



## SALT RIVER ELECTRIC

A Touchstone Energy Cooperative 

111 West Brashear Avenue • Bardstown, Kentucky 40004  
(502) 348-3931 • (502) 955-9732 • Fax (502) 348-1993

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DEC 16 2019

PUBLIC SERVICE  
COMMISSION

December 12, 2019

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

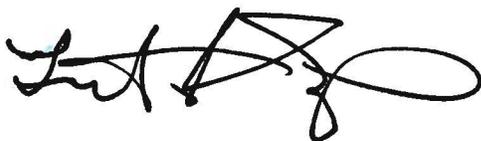
Re: Case No. 2019-00399

Dear Ms. Pinson:

Enclosed is the original and six (6) copies of Salt River Electric's responses to Commission Staff's First 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 November 26, 2019.

If you have any questions, please contact this office.

Sincerely,



Tim Sharp  
President and CEO

Enclosure

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DEC 16 2019

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  
CONVEINENCE AND NECESSITY

CASE NO.  
2019-00399

SALT RIVER ELECTRIC COOPERATIVE CORPORATION  
RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

BY ORDER DATED NOVEMBER 26, 2019



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

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DEC 16 2019

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 CONVEINENCE )  
AND NECESSITY )

CASE NO. 2019-00399

**CERTIFICATE OF PREPARATION**

**STATE OF KENTUCKY  
COUNTY OF NELSON**

**Timothy J. Sharp**, being duly sworn, states that he supervised the preparation of responses to Kentucky Public Service Commission Staff's **First Request** for Information dated November 26, 2019 in the above-named case, and that the matters and items set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

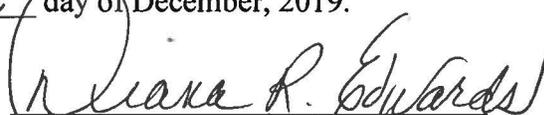
SALT RIVER ELECTRIC COOPERATIVE CORP.



\_\_\_\_\_  
Timothy J. Sharp PE  
President and Chief Operating Officer

**STATE OF KENTUCKY  
COUNTY OF NELSON**

Subscribed and sworn before me on this 12<sup>th</sup> day of December, 2019.



\_\_\_\_\_  
Notary Public, KY State at Large  
My commission expires: July 05, 2023  
I.D. No. 626327



COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF SALT RIVER )  
ELECTRIC COOPERATIVE )  
CORPORATION FOR AN ORDER ) Case No. 2019-00399  
ISSUING A CERTIFICATE OF PUBLIC )  
CONVEINENCE AND NECESSITY )

THE RESPONSE OF SALT RIVER ELECTRIC COOPERATIVE CORPORATION  
TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

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

## **INDEX**

**Attachment 1      TS2 End of Sales, FAQ'S**

**Attachment 2      Salt Rive Electric AMI System Questions**

1. Refer to the application, Exhibit 2, page 1. Salt River Electric states that Landis & Gyr's support for the Power Line Carrier (PLC) AMR/AMI system would end in 2020. Salt River Electric also states that replacement parts are sparsely available

- a. Provide copies of communications from Landis & Gyr to Salt River Electric indicating that it will cease supporting its TS2 meters after 2020 and that spare parts will no longer be available.

**Response:**

Please see Attachment 1- statement from Landis Gyr stating that meters are no longer available for purchase. This supports discussions with Landis Gyr on various occasions over the last 18 months. In addition, lead time on other parts have significantly increased from a day to several weeks. Salt River has been fortunate to procure some used parts and meters from other coops whom have already started or completed the conversion. As stated in the attachment, support for the software portion of the system is expected to continue until the end of 2022.

*(Response prepared by Melissa Hite)*

- b. Explain in specific detail how Salt River Electric became informed that support of the PLC system would end.

**Response:**

(Please refer to 1a)

*(Response prepared by Melissa Hite)*

- c. Explain in specific detail how Salt River Electric will continue to use its current meters for four years after support ends and replacement parts are sparsely available.

**Response:**

As part of the proposed AMI deployment, returned legacy metering equipment which can be repurposed and will be salvaged, reconditioned, and redeployed as needed to replace failed equipment.

*(Response prepared by Chase Mills)*

2. Provide a copy of the solicitation sent to prospective vendors.

**Response:**

(Please see Attachment 2)

*(Response prepared by Melissa Hite)*

3. Provide the number of T52 meters Salt River Electric has remaining in stock.

**Response:**

1073

*(Response prepared by Timothy J. Sharp)*

4. Provide the analysis that Salt River Electric performed, including the bid evaluation sheets, surveys of other utilities, and a copy of the material supplied to Salt River Electric's Board of Directors, supporting the selection of Aclara Technologies, LLC to be the vendor for the AMI System..

