

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENERGY)	
CORP. FOR A CERTIFICATE OF PUBLIC)	
CONVENIENCE AND NECESSITY FOR THE)	
CONSTRUCTION OF A HIGH-SPEED FIBER)	
NETWORK AND FOR APPROVAL OF THE)	CASE NO.
LEASING OF THE NETWORK'S EXCESS)	2021-00365
CAPACITY TO AN AFFILIATE TO BE ENGAGED)	
IN THE PROVISION OF BROADBAND SERVICE)	
TO UNSERVED AND UNDERSERVED)	
HOUSEHOLDS AND BUSINESSES OF THE)	
COMMONWEALTH)	

ORDER

This matter arises upon Kenergy Corp.'s (Kenergy) application requesting approval of a Certificate of Public Convenience and Necessity (CPCN), pursuant to KRS 278.020 and KRS 278.5464, for a fiber network to facilitate its intra-system communications and approval to lease excess capacity of that fiber network to an unregulated affiliate to provide broadband service in Kenergy's service territory. Kenergy filed an application on September 10, 2021, and an amended application on October 7, 2021. Pursuant to 807 KAR 5:001, Section 4(5), the Commission allowed the application to be amended and, because the amendment included late-filed testimony, determined that the amendment should not relate back to the original filing date and amended the procedural schedule to allow for full and complete discovery on the late-filed testimony.

The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General) was granted full intervention, and Kentucky

Broadband and Cable Association (KBCA) was granted limited intervention related to providing mapping information for unserved and underserved areas. Kenergy responded to multiple rounds of discovery and filed rebuttal testimony. KBCA filed witness testimony and responded to one round of discovery. The Attorney General did not file witness testimony. A formal hearing was held on March 31, 2022. Kenergy filed initial and supplemental responses to post-hearing data requests. KBCA filed a post-hearing brief on April 11, 2022; Kenergy filed a response brief on April 15, 2022; and KBCA filed a reply brief on April 21, 2022.

On April 13, 2022, amendments to KRS 278.5464 were enacted; the amendments are discussed below. On April 19, 2022, KBCA filed a motion requesting supplemental briefing to brief the impact of the amended KRS 278.5464 on this proceeding. On April 21, 2022, Kenergy filed a response objecting to additional briefing, arguing that the amendments had no impact on this proceeding. Also on April 21, 2022, KBCA filed notice that it was withdrawing the motion.

This matter now stands submitted for a decision.

LEGAL STANDARD

The Commission's standard of review regarding a CPCN is set forth in KRS 278.020(1), with additional standards for a CPCN for a fiber network used to provide broadband service set forth in KRS 278.5464. Because KRS 278.5464 was amended during the pendency of this proceeding, the Commission will discuss the original and amended legal standards, but must apply the legal standard in the amended KRS 278.5464, which became effective prior to the conclusion of procedural events in this proceeding.

KRS 278.020(1) states that no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission. To obtain a CPCN, the utility must demonstrate: (1) a need for such facilities; and (2) an absence of wasteful duplication.¹

Need requires a showing of a substantial inadequacy of existing utility service, due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference or poor management that results in an inability or unwillingness to render adequate service.²

Wasteful duplication is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”³ To demonstrate that a proposed facility does not result in wasteful duplication, an applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.⁴ Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.⁵ All relevant factors must be balanced.⁶

¹ *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 252 S.W.2d 885 (KY. 1952).

² *Kentucky Utilities Co.*, 252 S.W.2d at 890.

³ *Kentucky Utilities Co.*, 252 S.W.2d at 890.

⁴ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

⁵ See *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

⁶ Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), Order at 6.

The jurisdiction of the Public Service Commission extends to all utilities in the Commonwealth, however, the provision of broadband service is not a utility service and is not subject to state regulation, including regulation by the Commission.⁷ Additionally, in order to engage in purposes other than those related to energy, electric distribution cooperatives created pursuant to KRS Chapter 279 must conduct those nonregulated activities through an affiliate.⁸ Kenergy is an electric cooperative organized under KRS Chapter 279.⁹

This is the first proceeding brought under KRS 278.5464, which became effective June 29, 2021, and promotes broadband deployment. KRS 278.5464 states that the provision of broadband service is critical to a sound economy and general welfare of Kentucky, and that distribution cooperatives (Coops), such as Kenergy, can access and leverage federal funding to facilitate the provision of broadband service to Kentuckians who are currently unserved or underserved.

