Shoshone Powerplant
Pick-Sloan Missouri Basin Program

Ancillary Services

<table>
<thead>
<tr>
<th>Shoshone Ancillary Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinning Reserve</td>
</tr>
<tr>
<td>Non-Spinning Reserve</td>
</tr>
<tr>
<td>Replacement Reserve</td>
</tr>
<tr>
<td>Regulation/Load Following</td>
</tr>
<tr>
<td>Black Start</td>
</tr>
<tr>
<td>Voltage Support</td>
</tr>
</tbody>
</table>

Generators

<table>
<thead>
<tr>
<th>Shoshone Generators Existing Number and Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit #</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1 Unit</td>
</tr>
</tbody>
</table>
Shoshone Powerplant

0-10 MW

Generation

Shoshone
Fiscal Year Net Generation

Shoshone
Monthly Net Generation

Shoshone
Water Supply

[Charts and graphs showing net generation and water supply data over time]
Prime Laboratory Benchmarks

Benchmark 1
Wholesale Firm Rate

Benchmark 2
Reclamation’s Production Costs as Percentage of Wholesale Firm Rate

Reclamation O&M Production Cost as Percentage of Wholesale Firm Rate

Western-Loveland Project Rate

Other WAPA Costs 61%
Other Project Costs 95%
Shoshone 5%

Fiscal Year 2007
Benchmark 3
Production Costs

Shoshone Powerplant
0-10 MW

Shoshone Operation Costs

Fiscal Years

Shoshone Maintenance Costs

Fiscal Years

Shoshone Operation Costs
Fiscal Year 2007

Other 49%
Equipment 1%
Admin 15%
Payroll 29%
Supplies 4%

Travel 5%

Benefits 7%

Payroll 24%
Admin 13%
Supplies 2%

Shoshone Maintenance Costs
Fiscal Year 2007

Other 40%
Benefits 7%

Travel 4%

Payroll 24%
Benchmark 3
Production Costs

Shoshone Powerplant
0-10 MW

Shoshone Operation and Maintenance Costs

Fiscal Year

Thousand $/MW


Operation [ ] Maintenance [ ]

Shoshone Operation and Maintenance Costs
Fiscal Year 2007

75%
25%

External Group Average = $75,984/MW  Reclamation Group Average = $80,508/MW

Fiscal Year 2007
Total Production Costs

External Comparison

$/MWh

205 External Plants

External Group Average = $25.1/MWh  Reclamation Group Average = $18.1/MWh

Fiscal Year 2007
Total Production Costs

External Comparison

$/MW

205 External Plants

External Group Average = $75,984/MW  Reclamation Group Average = $80,508/MW
### Shoshone FY 2007 Equivalent Work Staffing Year Levels

<table>
<thead>
<tr>
<th></th>
<th>Equivalent Work Year Staffing Charged to Powerplant</th>
<th>Leave Additive</th>
<th>Denver and Washington Equivalent Work Year Staffing Additive</th>
<th>Total Equivalent Work Year Allocated to Powerplant</th>
<th>Total Equivalent Staffing Work Year per Generating Unit</th>
<th>Total Equivalent Work Year Staffing per Megawatt</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>1.04</td>
<td>0.12</td>
<td>0.02</td>
<td>1.17</td>
<td>1.17</td>
<td>0.39</td>
</tr>
<tr>
<td>Operation</td>
<td>0.35</td>
<td>0.04</td>
<td>0.00</td>
<td>0.39</td>
<td>0.39</td>
<td>0.13</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1.64</td>
<td>0.18</td>
<td>0.00</td>
<td>1.82</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>Total Staffing</td>
<td>3.03</td>
<td>0.34</td>
<td>0.02</td>
<td>3.39</td>
<td>3.39</td>
<td>1.13</td>
</tr>
</tbody>
</table>

#### Shoshone Equivalent Work Year per Unit

- **General**: 35%
- **Maintenance**: 53%
- **Operation**: 12%

#### Shoshone O&M Equivalent Work Years per Unit

#### Shoshone O&M Equivalent Work Years per MW
Benchmark 5
Plant Availability Factor

Benchmark 6
Plant Forced Outage Factor
Shoshone Powerplant
0-10 MW

Benchmark 7
Plant Scheduled Outage Factor

FY-2003 – Contract repairs to draft tube.

Unit Starts
## Benchmark Data Comparison

<table>
<thead>
<tr>
<th>Fiscal Year 2007</th>
<th>Shoshone Powerplant</th>
<th>Reclamation Average 0-10 MW Group</th>
<th>Total Reclamation Average</th>
<th>Industry Average</th>
<th>Best Performers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Firm Rate Mills/kWh</td>
<td>23.9</td>
<td>Not Applicable</td>
<td>*22.45</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Production Cost as Percentage of Wholesale Firm Rate</td>
<td>1.4%</td>
<td>Not Applicable</td>
<td>12.1%</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>O&amp;M Cost $/MWh</td>
<td>29.77</td>
<td>14.71</td>
<td>2.76</td>
<td>***25.9</td>
<td>1.00</td>
</tr>
<tr>
<td>O&amp;M Costs $/MW</td>
<td>198,590</td>
<td>60,518</td>
<td>7,847</td>
<td>***75,984</td>
<td>2,897</td>
</tr>
<tr>
<td>O&amp;M Equiv Work Year per MW</td>
<td>0.74</td>
<td>0.41</td>
<td>0.03</td>
<td>Not Available</td>
<td>0.0</td>
</tr>
<tr>
<td>Availability Factor</td>
<td>96.9</td>
<td>88.73</td>
<td>82.3</td>
<td>**88.64</td>
<td>98.5</td>
</tr>
<tr>
<td>Forced Outage Factor</td>
<td>0.0</td>
<td>0.91</td>
<td>2.6</td>
<td>**2.61</td>
<td>0.0</td>
</tr>
<tr>
<td>Scheduled Outage Factor</td>
<td>3.1</td>
<td>10.36</td>
<td>15.1</td>
<td>**8.74</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Weighted by Net Generation  
**2006 NERC Average  
***Energy Information Administration Data