**Response:**

Multiple vendors were solicited for proposals to provide replacement systems over the past 18 months. Each of these vendors were given an opportunity to make a presentation of their proposal to a committee consisting of Engineering, Operations, Finance, and Information Technology personnel. The same committee followed up with phone calls and site visits to existing customers to gain a better understanding of the day to day realities of each system. Upon completion of the process, the same committee evaluated the proposals and came to the decision that Aclara was the best choice to meet our desired needs in the most economical fashion. Please see Appendix B in the original Application for Certificate of Public Convenience and Necessity to Construct an AMI.

The Board of Directors was made aware of the need for a new system via discussions surrounding the Construction Work Plan at the February 8, 2019 Board meeting, see Appendix D of the original Application for Certificate of Public Convenience and Necessity to Construct an AMI. The Board was updated as to the selection and filing of the CPCN at the November 7, 2019 Board meeting.

*(Response prepared by Timothy J. Sharp)*

5. Refer to the application, paragraph 6, which states that Salt River Electric will pay for the proposed project using internally generated funds and a short-term line of credit until new RUS loan funds are needed to pay for construction.
- a. Provide a detailed breakdown showing the amount of internally generated funds and the short-term line of credit that will be used prior to drawing on RUS loan funds that will be used to pay the cost of the proposed project.

**Response:**

Salt River's breakdown of internally generated funds that will be used prior to drawing RUS loan funds to pay for the proposed project consist of the following:

Lincoln National Bank	\$	342
People Mt. Washington	\$	197,513
BB& T Springfield	\$	243,891
BB&T	\$	378,544
Peoples Bank		
Taylorsville	\$	556,353
Town & Country	\$	647,456
Wilson & Muir	\$	669,724
First Harrison	\$	687,273
NRUCFC	\$	20,000,000
<u>Available Cash</u>	<u>\$</u>	<u>23,381,097</u>

In addition Salt River has lines of credit available to utilize if necessary from CoBank (\$1m) and CFC (\$4m).

*(Response prepared by Timothy J Sharp)*

- b. Explain how Salt River Electric will determine when the RUS loan funds will be needed to pay the cost of the proposed project.

**Response:**

Salt River will determine when RUS loan funds are necessary based on cash flows implementing the equity management policy approved by the Board of Directors.

*(Response prepared by Timothy J. Sharp)*

- c. Explain whether Salt River Electric will need to file for permission to take on the additional financing from RUS and, if so, when such a filing will be made.

**Response:**

Salt River would not need to file for permission to take on the additional financing from RUS since the work plan loan funds have been approved by RUS as of June 20, 2019.

*(Response prepared by Timothy J. Sharp)*

6. Refer to the application, Appendix A, which contains the estimated cost of the proposed project and the 2019-2022 Construction Work Plan filed with the Commission. Salt River Electric estimated in the Construction Work Plan that the meter replacement project would cost almost twice as much.

- a. Reconcile the difference between the two figures.

**Response:**

Labor cost associated with the replacement of electric meters was included in the Construction Work Plan but excluded from the CPCN estimates. The four year deployment schedule allows Salt River to leverage existing company resources to replace electric meters in conjunction with completing normal business operations. This strategy avoids the incremental labor cost of the proposed replacement program

*(Response prepared by Chase Mills)*

- b. Given that the RUS has approved the projects and estimated project costs in Salt River Electric's 2019-2022 Construction Work Plan, and that the

Construction Work Plan meter cost estimate is higher than the Aclara bid, explain whether Salt River Electric is allowed to use the unused differences between the Construction Work Plan estimate and Aclara's final installed cost for other projects. If so, explain whether there are any limitations on excess funds.

**Response:**

The 2019-2022 Construction Work Plan included many projects estimated to be \$47 million over that period. Salt River only elected to finance \$30 million, approximately 64%, of this work plan through RUS. These funds are not designated for specific projects but can be applied to any project listed in the approved work plan, thereby providing some flexibility when actual costs differ from estimates.

*(Response prepared by Timothy J Sharp)*

7. Explain in detail Salt River Electric's plans for the existing TS2 meters that will be replaced, including testing for accuracy in accordance with 807 KAR 5:041, Section 15(3),

**Response:**

Meters removed from service will be tested for accuracy in accordance with KPSC requirements at the meter lab at Salt River's Nelson county warehouse. Depending on the condition of the removed meter, it will either be retired or reconditioned. Reconditioning will include cleaning, adjusting reading accuracy as close as possible to 0% error, and updating firmware. These reconditioned meters will be redeployed as needed until the AMI program is completed

*(Response prepared by Chase Mills)*

8. Explain whether the TS2 meters have been fully depreciated, and, if not, provide the amount of accumulated depreciation on the TS2 meters and explain how Salt River Electric intends to recover the undepreciated costs of the TS2 meters.

