COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

APPLICATION

Kenergy Corp. ("Kenergy"), by counsel, pursuant to KRS 278.020, KRS 278.5464, 807 KAR 5:001 Sections 14 and 15, and other applicable law, hereby submits this Application seeking the authorization of the Kentucky Public Service Commission ("Commission") to: (i) construct a high-speed fiber optic cable network in support of Kenergy's current and future communication needs as a rural electric distribution cooperative; and (ii) lease excess capacity of the fiber network in support of extending and enhancing the availability of broadband service to unserved and underserved households and businesses in Kenergy's service territory. In support of this Application, Kenergy respectfully states as follows.

INTRODUCTION

1. Kenergy is a nonprofit rural electric distribution cooperative organized under KRS Chapter 279 engaged in the business of distributing retail electric power to its member-owners in

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the Kentucky counties of Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, Webster, Breckinridge, Union, Crittenden, Caldwell, Lyon, and Livingston.

2. Kenergy has determined that its existing communications facilities in the long term will be inadequate and that the construction of a high-speed fiber network is necessary to ensure the cooperative's continued provision of safe, reliable and affordable electric service. Considering the increased speed and reliability of the proposed fiber system, construction of a new fiber optic network as proposed is prudent and in the best interest of Kenergy's member-owners.

3. Consistent with KRS 278.5464, the fiber optic network Kenergy seeks to construct is designed with excess capacity to be leased to Kenergy's affiliate, Kenect, Inc. ("Kenect"), thereby enabling Kenect to extend and enhance the availability of broadband service to unserved and underserved households and businesses in Kenergy's service territory.

4. Because public convenience and necessity require the construction as further described herein, and because the proposal is in the public interest, Kenergy respectfully requests the Commission grant the relief requested.

OVERVIEW AND BACKGROUND

General Filing Requirements

5. Pursuant to 807 KAR 5:001 Section 14(1), Kenergy states that its full name is Kenergy Corp., its mailing address is P.O. Box 18, Henderson, Kentucky, 42419-0018, and its electronic mail address for purposes of this proceeding is kpsc@kenergycorp.com. Also pursuant to 807 KAR 5:001, Section 14(1), Kenergy states that this Application and the supporting exhibits, which are incorporated herein by reference, contain fully the facts on which the relief requested by Kenergy is based. 6. Pursuant to 807 KAR 5:001, Section 14(2), Kenergy states that it is a Kentucky rural electric non-profit cooperative corporation, in good standing, which was incorporated upon the filing of Articles of Consolidation on June 22, 1999.

Kenergy's Existing Communications Facilities and Automated Meter System

7. Kenergy's existing intra-system communication system connecting its forty-nine substations and control offices transmits information through microwave communications in the radio frequency. Similarly, Kenergy's existing automated meters, which were installed throughout Kenergy's territory pursuant to the Commission's authorization in Case No. 2014-00376,¹ communicate only through microwave communications.

8. Kenergy seeks a CPCN to construct a fiber optic network that will enhance and improve its intra-system communications. The installation of a fiber optic network between Kenergy's substations and control stations will allow faster and more reliable intra-system communications at lower maintenance costs, as compared to the existing microwave-based system.² Additionally, the introduction of a wireline fiber optic network will allow Kenergy to better protect its electric grid from the growing threat of cyberattacks because wireline fiber optic cable provides enhanced security when compared to radio frequency transmissions over the public airwaves.³

¹ In the Matter of: Application of Kenergy Corp. for an Order Issuing a Certificate of Convenience and Necessity to Install an Automated Metering and Infrastructure System (Ky. P.S.C. Feb. 24, 2015).

² See Utility of the Future Study, NextGrid Illinois, University of Illinois at Urbana-Chicago (Jan. 14, 2019), at 63 ("The use of fiber for communication applications provides for more reliable service to customers because fiber cables are immune to noise and require less maintenance.").

³ See The Advantages and Disadvantages of Fiber Optic Transmission, FS Community, <u>https://community.fs.com/blog/the-advantages-and-disadvantages-of-fiber-optic-transmission.html</u> ("Low Security Risk: the growth of the fiber optic communication market is mainly driven by increasing awareness about data security concerns and use of the alternative raw material. Data or signals are transmitted via light in fiber optic transmission. Therefore there is no way to detect the data being transmitted by 'listening in' to the electromagnetic energy 'leaking' through the cable, which ensures the absolute security of information."); What Are the Advantages and Disadvantages of Optical Fiber Cable?, <u>https://www.linkedin.com/pulse/what-advantages-disadvantages-optical-fiber-cable-max-liao</u> ("Optical fibers are difficult to tap. As they do not radiate electromagnetic energy, emissions cannot be

9. In addition to the improved security associated with fiber-based communications, the use of fiber also helps avoid growing congestion in the use of the public airwaves. The radio frequency spectrum is growing increasingly crowded as advancements in technology (e.g., Wi-Fi, Bluetooth, and 5G technology) continue to make wireless communications devices both more ubiquitous and more intensive in their use of the public airwaves.⁴ Thus, transitioning to a fixed, fiber optic communication system will also help mitigate against the possibility of third-party interference with Kenergy's intra-system communications as the radio frequency spectrum continues to become more crowded.

10. In addition to these immediate benefits that Kenergy anticipates from the installation of fiber optic cable, Kenergy likewise has a long-term need for a fiber optic intrasystem communication network to ensure that its member-owners can take full advantage of the additional bandwidth, reliability and speed afforded by a fiber based system as advanced metering infrastructure ("AMI") technologies evolve, including opportunities to better incorporate new demand-side management ("DSM") distributed energy resource ("DER"), and electric vehicle ("EV")⁵ technologies; better member information sharing; as well as enhanced outage detection and management, voltage monitoring, and reactive power management.

intercepted. As physically tapping the fiber takes great skill to do undetected, fiber is the most secure medium available for carrying sensitive data.").

⁴ See Understanding Solutions For the Crowded Electromagnetic Frequency Spectrum, Electronic Design, Mar. 21, 2012, https://www.electronicdesign.com/technologies/communications/article/21799723/understanding-solutionsfor-the-crowded-electromagnetic-frequency-spectrum ("These full segments include VHF, UHF, and the low microwave frequencies from roughly 100 MHz to 4 GHz. That's where cell phones, broadcast TV, wireless local-area networks (LANs), and lots of popular short-range technologies like Bluetooth and Wi-Fi operate. Without more spectrum, we face a crisis of wireless expansion."); Hook, Sara Anne, Allocation of the Radio Spectrum: Is the Sky the Limit?, Ind. Int'l & Comp. L. Rev. 319, 319, 322 (1993) ("Given current technology, radio spectrum can also be defined as a limited natural resource. . . . Few outside the communications realize the magnitude of the problem of scarce spectrum and how it will impact the development and viability of communications technology in the future."). ⁵ Electric vehicles are expected to represent a significant share of the market by 2030. *See* President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks, The White House (Aug. 5, 2021), https://www.whitehottse.gov/briefing-room statements-releases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-on-clean-cars-and-trucks" ("[T]]he President will sign an Executive Order

11. At the time construction of the proposed fiber network is completed, Kenergy's existing automated meters will be entering the last third of their useful life. Thus, beginning construction of a fiber optic network now will ensure that, when Kenergy's existing meters have neared the end of their useful life, Kenergy will be prepared to extend the benefits of a more robust, fiber-based AMI intrastructure to its member-owners. Simply put, this upgraded two-way communication between Kenergy and its members-owners will ensure that energy efficiency and peak management opportunities can be fully optimized.

