FY 2018 Payments In Lieu of Taxes (PILOTs)

- FY 2018 payments = $29,925,260
- Increase of $0.8M or 2.7%
- Increase reflects Century II capital investments and higher margins
<table>
<thead>
<tr>
<th>Established by</th>
<th>Approved by</th>
<th>Basis</th>
<th>Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water &amp; Wastewater</td>
<td>City Charter</td>
<td>Net Plant Value</td>
<td>February</td>
</tr>
<tr>
<td>Electric &amp; Gas</td>
<td>State Law</td>
<td>Net Plant Value &amp; Avg. Operating Margin</td>
<td>June</td>
</tr>
<tr>
<td>System</td>
<td>FY 2018</td>
<td>FY 2017</td>
<td>Increase</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>------------</td>
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<tr>
<td>Electric</td>
<td>$15,542,951</td>
<td>$14,828,556</td>
<td>$714,395</td>
</tr>
<tr>
<td>Gas</td>
<td>6,859,312</td>
<td>6,987,365</td>
<td>(128,053)</td>
</tr>
<tr>
<td>Water</td>
<td>3,304,740</td>
<td>3,294,652</td>
<td>10,088</td>
</tr>
<tr>
<td>Wastewater</td>
<td>4,218,257</td>
<td>4,017,388</td>
<td>200,869</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$29,925,260</strong></td>
<td><strong>$29,127,961</strong></td>
<td><strong>$797,299</strong></td>
</tr>
<tr>
<td>County</td>
<td>FY 2018</td>
<td>FY 2017</td>
<td>$ Change</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>City of Knoxville</td>
<td>$19,144,877</td>
<td>$18,524,684</td>
<td>$620,193</td>
</tr>
<tr>
<td>Knox County</td>
<td>9,888,055</td>
<td>9,742,580</td>
<td>145,475</td>
</tr>
<tr>
<td>Union County</td>
<td>350,536</td>
<td>337,775</td>
<td>12,761</td>
</tr>
<tr>
<td>Sevier County</td>
<td>343,139</td>
<td>324,143</td>
<td>18,996</td>
</tr>
<tr>
<td>Grainger County</td>
<td>136,007</td>
<td>133,658</td>
<td>2,349</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>37,929</td>
<td>39,253</td>
<td>(1,324)</td>
</tr>
<tr>
<td>Blount County</td>
<td>12,528</td>
<td>13,276</td>
<td>(748)</td>
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<tr>
<td>Anderson County</td>
<td>10,593</td>
<td>11,033</td>
<td>(440)</td>
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<tr>
<td>Loudon County</td>
<td>1,596</td>
<td>1,559</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$29,925,260</strong></td>
<td><strong>$29,127,961</strong></td>
<td><strong>$797,299</strong></td>
</tr>
</tbody>
</table>
KUB PILOTs Have Grown Faster Than Inflation
Resolution 1373
(Electric and Gas PILOTs)

- Requests City Council set electric and natural gas tax equivalent payments for FY 2018 and provides for their distribution
- Total payments = $22,402,263
Project Help Campaign Results

- Campaign ended on February 2
- $38,808 collected for emergency heating assistance
- More than 100 households can be helped by these donations
Round It Up Overview

- 3-year pilot approved by Board in November 2014, effective May 2015
- Funds weatherization for low income KUB customers
- Administered by Knoxville-Knox County Community Action Committee (CAC)
Strong Customer Participation
Assisting Families in Need

- 59% participation rate
- $2.1 M in contributions to date
- More than 160 homes weatherized
- Over 2,000 waiting for services
Completed Job
KUB Service Area

As of January 31, 2018
Variety of Improvements for Whole-Home Retrofits

As of January 31, 2018

- HVAC
- Insulation
- Bath Fan
- Air Duct
- CO Detector
- Water Heater
- Air Sealing
- Windows
- Doors
“Since KUB customers have given generously through Round It Up, we have doubled the amount of services we have been able to provide to low income, elderly and disabled neighbors.”

— Jason Estes
CAC Housing & Energy Services Director
Round It Up in Action
Example #1: Background

- Disabled veteran
- 57-year-old home
  - Poor insulation
  - Aged water heater

Completed in February 2017
Round It Up in Action
Example #1: Improvements

- Water heater replaced
- Attic insulated
- Exterior door replaced
Round It Up in Action
Example #1: Customer Impact

- 28% decrease in energy costs
- $500 in annual utility savings

“The insulation makes a big difference. The contractors were all great. I liked them all.”

— RIU Customer
December 2017
Round It Up in Action
Example #2: Background

- Disabled, elderly customer
- 77-year-old home
  - Poor insulation
  - Aged HVAC system

Completed in November 2016
Round It Up in Action
Example #2: Improvements

- Replaced heat pump and duct work
- Insulated attic and floors
Round It Up in Action
Example #2: Customer Impact

- 16% decrease in energy costs
- $300 in annual utility savings

“You just don't know how much it means to go from having a cold house in the winter to being comfortable. Drastic reduction in amount of air leakage.”

