PROPOSED BOARD RESOLUTION

(Local Power Company Investment for Commercial Broadband)

WHEREAS under section 10 of the TVA Act, the Board is expressly "authorized to include in any contract for the sale of power such terms and conditions, including resale rate schedules, and to provide for such rules and regulations as in its judgment may be necessary or desirable for carrying out the purposes of [the TVA] Act"; and

WHEREAS TVA regulates the retail rates of the local power companies (LPCs) that distribute TVA power and establishes the terms and conditions under which TVA power is sold to ensure that LPC systems are operated for the benefit of electric consumers and that power is sold at rates as low as are feasible; and

WHEREAS some LPCs desire to invest in an advanced fiber infrastructure to improve electric system operations and enable commercial broadband services for its customers; and

WHEREAS TVA recognizes that broadband connectivity is fundamental for economic development, innovation, and improved quality of life and, as such, the potential economic development benefits conferred on the electric system by the provision of commercial broadband justify an LPC funding commercial broadband services (Commercial Broadband Venture) under certain circumstances and with certain restrictions; and

WHEREAS because the wholesale power contract between TVA and each LPC requires electric system revenues and assets to be used for the benefit of the electric system and its consumers, LPCs currently may only use such revenue and assets to fund the portion of the fiber optic network directly related to the electric system operations, but LPCs may not fund the portion related to the Commercial Broadband Venture; and

WHEREAS the TVA Board approved the Use of Revenues Guidelines on April 18, 2013, for carrying out the provisions of the wholesale power contract relating to the use of electric system revenues; and

WHEREAS a memorandum from the Vice President of Government Relations, dated July 16, 2019 (Memorandum), a copy of which is filed with the records of the Board as Exhibit ___________, recommends that the Board of Directors 1) approve an amendment to the Use of Revenues Guidelines to recognize that a) an LPC investment for commercial broadband is a permitted use of electric system revenues and assets and b) that such investment is not inconsistent with section 1(a) of the Schedule of Terms and Conditions of the wholesale power contract, as described in the Memorandum, 2) and direct the President and Chief Executive Officer, or that officer's designee, to develop and implement a process designed to ensure that LPC investments for commercial broadband a) are consistent with TVA's regulatory framework, b) do not result in subsidization by electric system operations, and c) any such investments will be fully repaid to the electric system, and 3) authorize and direct the Vice President, Pricing and Contracts, or that officer's designee, to enter into agreements to authorize appropriate LPC investments for commercial broadband that are otherwise consistent with TVA's regulatory framework.

BE IT RESOLVED that after review of said Memorandum, the Board of Directors finds it to be appropriate and in the interest of TVA to approve the amended Use of Revenues Guidelines, attached to and described in the Memorandum.

RESOLVED further, that the Board hereby authorizes and directs the President and Chief Executive Officer, or that officer's designee, to develop and implement a process designed to ensure that LPC investments for commercial broadband are consistent with TVA's regulatory framework, do not result in subsidization by electric system operations, and any such investments will be fully repaid to the electric system, as further described in the Memorandum.

RESOLVED further, that the Board hereby authorizes and directs the Vice President, Pricing and Contracts, or that officer's designee, to enter into agreements to authorize appropriate LPC investments for commercial broadband that are otherwise consistent with TVA's regulatory framework.

RESOLVED further, that approval by the Board of Directors of each action described above is contingent upon the satisfactory completion of any environmental reviews determined to be required by federal law.

July 16, 2019
External Relations

Board of Directors

SUBJECT

The Board is requested to amend the Use of Revenues Guidelines set forth in Attachment A to recognize that 1) a TVA approved investment by LPCs in commercial broadband is a permitted use of electric system revenues and assets and 2) any TVA approved investment is not inconsistent with section 1(a) of the Schedule of Terms and Conditions of the wholesale power contract. It is further recommended that the Board authorize and direct the President and Chief Executive Officer, or that officer's designee, to develop and implement a process designed to ensure that LPC investments for commercial broadband 1) are consistent with TVA's regulatory framework, 2) do not result in subsidization by electric system operations, and 3) any such investments will be fully repaid to the electric system.

It is further recommended that the Board authorize and direct the Vice President, Pricing and Contracts, or that officer's designee, to enter into agreements to authorize appropriate LPC investments for commercial broadband that are otherwise consistent with TVA's regulatory framework.

