Wholesale Water Rate Adjustment

January 21, 2021

Resolution 1428
Second Reading
Wholesale Water Rate

- Two recurring customers
  - Town of Dandridge
  - Shady Grove Utility District
- Customers also purchase water from Jefferson City
- Jefferson City rate 13% lower than KUB
- Dandridge reduced purchases to minimum levels
- If Shady Grove follows course, combined annual revenue loss would be ~ $1.2M
Proposed Rate Adjustment

- Lower “Sales for Resale” rate from $1.70 per Ccf to $1.48 per Ccf
- Equivalent to rate charged by Jefferson City
- Dandridge and Shady Grove have executed commitments to return/remain at historic purchasing levels or higher
Resolution 1428

- Lowers “Sale for Resale” water rate to $1.48 per CCF
- Effective February 2021
Background of Ethics Policies

- Pre 2000: City Charter, Resolution 1, general state law
- 2000: Conflict of interest added to By-laws
- 2005: Employee Conflict of Interest Policy and required annual disclosure
- 2006: TN State Ethics Commission established
- 2007: Board adopted Ethics Policy
- 2012: By-laws ethics section updated
- 2013: Annual disclosure requirement adopted
Ethics Policy Components

- Aligns with governing statutes and guidelines
- Certifies compliance with ethical standards
  - Political activity
  - Nepotism
  - Gifts and gratuities
  - Personal and financial interests
  - Improper use of position or authority
  - Improper use of KUB time, facilities, and equipment
- Requires disclosure if a conflict exists
Annual Disclosure Form

− Form included in today’s agenda packet
− Annual disclosure occurs in January
− Return forms before end of January
Tennessee Open Meetings Act

- Applies to public body with authority to make decisions or recommendations to a public body

- Requires
  - Adequate public notice
  - Minutes recorded and open to public
  - All decisions or deliberations toward a decision discussed in open meetings
  - Public votes
Tennessee Public Records Act

- Applies to all records, regardless of physical form or characteristics, made or received during KUB’s course of business
- Resolution 1358 established KUB policy
- Provisions include
  - Processes for making and responding to request
  - Naming of public records coordinator
  - Making policy available on website
KUB’s Support of EVs

- EV charger rebates
- EV supportive Time-of-Use retail rates
- Participate and support state-wide EV efforts
- Support TVA’s EV programs
TVA EV Supportive Policy Changes

- Allow resale of electricity for EV chargers
- Allow distributors to own charging stations
- Provide EV fast charger wholesale rate
## EV Charging Station Types

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Fast Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>120 V</td>
<td>208 V or 240 V</td>
<td>208 V or 480 V</td>
</tr>
<tr>
<td>Charge Time</td>
<td>12-40 hours</td>
<td>2-4 hours</td>
<td>15-45 minutes</td>
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<tr>
<td></td>
<td>2-5 RPH*</td>
<td>10-30 RPH*</td>
<td>100-200 RPH*</td>
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<tr>
<td>Primary Use</td>
<td>Residential</td>
<td>Residential, commercial, public</td>
<td>Commercial, public</td>
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</tbody>
</table>

*RPH = miles of range per hour of charging
Fast Chargers on KUB System
Public fast chargers address range anxiety
Current rates not designed for EV fast chargers
TVA Fast Charger Wholesale Rate

- Consumption based rate
- Applies to separately metered fast charger stations (public, fleet, or transit)
- Non-standard rate structure
KUB EV Fast Charger Retail Rate

- Companion to TVA wholesale EV rate
- Worked closely with TVA to develop
- New rate on February Board agenda
Regulatory Review Requirements

- TVA and State Comptroller must review proposal details

- Business case must include
  - Operational benefits to existing divisions
  - Competitive environment analysis
  - Fiber division financial plan
  - Funding plan
Impact on Electric Division

- Infrastructure owned by Electric Division
- Supports electric improvements
  - Expanded investment in distribution automation (DA)
  - Communication platform for future applications
  - Conservation voltage reduction
  - Customer based demand response
  - Next generation advanced meters
- Provides opportunity for broadband system
Competitive Environment Analysis

- Analysis of competition and existing providers
- Projections of customer demand for a new entrant into the market
- Analysis based on purchase intent survey and other research
Overview of Competition in the Area

- Six main providers the KUB service territory
- Comcast/Xfinity and AT&T largest incumbent providers
- 60% only have option for one service provider
- Nearly 80% of survey responders are interested in KUB providing broadband services
- 50% of responders would consider switching to KUB Broadband service at similar price as current provider
## Commercial Versus Municipal Broadband

<table>
<thead>
<tr>
<th></th>
<th>Xfinity 300 MB</th>
<th>Xfinity 1 GB</th>
<th>Chattanooga 300 MB</th>
<th>Chattanooga 1 GB</th>
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</thead>
<tbody>
<tr>
<td>Download Speed</td>
<td>300 MB</td>
<td>1 GB</td>
<td>300 MB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Upload Speed</td>
<td>20 MB</td>
<td>35 MB</td>
<td>300 MB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Data Cap</td>
<td>1 TB</td>
<td>1 TB</td>
<td>Unlimited</td>
<td>Unlimited</td>
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<tr>
<td>Cost per month</td>
<td>$86</td>
<td>$106</td>
<td>$58</td>
<td>$68</td>
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</table>

