Okanogan County Public Utility District
May 28, 2013

Review Panel Workshop –
2013 Equity Management Plan and Rate Study Update

Richard Cuthbert, Senior Project Manager
Gina Baxter, Senior Analyst
Workshop Agenda

• Review of electric utility ratemaking process
• Review of the equity management plan (EMP) and how it impacts the ratemaking process
• Review revised preliminary draft 2013 results
  – EMP Base Case and Alternative Scenarios
  – Cost-of-Service Analysis
  – Rate Design Analysis
Feedback Needed from Review Panel

• What level of rate increases should the District adopt over the next three years?
• If rate increases are adopted, what rate components should be increased?
  – Basic Charges?
  – Energy Charge?
Review of the Ratemaking Process
Steps in Electric Utility Ratemaking Process

- Customer and sales projections
- Operating budgets and CIP
- Other assumptions

Utility information

Revenue requirements

Check adequacy of rates

Cost-of-service analysis

Rate design

Rate recommendation
Revenue Requirements

• Determines the overall level of revenue needed to provide electric service

• Items included in the revenue requirement:
  – Operation and maintenance costs
  – Other operating costs (e.g., taxes)
  – Interest expense
  – Depreciation
  – Other income (e.g., interest earnings)
  – Margins
Cost-of-Service Analysis

• Cost-of-service (COS) equals total cost of providing utility service to groups of similar customers or customer classes
• COS analysis is the process of classifying and allocating a utility’s revenue requirements to customer classes
Typical Electric Utility System
Draft 2013 Equity Management Plan Results – Base Case
Base Case Preliminary Unit Revenues from Retail Sales Including COPA (¢/kWh)

![Graph showing retail unit revenues including COPA from 2010 to 2022.]

- Projected Rate Increases:
  - 13% in 2013 and 2014
  - 3% in 2015, 2016, and 2017

Retail Unit Revenue Including COPA (cents per kWh)
EMP Options

• Base Case
  – 13% for 2013, 12.5% for 2014, 2.5% in 2015-2017

• EMP Option 1
  – 16% for 2013, 16% for 2014, 0% in 2015-2017

• EMP Option 2
  – 9.5% for 2013, 9.5% for 2014, 9.5% in 2015, 2.5% in 2016 and 2.0% in 2017
Draft 2013 Cost-of-Service and Rate Design Results
### District’s Draft TY 2013 Revenue Requirement

<table>
<thead>
<tr>
<th>Description</th>
<th>Projected Test Year 2013</th>
<th>Pro forma Adjustments (1)</th>
<th>Adjusted Test Year 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenues From Sales of Electricity</td>
<td>$39,868,382</td>
<td>$4,703,167</td>
<td>$44,571,549</td>
</tr>
<tr>
<td>Other Electric Revenues</td>
<td>727,000</td>
<td>-</td>
<td>727,000</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$40,595,382</strong></td>
<td><strong>$4,703,167</strong></td>
<td><strong>$45,298,549</strong></td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$46,427,249</td>
<td>$0</td>
<td>$46,427,249</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>1,959,636</td>
<td>0</td>
<td>1,959,636</td>
</tr>
<tr>
<td><strong>Total Operating Cost of Service</strong></td>
<td><strong>$48,386,885</strong></td>
<td><strong>$0</strong></td>
<td><strong>$48,386,885</strong></td>
</tr>
<tr>
<td>Margins or Increase in Net Assets</td>
<td>(4,696,503)</td>
<td>4,703,167</td>
<td>6,664</td>
</tr>
<tr>
<td>Operating Revenue Requirements</td>
<td><strong>$43,690,382</strong></td>
<td><strong>$4,703,167</strong></td>
<td><strong>$48,393,549</strong></td>
</tr>
<tr>
<td>Total Non-Operating Revenues</td>
<td>$3,095,000</td>
<td>$0</td>
<td>$3,095,000</td>
</tr>
<tr>
<td>Total Revenue Requirements</td>
<td>$43,690,382</td>
<td>$4,703,167</td>
<td>$48,393,549</td>
</tr>
<tr>
<td>Less Interest Income</td>
<td>(991,000)</td>
<td>-</td>
<td>(991,000)</td>
</tr>
<tr>
<td>Less Contributions in Aid of Construction</td>
<td>(1,104,000)</td>
<td>-</td>
<td>(1,104,000)</td>
</tr>
<tr>
<td>Less Use of Rate Stabilization Funds</td>
<td>(1,000,000)</td>
<td>-</td>
<td>(1,000,000)</td>
</tr>
<tr>
<td>Less Other Revenues</td>
<td>(727,000)</td>
<td>-</td>
<td>(727,000)</td>
</tr>
<tr>
<td>Less Wholesale Revenues</td>
<td>(2,640,925)</td>
<td>-</td>
<td>(2,640,925)</td>
</tr>
<tr>
<td><strong>Revenue Requirements from Rates</strong></td>
<td><strong>$37,227,457</strong></td>
<td><strong>$4,703,167</strong></td>
<td><strong>$41,930,624</strong></td>
</tr>
<tr>
<td>Revenue Increase (Decrease)</td>
<td>-</td>
<td>$4,703,167</td>
<td></td>
</tr>
<tr>
<td>Percent Change</td>
<td>-</td>
<td>13.0%</td>
<td></td>
</tr>
<tr>
<td>Debt Service Coverage Ratio (DSC)</td>
<td>0.28</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td>TIER (Operating)</td>
<td>(3.11)</td>
<td>(0.60)</td>
<td></td>
</tr>
<tr>
<td>TIER (Total)</td>
<td>(1.40)</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