Kenergy's Pursuit of Solutions / Opportunities

12. In order to address its short-term and long-term intra-system communication needs, Kenergy has developed an Amended Construction Work Plan ("ACWP") that includes the construction of approximately 7,200 miles of high-speed fiber optic cable across its territory over the next four to six years. This fiber infrastructure will support substantial and necessary improvements to Kenergy's intra-system communications and permit smart grid applications into the foreseeable future.

13. Additionally, in recognition of the value and importance of accessible and affordable broadband service to Kenergy's predominantly rural member-owners, – and cognizant of the fact that large portions of Kenergy's certified service territory have been determined by the Federal Communications Commission to be "unserved or underserved" by broadband service providers – Kenergy proposes to construct its fiber optic network with sufficient additional fiber capacity to extend and enhance the availability of broadband to its unserved and underserved member-owners. Consequently, the proposed construction not only addresses Kenergy's intra-system communication needs, it simultaneously furthers the bi-partisan policy initiatives of

that sets an ambitious new target to make half of all new vehicles sold in 2030 zero-emissions vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles.").

Governor Beshear and the General Assembly, as seen in both the Governor's "Better Kentucky Plan" and the General Assembly's 2021 passage of House Bill 320, which specifically permitted electric distribution cooperatives, like Kenergy, to serve a vital role in the proliferation of broadband in unserved and underserved areas of the Commonwealth.

14. In short, the ACWP represents an incredible opportunity for Kenergy to upgrade its electric distribution system while simultaneously helping extend and enhance broadband availability to those in need.

15. Moreover, as explained below and in the testimony of Kenergy's witnesses, the ACWP accomplishes this *without cost* to Kenergy's member-owners. Kenergy has accomplished this through a lease/sublease structure that ultimately results in Kenergy leasing out the excess fiber on the system and, in return, receiving annual lease payments that are structured to reimburse Kenergy for all costs of construction and associated Rural Utilities Services ("RUS") debt service over the first twenty years of the excess fiber's anticipated 30+ year useful life.⁶ In this manner, Kenergy's member-owners will not subsidize the unregulated broadband service provided on the excess fiber capacity. Furthermore, the lease payments occurring after year four will actually help generate additional revenue from the broadband opportunity afforded by upgrading Kenergy's own intra-system communications.

16. In the testimony of Travis Siewert (Kenergy's Manager of General Accounting), he describes the contracts that Kenergy has negotiated for Kenect's subleasing of the network and how they were intentionally structured so that Kenect's sublessee, Conexon Connect, fully reimburses Kenergy for all costs of construction, including the portions of construction attributable to Kenergy's intra-system communication needs, through its payment of the Base Lease Fee.

⁶ See Kenergy – Kenect Lease (the "Lease"), a copy of which is attached hereto and incorporated herein as Exhibit 1 to the testimony of Jeff Hohn.

17. Specifically, the Network Sublease, attached as Exhibit 2 to the Testimony of Jeff Hohn, provides that the Base Lease Fee owed by Conexon Connect will be adjusted pursuant to the following contractual mechanism:



See Network Sublease (Hohn Exh. 2) at Sec. 4.1.

18. In addition to the automatic Base Lease Fee adjustment, Kenergy and Kenect have requested a guarantee of payment of the Base Lease Fee and guarantee of performance under the Network Sublease for the Initial Term from Conexon Connect's parent company, Conexon. The requested parent guarantee will add an additional layer of security to protect Kenergy's members from the possibility of loss on the project.

19. As Mr. Siewert explains, by having a parent guarantee and an adjustment clause tied to the actual costs incurred by Kenergy, the Base Lease Fee was intentionally designed by Kenergy to ensure that the Base Lease Fee is always sufficient to cover Kenergy's debt payments associated with the cost of construction. These risk mitigation mechanisms successfully negotiated into the sublease of the fiber optic network will have the effect of providing Kenergy's member-owners with electric system upgrades at effectively no cost, while simultaneously deploying the essential broadband network that Kenergy's member-owners need to take advantage of the economic, educational, and health benefits provided by reliable, high-speed internet service.

20. Finally, as is set forth in the testimony of Mr. Siewert, the Base Lease Fee is not only structured to fully cover Kenergy's cost of constructing the fiber optic network, it ultimately yields a significant financial benefit. Based upon the financial analysis, Kenergy is expected to enjoy a positive cash flow in year five. This additional revenue will help ease electric rate pressures on Kenergy's member-owners.

21. By way of context, Conexon (and its affiliate Conexon Connect) has a proven, successful track record in partnering with rural electric cooperatives across the country to ensure that residents of traditionally unserved or underserved rural areas experience the opportunities afforded by broadband service.

2021 Broadband Legislation in Kentucky

22. As the Commission recalls, in 2020 Kenergy had filed an application seeking a waiver of certain rules governing transactions between a utility and its affiliate in Case No. 2020-00215. Though the Commission granted Kenergy certain relief—particularly the ability to invest \$3,000,000 into Kenect as start-up capital—it noted that there remained certain obstacles to a successful fiber project. Subsequently, and consistent with the Commission joining the Attorney General in acknowledging it would be appropriate for the General Assembly to provide guidance regarding the Commonwealth's policy with respect to a cooperative corporation's involvement in broadband expansion, the Kentucky General Assembly passed HB 320, which would become KRS 278.5464 (effective on June 29, 2021).

- 23. The first subsection of that new law (KRS 278.5464) provides as follows:
- (1) The General Assembly recognizes and declares:
 - (a) The provision of broadband service to residential, commercial, and industrial customers is critical to securing a sound economy and promoting the general welfare of the Commonwealth; and

(b) Distribution cooperatives are able to access and leverage federal funding to extend and enhance the availability of broadband service to Kentucky residents who are currently unserved or underserved.

KRS 278.5464(1).

24. This new law provides a fantastic opportunity in Kenergy's territory, where broadband service is sorely lacking. Kenergy needs to upgrade its intra-system communication capabilities, and the construction of the proposed fiber optic cable system will accomplish that. At the same time, the General Assembly's recently announced state policy recognizing distribution cooperative opportunities to enhance the proliferation of broadband services gives Kenergy the opportunity to leverage efficiencies in the construction of that fiber network to serve this legislative priority.

25. Specifically, Kenergy has designed a proposed fiber optic cable system with capacity in excess of that which may be strictly necessary solely for its electric distribution purposes; by then entering into definitive arrangements to lease the excess capacity to an affiliate (Kenect) engaged exclusively in the provision of broadband service to unserved or underserved households and businesses, as well as sublease of the network to Conexon Connect, Kenergy has created an income stream sufficient to cover the capital costs of the construction. This plan is consistent with the letter and the spirit of KRS 278.5464, particularly KRS 278.5464(3)(1) and KRS 278.5464(4)(a).

REQUESTS FOR RELIEF

26. Kenergy believes its ACWP, particularly to the extent it proposes "construction of any plant, equipment, property, or facility for furnishing to the public any of the services enumerated in KRS 278.010,"⁷ requires a CPCN under KRS 278.020. Kenergy also believes its

⁷ KRS 289.020(1)(a).

proposed leasing of excess capacity on its proposed fiber optic system requires the Commission's approval under to KRS 278.5464(3)(b), which "shall" be granted "upon a finding the proposal is in the public interest." Kenergy respectfully requests this relief and such other relief as may be required or to which it may appear entitled.