**Response:**

The TS2 meters are not fully depreciated. The net balance including labor and materials of the metering system is \$5,762,622. Salt River would like to recover the undepreciated cost of the TS2 meters by escalating the depreciation of the meters to the commission approved 15 year rate instead of the 25 year rate currently being implemented during the transition to the new system. Upon completion of the project,

Salt River would propose to expense the remaining book value in a single year to accurately account for the system book value.

*(Response prepared by Timothy J Sharp)*

9. Provide support for the useful life of the proposed AMI meters and components.

**Response:**

Aclara answered Question 3 on the other question section of the RFP as follows: “The design life cycle of Aclara meters and RF network equipment is greater than 15 years”. Salt River expects a minimum 15 year useful life.

*(Response prepared by Melissa Hite)*

10. Provide a detailed timeline for deployment of the meters if the Commission approves the Certificate of Public Convenience and Necessity.

**Response:**

Following CPCN approval, Salt River will immediately agree to a contract with Aclara so they can begin working on the RF network. The RF network will require several months to complete which includes specific site visits, settings poles and installing antennas. This network will be the priority so that once it is complete, any meter which fails can be replaced with a new Aclara meter. Following completion of the RF network, Salt River will replace meters over the next several years using existing company resources. The project is budgeted between 2020 and 2023 and will be completed during these years.

*(Response prepared by Chase Mills)*

ATTACHMENT 1  
PAGE 1 OF 1

TS2 End of Sales, FAQ's	
<b>Q:</b>	<b>I heard that the TS2 system is going away.</b>
A:	That is partially correct. The sale of TS2 modules is going to end due to vendor notifications of component obsolescence. However, TS2 network equipment will continue to be available. The TS2 system will remain supported in Command Center through 2022 and the support is available through 2022.
<b>Q:</b>	<b>How long do I have to purchase TS2 products and what is available for sale?</b>
A:	The last-time buy will close on <b>October 31, 2019</b> , for the following equipment: <ul style="list-style-type: none"> <li>▪ TS2 FOCUS AL (Part numbers FASY-0694-0001/2, FASY-0624-0003/4, and Multi-Utility FASY-0749-0001/2)</li> <li>▪ TS2 FOCUS AX/AX-SD* (Part numbers 26-1238, 26-1239, 26-1240, 26-1241)</li> <li>▪ TS2 S4e* (Part number FASY-0636-0002)</li> <li>▪ TS2 kV2c (Part numbers FASY-0538-0002 and Multi-Utility FASY-0650-0002)</li> <li>▪ TS2 Load Control Switch (Part numbers FASY-0530-0008/10)</li> </ul> <p>You must take delivery of this product by <b>March 31, 2020</b>.</p> <p><i>*Note the S4e meter has been discontinued and meter stock has been depleted. Landis+Gyr is actively developing a TS2 module for the new S4x meter and is also investigating qualifying the TS2 AX module for the FOCUS AX Polyphase.</i></p>
<b>Q:</b>	<b>What are my options for an upgrade?</b>
A:	You may want to consider Gridstream RF and/or PLX going forward as the added features and benefits are significant. Your TS2 can remain in place while you transition, and your technical team would be happy to sit down and review options.
<b>Q:</b>	<b>I want to continue to use my TS2 network. Can I get replacements?</b>
A:	The PLC 3000 Collectors and Transformer Coupling Units will remain available as they are compatible with TS2 and/or PLX.
<b>Q:</b>	<b>I have load control with TS2, what are my options?</b>
A:	Your TS2 load control may stay in place while you consider upgrades to your network and a transition to Gridstream RF or PLX.
<b>Q:</b>	<b>I've got a lot of investment in meters. Are they junk if I upgrade?</b>
A:	Landis+Gyr has introduced new FOCUS AXe/AXe-SD and S4x meters with much more capabilities available with Gridstream RF and PLX deployments, so consider the cost of a retrofit versus the benefit of new metering.
<b>Q:</b>	<b>I have all my substations upgraded to TS2. Do I keep adding or replacing TS2 meters? What are my options?</b>
A:	Option 1. Stay with TS2, but understand that its capabilities are limited and any endpoints you purchase under this last-time buy opportunity are an investment in 12-year-old technology. Option 2. Take advantage of your current investment and Landis+Gyr's reputation in the marketplace to consider a migration to their latest generation AMI systems and meters.
<b>Q:</b>	<b>I have begun the migration to Gridstream RF or PLX, but won't have my TS2 system replaced before October 31, 2019. What are my options?</b>
A:	Many utilities have added the new AMI network to certain areas or substations, and made all new meter purchases of the new technology. As they deploy new meters, their policy is to conduct a "remove from service" of the TS2 meters, and place them into stock for re-use elsewhere on their system. Re-use of the TS2 meters helps to manage costs.
<b>Q:</b>	<b>What version of Command Center supports all of the PLC and RF offerings.</b>
A:	Command Center 7.0 which is available now.

