

Proposed Rate Actions

June 18, 2020



Resolution 1414 Second Reading

Proposed Rate Action Items

- Pilot time of use (TOU) electric rates for residential and business customers
- Amend Purchased Power Adjustment mechanism
- Housekeeping changes
 - Amend residential rate schedules to change "Customer Charge" to "Basic Service Charge"
 - Several minor word changes in electric rate schedules

Pilot TOU Electric Rates

- Optional pilot programs for residential and business customers less than 1000 kW
- Opportunities for savings on monthly bills
- On-peak and off-peak energy rates
- Participation limited during pilot phase
- Customers can revert to standard schedule
- Effective November 2020

Purchased Power Adjustment (PPA) Amendments

- PPA automatically flows through changes in purchased power costs from TVA
- Proposed amendments:
 - Reflect TOU rates
 - Reset base rates for current wholesale power costs
 - Reflect wholesale power cost credit from TVA long-term partnership agreement
- Effective July 2020

Resolution 1414

- Amends Electric Division rate schedules for new pilot TOU rates
- Amends Purchased Power Adjustment
- Amends various rate schedules for housekeeping changes



Long-term Natural Gas Supply Contract

June 18, 2020



Long-term Contract Details

- Resolution 1405 authorized execution of long-term supply contract with Tennergy
- Tennergy pre-pays for their gas supply
- Pre-pay allows Tennergy to sell to KUB at discount
- Average daily purchases of 2,800 dekatherms (~10% of KUB supply)
- Term up to 31 years
- Discount to gas index minus ~ \$.30

Resolution 1416

- Amends Resolution 1405 to extend contracting authority to December 31, 2020
- Effective upon passage



Second Amendment of the KUB Retirement System

June 18, 2020



KUB Retirement System

- Established effective July 1, 1999 by Resolution No. 979
- Includes
 - Guaranteed pension benefit
 - 401(k)
 - Disability benefits
- Defines responsibilities of Board, President, Officers, and Administrative and Investment Committees

Current Trustee Provisions

- Section 10 of Resolution No. 979 provides that each qualified Plan shall have a Trustee, which shall
 - Hold custody of Plan funds
 - Invest funds in accordance with Investment Policy and the directions of Investment Managers
 - Recognize its role as a fiduciary of the Retirement System and its specific responsibilities as set out in a Trust Agreement

Fiduciary Landscape Changing

- Fewer banks willing to act as trustees
- Majority of plans are served by custodian
- Banks willing to serve as custodians
 - Perform same administrative role
 - Do not act as a fiduciary
- Trustee search identified limited options

Proposed Amendment

- Permit appointment of trustee or custodian
- Update terms to include custodian agreements
- Prior to appointment of a custodian, advance notice to be provided to Board's Audit and Finance Committee

Resolution 1417

- Recommendation of the Audit and Finance Committee
- Amends Resolution No. 979, establishing the KUB Retirement System, as amended by Resolution 1037
- Becomes effective upon passage



401(k) Plan and OPEB Trust Investment Policy Amendments

June 18, 2020



Resolutions 1418 and 1419

Investment Policy Overview

- Investment policies outline delegations of responsibility, set broad guidelines for diversification and asset allocation, and provide for performance standards
- Investment policy changes require Board approval

Investment Policy Amendments

- Reviewed by
 - Investment advisors
 - Retirement System counsel
 - Retirement System actuary
- Recommended for approval by
 - Retirement System Investment Committee
 - President and CEO
 - Audit and Finance Committee

401(k) Amendments

- Clarify investment terms, objectives, and guidelines
 - Add custodian language from Resolution 1417
 - Change terminology from Lifestyle to Target Date Funds
 - Clarify Standards of Measurement
 - Other housekeeping items

401(k) Amendments

Allow flexibility to replace current small cap growth and small cap value equity funds with a combined small and mid cap equity fund in the active management tier

Passive	Active	
Fixed Income	Fixed Income	
Target Retirement Date	Balanced	
Large Cap	Large Value	Large Growth
	Mid Cap	
Small/Mid Cap	Small Value	Small Growth
International	International	