Issuance of Certificate of Public Convenience and Necessity

27. To obtain a CPCN pursuant to KRS 278.020, a utility must generally demonstrate

a need for the facilities it proposes to construct and an absence of wasteful duplication.⁸

28. "Need" requires:

[A] showing of substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be 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, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.9

As is fully set forth above and supported by the testimony submitted herewith, Kenergy has both short and long-term electric utility needs for construction of an intra-system communication system. In the short term, construction of a fiber optic network will fulfill an electric utility need due to the faster, more reliable, and more secure method of intra-system communications than that generally provided by the radio frequency technology currently utilized by Kenergy.

30. Over the long-term, the electric utility needs of Kenergy will be fulfilled by allowing practically-instantaneous communications among Kenergy's electric substations and

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⁸ Kentucky Utilities Co. v. Pub. Serv. Comm'n, 252 S.W.2d 885 (Ky. 1952); Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168 (Ky. 1965).

⁹ 252 S.W.2d at 890.

control offices, as well as between Kenergy and its member-owners, thereby allowing Kenergy to provide efficient, reliable, and technologically-advanced service to its member-owners. Although Kenergy acknowledges that its existing automated meter system is in the first third of its useful life, the estimated timeframe for completion of the fiber network throughout Kenergy's territory is four to six years, at which point Kenergy's automated meter system will be entering the last third of its useful life. Accordingly, beginning construction of a fiber optic network now will allow Kenergy to have its fiber network ready for the next generation of automated meters. This will allow Kenergy the increased capacity to serve homes, farms, and businesses with two-way communications for an array of energy management devices, as well as enhanced DSM, DER, EV and other evolving technologies.

31. Kenergy's electric utility need for construction of a fiber optic network is further demonstrated by a white paper jointly published by the National Rural Telecommunications Cooperative and the National Rural Electric Cooperatives Association, titled "The Value of a Broadband Backbone for America's Electric Cooperatives: A Benefit Assessment Study."¹⁰

32. The white paper demonstrates the need for Kenergy's transition to a fiber based communication system based upon the following findings, among others:

- a. An estimated \$10 to \$16.6 million economic gain from fully implementing all benefits provided by a fiber optic backbone for a 50,000 member electric cooperative.¹¹ (Kenergy is an approximately 58,000 member electric cooperative.)
- b. "Fiber offers the most secure, most reliable, highest-throughput, and lowestlatency communications option for network communications. . . . To guarantee the performance of all aspects of a network, a fiber backhaul system is typically the best option."¹²

¹⁰ The Value of a Broadband Backbone for America's Electric Cooperatives: A Benefit Assessment Study, National Rural Telecommunications Cooperative, National Rural Electric Cooperatives Association (July 2, 2018), *available at:* https://www.nrtc.coop/images/pdfs/the-value-of-a-broadband-backbone.pdf.

¹¹ Id. at 4.

¹² Id. at 10.

c. "The increasing number of sophisticated cyberattacks also necessitates improved in-house communications systems and the need for a private network, rather than third-party carriers, to house and transmit sensitive data. Data security and the ability to control the upgrades necessary to protect the grid will continue to grow in importance."¹³

33. In addition to the improved speed, reliability, security, and technological capabilities afforded by the proposed network and their concomitant highlighting of the "substantial inadequacy" of Kenergy's existing intra-system communications capabilities, the lease structure arrangements described by Mr. Siewert similarly demonstrate that it is "economically feasible for the new system or facility to be constructed or operated."¹⁴

34. Moreover, the construction of a fiber optic network will not result in wasteful duplication. "Wasteful duplication" is defined as "an excess of capacity over need," when viewed "from the standpoints of excessive investment in relation to efficiency, and an unnecessary multiplicity of physical properties."¹⁵

35. The proposed construction of Kenergy's fiber optic network will not result in "wasteful duplication" when viewed from the standpoint of excessive investment in relation to efficiency and an unnecessary multiplicity of physical properties because (1) the proposed fiber network will provide a level of communication capabilities that Kenergy's existing radio frequency communications simply cannot match, and (2) Kenergy and its affiliate Kenect have negotiated a leasing arrangement of the proposed Network, which will recover the entirety of Kenergy's proposed investment. Based upon the financial analysis, this leasing arrangement will also result in positive cash flow after the first 4 years, meaning the construction will further benefit

¹³ Id. at 11.

¹⁴ Kentucky Utilities Co. v. Pub. Serv. Comm'n, 252 S.W.2d at 890 (Ky. 1952).

¹⁵ Id.at 891.

Kenergy's member-owners by providing additional revenue that can be used to help keep electric rates low.

36. Accordingly, Kenergy's investment should not be considered "excessive" as, not only will the investment be fully recovered through the lease payments owed by sublessee (Conexon Connect), but the investment is expected to generate positive returns to Kenergy's member-owners beginning two-thirds of the way through the term of the underlying lease.

37. In addition to the fact that the proposed investment does not result in wasteful duplication for the reasons above, KRS 278.5464(4)(a) provides as follows:

The commission shall take into consideration the policy of encouraging the provision of broadband service to unserved or underserved households and businesses throughout the Commonwealth when determining whether:

(a) The proposed investment will result in wasteful duplication of investment in the case of any distribution cooperative's application for a certificate of public convenience and necessity under KRS 278.020 that includes the construction of a fiber optic cable system with capacity in excess of that which is necessary to support the distribution cooperative's system under subsection (3)(a)(1) of this section.

38. Kenergy respectfully requests that the Commission consider Kenergy's plans to lease excess capacity from construction of the fiber optic network to assist in the proliferation of broadband service in Kenergy's certified service territory, vast portions of which are presently defined as unserved or underserved households by the FCC, when determining whether the proposed construction of a fiber optic network results in wasteful duplication.

39. Pursuant to 807 KAR 5:001, Section 15(2)(a), the facts relied upon to show that the proposed construction or extension is or will be required by public convenience or necessity are set forth in this Application and in the exhibits hereto. In support of this Application, Kenergy submits testimony from the following Kenergy employees:

- Jeff Hohn, President and CEO: Mr. Hohn provides testimony at Exhibit A addressing, among other things, the need for replacement of the existing substation-to-substation microwave system and the long-term need for a fiber optic smart grid to connect members to the substations, as well as the contractual arrangements showing that Kenergy is not exposing its members to rate risk by embarking on this project;
- **Travis Siewert, Manager of General Accounting**: Mr. Siewert provides testimony at Exhibit B addressing the financial component of construction and the mechanics of the financing, as well as a detailed explanation of the operation of the lease payments, which are specifically designed to recover the debt payments owed as a result of the planned construction and generate a return to Kenergy's member-owners.
- Robert Stumph, Vice President of Engineering: Mr. Stumph provides testimony at Exhibit C addressing the details of the amended construction work plan for the installation of a smart grid network.

40. Pursuant to 807 KAR 5:001, Section 15(2)(b), Kenergy states that no franchises or permits from public authorities are required for the proposed new construction or extension, as the fiber will be constructed on Kenergy's existing infrastructure in the electric space. This topic is discussed more fully in the testimony of Jeff Hohn.

41. Pursuant to 807 KAR 5:001, Section 15(2)(c), a full description of the proposed location, route, or routes is set forth in the testimony of Robert Stumph and on the maps that are part of the ACWP submitted as Stumph Exhibit 1. A description of the manner of construction is also set forth fully in the testimony of Robert Stumph. There are no public utilities, corporations

or persons with whom the proposed electric distribution-purposed construction or extension is likely to compete.