- Municipal Broadband offers a superior product at the best value
- Potential average savings of $28-$38 per month
Observations of Entry of Municipal Broadband Into Markets

- Utilities able to compete in market
- Competition drives lower prices with corresponding contracts from incumbents
- Customers benefit from competition
Fiber Division Financial Plan Components

- Projected products, pricing, and revenues
- Market share (most plans target 35% take rate)
- Costs for products and internet capacity
- Projection of fees paid to Electric Division for use of assets
- Marketing and sales cost
Funding Plan

- Financial plans for both Electric and Fiber Divisions
  - Complete sets of proforma financials
  - Ten-year funding plans
- Defines financial relationships
  - Cost allocations
  - Expense reimbursement methods
- Expenditures for building the network funded in a balanced manner
TVA and State Comptroller of the Treasury review business plans
Process estimated to take 60 to 90 days
Approval is authorization to move forward with other approval steps
Next Steps

- Stakeholder meetings progressing and going well
- Customer Advisory Panel interested in topic
- Targeting March Board meeting for potential official action on business plans
1” to 2” of Snow Predicted for Christmas Eve

- KUB developed response plan
- Ensured key resources were available for holiday
- Able to release crew to assist Sevier County Electric
Actual Accumulation of 2.5” to 6” of Snow

- Weather changed rapidly
- KUB quickly adjusted plan
  - Implemented ICS
  - Additional resources
- Christmas Day temperatures dropped to low teens
Storm Significantly Impacted Our Customers

- Storm began on Christmas Eve
- Over 23,000 customer outages at peak
- More than 32,000 customers experienced outages
90 Percent of Outages from Falling Trees

Causes of Outages

- Trees Outside Trim Zone: 51%
- Trees Inside Trim Zone: 39%
- Equipment Failure: 7%
- Unknown: 3%
Restoration Slowed Due to New Events, Road Conditions, and COVID

- Many resources responded:
  - 61 KUB and on-system contractor crews
  - 25 off-system crews
  - COVID impacted availability

- Roads icy or blocked by downed trees

- Hundreds of new outage events daily

- Service restored in 4 days
Crews Worked Around the Clock
Underground Crews Responded to 105 Events

- 36 employees worked Christmas Eve through weekend
- Also helped supply water to Hallsdale Powell Utility District
Thank You!

- Approximately 300 KUB employees worked the event
- 25 contract crews aided
- Special thanks to TMEPA for crew assistance

- Lenoir City Utilities Board
- LaFollette Utilities
- Service Electric
- Pike Electric
- BESCO
- Service 1
- Sheffield City Utilities (Alabama)
- Bolivar Energy (West Tennessee)
- ABC Tree Service WA Kendall & Co.
- Davey Tree Service
- Jackson Energy Authority (West Tennessee)
- Wilson County Electric (North Carolina)
- Xylem
- WA Kendall & Co.
Most Customers Very Appreciative

HOLIDAY STORM RESPONSE

"Thank you to the unsung heroes keeping us warm"

"Thank you to everyone who works to keep the power on. We see and appreciate you."

"Thank you for restoring our power while sacrificing time with your family!"
## Historical Comparison

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<tbody>
<tr>
<td>Customers out</td>
<td>40,000+</td>
<td>75,000+</td>
<td>127,000+</td>
<td>56,000+</td>
<td>54,000+</td>
<td>32,000+</td>
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<tr>
<td>Poles replaced</td>
<td>100</td>
<td>142</td>
<td>151</td>
<td>81</td>
<td>40</td>
<td>25</td>
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<tr>
<td>Transformers replaced</td>
<td>45</td>
<td>91</td>
<td>132</td>
<td>40</td>
<td>19</td>
<td>17</td>
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<tr>
<td>Customer Events</td>
<td>N/A</td>
<td>7,800</td>
<td>23,000</td>
<td>2,700</td>
<td>3,400</td>
<td>2,200</td>
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<tr>
<td>Customer calls</td>
<td>50,000+</td>
<td>45,000+</td>
<td>220,000+</td>
<td>71,000+</td>
<td>28,000+</td>
<td>21,000+</td>
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<tr>
<td>Restoration length</td>
<td>8 days</td>
<td>7 days</td>
<td>7 days</td>
<td>3 days</td>
<td>2.5 days</td>
<td>4 days</td>
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<tr>
<td>Estimated cost</td>
<td>$2 million</td>
<td>$2 million</td>
<td>$4 million</td>
<td>$2.5 million</td>
<td>$1.2 million</td>
<td>$1.5 million</td>
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* June 2011 event includes two separate storms on June 21 and June 23