COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENERGY CORP. FOR AN)	
ORDER ISSUING A CERTIFICATE OF)	CASE NO.
CONVENIENCE AND NECESSITY TO INSTALL)	2014-00376
AN AUTOMATED METERING AND)	
INFRASTRUCTURE SYSTEM)	

ORDER

On October 27, 2014, Kenergy Corp. ("Kenergy") filed an application seeking a Certificate of Public Convenience and Necessity ("CPCN") to purchase and install an Advanced Metering Infrastructure System ("AMI") to begin in 2015 and continue through 2016. Kenergy further requests relief from annual periodic and statistical testing of meters as required under 807 KAR 5:041, Section 16, for the duration of the meter implementation and verification period, with testing to resume in January 2018.

On December 2, 2014, the Commission issued an Order establishing a procedural schedule for the processing of this matter. The procedural schedule provided for, among other things, a deadline to request intervention, two rounds of discovery on Kenergy's application, and an opportunity for the submission of intervenor testimony. There are no intervenors in this proceeding. Kenergy responded to two rounds of discovery requests put forth by Commission Staff. This matter now stands submitted for a decision based on the evidentiary record.

BACKGROUND

Kenergy asserts that, for the past nine years, it has been researching and assessing smart meters and various automated systems capable of, among other things, communicating usage data to customers. Kenergy proposes to purchase and install 56,000 single- and three-phase meters, as well as a meter-data management system ("MDMS") and associated communications equipment and software at a total estimated cost of \$9,719,314. The single- and poly-phase meters proposed in Kenergy's system overhaul will replace electro-mechanical meters currently in use. Kenergy has received loan approval from the U.S. Department of Agriculture's Rural Utilities Service ("RUS") to fund the proposed project.

In early 2014, Kenergy assembled an internal team to develop an AMI Request for Proposal ("RFP"). After reviewing cellular, power line, and radio frequency ("Rf") carrier technologies, the team concluded that Rf technology offered superior data delivery and greater flexibility for the future. The Kenergy team developed the RFP, and on June 26, 2014, Kenergy released it to seven Rf AMI vendors, ten Meter Installation/End of Life Testing vendors, and three MDMS vendors.

The RFP responses were received on August 7, 2014, and were evaluated on cost and ability to integrate with Kenergy's existing communicating system. For example, Kenergy looked for an Rf Internet Protocol-based AMI system that would bond with Kenergy's private microwave and fiber-optic field network infrastructure. According to Kenergy, such unification makes advanced metering, outage management, power-quality monitoring, and load control cost-effective and practical, and allows for future expansion and application enhancements. All meters will be able to collect and report

kilowatts ("kWs"), kilowatt hours, and voltage. The poly-phase meters will be able to collect and report power factor at peak kW and will accommodate varying voltages. One of the important benefits of the MDMS considered by Kenergy was that the new system will allow for the use of pre-paid metering and "Dynamic Pricing (TOU, Critical Peak, Peak Rebate, Real-time Pricing)."

Kenergy states that upon completion, the system will provide two-way communication that allows it to either automatically control or systematically monitor distribution voltage, capacitance, and switching within its system. Kenergy will use the AMI technology to remotely activate or deactivate meters at apartments and on seasonal accounts, and meters that have been disconnected then reconnected in the last 18 months. The AMI meters will display the on/off switch status directly on the meter display.

DISCUSSION

Kenergy is the only jurisdictional electric distribution cooperative in Kentucky that requires members to read, record, and report individual monthly electric usage. With the completion of its AMI system, Kenergy members will no longer collect and report this information.

Kenergy selected Landis+Gyr to commission and integrate Landis+Gyr's Gridstream Rf network into Kenergy's existing communication network. The Landis+Gyr system is capable of providing information via Rf transmission to the MDMS head-end system up to 12 times per hour.

¹ Application, Exhibit 1, p. 3 of 3; and *See* Response of Kenergy Corp. to Initial Request for Information of Commission Staff, Item 3.c.