42. Pursuant to 807 KAR 5:001, Section 15(2)(d), Kenergy is providing herewith one (1) copy in portable document format on electronic storage medium and upon request two (2) copies in paper medium of the following information: (i) maps to suitable scale showing the location or route of the proposed construction or extension, as well as the location to scale of like facilities owned by others located anywhere within the map area with adequate identification as to the ownership of the other facilities (*see* Stumph Exhibit 1); and (ii) map of the system submitted as the drawings of the proposed plant, equipment, and facilities (*see* Stumph Exhibit 1.)

43. Pursuant to 807 KAR 5:001, Section 15(2)(e), Kenergy states that it intends to finance the costs of the ACWP with a loan from RUS. The estimated cost of the ACWP is \$143,825,355.¹⁶ Pursuant to KRS 278.300(10), Commission approval of the loan from RUS is not required because the "evidences of indebtedness is subject to the supervision or control of the federal government or any agency thereof." Further discussion of the financing related to project, including a discussion of the bridge loan that will be needed to facilitate initial cash flow of the project, is provided in the testimony of Travis Siewert.

44. Pursuant to 807 KAR 5:001, Section 15(2)(f), the estimated annual cost of operations and maintenance after the fiber network has been placed into service is \$274,287, all of which is recovered through the Base Lease Fee so that Kenergy members do not subsidize the annual maintenance costs. (*See* Siewert testimony.)

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¹⁶ This is the gross cost without RDOF dollars or other potential and/or pending state and federal grants, which may reduce the total cost, if obtained.

Approval of Lease of Excess Network Capacity

46. Pursuant to KRS 278.5464(3)(a)(1), a distribution cooperative may facilitate the operation of an affiliate engaged exclusively in the provision of broadband service to unserved or underserved households and businesses by leasing excess capacity on any fiber optic cable used to support the distribution cooperative's distribution system. The Commission "shall grant approval of the leasing of excess capacity...upon a finding the proposal is in the public interest." KRS 278.5464(3)(b).

47. As is demonstrated by the General Assembly's bi-partisan effort to create the Broadband Deployment Fund, which is intended to facilitate the construction of fiber optic networks in "unserved or underserved" areas of the Commonwealth, Kenergy's plan to lease excess capacity to Kenect for the provision of broadband services serves the public interest.

48. Indeed, on June 24, 2021, Governor Beshear launched the next phase of his Better Kentucky Plan, which included a request for information regarding the provision of broadband services, and estimated that 10,000 new jobs across the Commonwealth would be created due to broadband expansion. Further, Governor Beshear indicated that the COVID-19 pandemic "demonstrated just how critical it is for all Kentuckians to have reliable internet access to stay informed, safe, and connected."

49. Construction of the smart grid network is in the public interest as it supplies an immediate and long-term utility need. It also meets the statutory goal of providing broadband service to unserved and underserved members of Kenergy's territory. The mandate of House Bill 320 provided Kenergy the ability to leverage its access to federal funding in order to assist in the provision of broadband service to Kenergy's largely "unserved or underserved" member-owners. By filing this application, Kenergy seeks to prepare its electric grid for future technologies through

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the construction of a fiber optic network that will facilitate faster, reliable, and more secure communications, while simultaneously utilizing the excess capacity on the network to ensure Kenergy's member-owners have the ability to take advantage of a high-speed broadband network.¹⁷

50. Kenergy is a tax-exempt, non-profit cooperative rural electric corporation. Kenergy could lose its tax-exempt status if annual non-member revenue exceeds fifteen percent (15%) of total revenue.¹⁸ However, with annual gross receipts of \$358 million, Kenergy's tax exempt status would not be endangered by non-member revenues, unless annual non-member revenues were to exceed approximately \$53.6 million. The projected sum of annual broadband revenue and all other non-member revenue does not approach that limit.

Conclusion

51. In sum, Kenergy submits that the proposed fiber optic network is not duplicative of existing services and that there is both a short-term and long-term need of these facilities by

https://www.frs.org/sites/default/files/documents/2017-12/Hudson%202016%20Thc%20Economic%20Impact%20of%20Rural%20Broadband.pdf .

¹⁷ KRS 278.5464(1) ("The General Assembly recognizes and declares: (a) the provision of broadband service to residential, commercial, and industrial customers is critical to securing a sound economy and promoting the general welfare of the Commonwealth; and (b) Distribution cooperatives are able to access and leverage federal funding to extend and enhance the availability of broadband service to Kentucky residents who are currently unserved or underserved."). *See also* Broadband Internet's Value for Rural America, Economic Research Service/USDA, Economic Research Report Number 78, at iii,

https://www.ers.usda.gov/webdocs/publications/46200.9335_err78_1_.pdf ("In comparing counties that had broadband access relatively early (by 2000) with similarly situated counties that had little or no broadband access as of 2000, employment growth was higher and nonfarm private earnings greater in counties with a longer history of broadband availability." (emphasis added)); The Economic Case for Bringing Broadband to the Rural US, Wolfgang Bock, June 4, 2018, https://www.bcg.com/en-us/publications/2018/economic-case-bringing-broadband-rural-united-states ("The World Bank estimates that a 10% increase in broadband penetration can lead to a 1.21% jump in GDP growth in developed economics."); The Economic Impact of Rural Broadband, Hanns Kuttner, The Hudson Institute, at 21(April 2016) ("The economic effects of the rural broadband industry reach throughout the economy. The rural broadband industry influences the size of the economy through employment and purchases of goods and services. This influence totaled \$24.1 billion in 2015."), available at

¹⁸ See 26 U.S.C. § 501(c)(12)(A) ("... mutual or cooperative telephone companies, or like organizations; but only if 85 percent or more of the income consists of amounts collected from members for the sole purpose of meeting losses and expenses.").

Kenergy's electric utility business. Furthermore, any financial risk of the fiber optic network is mitigated or eliminated by the lease of the excess capacity for broadband purposes, which will pay the cost of construction and maintenance and generate a rate of return that will help ease electric rate pressure on Kenergy's member-owners.

WHEREFORE, Kenergy requests an Order from the Commission:

- 1. Issuing Kenergy a CPCN for its ACWP, as described herein;
- 2. Finding that Kenergy's leasing of excess capacity on its proposed fiber optic network, as described herein, is in the public interest, and thus approving same;
- 3. Granting Kenergy all other relief to which it may appear entitled.

This <u>10</u>⁴⁰ day of September, 2021.

Respectfully submitted,

DORSEY, GRAY, NORMENT & HOPGOOD 318 Second Street Henderson, Kentucky 42420 Telephone 270 - 826-3965 Telefax 270 - 826-6672 counsel for Kenergy Corp. By

J. Christopher Hopgood chopgood a,dkgnlaw.com

VERIFICATION

The undersigned hereby verifies that the statements and information set forth in the foregoing Application are true and correct to the best of my knowledge and belief.

feff Høhn, CEO & President Kenergy Corp.

STATE OF KENTUCKY

COUNTY OF HENDERSON

The foregoing was signed, acknowledged and sworn to before me by

Jeff Hohn, CEO and President, Kenergy Corp., this <u>940</u> day of September, 2021.

