FY 2019 Payments In Lieu of Taxes (PILOTs)

- FY 2019 payments = $31,550,780
- Increase of $1.6M or 5.4%
- Increase reflects Century II capital investments, Grid Modernization investments and higher margins
### PILOTs Governance

<table>
<thead>
<tr>
<th></th>
<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>KUB Board</td>
<td>Net Plant Value</td>
<td>February</td>
</tr>
<tr>
<td>Electric &amp; Gas</td>
<td>State Law</td>
<td>KUB Board &amp; City Council</td>
<td>Net Plant Value &amp; Avg. Operating Margin</td>
<td>June</td>
</tr>
<tr>
<td>System</td>
<td>FY 2019</td>
<td>FY 2018</td>
<td>Increase</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
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<td>-----------</td>
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<tr>
<td>Electric</td>
<td>$16,459,902</td>
<td>$15,542,951</td>
<td>$916,951</td>
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<tr>
<td>Gas</td>
<td>7,150,052</td>
<td>6,859,312</td>
<td>290,740</td>
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<tr>
<td>Water</td>
<td>3,511,656</td>
<td>3,304,740</td>
<td>206,916</td>
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<tr>
<td>Wastewater</td>
<td>4,429,170</td>
<td>4,218,257</td>
<td>210,913</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$31,550,780</strong></td>
<td><strong>$29,925,260</strong></td>
<td><strong>$1,625,520</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Payments by Jurisdiction

<table>
<thead>
<tr>
<th></th>
<th>FY 2019</th>
<th>FY 2018</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Knoxville</td>
<td>$20,238,463</td>
<td>$19,144,877</td>
<td>$1,093,586</td>
<td>5.7%</td>
</tr>
<tr>
<td>Knox County</td>
<td>10,401,877</td>
<td>9,888,055</td>
<td>513,822</td>
<td>5.2%</td>
</tr>
<tr>
<td>Union County</td>
<td>384,659</td>
<td>350,536</td>
<td>34,123</td>
<td>9.7%</td>
</tr>
<tr>
<td>Sevier County</td>
<td>323,267</td>
<td>343,139</td>
<td>(19,872)</td>
<td>(5.8%)</td>
</tr>
<tr>
<td>Grainger County</td>
<td>137,481</td>
<td>136,007</td>
<td>1,474</td>
<td>1.1%</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>39,024</td>
<td>37,929</td>
<td>1,095</td>
<td>2.9%</td>
</tr>
<tr>
<td>Blount County</td>
<td>13,627</td>
<td>12,528</td>
<td>1,099</td>
<td>8.8%</td>
</tr>
<tr>
<td>Anderson County</td>
<td>10,779</td>
<td>10,593</td>
<td>186</td>
<td>1.6%</td>
</tr>
<tr>
<td>Loudon County</td>
<td>1,603</td>
<td>1,596</td>
<td>7</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$31,550,780</strong></td>
<td><strong>$29,925,260</strong></td>
<td><strong>$1,625,520</strong></td>
<td><strong>5.4%</strong></td>
</tr>
</tbody>
</table>
KUB PILOTs Have Grown Faster Than Inflation

![Graph showing the growth of KUB PILOTs compared to inflation and other costs]
**Resolution 1389**  
* (Electric and Gas PILOTs)*

- Requests City Council set electric and natural gas tax equivalent payments for FY 2019 and provides for their distribution
- Total payments = $23,609,954
Gas Supply Update

December 20, 2018
KUB’s Transportation Portfolio

- Tennessee Gas Pipeline
- East Tennessee Natural Gas
- Texas Eastern
- Southern Natural Gas
- Nora Lateral
- Jewell Ridge Lateral
- John Sevier Lateral
- Transco

- 54,000 dth/d*
- 5,000 dth/d
- 4,467 dth/d
- 4,380 dth/d
- 10,000 dth/d
Gas Supply Sources Changing Daily

Typical December Day

December 18, 2018

December 19, 2018

- Purchases (TGP, Tetco)
- Purchases (ETNG)
- Storage - TGP
- Storage - Saltville
- Storage - LNG
LNG is Reserved for Peak Day Use
KUB Stores 412,000 dth
Actions Taken to Date

