

## CREDIT OPINION

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# Knoxville (City of) TN Electric Enterprise

## Update to credit analysis

### Summary

Knoxville Electric Enterprise, TN (Aa2 stable revenue rating) benefits from a strong regional economy and stable customer base. In addition, the system is well managed and revenues continue to provide healthy debt service coverage and liquidity. Debt levels are moderately elevated but manageable. A medium-term challenge will be the successful completion of the electric system's Enhanced Grid Modernization effort and implementation of broadband service to Fiber Division customers. While the majority of the Enhanced Grid Modernization project is related to the implementation of new advanced technologies which will improve the reliability of the electric system, a portion is also related to the deployment of a high speed fiber network which will allow for the provision of broadband services to local customers.

### Credit strengths

- » Large, stable service area with limited customer concentration
- » Healthy debt service coverage

### Credit challenges

- » Above-average debt profile
- » Roll out of Enhanced Grid Modernization

### Rating outlook

The stable outlook reflects the expectation that the system will continue to proactively review and adjust rates to maintain debt service coverage and cash flow to support pay-as-you-go capital investment. The outlook also reflects the district's broad and stable service area.

### Factors that could lead to an upgrade

- » Declines in debt ratios
- » Increased system demand and customer growth
- » Increases in reserve and liquidity levels

### Factors that could lead to a downgrade

- » Deterioration of debt service coverage and overall financial position

- » Sizeable increases in debt ratios
- » Reliance on electric system by fiber division beyond current expectations

## Key indicators

### Exhibit

Knoxville (City of), TN Electric Enterprise					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	19 years				
System Size - O&M (in \$000s)	510,498				
Service Area Wealth: MFI % of US median	69.5%				
Legal Provisions					
Rate Covenant (x)	1.20				
Debt Service Reserve Requirement	No DSRF (Baa and Below)				
Management					
Rate Management	Aaa				
Regulatory Compliance and Capital Planning	Aa				
Financial Strength					
	2018	2019	2020	2021	2022
Operating Revenue (\$000)	533,206	521,369	547,687	553,902	606,335
O&M (\$000)	474,548	457,112	461,031	457,068	510,498
Net Funded Debt (\$000)	247,055	322,170	305,835	275,415	306,753
Annual Debt Service Coverage (x)	4.01	3.50	3.50	3.67	3.49
Cash on Hand	36 days	33 days	61 days	55 days	56 days
Debt to Operating Revenues (x)	0.5x	0.5x	0.5x	0.5x	0.5x

Sources: US Census Bureau, Knoxville (City of) TN Electric Enterprise, TN's financial statements and Moody's Investors Service

## Profile

The Knoxville Utilities Board (KUB) provides electric transmission and distribution, gas distribution, water treatment and distribution, sewer collection and treatment and broadband services to a population of 466,184 (2020 American Community Survey) located in the City of Knoxville (Aa1 stable) and County of Knox (Aa1 stable).

## Detailed credit considerations

### Service Area and Characteristics: Knoxville service area provides continued customer growth

KUB's electric system will continue to experience moderate customer growth over the near-term given the regional significance of the City of Knoxville tax base. KUB is a Tennessee Valley Authority (Aaa stable) electric distributor with approximately 215,264 customers as of fiscal 2022. Electric service is provided not only to the City of Knoxville, but also Knox County and portions of the adjacent counties.

The Knoxville-Knox County area is the regional business, educational and health care service center for eastern Tennessee (Aaa stable). Large, institutional employers, such as the University of Tennessee and the Tennessee Valley Authority (Aaa stable), anchor the local job base and provide stability. In addition, the local economic base also benefits from its proximity to Oak Ridge National Laboratories. Given these favorable economic characteristics, the county's unemployment rate (2.9% in August 2022) has consistently been below state (3.5%) and national (3.9%) levels. Median family income of \$79,265 in Knox County approximates that of the US median (99% of US) and is slightly higher than the state median (115.2% of state).

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From 2012 through 2022, the system's customer base, which is predominantly residential, has experienced moderate growth, increasing approximately 0.89% annually. Officials expect that growth over the next five years will be similar to current levels.

The electric system's total peak capacity of 3,029 MW is sufficient to meet current and future needs. Since 2008, system demand had declined from its peak of 1,246 MW, which management attributes to more efficient appliances and general conservation. However, the system reached a new peak demand of 1,328 MW (43.8% of peak capacity) in 2015 as a result of colder weather conditions. The system is well diversified, with residential customers comprising 88.5% of the customer base and 48% of system revenues in fiscal 2022. The top 10 customers account for a reasonable 15.4% of total system revenues, with Carpenter Creek LLC as the largest source of revenue, at 3.44%, followed by the University of Tennessee at 3.42%.

The Electric Division is in the midst of a major ongoing initiative, the Enhanced Grid Modernization effort. This project includes the installation of a high-speed fiber optic network (owned by the Electric Division) which will allow KUB to implement new advanced technologies (smart switches, additional substations, etc) that will improve the overall reliability and flexibility of the electric system. In addition to improving the reliability of the electric system, the fiber optic network will allow KUB to offer broadband services to residents within the service area. A separate Fiber Division was established during the past year and a plan to offer broadband service was reviewed and approved by the State Comptroller of TN, TVA and Knoxville City Council. The Fiber Division operates completely separately from the Electric Division and the only financial assistance from the Electric Division is \$35 million in start-up loans (monies loaned to the division over three years - first \$10 million loan authorized in August 2021 and \$20 million loan authorized for the fiscal 2023 budget). This loan amount cannot be increased unless it is again reviewed by TVA and will be fully repaid by the Fiber Division with annual payments through fiscal 2030. The Fiber Division also pays utilization and access fees to the Electric Division for use of the fiber optic network which began in late fiscal 2022 and will ramp up based on fiber customer additions. Roll-out of broadband services to customers through the Fiber Division will be done with a measured approach. Only when customers sign-up for Broadband service, will fiber be run from the street to the residential properties. Management has various roll out plans and target take rates in place which are conservative in nature and will only advance if these targets are achieved.