My commission expires 5-24-2023

Madein

Notary Public, State of Kentucky at Large Notary Public ID No. 123517

Sectors 1

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17		AND BUSINESSES OF THE COMMONWEALTH)
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20		TESTIMONY OF JEFF HOHN
21	0.1	
22	Q1.	Please state your name, business address and position with Kenergy.
23	٨	Laffrey Habre (402 Old Complex Bood Handerson Kontroley (2420) Jan CEO
24	А.	Jeffrey Hohn, 6402 Old Corydon Road, Henderson, Kentucky 42420. I am CEO.
25 26	Q2.	What is your educational background?
20	Q2.	what is your educational background?
28	A.	My resume is attached.
29	1 k.	Try resume is utuened.
30	Q3.	What is your work experience?
31	201	mar is your more experience.
32	A.	My resume is attached.
33		
34	Q4.	Have you previously submitted testimony or sworn applications before the
35	Kentu	icky Public Service Commission?
36		
37	A.	Yes, Case No. 2015-00312 and 2020-00215.
38		
39	Q5.	Have you previously submitted testimony before other regulatory agencies?
40		

1 2 3	I	A. Yes. The New Mexico Public Regulation Commission and the Wyoming Public Service Commission.
4 5	Q6.	What is Kenergy seeking in this case?
6 7 8 9 10 11	Α.	A certificate of public convenience and necessity to construct a smart grid fiber network and lease the excess fiber to its affiliate, Kenect, so that it can provide broad band services to the unserved and underserved residents and businesses in Kenergy's territory.
12 13	Q7.	Physically, what will the plant and fixtures of a fiber smart grid look like?
14 15 16 17 18 19 20	A.	A fiber optic network operates much like an electric distribution network. Where an electric distribution network picks up power at its wholesale provider's substations, a fiber optic network picks up the information it distributes at trunk line points. Kenergy's immediate intra-system communications and automated meter communications are provided through radio frequency operating in the licensed and unlicensed public band width.
21 22	Q8.	Who owns the fiber and why that entity?
23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	Α.	Kenergy would construct the fiber and lease it to Kenect. Kenect will then contract out the operation of the broad band retail component. First, Kenergy has the ability to borrow at low interest rates from the Rural Utility Service ("RUS"). RUS has a smart grid program specifically designed to lend money to rural electric cooperatives for this purpose. Kenect does not have access to such low interest funding and as such, the interest expense on the project would be four times higher if Kenect builds the fiber. Second. Kenergy can utilize the fiber for intra-system communications and the fiber serves as an alternative to automated meter communications when the current radio frequency automated meter system ("AMI") reaches the end of its useful life (approximately 5 years from the completion of the fiber construction project). Additionally, Kenergy has the right to attach its equipment to its poles. Most of Kenergy's poles are in the highway right of way. Others are on member's property to which each member has consented by virtue of membership according to the terms of the membership. On the odd occasion where a private casement is necessary. Kenegy has been successful

in obtaining private easements. There are no known instances where Kenergy or 1 2 its predecessors have had to exercise eminent domain for its infrastructure. See Kenergy's membership agreement attached as Exhibit 3 hereto and its standard 3 4 private easement attached as Exhibit 4 hereto. 5 6 O9. Will Kenergy use any of its assets to subsidize Kenect's operations? 7 8 A. No. Under the business model, the opposite will occur. Through recovery of 9 the lease payment from the broad band business, Kenergy will receive in full all 10 its costs plus a rate of return that will ease rate pressure on the Kenergy membership. Attached hereto as Hohn Exhibits 1 & 2 is a pro forma lease from 11 Kenergy to Kenect and a sublease from Kenect to its contractor. 12 13 Q10. What is needed of the Commission in order to move the project forward? 14 15 A. Kenergy seeks an Order pursuant to KRS 278.5464 to build a smart grid network 16 17 and lease the excess fiber its affiliate, Kenect. A certificate of public 18 convenience and necessity is needed to build the smart grid network. No 19 financing permission is needed because the financing is federally exempt. 20 Is the smart grid network duplicative of existing services? 21 Q11 22 23 Α. No. Kenergy's radio frequency intra-system communications and automated 24 meter communications are functional but in the long term will be outdated. 25 Approximately one-half of Kenegy's microwave radios were manufactured by Alcatel and those products are beyond the end of their useful life and no longer 26 27 supported. There is continued pressure on the frequency band in which 28 microwave devices operate. The long range future of this public bandwidth shows more and more radio frequency traffic. Portions of the Kenergy 29 microwave system operate in the 6 ghz frequency and invasive traffic in this 30 31 bandwidth has been increasing. Further, common sense dictates that a fiber system of communications is more secure from hackers and cyber criminals. 32 The need of high speed broad band in the Kenergy territory outweighs any short 33 term duplication and the legislative intent in KRS 278.5464 overrides any 34 traditional concerns over duplication. 35

3

- 1Q12.How is the smart grid network necessary for Kenergy's electric distribution2System?
- A. Although Kenergy's radio frequency AMI system is still in the first third of its
 useful life, by the time the smart grid network is completed (4 to 6 years from
 now, the AMI system will be nearing the last third of its useful life.
 With the advent of smart grid networks throughout the electric industry, the next

8 generation of automated meters will likely be fiber dependent. Kenergy believes it is wise to prepare for this change sooner rather than later. The cost of 9 10 having a smart grid network ready for fiber automated meters a few years before the end of the useful life of the existing system is outweighed by the benefits the 11 12 Kenergy territory will receive from the implementation of broad band. The Commission should view this no differently than the long range planning needed 13 14 for a power plant. No one would suggest that a utility wait until its generating facilities were useless before seeking to replace them. No one would second guess 15 16 the wise planning of having facilities in place for what is certainly a known change 17 from radio frequency to fiber communications. Simply, the need for the smart grid 18 network is met by known long term needs. Taking advantage of low interest rates. 19 government subsidies for construction of broad band networks and a lease 20 arrangement that holds harmless the Kenergy rate payer is planning that should be 21 encouraged.

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- Q13. Where will the fiber smart grid be constructed on the Kenergy system?
- A. In the electric space for two reasons. First the system will provide
 communications systems between substations and eventually from members to
 substations. Second, the system will receive the same FEMA coverage benefit
 as Kenergy's other assets coverage by existing in the electric space.
- 29 Q 14. Will there by make ready work for the installation of the smart grid network?
- 31 A. Yes.
- 33 Q 15. Will Kenergy perform the make ready work in-house or outsource it?
- 35 A. Likely some of both.
- 37 Q 16. Will the outsourced work be bid?

1	
2	A. Yes, pursuant to RUS guidelines.
3	
4	Q 17. Do you adopt the statements in the Application as your testimony
5	
6	A. Yes.
7	
8	
9	Q. 18. Does this conclude your testimony?
10	
11	A. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE 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 LEASING OF THE NETWORK'S EXCESS CAPACITY TO AN AFFILIATE TO BE ENGAGED IN THE PROVISION OF BROADBAND SERVICE TO UNSERVED AND UNDERSERVED HOUSEHOLDS AND BUSINESSES OF THE COMMONWEALTH	<pre>()) CASE NO. 2021-00)))))))</pre>	
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TESTIMONY VERIFICATION

l verify, state and affirm that the testimony attached hereto and filed with this

verification is true and correct to the best of my knowledge and belief formed after a

reasonable inquiry, and I ask that I be added as a witness for this information.

1 John

STATE OF KENTUCKY

COUNTY OF DAVIESS

The foregoing was signed, acknowledged and sworn to before me by JEFF HOHN this $\frac{44}{2}$ day of September, 2021.