- Managing gas supply
- Curtailment of interruptible customers
- Requested voluntary reductions
- Coordination with pipeline & others
- Incident Command Structure/contingency planning
Energy and Water Education Grant

December 20, 2018

KUB
New Grant Award Strengthens Knoxville Partnership

- Southeast Sustainable Communities Fund to provide $300,000 for education and outreach
- Builds on Smarter Cities Partnership
  - Initiated in 2013
  - Engaged more than 20 community organizations
  - Developed strategies for energy efficiency and education
Grant Partners

- City of Knoxville
- Knoxville Knox County Community Action Committee (CAC)
- Alliance to Save Energy
- Socially Equal Energy Efficiency Development (SEEED)
- KUB
- Tennessee Valley Authority (TVA)
- Knoxville-Knox County Emergency Management Agency
- University of Tennessee Extension
- Shelton Group
Energy Education Complements Weatherization Assistance Programs

- Approximately 200 workshops with nearly 2,000 participants over past three years
- Door-to-door outreach
- Informational meetings for clients waiting on services at CAC
Funding Enhances Education and Outreach

Topics addressed:
- Energy and water efficiency
- Healthy homes
- Emergency preparedness

Offerings for participants:
- Workshops with take-home kits
- Low-cost home improvements
- “Green House Calls”
Program Complements Current Outreach Efforts

- Customer newsletters
- Go Green East Tennessee ads
- Social media posts
- Website content
- Nearly 50 outreach events in past year
Employee Recognition Program
Awards Presentation
December 20, 2018
South Knox Main and Gate Station Project
Brooke Sinclair, System Maintenance
Value Engineering = Cost Savings

- Gas main work initiated by Tennessee Department of Transportation (TDOT) Project on Chapman Highway
- Joey recognized an opportunity to move from Chapman Highway, decrease footage of higher pressure pipe, and replace an aging gate station
- Resulted in $2M in savings
Effective Bid Process = Additional Cost Savings

- Joey and Dallas improved specifications and conducted thorough pre-bid site visits
- Dallas managed the construction project to strictly adhere to the contract and specification documents
- Resulted in additional savings for the main installation
Ahead of TDOT Schedule

Main Installation Completed
August 2018

Gate Station Commissioning
December 2018
South Knox Main and Gate Station Project

- Dallas Coplin, Gas Systems Engineering
- Brooke Sinclair, Manager, System Maintenance
- Joey Henry, Water Systems Engineering
Wastewater Solids Laboratory Development
Joshua Johnson, Plant Operations
Require employees to obtain operator certification from the Tennessee Department of Environment and Conservation (TDEC)

Part of the certification test is laboratory analysis

Real-time process evaluation
  - Provides process control analyses for decisions

All compliance related analysis completed by KUB Water Quality Laboratory
Wastewater Solids Laboratory Development

- Recognized opportunity to improve process and support certification process
  - Designed the lab area
  - Utilized existing equipment and procured items
  - Developed written procedures
  - Trained operators
  - Laboratory skills have improved
    - Recent test takers confirmed the hands on experience helped

- Focused on our Blueprint
  - Investing in a skilled, diverse work force
  - Meeting or exceeding regulatory standards
Wastewater Solids Laboratory Development

- Tom Pucci, Plant Operations
- Josh Johnson, Manager, Plant Operations
Good Samaritan
Darrin Rhines, Meters Department Lead
Good Samaritan Puts Out Fire

- Enroute to a job in Powell
- Spotted a postal vehicle on fire
- Adam acted quickly and helped extinguish the flames
Good Samaritan

- Adam Owen, Meters
- Darrin Rhines, Meters Department Lead
Work Healthy Program
Deanna Unger, Human Resources
Organizational Impact

- Over 120 hours of industrial athletic training and ergonomic education conducted in FY18
- Recognition of key risks and investment in process modification
Ergonomic Innovation in Grid Modernization
Program Outcomes

- **FY17 strains and sprains**
  - 19 total
  - 9 in Overhead Construction (OHC)

- **FY 18 strains and sprains**
  - 11 total
  - 3 in OHC

- **Reduction in work-related surgeries in construction groups**
Work Healthy Program

