

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CUMBERLAND VALLEY)	
ELECTRIC, INC. FOR A CERTIFICATE OF PUBLIC)	
CONVENIENCE AND NECESSITY TO REPLACE ITS)	CASE NO.
TWO-WAY RADIO SYSTEM AND DEVELOP A GIS)	2012-00250
ACCORDING TO THE APPLICANTS 01/01/2012-)	
12/31/2015 CONSTRUCTION WORK PLAN)	

ORDER

Cumberland Valley Electric, Inc. ("Cumberland Valley") filed an application on July 11, 2012 requesting a Certificate of Public Convenience and Necessity ("CPCN") for replacement of its Two-Way Radio System ("radio system") and the development of a Geographic Information System ("GIS") according to infrastructure details presented in its January 1, 2012 through December 31, 2015 Construction Work Plan ("Work Plan").¹ These additions and improvements to its existing facilities are necessary in order to provide adequate and dependable electric service to its existing and anticipated new members. Cumberland Valley indicates that the proposed radio system and GIS will not duplicate its existing facilities and infrastructure. The estimated cost of the proposed replacement, improvements, and additions of its radio system and development of a GIS program is \$1,330,000.

On June 14, 2012, Cumberland Valley requested to deviate from 807 KAR 5:001 and file its application via the electronic filing process. This request was granted by the Commission in an Order issued on July 2, 2012. In its application, Cumberland Valley

¹ Case No. 2011-00442, Application of Cumberland Valley Electric, Inc. for a Certificate of Public Convenience and Necessity to Construct Distribution Facilities in Accordance with its 2012-2015 Construction Work Plan (Ky. PSC Mar. 29, 2012), and application at 2.

requested expedited consideration due to critical project timing. Based on the application, and the responses to the Staff's request for information, the Commission will approve the request of Cumberland Valley for the reasons noted.

The cost estimates as noted below are believed to be appropriate and sufficient to complete the two requested projects.

Radio System Replacement and GIS Additions Approximate Cost Summary²

<u>Category Name</u>	<u>Estimated Cost</u>
New Radio Communication System	\$400,000
New Geographic Information System	\$930,000
Hardware	\$ 27,000
Field Inventory	875,000
Software Implementation and Training	12,000
Software Licensing	<u>15,600</u>
Sub-Total	\$929,600
Total	\$1,330,000

In its application, Cumberland Valley indicates that in addition to the capital investment summarized above, there will be an estimated annual cost of operation for this equipment of \$191,237, excluding the cost of power, and that the current level of revenues is sufficient to cover these and any possible additional annual operating expenses.³ In addition, Cumberland Valley states that the proposed radio system and GIS improvements and additions will be initially financed with internally generated funds until the funding it has applied for through the United States Rural Utilities Services

² *Id.* Application at 3; Cumberland Valley's Response to Item No. 3 of Commission Staff's First Request for Information at 10-11.

³ Application at 4.

("RUS") Guaranteed Federal Financing Bank loan program becomes available.⁴ On October 13, 2011, Cumberland Valley's Board of Directors approved the Work Plan, which included the proposed radio system and GIS improvements and additions. RUS granted approval on November 17, 2011.⁵

Cumberland Valley's proposed radio system, identified as "First Choice," parallels and interacts with the recently installed 150 MHz East Kentucky Power Company ("EKPC") Motorola Pass Port system.⁶ Although this radio system is not considered best in class or the latest technology, it provides for outstanding interoperability with EKPC.⁷ Also, Cumberland Valley was able to borrow equipment from EKPC in order to test and proof the system, determine that it had the capability needed to adequately cover its service territory, and to determine that the system presented an appropriate and viable solution to its voice communication needs.⁸ The proposed system is a trunked voice analog system having the capability to support mobile-to-mobile communications across the combined Cumberland Valley service areas without the need for dispatcher intervention.⁹ Cumberland Valley expects to help assure future communications adequacy by including contracted maintenance or a service-level agreement during the purchase of the units from the vendor.¹⁰ Since the

⁴ *Id.*; RUS finances 75 percent of the cost of the field inventory for a GIS project.

⁵ Application at 2.

⁶ Response to Item 2 of Commission Staff's First Request for Information at 6-7.

⁷ *Id.* at 7.

⁸ *Id.*

⁹ *Id.* at 7-8.

¹⁰ *Id.* at 7.

system is common to EKPC and Cumberland Valley, their respective dispatchers and work groups will have the ability to establish communications with each other during times of mutual endeavors and interactive work.¹¹ The system is designed to provide 90-percent coverage 90 percent of the time utilizing 100W base station power and 45W mobile units and will require a total of four tower locations, one each in the counties of Jackson, Knox, Harlan, and McCreary.¹² Two tower locations have existing backup generators and Cumberland Valley expects that EKPC will provide backup generators at the other two towers in the future. Emergency power back up is also in place at the base stations located in the two Cumberland Valley offices.¹³

Cumberland Valley has a current GIS database that is a personal geo-database residing on a single work station maintained by a third party, but it needs the GIS program to be upgraded to a server-based GIS system. A number of desired applications are to be implemented, including mapping, staking, engineering analysis modeling, Right-of-Way maintenance, and outage management support. Data will be formatted for Environmental Systems Research Institute, Inc.'s ("ESRI") most recent version of GIS products, a very common product line and application library providing interoperability with other internal systems and other external parties.¹⁴ Cumberland Valley will purchase electric utility application software, such as mapping, staking, and viewing, from a software vendor with an ESRI foundation.

¹¹ *Id.*

¹² *Id.* at 8.

¹³ *Id.* at 9.

¹⁴ Case No. 2011-00442, Redacted Response of Cumberland Valley Electric, Inc. to the Commission Staff's First Request for Information, Appendix B, GIS Overview at 1, filed Mar. 14, 2012.

The most costly portion of the GIS system upgrade will be performing and completing the field inventory functions prior to the end of 2015. The inventory will consist of location and attributes for such features as poles, meters, transformers, pedestals, junction boxes, attachments, conductors, and various other units of power distribution equipment.¹⁵ Once completed, the GIS database information will be maintained on a daily basis by three employees who are staking technicians and a new full time GIS technician/administrator.¹⁶ External sets of data may be imported and utilized to provide important information in assembling the complete functional system. Computer applications, such as Cumberland Valley's customer service information, work order tracking, outage management, and engineering analytics, will be integrated with the mapping software to provide a useful and function-filled system.¹⁷ Cumberland Valley is implementing the state-of-the-art National Information Solutions Cooperative's outage management system with server based GIS data as a key component.¹⁸

The Commission, having reviewed the record and being otherwise sufficiently advised, finds that the improvements and additions proposed by Cumberland Valley in its application for a CPCN for replacement of its radio system and the implementation of a server-based GIS as presented in its Work Plan are for public convenience and necessity and should be approved.

IT IS THEREFORE ORDERED that Cumberland Valley's application for a CPCN to replace its radio system and implement a server based GIS is approved.

¹⁵ Response to Commission Staff's First Request for Information at 13.


¹⁶ Case No. 2011-00442, Redacted Response of Cumberland Valley Electric, Inc. to the Commission Staff's First Request for Information, Appendix A at 4, filed Mar. 14, 2012.

¹⁷ *Id.* at 5.

¹⁸ Response to Commission Staff's First Request for Information at 14-15.

By the Commission

ENTERED ^A
OCT 29 2012
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST


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