My commission expires 5-24 - 2023 Notary Public No 623317

FIBER OPTIC LEASE

This Fiber Optic Lease ("Lease"), is made and entered into as of the _____ day of ______, 2021 ("Effective Date"), by and between Kenergy Corp., a Kentucky corporation with a principal business address of P.O. Box 18, Henderson, KY 42419 ("Lessor"), and Kenect, Inc., a Kentucky corporation with a principal business address of P.O. Box 18, Henderson, KY 42419 ("Lessee").

WHEREAS, Lessor has engaged Conexon, LLC to design and build a fiber optic network substantially as described on **Exhibit A** attached hereto, which shall include fiber optic cables and all related equipment, appurtenances and access points necessary for the provision of broadband and related services (collectively, the "Network"), which shall be owned in its entirety by Lessor during and following completion of construction; and

WHEREAS, Lessor desires to lease to Lessee, and Lessee desires to lease from Lessor, the Network pursuant to the terms and conditions of this Lease.

NOW, THEREFORE, in consideration of the mutual covenants and promises hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Lease. Subject to the provisions of this Lease, Lessor leases to Lessee the exclusive right and privilege to use the Network, as more particularly described on Exhibit A, including the fiber strands and any segment later constructed by or on behalf of Lessor, except for the capacity used in connection with the operation of electrical transmission or distribution systems. Lessee shall have the right to connect, at Lessee's expense, the Network to the fibers or system of a third party at a reasonable number of mutually acceptable demarcation points; provided, however, Lessee shall obtain Lessor's approval, not to be unreasonably withheld, of the location and manner in which such connections will be made at Lessor's manholes, handholes or overhead splice cases.

2. <u>Term</u>. The term of this Lease commences upon the Effective Date and shall continue for a period of thirty (30) years (the "Initial Term"). The term shall automatically be renewed at the end of the Initial Term (or any Renewal Term) for an additional term of two (2) years (each, a "Renewal Term" and, together with the Initial Term, the "Term") unless Lessee provides Lessor with at least ninety (90) days' prior written notice of its intent not to renew the Lease.

3. <u>Rent.</u> Lessee shall pay monthly rent to Lessor in an amount equal to the monthly Base Lease Fee payments Lessee receives, as defined in and pursuant to that certain Fiber Optic Sublease Agreement entered into between Lessee and Conexon Connect, LLC, dated of as ______, 2021. Lessee shall pay the monthly rent to Lessor without demand within seven (7) days of Lessee's receipt of any such Base Lease Fee payment from Conexon Connect, LLC.

4. <u>Lessee's Use of Network</u>. Lessee may use the Network for any lawful purpose and shall comply with and conform to all laws, ordinances and regulations that relate in any

manner to the use or operation of the Network. Lessee, its employees, agents and contractors shall have access 24 hours per day, seven days per week to the Network for maintenance and operation thereof.

5. <u>Alterations Prohibited</u>. Lessee shall not make any alterations, additions or improvements to the Network without the prior written consent of Lessor, which consent shall not be unreasonably withheld. All additions and improvements made to the Network, which become an integral part of the Network, shall belong to and become the property of Lessor upon the expiration or termination of the Lease. Notwithstanding the foregoing, any equipment or improvements made by Lessee or any sublessee on the Lessee's side of any demarcation point shall remain the property of Lessee or such sublessee, as the case may be.

6. <u>Lessee's Obligation to Repair</u>.

(a) Lessee, at its own cost and expense, shall keep, or shall enter into contracts with third parties to keep, the Network in good repair, condition and working order consistent with industry standards. Lessee or its third-party contractor shall respond promptly to any outage in the Network in accordance with any reasonable service level provisions contained in any agreement between Lessee and its third-party contractor(s).

(b) Lessee or its third-party contractor(s) shall give Lessor at least ten (10) days' notice of any scheduled maintenance operations and shall use reasonable diligence to provide advance notice of any emergency maintenance or repair that is likely to interrupt transmissions on the Network. Lessee or its third-party contractor(s) shall attempt, where practicable, to coordinate scheduled maintenance at times that will minimize interference with the business of Lessor and its customers.

7. <u>Risk of Loss; Insurance</u>. Lessor shall bear the risk of loss and damage to the Network resulting from any casualty beyond the control of the parties; however, Lessee shall bear the risk of loss and damage to the Network resulting from any misuse or abuse of the Network by Lessee or any negligent act or omission of Lessee, its agents and employees. No loss or damage to the Network or any part thereof shall impair or lessen either party's obligations under this Lease, which shall continue in full force and effect. Lessor shall keep the Network insured against casualties to the extent Lessor deems reasonably necessary.

8. <u>Liens and Taxes</u>. Lessee shall keep the Network free and clear of all levies, liens and encumbrances arising out of Lessee's lease and use of the Network. Lessor shall pay all business personal property taxes assessed against the Network. Lessee shall pay any federal universal service fees or similar taxes to the extent that the Lessor is required to collect or pay them, and all sales or use taxes payable with respect to this Lease.

9. <u>No Warranties</u>. EXCEPT AS SPECIFICALLY SET FORTH HEREIN, LESSOR MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE CONDITION OF THE NETWORK, ITS MERCHANTABILITY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE. 10. <u>Indemnity</u>. Each party shall indemnify, defend and hold the other party harmless from and against any and all claims, actions, suits, liabilities, damages, judgments, fines, penalties, proceedings, costs and expenses (including, without limitation, reasonable attorney fees) arising out of, connected with or resulting from the indemnifying party's ownership, use or operation of the Network, including, without limitation, claims for bodily injury to or death of any person (including the indemnifying party's employees) and property damage.

11. <u>Assignment and Sublease</u>. Lessee may, upon written notice to Lessor, assign, transfer, pledge, hypothecate, grant a security interest in this Lease or sublease the Network or any part thereof. This Lease shall inure to the benefit of, and is binding upon, the successors and assigns of the parties hereto.

12. <u>Ownership</u>. The Network is, and shall at all times be and remain, the sole and exclusive property of Lessor; and Lessee shall have no right, title or interest therein or thereto except as expressly set forth in this Lease.

13. <u>Non-Waiver</u>. No covenant or condition of this Lease can be waived except by the written consent of the parties. Forbearance or indulgence by either party in any regard whatsoever shall not constitute a waiver of the covenants or conditions to be performed by the other party to which the same may apply, and, until complete performance by such party of said covenants or conditions, the non-defaulting party shall be entitled to invoke any remedy available to such non-defaulting party under this Lease or by law or in equity despite said forbearance or indulgence.

14. <u>Entire Agreement</u>. This Lease constitutes the entire agreement between Lessor and Lessee with respect to the lease of the Network, and it shall not be amended, altered or changed except by a written agreement signed by the parties hereto.

15. <u>Titles: Governing Law</u>. The titles to the paragraphs of this Lease are solely for the convenience of the parties and are not an aid in the interpretation of the document. This Lease shall be governed by the laws of the Commonwealth of Kentucky.