- Kevin Riehn, Safety, Security, & Technical Services
- Emily Smith, Human Resources*
- Mike Smith, Overhead Construction*
- Jeff Hall, Safety, Security, & Technical Services*

*Accepting award for team
Ergonomic Improvement For Grounding Reduces Shoulder Injuries

- Breaker must be de-energized, tested and grounded before work is performed
- Shoulder strain created when landing ground on vertical jumpers
Shoulder Strain Caused By Holding, Pulling, and Twisting To Secure Clamp

62 pounds of force
Tony Strader Designed Horizontal Post
Removing Weight From Task
Improvement Results in Less Force

23 pounds of force
Overhead Construction Ergonomic Improvement

- Steve Proffitt, Manager, Overhead Construction
- Tony Strader, Overhead Construction
Hardin Valley Dig in Response
Jamie Davis, Grid Modernization
Hardin Valley Dig In Response

- Third-party contractor impacted 8 inch gas line
- Combination of factors presented unique challenges
- Potential for multi-day response to restore service
- Situation required quick thinking and expertise
Hardin Valley Dig In Response

- Underground Construction was dispatched to respond
- Over a century of experience represented
- Repairs made quickly and safely avoiding a service interruption
Hardin Valley Dig in Response

<table>
<thead>
<tr>
<th>Back Row:</th>
<th>Not Pictured:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brent Elkins</td>
<td>Brian Harvey</td>
</tr>
<tr>
<td>Seth Lakin</td>
<td></td>
</tr>
<tr>
<td>Brandon Spoon</td>
<td></td>
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<tr>
<td>Josh Harris</td>
<td></td>
</tr>
<tr>
<td>Joe Hall</td>
<td></td>
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<tr>
<td>Randy Rauhuff</td>
<td></td>
</tr>
<tr>
<td>Rick Marsh</td>
<td></td>
</tr>
<tr>
<td>Tyler Hodges</td>
<td></td>
</tr>
<tr>
<td>Randy Skeen</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Front Row:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Dockery*</td>
</tr>
<tr>
<td>Brad Irwin</td>
</tr>
<tr>
<td>Jason Hellard*</td>
</tr>
<tr>
<td>Robert Langston</td>
</tr>
<tr>
<td>Brian Sharp*</td>
</tr>
</tbody>
</table>

*Accepting award for team
Board Chair Award
Parkwest Hospital Transformer Team
Bob Colwick, Electric Systems Engineering
Parkwest Hospital
Infrared Imaging Results

Conductors

Infrared scan of conductors
Remediation Efforts

- Electrical team started immediate planning to correct issues
  - Key Accounts scheduled an outage with hospital staff
  - Station Management Services Wires and Overhead Construction completed work on Friday evening with no unscheduled power interruptions
  - All work completed in four hours
- Proactive thinking ensured reliable service
Proactive Thinking Ensures Reliability

- Initiated large/critical transformer inspection program
- Improved communications and coordination with hospitals
Parkwest Hospital Transformer Team

Back Row:
- Barry Jones, System Operations
- Dewayne Rankin, Overhead Construction*
- Dustin Troutt, Overhead Construction
- Mike Elliott, Overhead Construction
- Kevin Whittington, Overhead Construction
- Gene Bailey, System Operations
- Keith Maples, Station Management Services
- Mike Miller, Overhead Construction
- Lance Mitchell, Overhead Construction
- Nathan Parker, Station Management Services
- Austin Spears, Station Management Services
- Vinnie Loyacano, Overhead Construction
- Jared Burris, Station Management Services

- Mike Evans, Station Management Services
- Mike Armstrong, Overhead Construction
- Ryan Prosise, Overhead Construction
- Dustin Bailey, Overhead Construction
- Todd Lashley, Overhead Construction
- Kevin Roberts, Station Management Services

*Accepting award for team
Parkwest Hospital Transformer Team

**Front Row:**
- Joel Henderson, Overhead Construction
- Candace Scruggs, Customer Support & Key Accounts*
- Willy Wilkerson, Overhead Construction
- Tim Ramsey, Station Management Services*
- Mathew Stinnett, Electric Systems Engineering*
- Ron Stewart, Overhead Construction
- Mark Hall, Overhead Construction

**Not Pictured:**
- Robert Forbes, Overhead Construction

*Accepting award for team