Other Post-employment Benefits (OPEB) Amendments

- Update terminology and align existing and required operating practices with the document
 - Updates actuarial valuation to yearly
 - Refers to officials commonly as OPEB Board

Resolution 1418

- Recommendation of the Audit and Finance Committee
- Adopts revised 401(k) Plan Investment Policy
- Becomes effective July 1, 2020

Resolution 1419

- Recommendation of the Audit and Finance Committee
- Adopts revised OPEB Trust Investment Policy
- Becomes effective July 1, 2020



Return to Normal Billing Operations

June 18, 2020



Actions Taken to Help Customers

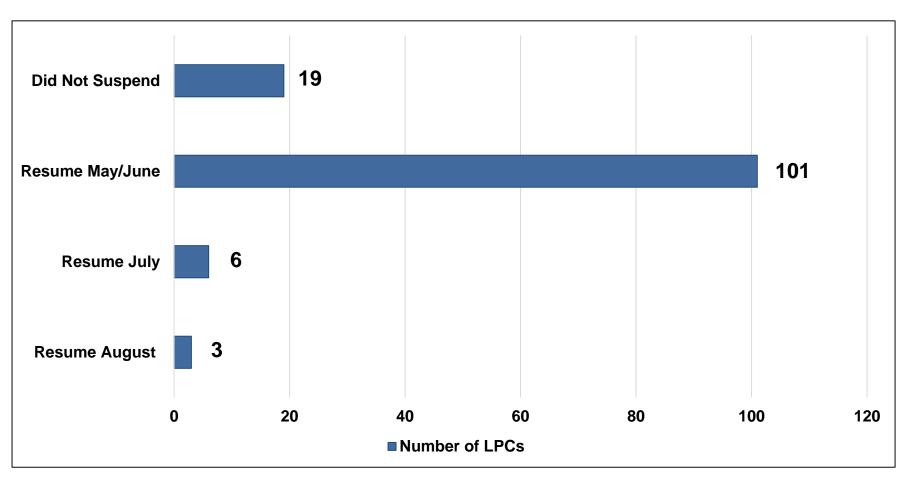
- Suspended disconnects for nonpayment March 16
- Waiving payment transaction fees
- Removing late fees for individual customers
- Procured \$80,000 in TVA grants for agencies providing pandemic-related assistance
- Participated in TVA's Back to Business Credit Program
- Increased communication about actions taken and assistance opportunities

Resuming Disconnects Trails Reopening

- City/County reopening plan concludes in July
- Opening Customer Service Centers July 6
- Door notices begin July 27
- First disconnects for nonpayment August 3



Most Local Power Companies in Valley to Resume Disconnections by End of June



Source: TVA LPC Peer Survey - 146 LPCs*

*17 Undecided

Advance Communication to Customers and Community Partners

- Partners contacted in early June
- Postcard, emails, and bill messages to all customers
- Social media and website content
- Proactive phone calls to those possibly needing assistance



IMPORTANT MESSAGE

At KUB, we know the spread of COVID-19 has had an adverse financial impact for our customers. That's why we acted quickly in March to alleviate those impacts by suspending disconnects for non-payment. Since then we have worked with individual customers and community groups to provide assistance to those who needed it.

Like many of you, we are now working to gradually return to "normal." We plan to reopen our customer service centers in early July. As part of our return to normal billing processes, service disconnections for nonpayment will resume August 3. Our commitment to assisting those in need will not change, so please call us at 524-2911 if you think you will have trouble paying an upcoming bill.

KUB is made up of more than 1,000 of your friends and neighbors. We understand the difficulties you may be facing. But East Tennesseans are resilient. Give us a call if you think you will need help on an upcoming bill.

We're here for you. Together we can get through this.

Thank You,

KUB Customer Service

For more information, please visit www.kub.org/assistance.