The effectiveness of the amendment of the Use of Revenues Guidelines and the authorization of the President and Chief Executive Officer and Vice President, Pricing and Contracts described above are contingent upon the satisfactory completion of any environmental reviews determined to be required under federal law.

BACKGROUND

TVA Regulation

Congress, in the TVA Act, has charged TVA with advancing the social and economic development of the residents of the Tennessee Valley region. One of the significant ways that TVA fulfills this congressional mandate is by providing reliable power, at rates as low as feasible, to the region's LPCs, and through them, to the nearly 10 million consumers of electricity. TVA's authority and responsibility for regulating LPCs to carry out the purposes of the TVA Act is found primarily in section 10 of the TVA Act. That section provides in relevant part:

> [T]he Board is authorized to include in any contract for the sale of power such terms and conditions, including resale rate schedules, and to provide for such rules and regulations as in its judgment may be necessary or desirable for carrying out the purposes of this Act.

The Board primarily carries out its regulatory role through the incorporation of regulatory provisions in the wholesale power contract (Power Contract) between TVA and each LPC. These contract provisions ensure that LPC systems are operated primarily for the benefit of electric consumers and that rates are kept low. Specifically, section 6 of the Power Contract governs the permissible use of gross revenues from electric operations, and issues frequently arise concerning the permissible uses of electric system revenues. To clarify the Board's intent regarding certain permitted expenditures not expressly provided for in section 6 of the Power Contract, the TVA Board adopted the Use of Revenues Guidelines on April 18, 2013. Additionally, section 1(a) of the Schedule of Terms and Conditions of the Power Contract expressly prohibits the pledging of electric system assets for the LPC's other non-electric operations. This section is designed to ensure that the electric system is not subsidizing an LPC's other non-electric operations or is not otherwise being put at risk by such other operations.

Fiber Optic Networks

Power companies across the country are increasingly installing fiber optic networks for the many electric benefits it can offer. Installing such a network can be a prudent business decision for power companies. LPCs are able to leverage their rights-of-way (ROW) and power poles to significantly reduce fiber installation time and costs. The resulting fiber optic will enable smart grid benefits that substantially improve reliability and efficiency of electric operations by networking operation centers, power-generating facilities, and substations. Also, upgrading to a fiber optic network allows LPCs to provide customer-friendly offerings such as remote metering and automated billings, leading to increased accuracy, customer satisfaction, and loyalty. Another benefit is that a fiber optic network can be used to provide commercial broadband to the power company's offices as well as its customers.

LPC Commercial Broadband

Over the last few years, TVA has seen a growing interest in commercial broadband deployment within the Valley. Due to the lack of available commercial broadband services (internet, phone, and cable) in rural areas, many municipalities and electric cooperatives have sought to provide such services to their customers. LPCs, particularly electric cooperatives, feel an obligation to provide these nearly essential services to their customers. Enabling legislation, namely the 2017 Tennessee Broadband Accessibility Act, 2018 Alabama Broadband Accessibility Act, 2019 Mississippi Broadband Enabling Act, and 2019 Georgia Achieving Connectivity Everywhere Act has cleared the way for electric cooperatives to pursue commercial broadband services. These and other activities have led to TVA's determination of the need to amend the Use of Revenues Guidelines to clarify that LPCs may invest electric system funds in commercial broadband provided that the risk to electric system ratepayers is sufficiently mitigated through appropriate risk mitigation and compliance oversight measures incorporated in a TVA review and approval process.

Although an LPC's investment in commercial broadband services (Commercial Broadband Venture) is likely to confer economic development benefits on the electric system, such a venture is not without significant risk. Risks include, but are not limited to, higher than anticipated costs, lower than expected revenues, competitor pricing, or emerging technologies. The risks associated with a Commercial Broadband Venture should be appropriately balanced against the potential economic benefits a successful Commercial Broadband Venture could confer on an electric system and its consumers.

LPC Financing

Significant funding may be necessary to deploy fiber optic networks and/or support commercial broadband purposes. This is especially the case when there is challenging topography or a sizeable service territory.

