City of Houston
HPW Combined Utility System (CUS)
2018 Proposed Rate Increase
Rating Agencies’ view of the CUS

- Moody’s ... Aa2, stable outlook
  - Strengths:
    - Near monopoly in robust service area
    - Closed system (can’t move funds for other non-system uses)
    - Automatic rate increase
  - Challenges
    - Rate limitations, with large CIP needs and increasing operating costs due to surface water conversion mandates
    - High debt position
    - EPA – probably more debt
    - Significant variable rate debt and swap exposure
  - What could lead to downgrade
    - Significant deterioration in cash
    - Weaker debt coverage
    - Material increase in debt
Ordinance 2010-305

- Authorizes the City to provide for the automatic annual adjustment
  - Based on percentage increase of seasonally adjusted Producers Price Index (PPI) for all commodities
  - Not to exceed the sum of the percentage increase of Consumer Price Index (CPI) and Houston Population Index.
  - Effective April 1st each year (need 30 days advance for billing)

- Increases in rates are necessary and sufficient to pay cost increases, provide service for City’s increased population, protect the financial integrity of the System, and City’s covenant
Ordinance 2010-305 – Calculated Index

- (i) Percentage increase of PPI
  - PPI Index (All Commodities) *
    - 2016 = 185.408; 2017 = 193.566
    - Percentage increase = 4.4%

- (ii) Percentage increase of CPI and Population
  - CPI Index *
    - 2016 = 216.414; 2017 = 220.657
    - Percentage increase = 2.0%
  
  Houston Population Estimates**
  - July 1, 2015 = 2,284,816; July 1, 2016 = 2,303,482
  - Percentage increase = 0.8%

- Sum of percentage increase CPI and Population = 2.8%

Source:
* Bureau of Labor Statistics
** US Census Bureau
CUS Annual Debt Service Projected (in $ Millions) including Future Debt

- Future Debt Service
- First Lien Bonds
- Previous Ordinance Bonds
- Bonds Payable from System Gross Revenues
- Discretionary Debt Service
- Future Outstanding Principal
CUS Current Trends
Customer Sales Volume & Acct. Growth

CUS FY07 to FY17 No. of Accounts Growth

<table>
<thead>
<tr>
<th>Type</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family (SF)</td>
<td>11.74%</td>
</tr>
<tr>
<td>Multi Family</td>
<td>14.78%</td>
</tr>
<tr>
<td>Commercial</td>
<td>21.23%</td>
</tr>
</tbody>
</table>

CUS FY13 to FY17 SF Customer Usage

<table>
<thead>
<tr>
<th>Year</th>
<th>Average (GPM)</th>
<th>Mode (GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>5,649</td>
<td>1,000</td>
</tr>
<tr>
<td>2014</td>
<td>5,402</td>
<td>1,000</td>
</tr>
<tr>
<td>2015</td>
<td>4,945</td>
<td>1,000</td>
</tr>
<tr>
<td>2016</td>
<td>5,212</td>
<td>1,000</td>
</tr>
<tr>
<td>2017</td>
<td>5,740</td>
<td>1,000</td>
</tr>
</tbody>
</table>

SF Rates:

<table>
<thead>
<tr>
<th>Gallons</th>
<th>Current</th>
<th>With Increase</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1k</td>
<td>$16.70</td>
<td>$17.18</td>
<td>$0.48</td>
</tr>
<tr>
<td>4k</td>
<td>$51.47</td>
<td>$52.92</td>
<td>$1.45</td>
</tr>
<tr>
<td>5k</td>
<td>$61.84</td>
<td>$63.58</td>
<td>$1.74</td>
</tr>
</tbody>
</table>

12018 water and sewer rate increase of 2.8%
CUS continues to experience relatively flat sales volume since 2007:

- Passive conservation with low flow plumbing and fixtures, plus low water consumption appliances
- Customers learned water use lessons during drought

Over 80% of CUS O&M costs are fixed

Unanticipated costs from Hurricane Harvey related damages

- FEMA reimbursements are < 100% in some categories

Debt service increases significantly through FY34

Minimum debt coverage* target of 1.3 times (bond covenants require 1.2x)

- Rating agencies prefer 2x for utilities our size

* Minimum debt coverage is a measure of financial health, indicating how much a company can pay off its debt with its earnings.
CUS FY19 Rate Increase
Revenue vs. Expense Increases

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29,400,000</td>
<td>$34,300,000</td>
</tr>
</tbody>
</table>

Rate Increase: 2.80%
Expense Increase: 2.88%

Notes:
1. Increases in capital equipment includes vehicle replacements such as trucks and trailers as well as pump replacements.
2. Increases in contractual obligations mainly due to items such as sewer overflow prevention contract, sludge de-watering maintenance in various facilities, generator maintenance contracts, pump services contracts in various facilities, as well as River Authority contracts.
3. Rate increase assumes 2.8% (percentage increase of CPI and population)
## HIGH CONSUMPTION - LEADING CAUSES

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Consumption</th>
<th>Cost Extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Leaking Toilet</td>
<td>@ ½ gallon per minute 21,600 gallons per month Can be much higher</td>
<td>$360.00 extra</td>
</tr>
<tr>
<td>2.</td>
<td>Drip Irrigation</td>
<td>@ 1 gallon per minute 43,200 Gallons per month</td>
<td>$700.00 extra</td>
</tr>
<tr>
<td>3.</td>
<td>Watering Garden/Grass</td>
<td>@ 10 Gallons per minute, 2 hours per day 36,000 per month</td>
<td>$600.00 extra</td>
</tr>
<tr>
<td>4.</td>
<td>Hose Left on – 1 Night</td>
<td>@ 10 Gallons per minute for 9 hours 5,400 in one night</td>
<td>$80.00 extra</td>
</tr>
<tr>
<td>5.</td>
<td>Private Line Break – 1 week</td>
<td>@ 15 Gallons per minute, 151,200 per week</td>
<td>$2,500.00 extra</td>
</tr>
<tr>
<td>6.</td>
<td>Private Line Break – 1 month</td>
<td>@ 15 Gallons per minute, 648,000 per month</td>
<td>$10,800.00 extra</td>
</tr>
</tbody>
</table>
Working with Customers

Work with customers with a high bill

• Most customers can sign up for our Consumption Awareness Program (CAP)
  • Develop water budget
  • Get alerts when exceeding budget
  • Fixed network provides hourly reads for most customers
• Help determine cause
  • Website describes how to determine if there is a leak
  • Website describes how to find leaks
• Payment plans offered
  • No interest or penalty when current on agreed plan
• WATER Fund
  • Provides financial assistance to senior citizens and disabled or other low income customers with financial needs.
  • Funded entirely through voluntary donations from customers, charities, and businesses.
Summary

- CUS needs annual average of 3% to 3.5% rate increase annually (assuming 2% O&M increases annually) to maintain current Aa2 metrics
- Proposed rate increase effective April 1, 2018 from CPI plus population growth of 2.8%