[Signature page follows]

<u>Exhibit A</u>

Network Description

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE ELECTRONIC APPLICATION OF)
KENERGY CORP. FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY)
FOR THE CONSTRUCTION OF A HIGH-SPEED)	Case No.
FIBER NETWORK AND FOR APPROVAL OF THE) 2021-00
LEASING OF THE NETWORK'S EXCESS CAPACITY)
TO AN AFFILIATE TO BE ENGAGED IN THE)
PROVISION OF BROADBAND SERVICE TO)
UNSERVED AND UNDERSERVED HOUSEHOLDS)
AND BUSINESSES OF THE COMMONWEALTH)	

HOHN EXHIBIT 2 FILED UNDER PETITION FOR CONFIDENTIALITY

MEMBERSHIP FEE 200.1	APPL	KENERGY ICATION FOR MEMBERSHIP P/SECURITY DEPOSIT CERTIFICATE	Date_	
SECURITY DEPOSIT 235		EASEMENT		
		Α	CCOUNT#	
ADDRESS			4- Y	
APPLICANT		FEDERAL ID OR DRIVERS LICENSE & SOCIAL SECURITY		OFFICE USE ONLY
EMPLOYER		PHONE		DATE
SPOUSE'S NAME		FEDERAL ID OR DRIVERS LICENSE & SOCIAL SECURITY		APPLIED TO FINAL BILL
JOINT APPLICANT		FEDERAL ID OR DRIVERS LICENSE & SOCIAL SECURITY		CASH REFUND or CHECK
EMPLOYER		PHONE		INTEREST AMOUNT
CO-SIGNER		CO-SIGNER CAPITAL CREDIT #		MASS REFUND/DATE
WHITE - CUSTOMER COPY YEI	LLOW CARD - OFFICE COPY		L	AT-44 Revised 01/2006

(1) I apply for membership in Kenergy Corp. (hereinafter referred to as "cooperative") and attach to this application the membership fee of FIVE DOLLARS (\$5.00).

(2) I agree that as a member of the cooperative:

(a) I will pay the cooperative's tariff rates as approved from time to time for all electric energy charged to my account.

(b) I grant the cooperative the permanent right to construct, operate, remove, replace and perpetually maintain its electric power lines (whether overhead or underground) and all associated equipment on the property owned or occupied by me, and in or upon all roads, streets or highways abutting that property, and will execute and deliver to the cooperative any conveyance, grant or instrument which the cooperative shall request for said purpose or any of them. I agree that all wires, meters, poles, transformers and other equipment which the cooperative constructs or installs on that property will, at all times, be owned by the cooperative, and the cooperative shall have the right to come on that land to exercise the rights granted it by me herein, which include the right to cut, trim and control the growth of trees, shrubbery and other vegetation, by any reasonable means, that may interfere with or threaten to endanger the operation or maintenance of lines or other equipment.

(c) I understand that as a member of the cooperative I will have the rights and privileges of a member under the Articles of Consolidation and Bylaws of the cooperative and will be bound by the responsibilities, rules and regulations imposed on a member by those documents and any amendments to those documents that may from time to time be adopted by the Board of Directors or membership of the cooperative.

(3) I further understand that acceptance of my application for membership by the Board of Directors of the cooperative will constitute an agreement between the cooperative and me upon the terms set forth herein.

(4) Applicant agrees that this membership shall be

	a) Individual Membership	b) Joint Membership (both parties must sign certificate)	c) Business, Church
or Orga	anization		

(5) The undersigned Member(s) agrees to deposit with the cooperative such security deposit as is required by the rules and regulations of the cooperative and hereby grants cooperative a security interest in that deposit as collateral for service to be supplied by cooperative. If service to Member is terminated, cooperative shall apply that deposit and any assigned assets held by the cooperative to any bills due the cooperative and any portion of said deposit not so applied shall be refunded to undersigned upon termination of service.

APPLICANT (Signature)	JOINT APPLICANT (Signature)	EMP
	Hohn Exhibit 3	

EMPLOYEE INITIALS

Ke	nei	rav
----	-----	-----

ELECTRIC LINE - RIGHT -OF-WAY EASEMENT (OVERHEAD OR UNDERGROUND FACILITIES)

THIS EASEMENT for electric facilities made and entered into on this the _____ day of _____, 20____ by and between the undersigned (whether one or more)

(unmarried) (husband and wife) and Kenergy Corp a cooperative whose address is P.O. Box 18, 6402 Old Corydon Road, Henderson, Kentucky, 42419-0018 (hereinafter called "Cooperative").

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned grant(s) unto the cooperative, its successors and assigns, the right to enter upon the land of the undersigned, for the purposes stated herein, which lands are situated in ______ County, Kentucky, and more particularly described as follows:

Permission granted for telephone, cablevision or other communications to attach to poles and use same route.

A certain tract of la	and containing app			
and bounded as fo	liows:			
On the North By				
On the South By				
On the East By				
On the West By				
AND BEING the sa	ime real property a	cquired by the un	dersigned from	
by	(dated the	day of	, of record
in	book	, page	, office of the	County Court Clerk.

The undersigned grant(s) to the Cooperative an electric power line easement _______feet in width along with the right to construct, bury, reconstruct, rephase, repair, replace, operate and maintain on the above-described lands an electric transmission and/or distribution line, cable or system and necessary related facilities, and to cut, trim and control the growth by any reasonable means of trees, shrubbery and other vegetation located within the easement or that may interfere with or threaten to endanger the operation or maintenance of said line, cable or system.

The Undersigned covenant(s) that they (he or she) have (has) the right to convey the foregoing easement and rights granted herein and that the Cooperative shall have quiet and peaceable possession of said rights throughtout the existence of this easement.

Cooperative agrees that it shall pay all reasonable damages to existing buildings, growing crops (where appropriate), and fences caused by ordinary day-to-day construction, operation, maintenance or reconstruction required by Cooperative in the exercise of the rights herein granted. The easement shall be kept clear of all other obstructions, including buildings, that may interfere with or endanger the operation and maintenance of said line, cable or system.

The location of the easement herein granted shall at all times be as selected by Cooperative and said location shall be as approximately shown on the attached plat or sketch of said location if attached hereto.

Prepared by____

(Print)

KENERGY CORP.

IN WITNESS WHEREOF, the undersigned have set their hands this day and date first hereinabove written.

Signed in the presence of:

Notary Public, ____

My Commission Expires:

STATE OF KENTUCKY

COUNTY OF

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by____

Hohn		
Exhibit	4	

EP-20 (Revised 09/28/2005)

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

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

TESTIMONY OF TRAVIS SIEWERT

- A. Travis Siewert.
- Q2. Where do you work and what is your job title?
- A. Kenergy; Manager of General Accounting.
- Q3. Have you submitted testimony to the Kentucky Public Service Commission?
- A. I have responded to data requests.
- Q4. Are you familiar with the financial analysis of the Kenergy smart grid Kenect broadband project?
- A. Yes.
- Q5. What is the estimated cost to install a smart grid network throughout

Kenergy's territory?

- A. Conexon estimates the cost of installing a fiber network on Kenergy's existing poles is \$143,825,355. Conexon will own the electronics in the member's home.
- Q6. What is the annual estimated maintenance cost for the smart grid network?
- A. Conexon estimates the annual maintenance cost for the fiber will be per mile. By year 5, once construction is complete, the annual maintenance cost is estimated to be **maintenance**. The lease agreement requires Conexon to perform the maintenance, described as permanent attachment and connectivity, which includes splicing. Maintenance by Kenergy essentially constitutes making the fiber cable safe during an outage situation. All amounts and assumptions used in the model are based upon the experience and actual costs of over 40 electric cooperatives deploying fiber networks to serve their members across the nation.
- Q7. What protection does Kenergy have in assuring that its members do not subsidize the broad band component?
- A. If the Commission allows Kenergy to borrow the funds to construct the fiber network from RUS under its smart grid program, then Kenergy will own the fiber infrastructure, lease it to Kenect, and be the sole shareholder of Kenect. The member-owners of Kenergy will control all returns associated with its operation.