LPCs often use third-party financing from banks or lenders such as CoBank, Cooperative Financing Corporation (CFC), or USDA Rural Utilities Services to fund both fiber optic networks and invest in commercial broadband. These loans, however, require security that is typically in the form of electric system assets and/or corporate loan guarantees backed by the electric system. While these financing methods afford LPCs the opportunity to deploy broadband in a timely manner and meet consumer needs, they may also increase risk to the electric system and its ratepayers. An evaluation of the potential risks and benefits by the LPC securing such loans from third-party lenders is critical to protecting electric system ratepayers.

ALTERNATIVES CONSIDERED

TVA's Regulatory Assurance staff (Staff) reviewed and evaluated information pertaining to commercial broadband deployment throughout the nation and sought input from LPCs and the Tennessee Valley Public Power Association (TVPPA) on the need for further clarification and guidance for its regulation. Specifically, TVA obtained feedback from TVPPA's Fiber Deployment Advisory Group and TVPPA's Contract Compliance Advisory Group as well as a small group of cooperative general managers. Staff also engaged National Rural Electric Cooperative Association, Tennessee Electric Cooperative Association, and CoBank representatives for possible alternatives. Feedback from individual LPCs and TVPPA has been generally supportive of TVA's efforts and recommended actions.

RECOMMENDED ACTION AND POTENTIAL IMPACTS

The Board is requested to amend the Use of Revenues Guidelines to recognize that 1) a TVA approved LPC investment in commercial broadband is a permitted use of electric system revenues and assets and 2) such investment is not inconsistent with section 1(a) of the Schedule of Terms and Conditions of the Power Contract. It is further recommended that the Board authorize and direct the President and Chief Executive Officer, or that officer's designee, to develop and implement a process designed to ensure that LPC investments for commercial broadband 1) are consistent with TVA's regulatory framework, 2) do not result in subsidization by electric system operations, and 3) any such investments will be fully repaid to the electric system. At least annually, the President and Chief Executive Officer, or that officer's designee, will provide a status report on investments resulting from this Board action to the TVA Board through the Audit, Risk, and Regulation Committee.

It is further recommended that the Board authorize and direct the Vice President, Pricing and Contracts, or that officer's designee, to enter into agreements to authorize appropriate LPC investments for commercial broadband that are otherwise consistent with TVA's regulatory framework. The effectiveness of the amendment of the Use of Revenues Guidelines and the authorization of the President and Chief Executive Officer and Vice President, Pricing and Contracts described above are contingent upon the satisfactory completion of any environmental reviews determined to be required under federal law.

Allowing LPCs to invest in commercial broadband will improve the potential for long-term prosperity of communities in the Valley by providing capital for the deployment of broadband infrastructure. Allowing LPC investments in commercial broadband in their territories will likely result in improved economic conditions in those areas, including improved business, educational, and health care opportunities, and higher employment. Because LPCs, especially cooperatives, have limited resources for financing Commercial Broadband Ventures, permitting LPCs to make investments in commercial broadband through a TVA review process with appropriate protections in place for electric system ratepayers could greatly benefit LPC customers.

ATTACHMENT

Attachment A: Use of Revenues Guidelines
Attachment B: For reference only Section 1(a) of the Schedule of Terms & Conditions of the Power Contract

Justin C. Maierhofer
Vice President
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Attachments
cc (Attachments):
Ying Ayliffe, WT 3D-K
Cass Larson, BR 5B-C
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8/7/19			8/11/19
Sherry A. Quirk	Date	Jeffrey J. Lyash	Date

ATTACHMENT A
Use of Revenues Guidelines

The following is intended to provide guidelines for carrying out the provisions of the power contract relating to the use of electric system revenues. None of the following is intended to change any provision of the power contract.

TVA in its regulatory role realizes that there are certain expenses which, although they might be viewed as only indirectly related to supplying power, may be deemed to be an appropriate use of electric system revenues in the normal course of conducting business. In making these expenditures, distributors who are independent, locally governed, public power entities are expected to develop and consistently apply a fair process to ensure a reasonable benefit to its electric system and adequately protect ratepayers.

