

**Commonwealth of Kentucky
Before the
Public Service Commission**

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**Case Number 2016-00220
Clark Energy's Response to
Commission Staff's Second Information
Request**

Clark Energy Cooperative, Inc.

Winchester, Kentucky

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF CLARK ENERGY)	
COOPERATIVE, INC. OF WINCHESTER,)	
KENTUCKY, FOR COMMISSION APPROVAL)	
FOR A CERTIFICATE OF PUBLIC)	CASE NO.
CONVENIENCE AND NECESSITY TO)	2016-00220
INSTALL AN ADVANCED METERING)	
INFRASTRUCTURE (AMI) SYSTEM)	
PURSUANT TO 807 KAR 5.001 AND)	
KRS 278.020)	

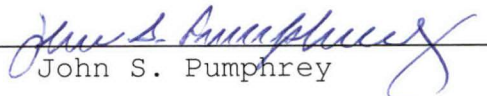
RESPONSE OF CLARK ENERGY COOPERATIVE, INC. TO
COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

Comes Clark Energy Cooperative, Inc. ("Clark Energy"), by counsel, and pursuant to Commission Staff's Second Request for Information dated September 15, 2016, files its response.

Todd Peyton, Manager of Engineering Services, is the witness responsible for Clark Energy's response.

Respectfully submitted,

GRANT, ROSE & PUMPHREY
51 South Main Street
Winchester, Kentucky 40391
Telephone: (859) 744-6828

By: 
John S. Pumphrey

ATTORNEYS FOR
CLARK ENERGY COOPERATIVE, INC.

VERIFICATION

I, Robert C. Brewer, as the person supervising the preparation of this response on behalf of Clark Energy Cooperative,

Clark Energy Cooperative, Inc.

**PSC Case No. 2016-00220
2nd Information Request**

Request #1

Responsible Party: Todd Peyton

1. Refer to Clark Energy's response to Item 5 (i) of Commission Staff's First Request for Information, and the Application, Exhibit 4, which gives a proposed summary of benefits, but without value assignments. Provide a copy of any cost/benefit analysis performed by Clark Energy, from 2001 until the present, during its transition from manually read electromechanical meters, through PLC TS1 and TS2 systems, up to the current proposed RF AMI system. If no cost/benefit analysis was performed, prepare and submit such an analysis. In the event that a cost or benefit is unquantifiable, a detailed discussion should be provided.

Response: Original cost/benefit information from 2001 is not available. The original AMR project (Landis&Gyr TS1) was implemented due to the high number of consumer complaints regarding manually read meters as well as the ability with the new technology to give consumers daily read information which was never before available due to the monthly only manual reads. By implementing AMR in the early 2000's Clark Energy has avoided the recurring cost of contractors' manually reading meters for 15 years at an estimated expense of nearly four million dollars (based on the expense incurred during the last year of manual reads and increased annually by 3%). The original transition from manual reads to daily electronic TS1 reads was the beginning of many of the benefits identified in the recently concluded PSC Case#2012-00428 "Smart Grid\Smart Meter Technologies" but that were not yet technologically available in the early 2000's.

Clark Energy Cooperative, Inc.

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Response Continued:

Clark Energy has utilized the Landis&Gyr TS1 system for many years. As consumer expectations increased, AMI technologies progressed, TS1 development stopped, TS1 end of life approached, and the availability of replacement parts became unreliable, Clark Energy proposed upgrading the existing Landis&Gyr TS1 system to Landis&Gyr TS2 as discussed in PSC approved Case#2011-00303. By upgrading the existing TS1 system to TS2 and staying with the Landis&Gyr product line, Clark Energy utilized existing TS1 infrastructure until new TS2 infrastructure could be installed, thereby preventing costly full-scale replacement and duplication of facilities, both hardware and software. This same philosophy is followed in the current case#2016-00220.

As discussed in Clark Energy's response to the PSC's first data request (Data Request Item 5) in this pending case, TS2 did not perform as marketed on Clark Energy's system. The TS2 issue, the rapid developments in RF technologies, stagnant development with PLC technologies, and the then pending PSC Case#2012-00428 dealing with Smart Metering all lead Clark Energy in the direction of RF. Furthermore Clark Energy believed the PSC's and consumers' expectations were moving beyond PLC capabilities. Therefore Clark Energy proposed the upgrade to Landis&Gyr's third generation AMR\AMI system that is the subject of this pending case. Benefits discussed in Exhibit 4 of the application for this case have very difficult purely monetarily quantifiable values but many of the benefits assist the consumer directly: Historical and near-real time usage information, possible new rate structures, pre-paid metering, etc. are benefits included in the order regarding PSC Case#2012-00428. Other benefits discussed in Exhibit 4 of the application such as utilizing existing infrastructure, automated outage reporting, distribution automation, and voltage data are very difficult to assign direct monetary values because these capabilities are integral to the RF

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Response Continued:

product and are not added expense. Cost-benefit analyses of other functionality such as remote connect\disconnect functionality and pre-paid metering have not been fully investigated but will be included in future tariff filings, should this CPCN be granted.

Clark Energy believes previous AMR\AMI expenditures were upgrades to existing facilities and functionality just as the proposed RF system in the current case. The requested upgrade to Landis&Gyr's RF system will allow Clark Energy to begin planning for and offering various items discussed in PSC case#2012-00248 while planning for the future and minimizing stranded cost, and obsolescence of equipment and technology.