaced on Salt River's distribution system. At this point, it will not be necessary to systematically complete entire circuits and/or substations.

Salt River will prioritize replacements of failed meters, meters on substations with failed substation metering equipment and pre-pay meters. Salt River will also replace meters whenever they are onsite for other business needs such as system upgrades, new business or maintenance.

Salt River will then complete a few smaller substations, such as Beams, Woosley and Knob Creek. This will free up substation metering equipment for use at other locations when failures on other substations occur.

Once the above objectives are achieved, Salt River will begin its systematic approach by continuously targeting two substations at each operations center (Nelson and Bullitt).

Adjustments in the following schedule are expected to maximize efficiency and to address legacy equipment failures as they occur.

### **Bullitt County Warehouse Initial Prioritization**

<b>Priority</b>	<b>Substation #1</b>	<b>Substation #2</b>
1	PLEASANT GROVE-1(14)	DARWIN THOMAS(23)
2	W MT WASHINGTON(20)	SHEPHERDSVILLE-2(152)
3	MT WASHINGTON 122(122)	TAYLORSVILLE(17)
4	MT. WASHINGTON 12(12)	JOE TICHENOR(22)
5	BROOKS(06)	BLUE LICK(05)
6	CEDAR GROVE(11)	GOSPELHILL(08)
7	BEULAHBEAM(21)	LITTLE MOUNT(27)
8	PLEASANT GROVE-2(142)	SHEPHERDSVILLE-1(15)
9	CEDAR GROVE INDUSTRIAL P	LEBANON JCT(25)
10	CEDAR GROVE INDUSTRIAL PA	

### **Nelson County Warehouse Initial Prioritization**

<b>Priority</b>	<b>Substation #1</b>	<b>Substation #2</b>
1	BARDSTOWN SHOPPING(02)	BALLTOWN(01)
2	EAST BARDSTOWN(07)	BLOOMFIELD(04)
3	BLUEGRASS PARKWAY-1(28)	NORTH SPRINGFIELD(13)
4	WEST BARDSTOWN(18)	DEATSVILLE(30)
5	SOUTH BARDSTOWN (31)	SOUTH SPRINGFIELD(16)
6	BLUEGRASS PARKWAY-2(282)	FREDRICKSBURG(26)
7	OWENS-ILLINOIS(10)	

*(Response prepared by Chase Mills)*

b. Describe Salt River's contingency plan for the anticipated four-year installation schedule if fewer TS2 meters than planned are able to be reconditioned and returned to service prior to replacement by the proposed Aclara AMI meters.

**Response:**

Following Aclara's deployment of their communication infrastructure any TS2 meter can be replaced with a new meter, this will be our preferred method. It is unlikely that reconditioned TS2 meters will be required once the communications infrastructure is fully deployed within the first year of this project.

*(Response prepared by Chase Mills)*

c. Explain how the estimated total cost to recondition and deploy TS2 meters during the proposed Aclara AMI installation period compares to replacing the pulled meter with an AMI meter.

**Response:**

Replacing the meter with an Aclara RF meter will be cheaper, but may not be possible at some customer locations during the deployment stage of the Aclara's communications network. Once the full deployment of Aclara's communications network is complete, all failed meters will be replaced with an Aclara meter and reconditioning and redeployment of TS2 meters will stop.

*(Response prepared by Chase Mills)*

8. Refer to Salt River's response to the Attorney General's First Request for Information, Item 27.b., which asked for a per-meter breakdown of the benefit amount to each ratepayer. Also refer to Salt River's response to the Attorney General's First Request, Item 12.b., which discussed an estimated cost savings of \$750,000 per year.

a. State whether the estimated savings of \$750,000 per year is the expected benefit from installing the proposed Aclara AMI system or was the estimated benefit from changing from electro-mechanical meters to the current TS2 system.

**Response:**

The \$750,000 per year is the benefit from the original conversion to the current system.

*(Response prepared by Tim Sharp)*

b. If the estimated savings is derived from the proposed Aclara AMI system, provide a schedule with a breakdown of the cost savings.

**Response:**

See a. above.

*(Response prepared by Tim Sharp)*

c. Salt River did not provide a per meter breakdown of the benefits. Provide the estimated per-meter amount of quantifiable benefits by ratepayer class.

**Response:**

Since the original \$750,000 savings referenced was in personnel costs to read the meters, the amount saved was directly related to each meter read. Hence all of the meters had the same per meter per year savings of approximately \$14.50 per meter per year regardless of rate class.

Residential savings per year	\$715,270.05
Commercial savings per year	\$ 32,248.00
Industrial savings per year	\$ 3,233.50

*(Response prepared by Tim Sharp)*



9. Confirm that the operating software for the Aclara AMI system is an off-the-shelf product and is not operating software developed solely for Salt River.

**Response:**

Aclara's software is an off-the-shelf product.

*(Response prepared by Melissa Hite)*

10. Describe in detail any difficulties that Salt River has experienced in obtaining replacement equipment for the TS2 system and provide cost impact from those difficulties.

**Response:**

We have seen lead times increase from the next day to 4+ weeks. Depending on the item needed, this is a major impact to our members; especially prepay members whom are relying on daily reads

*(Response prepared by Melissa Hite)*

11. Provide all documents provided by Aclara that support a determination that the proposed AMI meters will have a 15-year useful life.

**Response:**

See Aclara's response in the RFP Other Question section question number 3.

*(Response prepared by Melissa Hite)*

**APPENDIX**

**CONFIDENTIAL TREATMENT**

**AS AGREED UPON BY SALT RIVER ELECTRIC AND VENDORS**

**Aclara Technologies LLC**

**APPENDIX**

**CONFIDENTIAL TREATMENT**

**AS AGREED UPON BY SALT RIVER ELECTRIC AND VENDORS**

**Tantalus Systems Inc**

**APPENDIX**

**CONFIDENTIAL TREATMENT**

**AS AGREED UPON BY SALT RIVER ELECTRIC AND VENDORS**

**Landis + Gyr**