City of Mesa

FY 15/16
Utility Department Presentations and Rate Recommendations

City Council
April 16, 2015

Presented by the Office of Management and Budget
with the Solid Waste, Energy Resources and Water Resources Departments
Enterprise Operations

• Each utility is operated as a separate business center

• Combined Ending Reserve Balance adheres to the adopted financial policy of at least 8-10% over the forecast period

• Reserve balance can be used to smooth rate adjustments year-to-year

• Reserve balance can be used to phase in new programs or changes in operations
Revenue Targets

- Forecasted expenses are compared with forecasted revenues based on current rates and projected customer growth.
- In FY 15/16, the following increase in revenues is needed to accommodate the estimated costs:

<table>
<thead>
<tr>
<th>Utility</th>
<th>Revenue</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>$210,000</td>
<td>1.3%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$770,000</td>
<td>2.9%</td>
</tr>
<tr>
<td>Water</td>
<td>$6,201,000</td>
<td>5.2%</td>
</tr>
<tr>
<td>Wastewater</td>
<td>$3,673,000</td>
<td>5.2%</td>
</tr>
<tr>
<td>Solid Waste*</td>
<td>$2,099,000</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,953,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
Rate Adjustment Implementation

• Methods of implementation of rate adjustments can vary from year to year based on needs and goals of the individual utilities.

• Impact on individual customers can vary based on the method of implementation and the customer consumption of services.
Solid Waste Department
Solid Waste Dept. FY 14/15 Accomplishments

- CNG Fleet Conversion
- Garbage Truck Safety PSA
- Succession Planning
- Clean Sweep/Green Sweep Program
Solid Waste Dept. FY 15/16 Points of Pride/Emphasis

• Fleet Mind

• New Recycling Contracts

• Regional Partnerships
Solid Waste Dept. FY 15/16 Proposed Budget Reductions

- Diesel Fuel Savings
- Barrel Replacement Program
- Recycling Outreach
Solid Waste Utility Rate Recommendations

- CNG conversion continues to move forward over the next six years to reduce future fuel cost
  - Cost of capital investment creates pressure in early years with relief anticipated to begin in FY 18/19
- Two new contracts that will provide funds for recycling education and outreach program
- The tools and technology to further assist in maintaining a top-rated, competitive, customer service driven business operation are being continually reviewed and upgraded
Solid Waste Utility Rate Recommendations

- 5% increase on all residential rates
  - Residential 90 gallon barrel rate: $1.27 per month, from $25.45 to $26.72
  - Residential 60 gallon barrel rate: $1.14 per month, from $22.72 to $23.86
- Mesa Green and Clean Fee: $0.09 per month, from $0.65 to $0.74
- Average residential customer increase: $1.36 from $26.10 to $27.46
- 1.2% increase on Commercial Front Load rates
- Commercial Roll Off rates: no recommendation for adjustment at this time.
Energy Resources Department
Electric FY 14/15 Accomplishments

- First Place - American Public Power Association’s (APPA) 2014 Safety Awards of Excellence program & 431 days (on 4.16.15) without a Lost Time Accident.

- 4 kV/12 kV Conversion completed; Four 4kV substations decommissioned; design for Pocket Park at the former Extension Substation begun.

- Electric Services for Central Mesa Extension of the Light Rail system including train power supply stations, train stations/platforms, park and rides, traffic controls and vendor power pedestals are complete.
Electric FY 15/16 Areas of Emphasis

• Safety: Continue No Lost Time Accidents streak; jointly pursue projects to convert overhead circuits to underground where car-pole accidents have become more frequent.

• Reliability: Optimize configuration and operations of the 12kV electric distribution system to reduce the duration of electric service interruptions.

• Continue to enhance renewable electric portfolio via Customer Owned Solar program and development of City-Owned Solar in collaboration with Development & Sustainability.
Electric Utility Rate Recommendations

• Residential Service Charge component: $1.50 per month, from $6.50 to $8.00

• Consumption component of rate: No adjustment recommended

• Average residential customer: $1.50 per month, from $89.78 to $91.28, 1.7% (Including commodity pass-through cost)

• Second proposed increase since FY 03/04

• Non-residential rates: No adjustment recommended

• Developing concepts for Low Income Electric residential
Electric Utility Rate Recommendations

• Proposed service charge of $8.00 is:
  
  $10.50 per month less than SRP’s Summer Monthly Service Charge of $18.50
  
  $12.00 per month less than SRP’s Winter Monthly Service Charge of $20.00

• Monthly bills during calendar year 2014 were approximately $8.97 less per month than if served by SRP ($107.64 less per year)

• Commodity costs for power are passed through to the customers and are not included in the annual rate review
Natural Gas FY 14/15 Accomplishments

- Gold Award - American Public Gas Association’s (APGA) System Operations & Achievement Recognition (SOAR) program; APGA 2014 System Growth Marketing & Sales Award - Key Accounts program.