Relevant here, as originally enacted, KRS 278.5464 modified the wasteful duplication prong of the Commission's review of a Coop's application for a CPCN for a fiber network that will be used to provide electric service and broadband service to customers. As originally enacted, KRS 278.5464 required the Commission to consider the policy of encouraging the provision of broadband service to unserved or underserved households and businesses when considering the wasteful duplication prong of KRS 278.020. Thus, as KRS 278.5464 was originally enacted, the wasteful duplication

⁷ KRS 278.040; KRS.278.5462.

⁸ KRS 279.020.

⁹ Application (filed Sept. 10, 2021) (Sept. 10, 2021 Application) at 1.

analysis for this project would have been less constrained than other CPCN evaluations under KRS 278.020. This provision would have allowed Coops to build facilities in excess of what is necessary for electric utility purposes in order to use those facilities to provide broadband service, facilitated through an affiliate. Under Commission precedent, this “excessive investment” is exactly what the wasteful duplication prong of KRS 278.020 is ordinarily intended to bar. Notably, as originally enacted, KRS 278.5464 did not address the need prong of KRS 278.020. As such, under KRS 278.5464 as originally enacted, a Coop would still have the burden of proof in showing a need, in relation to the provision of electric utility service, before receiving a CPCN for a facility, exactly as it would absent KRS 278.5464.

As amended by House Bill 315,¹⁰ KRS 278.5464 now provides that a CPCN is not required when a Coop constructs and leases any fiber network to provide broadband service. However, as amended, KRS 278.5464 now provides that construction of a fiber network used to support the Coop’s electric distribution system shall require a CPCN under KRS 278.020. House Bill 315 removed the provision that required the Commission to consider the policy of encouraging the provision of broadband service when evaluating whether the proposed CPCN represented wasteful duplication. Thus, under the amended KRS 278.5464, the Commission must evaluate Kenergy’s application under both the need and wasteful duplication prongs of KRS 278.020(1) because Kenergy requested a CPCN “to construct a high-speed fiber optic cable network in support of Kenergy’s current and future communication needs a rural electric distribution cooperative.”¹¹

¹⁰ RS 2022 HB 315 (effective April 13, 2022).

¹¹ Sept. 10, 2021 Application at 1.

In both the original and amended version, KRS 278.5464 authorizes a Coop to lease excess capacity of the Coop's fiber optic distribution system to facilitate an affiliate's provision of broadband service to underserved areas and unserved areas, which are defined in terms up upload and download speeds. KRS 278.5464 also requires a Coop that leases excess capacity to an affiliate to provide broadband service to comply with the accounting and cost allocation provisions in KRS 278.2201-278.2213.

Also applicable to the proposed application, KRS 278.030(2) requires that every utility provide adequate, efficient and reasonable service.

PROPOSED PROJECT

Kenergy requested approval to construct a high-speed fiber optic cable network to support its current and future communication needs underlying Kenergy's electric distribution system, and to lease excess capacity on the fiber network to an affiliate, Kenect Inc. (Kenect), who will provide broadband service to unserved and underserved households and businesses in Kenergy's service territory.

Kenergy requested to construct approximately 7,200 miles of high-speed fiber optic cable across its service area in the next four-to-six years.¹² Kenergy explained that the project used a 30-year service life for the fiber network, but noted that fiber optic cables manufactured and installed 40 years ago are still in use.¹³ Kenergy will retain ownership of the fiber network, and contracted with Conexon Inc. (Conexon) to design,

¹² Application, paragraph 12.

¹³ Application, paragraph 15; Kenergy's Response to Attorney General's First Request for Information (filed Dec. 2, 2021), Item 20; Kenergy's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Dec. 3, 2021), Item 4.

construct, and maintain the network to be used in the operation of Kenergy's electric distribution systems.¹⁴ The network will be connected to Kenergy's own poles.

The project has an estimated cost of \$143,825,355, which includes make ready work and new poles.¹⁵ Assuming that estimated cost, this project would increase Kenergy's net investment in its system by more than 70 percent.¹⁶ Kenergy asserted that, due to the leasing arrangement described below, the proposed project will not result in direct costs to Kenergy's member-owners.¹⁷ Kenergy stated that Conexon was awarded funding for the project by the Rural Digital Opportunity Fund (RDOF), which will reduce the amount of funds that Kenergy will borrow from the Rural Utilities Service.¹⁸ Kenergy further stated that it and Kenect will also seek state funding for the project.