Assisting Customers in Many Ways

- Waiving fees
 - Payment transaction and door notice fees for all customers through September 30
 - Late fees for individual customers upon request
- Flexible payment arrangements
- Directing those in need to bill payment assistance programs and partners
- Internal credit ratings not impacted by late payments

Available Sources of Assistance

- \$2.7M in Low Income Home Energy Assistance
- Project Help has ~\$200K in approved-aid available
- Additional funding at CAC totaling \$30,000
- City grant for rental assistance able to assist with restoring disconnected utility service
- Network of 200+ faith-based organizations and other social service agencies

Efforts Will Continue

- Monitor and adjust as local and regional conditions change
- Collaborate with partners and stakeholders
- Provide updates on customer impacts



Grid Modernization Project Update

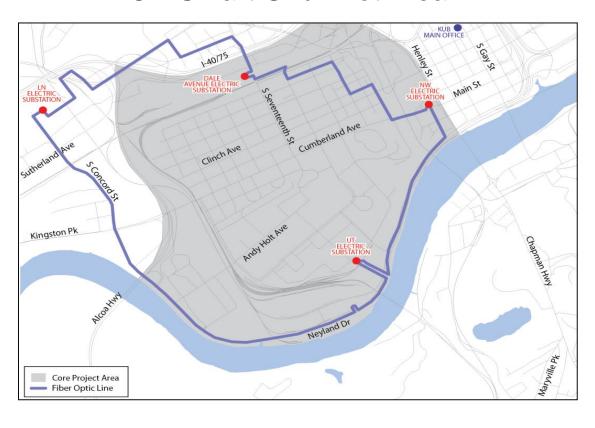
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Preliminary Projects Ensured Success

- 2006 to 2008: two pilot projects
 - Drive-by/Mobile collector
 - 20,000 endpoints
 - Fixed network (1-way communications)
- 2008 & 2009: KUB Smart Grid Community (KSGC) proof of technology project
 - 125 endpoints
 - Two-way wireless technology
- 2010: Department of Energy Smart Grid Pilot
 - Deployed system-wide meter communications network
 - Installed 6,000 meters

DOE Smart Grid Pilot Area



The Case for Full Deployment (December 2013)

- Customer expectations
- Operational and reliability gains
- Aging and obsolete equipment
 - Analog meters
 - Copper analog lines (support ends 2020)
- Environmental benefits
- Evaluate DOE smart grid pilot project

Plan for Grid Modernization (December 2014)

Communication Network









Metering



System Automation and Control







Century II Grid Modernization Investments: \$106M

- Four-year deployment of advanced meters: \$82M
- Ten-year fiber network and distribution automation: \$24M

Final Meter Installed April 15, 2020

- Over 384,000 meters installed in less than four years
- Contractor Utility Partners of America (UPA) utilized 37 installers daily
 - Eleven KUB technicians assisted
- Twenty-four tower base stations constructed to read meters remotely



Project Completed Ahead of Schedule and Under Budget

- Actual spend: \$76.3M
- Overall project savings: \$5.7M
 - Meter installation: \$2.3M
 - Project efficiencies:\$3.4M

Project Financials		
Utility	Budget	Under Budget
Electric	\$38M	\$1.1M
Gas	\$13M	\$1.1M
Water	\$21M	\$2.1M
Wastewater	\$2M	\$1M
Payroll	\$8M	\$0.4M
Total	\$82M	\$5.7M