- Underground Damage Prevention program, including our locating and marking of Mesa’s underground infrastructure, has resulted in damages that are 1/16th (or 94% lower than) of the national standard.

- Supervisory Control and Data Acquisition equipment was installed at nine Pressure Regulator Stations to enhance the safety, reliability and resiliency of Mesa’s gas utility system.
Natural Gas FY 15/16 Areas of Emphasis

• Develop CNG Station(s) for Solid Waste’s CNG Fleet; begin promoting CNG advantages to other Departments, allocate IRS rebates to offset some of the additional purchase costs; and initiate development of CNG Station at EVIT.

• Continue enhancement to Succession Plan – develop apprenticeship training/technician program for our Gas Service Specialists.

• Continue to grow our gas utility customers through effective planning and system expansion.
Natural Gas Utility Rate Recommendations

• All customers Service Charge: increase $1.29 per month
  ➢ Residential customers summer: from $10.82 to $12.11 per month
  ➢ Residential customers winter: from $13.75 to $15.04 per month

• Average residential customer monthly bill: from $33.55 to $34.84, 3.8% (Including commodity pass-through)

• Commodity costs for natural gas are passed through to the customers and are not included in the annual rate review
Managing Proposed FY 15/16 Budget Changes

- Develop & begin implementation of Pilot Low Income Electric Residential program.

- Eliminate four electric & four gas positions:
  - Completion of 4 kV/12kV Conversion obviates need for four electric positions ($366,708)
  - Current Gas Annual Work Plan, Efficiency Improvements & Utilization of job order contracting (JOC) obviates need for four gas positions ($277,022)

- Reduced levels of equipment utilization, reduced overtime, miscellaneous reductions in memberships/outside materials, and efficiency improvements (~$130,000).
Water Resources Department
Water Resources FY 14/15 Accomplishments

• Val Vista Transmission Main
  - Completion of Phase 1

• Salt River Pima – Maricopa Indian Community
  - Intergovernmental Agreement ($1.6M Savings)

• Projecting over $4M in savings
  - Sub-Regional Operating Group (SROG)
  - Val Vista Water Treatment Plant
  - Energy & Chemical Costs
Water Resources FY 15/16 Areas of Emphasis

- Southeast Mesa Infrastructure Planning
- Sanitary Sewer Overflow (SSO) Mitigation
- Odor Control Improvements
  - Wastewater Collection System
- Water Meters
  - Inventory Control System
  - Large Meter Replacement
Water Resources FY 15/16 Budget Highlights

- Water Purchase costs increased $787K
  - Projected $2.5M increase over next 4 years
- Minimal increase in chemical budget
- Energy costs increased $459K
- Joint Venture costs decreased $1.6M
- 4 Positions added to support construction activities
- Rates
  - Proposed realignment of residential water tiers
Water Utility Rate Structure

- City previously focused on better aligning fixed revenues with fixed costs. Target is fixed revenues at 35-40% of total costs. FY 15/16 estimated at 36.3%

- Water consumption per account has declined in recent years: more widespread use of water saving appliances, smaller number of people per household, less landscaping and more water conservation awareness

- Residential water tiers are based on demands on the system. The current tier levels do not align with standard usage patterns
  
  - Analysis revealed four or five standard levels of residential water usage
Avg. Residential Monthly Usage – Current Tiers

- 76.4% of all water bills
- 17.3%
- 6.3%
Avg. Residential Monthly Usage – Proposed Tiers

Usage Ratio (kgal/Bill)

- 55.4% of all water bills
- 28.0%
- 10.3%
- 6.3%

2009-07 to 2014-11
Water Utility Rate Structure Recommendation

• Current Residential Tier Structure:
  First 3,000 gallons included in service charge
  4,000 – 12,000 gallons
  13,000 – 24,000 gallons
  25,000 gallons and greater

• Recommended Residential Tier Structure at full implementation:
  First 3,000 gallons included in service charge
  4,000 – 7,000 gallons
  8,000 – 15,000 gallons
  16,000 – 24,000 gallons
  25,000 gallons and greater