Landis+Gyr will further perform system acceptance testing and provide ongoing technical support to Kenergy staff while the system is being installed. It will train Kenergy personnel on the installation and maintenance of network devices, radio and Rf field tools, and on the use of command center head-end software for utility operations and network administration. Further, Kenergy states that under the Master Purchase and Service Agreement, Landis+Gyr is contractually obligated to provide system support for at least 15 years after the deployment of the Gridstream Rf system.² Moreover, the software for all meters installed as part of this proposed AMI project can be upgraded remotely.³

Kenergy selected Luthan Electric Meter ("LEM") to evaluate and test all electromechanical meters that will be removed and replaced with an AMI meter for accuracy.

After testing, LEM proposes to store the removed meters for three months, pending
their disposal. The Commission finds that the storage period should be extended to six
months in order to accommodate possible customer billing complaints in which
examination of a removed electro-mechanical meter might be necessary. Any meters
which are stuck, dead, or show an average fast or slow error of 2 percent or greater will
be returned to Kenergy for further consideration.

National Information Solutions Cooperative ("NISC") was selected by Kenergy to support the integration of the MDMS with other appropriate Kenergy systems. NISC will assist in performing the system-acceptance testing and will train Kenergy personnel

² See Response of Kenergy Corp. to Initial Request for Information of Commission Staff, Item 4.

³ *Id*.

in the operation of the MDMS software. NISC will be available to provide technical support for the life of the system.

MyAccount, a software application used with the AMI system, allows customers access to their individual records and data. It will allow members access to hourly usage data, billing, trending information, payments, customer service, and messaging from Kenergy. Members will be able to compare usage data patterns graphically by time of day and to compare day-to-day and year-by-year information. The usage patterns can also be retrieved by customer representatives at Kenergy's offices when discussing a member's individual account.

Smart meters and the smart grid continue to present the utilities and the Commission with technical and economic complexities. For example, the manufacturer asserts a 20-year life for the new AMI system. Kenergy plans to depreciate the system over a 15-year period, at a 6.67 percent rate per annum. Further, Kenergy has not fully depreciated the electro-mechanical metering equipment in its current system. The estimated undepreciated balance, as of December 31, 2014, is \$3,304,363. Kenergy plans to request Commission and RUS approval for a regulatory asset, to be amortized over a ten-year period, for the undepreciated balance of metering equipment plus removal cost.

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that:

1. The AMI installations and equipment proposed by Kenergy as set forth in its application are necessary to provide adequate, reliable service to the existing and

forthcoming customers, and Kenergy's Application for a CPCN to install an AMI system is reasonable and should be approved.

- 2. The proposed system costs are reasonable.
- 3. The system improvements that are proposed will not duplicate existing facilities and are needed to provide reliable service.
- 4. A 15-year depreciation schedule as proposed by Kenergy is reasonable and should be approved.
- 5. Kenergy should not establish a regulatory asset for the undepreciated value of the existing meters in its system without prior Commission authorization.
- 6. Kenergy should store its removed meters with LEM for six months prior to disposal.
- 7. Kenergy should be relieved from its annual periodic and statistical testing of meters per 807 KAR 5:041, Section 16, for the duration of meter implementation and verification, resuming again in January 2018.

IT IS THEREFORE ORDERED that:

- 1. Kenergy is granted a CPCN to purchase and install an AMI system as outlined in its application, subject to the condition that Kenergy shall store the removed electro-mechanical meters with LEM for a period of six months.
- 2. Kenergy is authorized relief from annual periodic and statistical testing of meters per 807 KAR 5:041, Section 16, for the duration of implementation and verification, until January 2018.
- 3. Kenergy shall not establish a regulatory asset for the undepreciated value of the existing meters in its system without prior Commission authorization.

By the Commission

ENTERED

FEB 24 2015

KENTUCKY PUBLIC SERVICE COMMISSION

Executive Director

*J. Christopher Hopgood Dorsey, King, Gray, Norment & Hopgood 318 Second Street Henderson, KENTUCKY 42420

*Kenergy Corp. 6402 Old Corydon Road P. O. Box 18 Henderson, KY 42419