In addition to constructing the fiber network to support its electric distribution system, Kenergy proposed to construct the fiber network with capacity in excess of what is necessary for its utility communications system in order to extend and enhance broadband service in the area. Once constructed, Kenergy will lease the excess capacity to Kenect under an annual lease obligation that will be paid in monthly installments to Kenergy. Kenect will sublease the construction and maintenance of the fiber network, and operation of the broadband retail component, to Conexon. Conexon will pay an

¹⁴ Direct Testimony of Travis Siewert (Siewert Direct Testimony) (filed Sept. 10, 2021) at Q6; Amended Petition, Fiber Optic Sublease Agreement (filed Sept. 21, 2021); and Kenergy's Response to Staff's First Request, Item 13.

¹⁵ Application, paragraph 43; and Siewert Direct Testimony at Q5.

¹⁶ See *Annual Report of Kenergy to the Public Service Commission for the Year Ending December 31, 2021* (filed Mar. 21, 2022) at page 6 of 58. Kenergy's Annual Report indicates an end of 2021 balance for net utility plant of \$202,322,912.14.

¹⁷ Application, paragraphs 15, 16, 19, and 35. Kenergy will incur costs in constructing the fiber network, but argues that it will be reimbursed for all costs through broadband capacity leasing payments.

¹⁸ Kenergy's Response to Staff's First Request, Item 21.

annual base lease fee that covers all construction, operations and maintenance costs, interest, depreciation, and taxes, and includes an adjustment clause tied to actual costs incurred by Kenergy.¹⁹ Conexon's parent entity has provided a guarantee of payment of the base lease fee and guarantee of performance.²⁰ Kenergy stated that, under the lease and sublease agreements, neither Kenergy nor Kenect will hire any employees in connection with the fiber network.

Kenergy argued that the proposed project was in accordance with KRS 278.5464 because, in addition to supporting the electric distribution system, the project would facilitate the provision of broadband service and, according to the Federal Communications Commission (FCC), the majority of Kenergy's service area is unserved or underserved by broadband providers.²¹

KBCA disputed that KRS 278.5464, as originally enacted, was applicable to the proposed project, arguing that the majority of Kenergy's service area is served by broadband service providers at download and upload speeds that exceed the speeds used to determine whether an area is unserved or underserved by broadband. KBCA argued that the Commission should deny the CPCN for that reason.

Kenergy maintained that the fiber network would allow for instantaneous communication between the substation and control office, which can reduce outage duration by allowing dispatch to pinpoint locations and dispatch crews more efficiently and accurately. Kenergy also maintained that a fiber network would allow for peak load

¹⁹ Amended Petition, Fiber Optic Sublease Agreement (filed Sept. 21, 2021).

²⁰ Kenergy Supplemental Response to Commission Staff's Post-Hearing Request for Information (filed May 19, 2022).

²¹ Kenergy's Response to Staff's First Response, Item 16.

reduction, utilizing voltage reduction and monitoring end of line voltage for safe and reliable electric service. Kenergy asserted that another benefit was that dispatch could remotely open switches in emergencies and allow for real time operating and safety information.

Regarding future need, Kenergy's current advanced metering infrastructure (AMI) meters communicate only through microwave communications and have a remaining service life of 8 years. Kenergy contended that replacement of AMI meters operating on a fiber network would provide an opportunity to explore new demand side management (DSM), distributed energy resource (DER), and electric vehicle technologies, and optimize customer offerings if the system uses a fiber network as its backbone.

Kenergy forecasts 29 percent per year peak consumption growth over the next ten years. Kenergy explained that the fiber network segments are upgradable to support the anticipated growth. Kenergy's growth forecast is based upon actual growth rates and industry reports.

Kenergy argued that a fiber optic network would allow for faster and more reliable intra-system communications, because they are immune to noise and require less maintenance than the current microwave-based communication system, which is reaching the end of its service life and is no longer manufactured or supported by the original manufacturer. Kenergy further argued that a fiber network will better protect its system from cyberattacks.