The lease payment is calculated to cover the entire cost of the fiber network, including interest, depreciation, and taxes. The lease payment is charged

per mile of active fiber plant. The charge begins for each circuit when fiber construction on the circuit is completed and made available for service. The lease payment generates a positive rate of return for the cooperative on the fiber asset and over a period of 20 years will entirely cover the cost of the for the fiber plant. Conexon has also performed analysis of market rates and this lease rate is approximately the typical fiber strand lease rate of an average of 8 strands of usage throughout the network.

- Q8. Will Kenergy have additional overhead from the operation of a smart grid network?
- A. No. Kenergy's preference is to place all the customer service representatives on the Kenect side and minimize any additional staff on the Kenergy side. Regardless, if Kenergy has additional personnel costs, those costs are reimbursed by Kenect.

Q9. Explain how the financing of this project will be done?

A. The amount of any grant or subsidy will be applied to the construction cost. What has not been awarded will be borrowed from RUS, which will provide a 4-year construction loan that will be drawn upon as construction progresses. RUS typically provides an annual draw after the construction money has been spent so Kenergy will use its existing line of credit to pay construction bills as they come due. This short term line of credit will be paid annually with the RUS draw. It is expected that year one of the RUS debt will be interest only then the balance of the loan will be amortized over 35 years. The smart grid fiber network is built in segments and as each segment of the fiber has been accepted by Kenergy then the lease fee commences for the portions accepted. The lease fee

paid by Conexon to Kenect to Kenergy includes a rate of return that is more than the debt service. In addition Conexon shall pay Kenergy a fee equal to **service** of Conexon's gross revenue earned from services provided directly over the network.

- Q10. What will be the financial effect of the Conexon-Kenect-Kenergy relationship?
 - A. Attached hereto as Exhibit 1 are the financial projections for the project. The project's positive net revenue will provide a source of revenue to Kenergy that will subsidize the cost of providing electric services thereby easing rate pressure on its members.
- Q11. If Kenect is successful, will the non-member revenue from the broad band affiliate to Kenergy affect Kenergy's tax exempt status?
 - A Kenergy is a tax exempt non-profit corporation. These entities can lose their tax exempt status if non-member revenue exceeds fifteen percent (15%) of total revenue. However, with gross receipts of \$358 million, an amount in excess of \$53.6 million in non-member revenue would be required to jeopardize Kenergy's tax exempt status and the projected broad band revenue does not approach that limit.
 - Q 12. Does this conclude your testimony:
 - A. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

SIEWERT EXHIBIT 1 FILED UNDER PETITION FOR CONFIDENTIALITY

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE 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 LEASING OF THE)NETWORK'S EXCESS CAPACITY TO AN)AFFILIATE TO BE ENGAGED IN THE)PROVISION OF BROADBAND SERVICE)TO UNSERVED AND UNDERSERVED)HOUSEHOLDS AND BUSINESSES OF THE)COMMONWEALTH)	CASE NO. 2021-00
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TESTIMONY VERIFICATION

I verify, state and affirm that the testimony attached hereto and filed with this

verification is true and correct to the best of my knowledge and belief formed after a

reasonable inquiry, and I ask that I be added as a witness for this information.

TRAVIS SIEWERT

STATE OF KENTUCKY

COUNTY OF DAVIESS

The foregoing was signed, acknowledged and sworn to before me by TRAVIS SIEWERT, this 944 day of September, 2021.

My commission expires 81412025

Notary Public ID No. KVNP 31897

1		COMMONWEALTH OF KENTUCKY			
2	BEFORE THE PUBLIC SERVICE COMMISSION				
3					
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6	IN THE MA	TTER OF:			
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, 8	THE ELEC	TRONIC APPLICATION OF)			
9		CORP. FOR A CERTIFICATE OF			
9 10		DNVENIENCE AND NECESSITY)			
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		ER NETWORK AND FOR) CASE NO. 2021-00365			
12		L OF THE LEASING OF THE)			
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16	PROVISION OF BROADBAND SERVICE)				
17	TO UNSERVED AND UNDERSERVED)				
18	HOUSEHOLDS AND BUSINESSES OF THE)				
19	COMMON	WEALTH)			
20					
21					
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23		TESTIMONY OF ROBERT STUMPH			
24					
25	<u>.</u>				
26	Q1.	State your name.			
27					
28	А.	Robert Stumph.			
29					
30	Q2.	Where do you work and what is your job title?			
31	А.	Kenergy; Vice-President, Engineering.			
32	Q3.	Have you submitted testimony to the Kentucky Public Service Commission?			
33	А.	I have responded to data requests.			
34	Q4.	What is the purpose of your testimony?			
35	А.	To identify and detail Kenergy's Amended Work Plan which is further			
36		detailed in Stumph Exhibit 1 hereto.			
		-			

1 Q5. What is the scope of the amendment to the existing work plan?

2 A. Kenergy proposes to add a smart grid fiber network to its existing plant.

3 Q6. What is involved in building a smart grid network?

The project involves adding fiber optic cable to its existing poles so that each 4 A. of Kenergy's 49 substations and offices will communicate through fiber optic 5 lines instead of the existing microwave communication system. Second, 6 Kenergy proposes to install fiber optic cable on its distribution poles with 7 drops to the businesses and residences within Kenergy territory. This will 8 serve two purposes. First, it enables Kenergy to be in a position to install 9 fiber optic automated meters when the existing radio frequency meter system 10 ends its useful life. Second, it enables Kenergy to lease excess fiber optic 11 cable to Kenect, Kenergy's affiliate, so that each member in Kenergy's 12 territory can have access to high speed internet services. 13

14 Q7. What infrastructure does Kenergy need to add to the smart grid network?

A. First, it is easier to summarize what is not needed. Kenergy proposes to build
the smart grid network in the electric space on the existing poles¹.
Additionally, no new substations are needed. The bulk of the material cost
of the installation is the approximately 7,200 miles of fiber optic cable
needed. Additional infrastructure, such as head end equipment, will be
needed to install the smart grid network,

¹ The design may involve the addition of a relatively small amount of new poles.

1	Q8.	Are there drawings or schematics that detail the installation?
2	Α.	Only a map of the system with our distribution lines and substations
3		which is attached hereto as Stumph Exhibit 1 and represents the
4		amendment to the Kenergy work plan. "S" on the map indicates the
5		location of each substation and he lines represent the distribution line
6		system. Because the fiber optic system simply follows the existing
7		electric distribution system, the map is not overly detailed.
8	Q9.	Does this conclude your testimony?

9 A.

Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE 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 LEASING OF THE NETWORK'S EXCESS CAPACITY TO AN AFFILIATE TO BE ENGAGED IN THE PROVISION OF BROADBAND SERVICE TO UNSERVED AND UNDERSERVED HOUSEHOLDS AND BUSINESSES OF THE COMMONWEALTH)))))))))))))))))))
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TESTIMONY VERIFICATION

I verify, state and affirm that the testimony attached hereto and filed with this

verification is true and correct to the best of my knowledge and belief formed after a

reasonable inquiry, and I ask that I be added as a witness for this information.

ROBERT STUM

STATE OF KENTUCKY

COUNTY OF DAVIESS

The foregoing was signed, acknowledged and sworn to before me by **ROBERT STUMPH**, this $\mathcal{H}_{\mathcal{A}}$ day of September, 2021.

My commission expires $5-24-202^{\circ}$ A- Fluide Notary Public Notary Public ID No. 623317