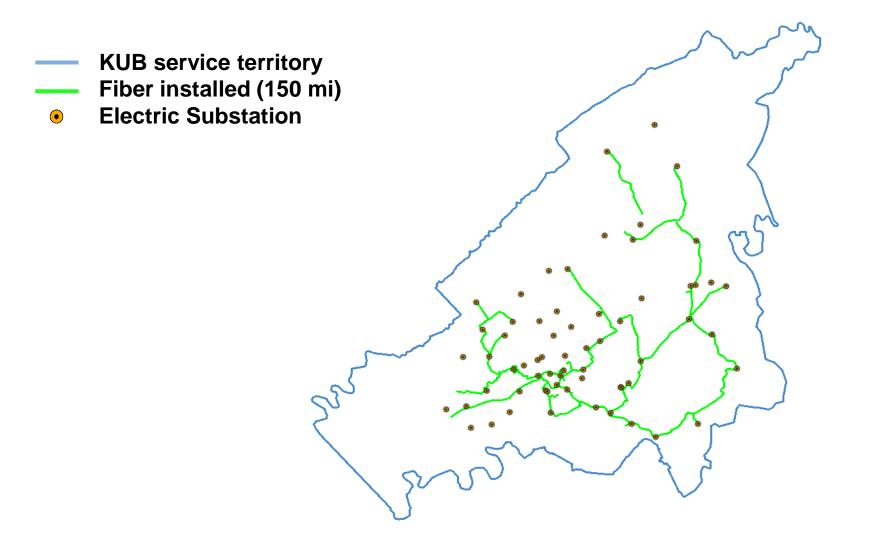
Project Results and Benefits

- Estimated \$6.4M cost reductions (\$3.5M in last year alone)
 - AMI meter reads: \$5M in savings
 - AMI transfer reads: \$1M in savings
 - AMI remote disconnects/reconnects: \$0.4M in savings
- Reduced truck rolls save (to date) \$0.2M and 1.2M miles driven
- Improved billing accuracy
 - May 2019: 99.58%
 - May 2020: 99.95%

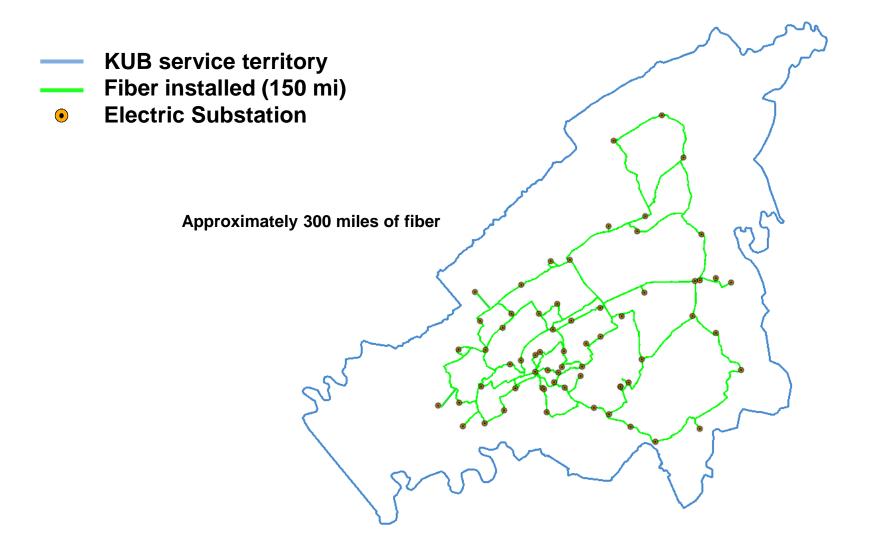
Advanced Meters Providing Early Benefits

- Detailed data for enhanced rate and operational analyses
- Alerts customers to water leaks
- Reduced impacts of backbills to customers
- Advanced meters deter tampering
- KUB's mobile work management application developed as part of the project

FY20 Current Fiber



Full Fiber Build-Out by FY30



Distribution Automation Prevents Customer Outages

- 1,335,323 customer minutes of interruption (CMI) saved since July 1, 2019 (excludes major event days)
- March 29, 2020 storm saved 1,330,302 minutes
 - 4,117 customers were not impacted due to technology
 - Total storm was around 6 million CMI
- Technology proving benefits above estimates

Future Enhancements on the Horizon

- Additional customer rate and payment options
 - Time of Use Rates
 - Prepaid Utility Services
- Enriched customer experience through new KUB website and mobile application
- Enhanced outage detection and response