— RIU Customer
December 2017
Board to consider program renewal in March
- Knoxville Extreme Energy Makeover program ended in 2017
- Continuance of Round It Up can provide sustainable funding
- Doubles number of homes CAC can serve compared to federal funds alone
2005 EPA Consent Decree required KUB to address sanitary sewer overflows (SSOs)

PACE 10 – programmatic approach for wastewater system assessment and capacity improvement
- Collection system
- Wastewater storage tanks
- Wastewater treatment plants (WWTPs)

PACE 10 merged into Century II
## Consent Decree Timeline

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Project</th>
<th>Cost</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2012</td>
<td>Kuwahee WWTP – CCP Phase I</td>
<td>$51M</td>
<td>✔️</td>
</tr>
<tr>
<td>Dec 2013</td>
<td>Fourth Creek WWTP – CCP Phase I</td>
<td>$20M</td>
<td>✔️</td>
</tr>
<tr>
<td>Dec 2016</td>
<td>134 Collection System Projects</td>
<td>$530M</td>
<td>✔️</td>
</tr>
<tr>
<td>June 2018</td>
<td>Fourth Creek WWTP – CCP Phase II</td>
<td>$4.7M</td>
<td>✔️</td>
</tr>
<tr>
<td>June 2021</td>
<td>Kuwahee WWTP – CCP Phase II</td>
<td>$52M</td>
<td>✔️</td>
</tr>
</tbody>
</table>
Composite Correction Plan (CCP)

- Construct Biologically Enhanced High Rate Clarification (BEHRC) system
- Provides full treatment to peak wet-weather flows in excess of existing capacity
- Final Consent Decree projects
Wastewater Treatment Process

Normal Treatment Train
N1. Influent Screens
N2. Grit Removal
N3. Primary Clarifier
N4. Aeration Tanks
N5. Final Clarifier
N6. Disinfection Contact Tank
N7. Tennessee River

Solids Treatment Train
S1. Solids Thickener
S2. Digester
   (S2-B. Biogas Generator)
S3. Centrifuge
S4. Biosolids Cake
S5. Farm

Wet Weather Treatment Train
A1. Wet Weather Storage
A2. Biological Contact Tank
A3. High Rate Clarifier
Biologically Enhanced High-Rate Clarification (BEHRC)
BEHRC Benefits

- Provides
  - Cost-effective full treatment for all flow
  - Operational flexibility
  - Smaller footprint compared to conventional treatment

- Supports system growth
Fourth Creek WWTP CCP Phase II

- Construction status
  - 95% complete
  - BEHRC operational: March 2018
  - Final contract completion: May 2018
  - CD deadline: June 30, 2018

- Cost: $4.7M

- Initial tour with TDEC complete
Kuwahee WWTP CCP Phase II

- **Current status**
  - Design 80% complete
  - Final design documents: June 2018

- **Schedule**
  - Construction: August 2018 – January 2021
  - CD deadline: June 30, 2021

- **Cost estimate**: $52M

- Largest single project in Consent Decree
Kuwahee BEHRC Location
View looking west along Neyland greenway

View looking southwest from Neyland Drive
Century II Investments Will Continue

- CCP for Fourth Creek and Kuwahee Wastewater Treatment Plants
  - On schedule to meet CD deadlines
  - Final EPA-required projects
RP3 Recognition Program
Sets Bar for Public Utilities

- KUB first earned designation in 2015
- Based on sound business and industry practices
- Recognizes proficiency in four areas
  - Reliability
  - Safety
  - Workforce development
  - System improvement

American Public Power Association
KUB RP3 Application a Corporate Effort

- Electric Systems Engineering
- System Operations
- Safety, Security, and Technical Services
- Human Resources
- Economic Development and Government Relations
- System Maintenance
Becoming an RP3 Provider

- Comprehensive application process
  - 26-page application
  - More than 1,500 pages of documentation
  - 6 months of preparation

- Peer review
  - 18-member expert panel of public power representatives
  - 3-month process
Programs Extensively Reviewed

- Safety programs
- Century II
- Vegetation management
- Employee development programs
- Physical and cyber security standards
- Community engagement
- Mutual-aid agreements
KUB Achieves Highest Recognition Level and Perfect Score

- KUB awarded Diamond level and 100 points in evaluation
- Recognition levels
  - Diamond
  - Platinum
  - Gold
- Achieved by about 10% of utilities nationwide
“What makes The Fort unique is our power capabilities. We will have two separate power feeds from our partner, Knoxville Utilities Board, which provides Tier IV power capabilities. Coupled with our cloud services and disaster recovery capabilities, The Fort will offer businesses a way to safely manage and scale their data with first-class technology.”

— Frank Hutchison
SH Data Technologies