(1) Assumes retail revenue increase equal to 13% retail rate increase effective for a 12 month period.
These figures are the amount of increases needed to meet cost of service.

These rate classes are already paying their cost of service.
## Base Case
### Average and Excess Method Unit Costs

<table>
<thead>
<tr>
<th>Service</th>
<th>Residential</th>
<th>Service</th>
<th>Industrial</th>
<th>Irrigation</th>
<th>Frost Control</th>
<th>Street Lights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Small General</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer - $/Customer-Month</td>
<td>$27.61</td>
<td>$31.55</td>
<td>$44.03</td>
<td>$171.52</td>
<td>$41.35</td>
<td>n/a</td>
</tr>
<tr>
<td>Energy - $/kWh</td>
<td>0.06628</td>
<td>0.06079</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
</tr>
<tr>
<td>Demand - $/kW-Month</td>
<td>n/a</td>
<td>n/a</td>
<td>$6.21</td>
<td>$6.08</td>
<td>$10.81</td>
<td>n/a</td>
</tr>
<tr>
<td>Fixed Costs ($/Customer-Month)</td>
<td>$78.27</td>
<td>$95.67</td>
<td>$1,404.72</td>
<td>$10,983.92</td>
<td>$186.57</td>
<td>$53.31</td>
</tr>
<tr>
<td>Variable Costs ($/kWh)</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
<td>0.03079</td>
</tr>
<tr>
<td><strong>Large General</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer - $/Customer-Month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy - $/kWh</td>
<td>0.06121</td>
<td>0.05631</td>
<td>0.02714</td>
<td>0.02782</td>
<td>0.02651</td>
<td>0.01416</td>
</tr>
<tr>
<td>Variable Costs ($/kWh)</td>
<td>0.02572</td>
<td>0.02632</td>
<td>0.02714</td>
<td>0.02782</td>
<td>0.02651</td>
<td>0.01416</td>
</tr>
</tbody>
</table>
2013 Residential Costs and Revenues

Note: Assumes the Basic Charge and Minimum Energy Charge will not change and that increases in rate revenues will be reflected in changes to the Energy charges.
Comparison of Unit Costs to Existing Rates

Okanogan County PUD

Residential Customer Class

Customer Costs ($/customer-month)

Existing Basic Charge and Minimum Energy Charge

COS Fixed Costs

COS Customer Costs

Existing

A&E

A&E

$90

$80

$70

$60

$50

$40

$30

$20

$10

$0

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Principles Used in Rate Design

- Promote revenue stability
- Reflect the cost of providing services
- Easily understood by customers
- Promote rate continuity over time
- Fair, equitable and non-discriminatory test
- Easy to administer
- Promote efficient use of electricity
- Meet and reflect utility’s policy objectives
Rate Design Options Reviewed Today

- Rates reflect 3 x 9.5% annual across-the-board increases
- Use of rate stabilization funds in 2013 and 2014
- Phase out residential Minimum Energy Charge (MEC) allowance
- Three rate options for residential class:
  - 3A: Three year phase out of residential MEC allowance and no change to Energy Charge
  - 3B: Three year phase out of residential MEC allowance - adjusted Energy Charge
  - 3C: Two year phase out of residential MEC allowance – no change to Energy Charge
- Change from horsepower to demand charge for Frost Control
Feedback Needed Today

• Confirmation on three 9.5% rate increases and use of rate stabilization funds?
• Across the board rate increases for all customer classes?
• Input on options for phase out of Residential and Small General Service Minimum Energy Charge allowance?
• Change from horsepower to demand charge for Frost Control?
• Effective date of first rate increase?
Next Steps

- Board to select final rate change options – May/June
- Completion of rate proposal – June
- Public meetings – June/July
- Board to vote on rates – Late July
- Rates implementation target – September 1, 2013
Questions?