DISCUSSION AND FINDINGS

As an initial matter, the Commission notes that Kenergy provided sufficient evidence and argument to meet its burden of proof for a CPCN for the fiber network under

KRS 278.5464 prior to the recent amendment. This is because, for reasons discussed further below, the evidence supports and the Commission would have found that Kenergy's existing radio communication network, which supports the electric distribution system, is aging and becoming obsolete, and must be replaced. Kenergy also provided sufficient evidence regarding areas unserved and underserved by broadband in its service area.²² However, the Commission must deny the CPCN due to the change in law. Kenergy did not request the CPCN for the sole purpose of constructing a fiber network and leasing it to Kenergy's affiliate to provide broadband service. Instead, Kenergy requested the CPCN to construct a fiber network to serve its electric utility distribution system, with plans to lease excess capacity for the provision of broadband service. Under the amendments to KRS 278.5464, because the proposed fiber network's purpose is to support the electric distribution system, Kenergy must provide sufficient evidence of the need for the fiber network to serve its electric distribution system and that the fiber network would not result in a wasteful duplication. As discussed further below, Kenergy provided evidence that the fiber network was needed but failed to meet its burden of proof that the fiber network would not result in wasteful duplication. This is a direct result of the amended law's removal of the ability for the Commission to consider the policy of encouraging the provision of broadband service to unserved or underserved households and businesses when determining whether a proposal results in wasteful duplication. With an ability to consider that policy in adjudicating a CPCN, the

²² KBCA provided evidence that metropolitan areas bordering or slightly within Kenergy's service area likely are served by broadband providers at speeds that exceed the statutory threshold. However, the evidence of record reflects that the majority of Kenergy's service area, which is rural, is unserved or underserved, as defined by KRS 278.5464.

Commission could have determined that the policy trumps evidence that would otherwise have indicated an excessive investment.

Regardless, the Commission's denial of the CPCN does not mean that Kenergy cannot build the fiber network to provide broadband service. As demonstrated by the sufficient evidence of record and supported by public comments, the majority of Kenergy's service territory is unserved or underserved by broadband service. The amended KRS 278.5464 provides that a CPCN is not required, and thus approval by this Commission is not required, when a Coop constructs and leases a fiber network to an affiliate for the provision of broadband service. Thus, Kenergy can facilitate the operation of an affiliate engaged exclusively in the provision of broadband service to unserved and underserved areas by constructing and leasing a fiber network for the provision of broadband service.

Need

Need for a proposed project can be established by demonstrating that an existing asset is obsolete, either because the existing system is no longer being manufactured or supported, has reached the end of its useful life, or is outmoded due to advanced technology. Here, Kenergy provided evidence that its existing system is reaching the end of its useful life and is no longer being manufactured or supported.

Based upon the case record, the Commission finds that Kenergy provided evidence that its current microwave-based system is aging and key equipment is no longer manufactured, and therefore is likely to adversely affect Kenergy's ability to provide adequate and reliable electric service. Kenergy provided sufficient evidence that its current microwave-based communication system, which consists of 49 substations and

control offices, has a remaining service life of 2.5 years.²³ Kenergy also provided sufficient evidence that the remaining net book value of microwave-based communication system is \$208,393, and will be fully depreciated in 2.5 years.²⁴

Kenergy also provided sufficient evidence that almost one-half of the equipment in its microwave-based communication system is no longer manufactured nor is technical support provided by the original manufacturer, Alcatel. Evidence in the record indicates that Alcatel stopped selling the equipment used by Kenergy on June 30, 2016; Kenergy explained that the telephone number for product support is now assigned to a medical alert device company.²⁵ Additionally, Kenergy testified that it experiences difficulties obtaining replacement parts, which are used or refurbished replacement parts.²⁶

Based upon the evidence of record, the Commission finds that Kenergy established a need for the proposed project in order to provide adequate, efficient and reasonable service. Kenergy's microwave communication system, which has a remaining service life of 2.5 years, consists of equipment that is again and no longer manufactured or supported by the original manufacturer.

²³ Application, paragraph 7; and Direct Testimony of Robert Stumph (filed Sept. 10, 2021) at Q6.

²⁴ Kenergy's Response to Commission Staff's Third Request for Information (Staff's Third Request) (filed Mar. 18, 2022), Item 10. See also Kenergy's Response to Commission Staff's Second Request for Information (filed Jan. 7, 2022), Item 1; and Kenergy's Response to Staff's First Request, Item 1. The original book value of the microwave-based communication system is \$2,267,178, and the accumulated depreciation is \$2,058,785. The annual maintenance of the microwave-based communication system is approximately \$104,000 per year.