These expenses include, but are not limited to:

Charitable Contributions and Sponsorships

- A distributor may make charitable contributions or participate in sponsorships, consistent with state law, in an amount commensurate with being a good corporate citizen (typically, a *de minimis* amount); provided, however, that distributor shall take into consideration that it operates on a non-profit basis and that its purpose is to provide safe, reliable electric service at the lowest feasible rates. Contributions should be targeted to organizations that are broad-based in community outreach and scope, with special emphasis on education, economic development, and/or civic-business partnerships that further enhance the distributor's mission of service.

Memberships in Trade Organizations

- Memberships such as APPA, NRECA, TVPPA, statewide organizations, and other organizations representing interests of distributors and their ratepayers.

Advertising

- Advertising should be directed toward educating the public on safety, energy programs, energy consumption, energy efficiency, and/or demand response.

Economic Development

- A distributor may use a justified, reasonable amount of electric system revenues for economic development that are expected to provide a commensurate benefit to the electric system.
- A distributor may participate in the United States Department of Agriculture Rural Economic Development Loan and Grant Program and is expected to follow Rural Utilities Service (RUS) Guidelines to ensure proper due diligence when loaning funds to customers for economic development benefits to the electric system.

Distributor Investment for Commercial Broadband

- A distributor may invest* in its legally-affiliated division or wholly-owned subsidiary to enable commercial broadband services (LPC Investments for Commercial Broadband), subject to the following parameters and TVA's approval process**:

- A transparent process must be implemented to inform ratepayers about this non-electric investment and the financial impact of the entire fiber optic project.
- The total rate impact of the entire fiber optic network must be within the acceptable range as defined by TVA.
- Any such investment must: (1) comply with all state, local, and other applicable law; (2) be memorialized in an amendment to the power contract that states the terms and conditions for TVA's approval; (3) support a phased deployment of commercial broadband; (4) provide for a 20 year or less loan term with applicable interest; and (5) require the distributor to complete a joint cost study.
- If electric system assets are pledged as security for a third-party loan or provided as a loan guarantee, the distributor must be the counterparty for the loan arrangement and funds must be dispersed by the distributor to the legally-affiliated division or wholly owned subsidiary.

* "Invest" and "investments" under this section shall include:

- distributor loaning electric system funds to its legally-affiliated division or wholly-owned subsidiary,
- distributor pledging electric assets, funds, revenues, credit or property on behalf of its legally-affiliated division or wholly-owned subsidiary, or
- distributor's electric system providing a loan guarantee for a third-party loan for the distributor's legally-affiliated division or wholly-owned subsidiary.

**TVA's approval process is designed to ensure that LPC investments for commercial broadband 1) are consistent with TVA's regulatory framework, 2) do not result in subsidization by electric system operations, and 3) any such investments will be fully repaid to the electric system.

- It is recognized that nothing in section 1(a) of the Schedule of Terms and Conditions should be read to prohibit a distributor's investment in its legally-affiliated division or wholly-owned subsidiary to enable it to provide commercial broadband services as provided for in this section.

Administration of a voluntary, customer-opt-in program to match Low Income Home Energy Assistance Program (LIHEAP) funds

Joint programs conducted by TVA and the distributor through agreements amending and supplementing the power contract

Distributor programs expressly approved by TVA through agreements amending or supplementing the power contract

ATTACHMENT B

Section 1(a) of the Schedule of Terms & Conditions of the Power Contract

1. **Financial and Accounting Policy.** [Distributor] agrees to be bound by the following statement of financial and accounting policy:

(a) Except as hereinafter provided, [Distributor] shall administer, operate, and maintain the electric system as a separate department in all respects, shall establish and maintain a separate fund for the revenues from electric operations, and shall not directly or indirectly mingle electric system funds or accounts, or otherwise consolidate or combine the financing of the electric system, with those of any other of its operations. The restrictions of this subsection include, but are not limited to, prohibitions against furnishing, advancing, lending, pledging, or otherwise diverting electric system funds, revenues, credit or property to other operations of [Distributor], the purchase or payment of, or providing security for, indebtedness or other obligations applicable to such other operations, and payment of greater than standardized or market prices for property or services from other operations of [Distributor]. In the interest of efficiency and economy, [Distributor] may use property and personnel jointly for the electric system and other operations, subject to agreement between [Distributor] and TVA as to appropriate allocations, based on direction of effort, relative use, or similar standards, of any and all joint investments, salaries and other expenses, funds, or use of property or facilities.