• Transition to new tier structure over five years to decrease annual impact to customers and to allow time for customers to assess water usage and apply conservation techniques if possible
## 5 Year Implementation – Monthly Bill Amounts

| Year | 0 kgal | 1 kgal | 2 kgal | 3 kgal | 4 kgal | 5 kgal | 6 kgal | 7 kgal | 8 kgal | 9 kgal | 10 kgal | 11 kgal | 12 kgal | 13 kgal | 14 kgal | 15 kgal | 16 kgal | 17 kgal | 18 kgal | 19 kgal | 20 kgal | 21 kgal | 22 kgal | 23 kgal | 24 kgal | 25 kgal | 26 kgal | 27 kgal | 28 kgal | 29 kgal | 30 kgal |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| YR3  | $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95| $27.95|
| YR4  | $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34| $29.34|
| YR5  | $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81| $30.81|
| YR6  | $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35| $32.35|
## 5 Year Implementation – Monthly Bill Variance

<table>
<thead>
<tr>
<th></th>
<th>VAR$ - MONTHLY BILL</th>
<th></th>
<th>VAR% - MONTHLY BILL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YR1</td>
<td>YR2</td>
<td>YR3</td>
</tr>
<tr>
<td>30 kgal</td>
<td>$10.29</td>
<td>$11.31</td>
<td>$12.42</td>
</tr>
<tr>
<td>29 kgal</td>
<td>$9.84</td>
<td>$10.82</td>
<td>$11.89</td>
</tr>
<tr>
<td>28 kgal</td>
<td>$9.39</td>
<td>$10.33</td>
<td>$11.36</td>
</tr>
<tr>
<td>27 kgal</td>
<td>$8.94</td>
<td>$9.84</td>
<td>$10.83</td>
</tr>
<tr>
<td>26 kgal</td>
<td>$8.49</td>
<td>$9.35</td>
<td>$10.30</td>
</tr>
<tr>
<td>25 kgal</td>
<td>$8.04</td>
<td>$8.86</td>
<td>$9.77</td>
</tr>
<tr>
<td>24 kgal</td>
<td>$7.59</td>
<td>$8.37</td>
<td>$9.24</td>
</tr>
<tr>
<td>23 kgal</td>
<td>$6.80</td>
<td>$8.04</td>
<td>$8.90</td>
</tr>
<tr>
<td>22 kgal</td>
<td>$6.01</td>
<td>$7.71</td>
<td>$8.56</td>
</tr>
<tr>
<td>21 kgal</td>
<td>$5.80</td>
<td>$6.80</td>
<td>$8.22</td>
</tr>
<tr>
<td>20 kgal</td>
<td>$5.59</td>
<td>$5.89</td>
<td>$7.88</td>
</tr>
<tr>
<td>19 kgal</td>
<td>$5.38</td>
<td>$5.67</td>
<td>$6.85</td>
</tr>
<tr>
<td>18 kgal</td>
<td>$5.17</td>
<td>$5.45</td>
<td>$5.82</td>
</tr>
<tr>
<td>17 kgal</td>
<td>$4.96</td>
<td>$5.23</td>
<td>$5.59</td>
</tr>
<tr>
<td>16 kgal</td>
<td>$4.75</td>
<td>$5.01</td>
<td>$5.36</td>
</tr>
<tr>
<td>15 kgal</td>
<td>$4.54</td>
<td>$4.79</td>
<td>$5.13</td>
</tr>
<tr>
<td>14 kgal</td>
<td>$4.33</td>
<td>$4.57</td>
<td>$4.90</td>
</tr>
<tr>
<td>13 kgal</td>
<td>$4.12</td>
<td>$4.35</td>
<td>$4.67</td>
</tr>
<tr>
<td>12 kgal</td>
<td>$3.91</td>
<td>$4.13</td>
<td>$4.44</td>
</tr>
<tr>
<td>11 kgal</td>
<td>$2.33</td>
<td>$3.91</td>
<td>$4.21</td>
</tr>
<tr>
<td>10 kgal</td>
<td>$2.19</td>
<td>$2.25</td>
<td>$3.98</td>
</tr>
<tr>
<td>9 kgal</td>
<td>$2.05</td>
<td>$2.11</td>
<td>$2.23</td>
</tr>
<tr>
<td>8 kgal</td>
<td>$1.91</td>
<td>$1.97</td>
<td>$2.08</td>
</tr>
<tr>
<td>7 kgal</td>
<td>$1.77</td>
<td>$1.83</td>
<td>$1.93</td>
</tr>
<tr>
<td>6 kgal</td>
<td>$1.63</td>
<td>$1.69</td>
<td>$1.78</td>
</tr>
<tr>
<td>5 kgal</td>
<td>$1.49</td>
<td>$1.55</td>
<td>$1.63</td>
</tr>
<tr>
<td>4 kgal</td>
<td>$1.35</td>
<td>$1.41</td>
<td>$1.48</td>
</tr>
<tr>
<td>3 kgal</td>
<td>$1.21</td>
<td>$1.27</td>
<td>$1.33</td>
</tr>
<tr>
<td>2 kgal</td>
<td>$1.21</td>
<td>$1.27</td>
<td>$1.33</td>
</tr>
<tr>
<td>1 kgal</td>
<td>$1.21</td>
<td>$1.27</td>
<td>$1.33</td>
</tr>
<tr>
<td>0 kgal</td>
<td>$1.21</td>
<td>$1.27</td>
<td>$1.33</td>
</tr>
</tbody>
</table>
Water Utility Rate Recommendations