²⁵ Kenergy's Response to Commission Staff's Post-Hearing Request (Staff's Post-Hearing Request) (filed Apr. 4, 2022), Item 1 and Hearing Video Transcript (HVT) of the Mar. 31, 2022 Hearing at 09:25:52.

²⁶ HVT of the Mar. 31, 2022 Hearing at 09:27:00 and 09:34:43.

In addition to current need, Kenergy provided qualitative evidence, including statements regarding future needs, including improved service options that would be available through fiber network technology. Kenergy also provided generalized industry studies regarding the preference for fiber networks for security, asset management, and DER. The Commission is not persuaded by the evidence of future need because it consisted of generalized statements and generalized industry reports that were not specific to Kenergy. However, because Kenergy established need based upon aging and obsolete equipment, the Commission finds that Kenergy established a need for the fiber network.

Wasteful Duplication

Based upon the evidence of record, the Commission concludes that Kenergy failed to provide sufficient evidence that the fiber network would not result in wasteful duplication. As noted above, wasteful duplication is defined as an excess of capacity over need, and importantly, utility need. Kenergy stated that only five percent of the fiber network's capacity would be used for intra-system communications, and 90–95 percent of the capacity would be excess to be leased to Kenect for broadband service.²⁷ Based on Kenergy's admission, it is clear that the fiber network represents an excess of capacity over the amount needed to provide adequate, efficient and reasonable *utility* service.

Further, Kenergy did not demonstrate that it performed a thorough review of all reasonable alternatives. Kenergy did not perform a formal cost-benefit analysis and admitted that it did not investigate reasonable alternatives to the proposed fiber network, stating that “based on reliability and capacity factors alone, there are not any reasonable

²⁷ Kenergy's Response to Staff's Third Request, Item 3(b).

alternatives that Kenergy felt would accomplish what Kenergy was striving to achieve.”²⁸ Kenergy explained that it “briefly considered other options” to upgrade or replace its aging communication system, but decided to propose a fiber network based upon “trade publications” from the National Rural Telecommunications Cooperative, National Rural Electric Cooperatives Association, and National Governors Association.²⁹ Kenergy stated that it would have sought a fiber network to replace the communication system because “it is the best available option,”³⁰ but did not provide any quantification of that assertion. Kenergy asserted that the fiber network “avoids additional investment in a less reliable, less secure communication system,”³¹ but provided no evidence to quantify or support that statement. Similarly, Kenergy asserted that there could be a \$10 million–\$16.6 million economic gain from implementing a fiber network, but the information was based upon a generalized study and not a study specific to Kenergy.³²

Based upon the evidence of record, the Commission concludes that Kenergy has not provided adequate support for the costs of its proposal and, because Kenergy did not evaluate reasonable alternatives, it did not provide sufficient evidence that the fiber network is the reasonable least-cost alternative to address the aging, obsolete communication system. For the above reasons, the Commission finds that Kenergy failed to meet its burden of proof that the proposed fiber network would not result in wasteful duplication. Had the amended law still provided, as the originally enacted law did, the

²⁸ Kenergy’s Response to Staff’s First Request, Item 22.

²⁹ Kenergy’s Response to Staff’s Third Request, Item 4.

³⁰ Kenergy’s Response to Staff’s Third Request, Item 1.

³¹ Kenergy’s Response to Staff’s Third Request, Item 10.

³² Application, paragraph 32(a).

Commission the ability to consider the policy of encouraging the provision of broadband service to unserved or underserved households and businesses when determining wasteful duplication, this “excessive investment” resulting in 90-95 percent of the facilities being used for non-utility, unregulated activities, would not have been fatal to the Commission’s determination.

With the denial of the CPCN and the amendments to KRS 278.5464, the Commission finds that the remaining issue regarding leasing excess capacity to an affiliate to provide broadband service is moot.

IT IS THEREFORE ORDERED that:

1. Kenergy’s request for a CPCN for a fiber network is denied.
2. This case is closed and removed from the Commission’s docket.

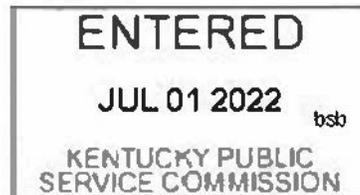
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