#### **Debt Service Coverage and Liquidity: Continued healthy debt service coverage in fiscal 2022**

KUB's electric system will maintain a strong overall financial position given prudent fiscal management and conservative budgeting practices. While debt service coverage declined in fiscal 2019 and 2020, the system maintains solid levels with fiscal 2022 coverage of 3.5 times. The system does make payments in lieu of taxes on an annual basis to the city, however these payments are subordinate to debt service.

Maximum annual debt service (MADS) coverage over the next ten years (inclusive of current and future debt issuances as well as annual rate increases and the loan to the Fiber Division) is projected to be between 3.62 and 4.0 times. The fiscal 2022 operating ratio of 84.2% is modestly higher than the median but reflects the fact that the system passes through energy charges from TVA directly to its customers.

KUB has full rate setting authority and passed on TVA's wholesale rate increase of 1.5% in October 2018 to customers. In addition to the TVA rate increases, KUB instituted a 1% increase in 2020 (effective October 1, 2019) and a 3% rate increase in 2022 (effective April 1, 2022) KUB has approved two additional annual 3% rate increases that will be effective April 2023 and April 2024. KUB has also instituted an automatic purchase power adjustment so that any future TVA increases are passed on to customers without the need for KUB Board approval.

#### **Liquidity**

The system's liquidity is expected to remain satisfactory given prudent management, supported by established fiscal policies. The system has a minimum cash balance policy of no less than \$45 million. Since 2010, unrestricted cash has been well above the policy. In fiscal 2022 cash was \$73.5 million or 56 days and net working capital was \$12.8 million in fiscal 2022.

#### **Debt and Legal Covenants: Legal provisions provide adequate protections for bondholders**

The system's debt levels (39.2% in fiscal 2022) will remain manageable despite future debt plans, given average amortization of principal and timely rate increases. In an effort to keep pace with growth as well as maintaining the system, officials continue to undertake a ten-year \$1.2 billion Capital Improvement Plan (CIP), 28% of which is funded with additional debt. The CIP primarily addresses the Century II initiative, which focuses on construction and refurbishment of substations, as well as replacing 2,600

distribution poles and 14 miles of underground cable per year. The system's amortization of principle is average at 39.1% repaid within 10 years (71.9% in 20 years). Management's 10 year financial plan includes various rate increases which will offset the projected annual debt issuances and maintain strong debt service coverage.

The legal provisions under the current resolution are expected to ensure adequate protection for bondholders. While the resolution includes a 1.20 times rate covenant and does not require a debt service reserve fund, we believe that the system's current debt service coverage adequately mitigates these features. All outstanding debt is secured by the net revenues on a parity basis and additional parity bonds may be issued if net revenues during twelve of the preceding twenty-four months are equal to 120% of aggregate maximum annual debt service (MADS), including the new parity bonds.

#### Legal security

The Series OO-2022 bonds are secured by a net revenue pledge of the electric system.

#### Debt structure

The system's debt profile is made up of 100% fixed rate securities.

#### Debt-related derivatives

The system is not currently party to any derivative agreements.

#### Pensions and OPEB

Employees participate in the Knoxville Utilities Board Pension Plan which is a single employer defined benefit plan administered through an Administrative Committee consisting of seven KUB employees that are appointed by KUB's President and CEO. As of December 31, 2021, the plan had 478 active members, 600 retirees and beneficiaries and 12 terminated vested participants. Based on the January 1, 2019 actuarial report, KUB contributed \$3.7 million for fiscal 2022 which constitutes 100% of the actuarial required contribution. The plan was 112.01% funded as of January 1, 2022.

## ESG considerations

### Knoxville (City of) TN Electric Enterprise's ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 2

#### ESG Credit Impact Score

# CIS-2

## Neutral-to-Low

For an issuer scored CIS-2 (Neutral-to-Low), its ESG attributes are overall considered as having a neutral-to-low impact on the current rating; i.e., the overall influence of these attributes on the rating is non-material.



Source: Moody's Investors Service

Knoxville Electric Enterprise, TN's ESG credit impact score of **CIS-2** indicates that ESG considerations have a neutral-to-low impact on the enterprise's ratings. The score reflects moderately negative exposure to environmental considerations, moderately negative exposure to social risk and neutral-to-low governance risks.

Exhibit 3

## ESG Issuer Profile Scores



Source: Moody's Investors Service

### Environmental

We assess the electric enterprise's exposure to environmental risks as moderately negative (**E-3**), an outcome driven by its exposure to physical climate risks. Like many local electric utilities, Knoxville Electric Enterprise is a Tennessee Valley Authority (TVA) power distributor. While Knoxville Electric Enterprise does have higher exposure to heat stress and extreme rainfall and moderate exposure to wildfires, which could damage poles and wires, these specific exposures are not currently so significant to elevate our overall E score above moderately negative.

### Social

Exposure to social considerations is moderately negative (**S-3**), reflective of broadly shared public concerns about environmental, social and affordability issues that could lead to adverse regulatory or political intervention. These risks are balanced by neutral- to-low exposure to health and safety, human capital and responsible production considerations.

### Governance

Governance risk is neutral-to-low (**G-2**). The city can recover service costs through a rate-setting mechanism that is not subject to state regulatory board approval, though intervention by local political leaders is a potential risk. Based on our assessment of past performance, risks associated with financial strategy, management credibility, organizational structure and compliance and reporting are neutral to low.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

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