• All customers: 5% increase on all rate components

• Residential Service Charge: $1.21 per month, from $24.14 to $25.35

• Residential average monthly seasonal consumption: $1.87 per month, from $17.81 to $19.68

• Residential average monthly seasonal consumption total bill: $3.08, from $41.95 to $45.03, 7.3%

• The City average monthly consumption is about 9,600 gallons however seasonality takes into account high demand summer months that experience some water consumption in tier 2. The resulting impact is greater than a straight 9,600 gallons per month.
Wastewater Utility Rate Recommendations

- All customers: 5% increase on all rate components
- Residential Service Charge: $0.82 per month, from $16.40 to $17.22
- Residential average monthly consumption: $0.51 per month, from $9.86 to $10.37
- Residential average monthly consumption total bill: $1.33, from $26.26 to $27.59, 5.1%
- Wastewater rates are not subject to seasonality. The monthly rate is adjusted annually based on the winter water average usage of the individual customer
# Average Residential Customer Impact

<table>
<thead>
<tr>
<th>Utility</th>
<th>Monthly</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Waste</td>
<td>$1.36</td>
<td>$16.32</td>
</tr>
<tr>
<td>Water</td>
<td>$3.08</td>
<td>$36.96</td>
</tr>
<tr>
<td>Wastewater</td>
<td>$1.33</td>
<td>$15.96</td>
</tr>
<tr>
<td>Total</td>
<td>$5.77</td>
<td>$69.24</td>
</tr>
<tr>
<td>Electric</td>
<td>$1.50</td>
<td>$18.00</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$1.29</td>
<td>$15.48</td>
</tr>
</tbody>
</table>
Enterprise Fund Fiscal Impact

The FY15/16 recommended utility rate/structure adjustments are anticipated to meet the revenue increase target of $12,953,000

<table>
<thead>
<tr>
<th>Utility</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>$210,000</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$770,000</td>
</tr>
<tr>
<td>Water</td>
<td>$6,201,000</td>
</tr>
<tr>
<td>Wastewater</td>
<td>$3,673,000</td>
</tr>
<tr>
<td>Solid Waste*</td>
<td>$2,099,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,953,000</strong></td>
</tr>
</tbody>
</table>

* Household Hazardous Waste Revenue not included
# Enterprise Fund Reserves

<table>
<thead>
<tr>
<th></th>
<th>Actuals FY 13/14</th>
<th>Estimate FY 14/15</th>
<th>Forecast FY 15/16</th>
<th>Forecast FY 16/17</th>
<th>Forecast FY 17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning Reserve Balance</strong></td>
<td>$54,457,000</td>
<td>$48,953,726</td>
<td>$43,953,289</td>
<td>$39,950,482</td>
<td>$42,134,249</td>
</tr>
<tr>
<td><strong>Total Sources</strong></td>
<td>$306,179,518</td>
<td>$321,297,471</td>
<td>$337,613,350</td>
<td>$355,404,576</td>
<td>$374,518,822</td>
</tr>
<tr>
<td><strong>Total Uses</strong></td>
<td>$311,682,791</td>
<td>$326,297,909</td>
<td>$341,616,157</td>
<td>$353,220,808</td>
<td>$377,521,248</td>
</tr>
<tr>
<td><strong>Ending Reserve Balance</strong></td>
<td>$48,953,726</td>
<td>$43,953,289</td>
<td>$39,950,482</td>
<td>$42,134,249</td>
<td>$39,131,823</td>
</tr>
</tbody>
</table>

**Ending Reserve Balance Percent**

- **Actuals** 15.0%
- **Estimate** 12.9%
- **Forecast FY 15/16** 11.3%
- **Forecast FY 16/17** 11.2%
- **Forecast FY 17/18** 10.0%

*As a % of Next Fiscal Year's Total Uses*
May 4 – Introduce Utility Rate Ordinances

May 18 – City Council Action on Utility Rates

July 1 – Effective date for Utility Rate changes