**Salt River Electric  
AMI System Questions**

Company Name	
Date Completed	
Submitted By	

**OPERATING ENVIRONMENT**

1	Is your software compatible with a virtualized environment such as ESXi VMWare?	
2	How many servers are required for a virtual environment install?	
3	What Operating System (OS) does your software run on?	
4	What language(s) is your software written in?	
5	Do you utilize any open source code in your software package?	
6	What type of database is used?	
7	What level of access do we have to our database?	

8	How much data can be compiled and stored on an annual basis, and maximum years.	
9	How much storage is recommended for your backup system?	
10	Do you have built in Application Program Interfaces (API's) to link to third party systems?	
11	What is the front-end user interface (wed based, client install, etc)?	
12	Do you integrate with SEDC?	
13	When and how often do you release updates?	
14	Is there a cost for software upgrades or new system releases?	
15	What type of backhaul communications are compatible with your system?	
16	What band width is utilized by your system? And is it proprietary?	
17	Can your system integrate with smart phones?	
18	Can your system integrate with smart home devices? If so, explain	
19	How is your system both in the office and in the field secured?	

**SYSTEM EQUIPMENT**

1	In terms of %, what is your coverage guarantee?	
2	What % of monthly, weekly, and daily data can be expected?	
3	Does your system have the ability to control cap banks, OCR's, and sectionalizers?	
4	Is there any specific requirements needed to control above equipment?	
5	What is the maximum number of meters or endpoints that any piece of field equipment can handle?	
6	Does your system push or pull data to SEDC?	
7	Mesh, point to point, or point to multi point?	
8	How many hops from meter to the office?	

**OUTAGE REPORTING**

1	In terms of %, what is your outage reporting guarantee?	
2	What are the typical minimum and maximum outage notification time intervals?	

3	How do you avoid reporting false outages?	
4	How do you report restores?	
5	In terms of %, what is your outage restoration report guarantee?	

**METER READING / METER SPECIFICATION**

1	What meter vendors are compatible with your software?	
2	Are there limitations to meter forms that can be used?	
3	Can meter firmware be updated remotely?	
4	What is the default automated meter reading frequency?	
5	What is the estimated time to complete a meter reading?	
6	How many days will the meter / module store daily read data?	
7	Is the system able to provide a meter load profile?	

8	Does the system allow for Time of Use (TOU) information?	
9	If yes to TOU, how many programmable periods are available?	
10	Does the system have safeguards for meter tampering?	
11	If meter tampering is recorded, is this time stamped?	
12	Will the system record "blinks"?	
13	Does your system detect power diversion/hot meter sockets?	
14	How is a "blink" determined in respect to time?	
15	Will the recorded blink be time stamped?	
16	How many blinks will be stored on front end interface?	
17	Will the meter / module record reverse energy flow?	
18	How does the meter/module record voltage?	
19	Can the meter be read ad hoc in real time?	

20	How does your system record/return demand data?	
21	Is the system capable of automatically exporting billing files?	
22	Can the system remotely reset demand meters?	
23	For TOU metering, can demand be recorded for each period?	
24	What percentage are you able to obtain on meter reads with your system?	

**DISCONNECT / RECONNECT**

1	Does your system provide for remote disconnect/connect?	
2	Can the remote reconnect happen with load side voltage?	
3	Does the member / consumer have the option to manually re-arm after remote disconnect?	
4	Does your system have the capability of service limiting?	

**OTHER SERVICES**

1	Can your system provide flexibility for external inputs for gas / water reading? If so , what is needed to do so?	
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2	If external inputs are available, are they viewed independently?	
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**LOAD MANAGEMENT**

1	Does your system have load management capabilities?	
2	Does your program provide verification that a control has occurred?	

**OTHER QUESTIONS**

1	What is the warranty period for each piece of equipment?	
2	What are the customer support center hours?	
3	What is the life cycle of all of the equipment?	
4	What is the failure rate for metering modules?	
5	Is there a system diagnostic test to verify equipment is communicating properly?	
6	Can you provide a list of end users with SEDC & Futura interfaces currently deployed, and for how long?	
7	Is there a limit to concurrent users on your system?	
8	Does your system have a load forecasting	

	application	
9	What are typical technical issues that may occur during the cutover process?	
10	What is the average annual historical cost increase of your software/hosting services/maintenance fees expressed as a percentage?	
11	How does your software/organization handle and comply with regulatory guidelines applicable to our cooperative?	
12	How long is your average support response time?	
13	Is there built -in surge protection on any of the equipment?	
14	How does your system perform Power/Service Quality monitoring and reporting?	