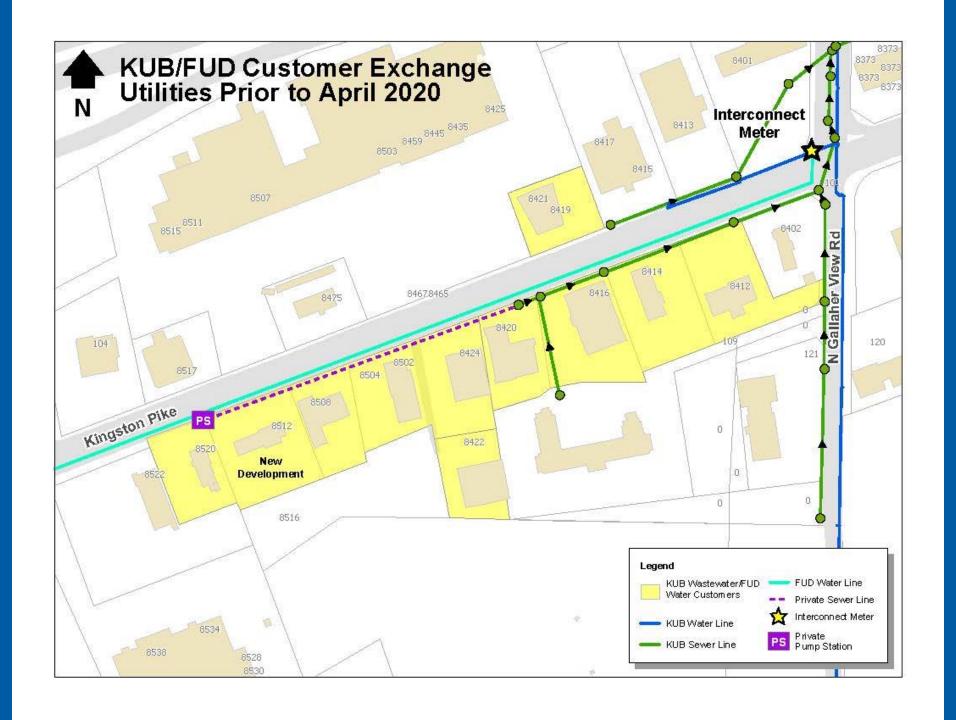
Customer Exchange with First Utility District

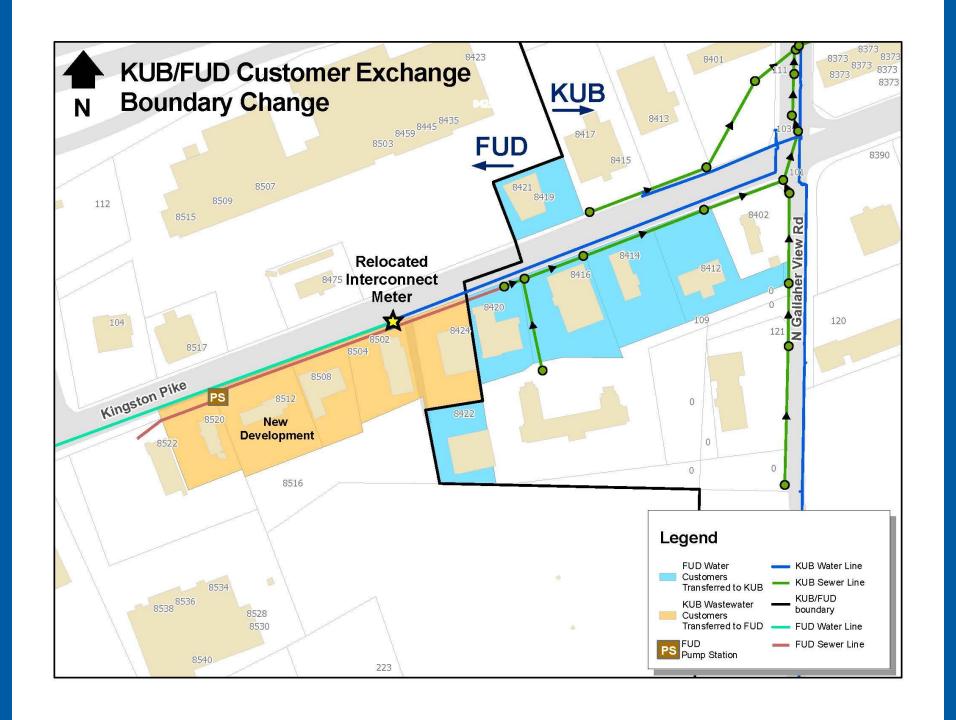
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Project Overview

- 11 properties on 8000 block of Kingston Pike with split utility service
- Development required wastewater pump station
- Cooperation between KUB and First Utility District (FUD)
- Board authorized exchange of customers in August 2019
- Exchange completed in April 2020









Exchange Benefits Both KUB and FUD

- More distinct service boundaries
- Single provider for 11 customers
- Pump station maintained by FUD
- Existing water interconnection maintained
- Stronger partnership

