New Melones Powerplant
Central Valley Project

Ancillary Services

<table>
<thead>
<tr>
<th>New Melones Ancillary Services</th>
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<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>New Melones Generators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Number and Capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Original Capacity (kW)</th>
<th>Capacity Increased (kW)</th>
<th>Present Capacity (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
</tr>
<tr>
<td>2</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
</tr>
<tr>
<td>4 units</td>
<td>300,000</td>
<td>-</td>
<td>300,000</td>
</tr>
</tbody>
</table>

The maximum operational capacity is 380,000 kW
New Melones Powerplant
100-500 MW

Generation

**New Melones Fiscal Year Net Generation**

- **Net Generation**: Line graph showing energy generation from 1998 to 2006.
- **10 Year Average**: Line graph showing the 10-year average energy generation from 1998 to 2006.

**New Melones Monthly Net Generation**

- **10-Year Average**: Line graph showing the 10-year average monthly energy generation from October 1998 to August 2007.
- **2007**: Line graph showing the energy generation for the year 2007.

**New Melones Water Supply**

- **Water Spilled**: Bar graph showing the amount of water spilled from 1998 to 2006.
- **Water Supply**: Bar graph showing the amount of water supply from 1998 to 2006.
Prime Laboratory Benchmarks

Benchmark 1
Wholesale Firm Rate

Benchmark 2
Reclamation’s Production Cost as Percentage of Wholesale Firm Rate
New Melones Powerplant
100-500 MW

Benchmark 3
Production Cost

New Melones Operation Costs

New Melones Operation Costs
Fiscal Year 2007

Payroll 32%
Utilities 4%
Travel 3%
Benefits 11%
Supplies 13%
Equipment 5%
Other 9%
Admin 23%

New Melones Maintenance Costs

New Melones Maintenance Costs
Fiscal Year 2007

Payroll 31%
Other 51%
Admin 18%
New Melones Powerplant
100-500 MW

Benchmark 3
Production Cost

Fiscal Year 2007
Total Production Costs
External Comparison

Fiscal Year 2007
Total Production Costs
External Comparison

107 External Plants

New Melones
Operation and Maintenance Costs

Fiscal Year


New Melones
Operation and Maintenance Costs

Fiscal Year 2007

19% 81%

New Melones
Operation and Maintenance Costs

Fiscal Year 2007

External Group Average = $63.9/MWh
Reclamation Group Average = $4.9/MWh

External Group Average = $21,167/MW
Reclamation Group Average = $9,854/MW

Operation Maintenance

Operation Maintenance

Operation Maintenance

Operation Maintenance
New Melones Powerplant
100-500 MW

Benchmark 4
Workforce Deployment

### New Melones 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>0.00</td>
<td>0.00</td>
<td>0.04</td>
<td>0.04</td>
<td>0.02</td>
<td>0.00</td>
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<tr>
<td>Operation</td>
<td>1.40</td>
<td>0.14</td>
<td>0.00</td>
<td>1.54</td>
<td>0.77</td>
<td>0.01</td>
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<tr>
<td>Maintenance</td>
<td>1.73</td>
<td>0.17</td>
<td>0.00</td>
<td>1.90</td>
<td>0.95</td>
<td>0.01</td>
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<tr>
<td>Total Staffing</td>
<td>3.13</td>
<td>0.30</td>
<td>0.04</td>
<td>3.47</td>
<td>1.73</td>
<td>0.01</td>
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</table>

### New Melones Equivalent Work Year per Unit

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<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>General</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Operation</td>
<td>0.14</td>
<td>0.17</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</table>

### New Melones O&M Equivalent Work Years per Unit

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Operation</td>
<td>0.14</td>
<td>0.17</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tbody>
</table>
New Melones Powerplant
100-500 MW

Benchmark 5
Availability Factor

Benchmark 6
Forced Outage Factor
Benchmark 7
Scheduled Outage Factor

New Melones Powerplant
100-500 MW

New Melones
Scheduled Outage Factor

Starts

New Melones
Average Starts per Unit
# Benchmark Data Comparison

<table>
<thead>
<tr>
<th>Fiscal Year 2007</th>
<th>New Melones Powerplant</th>
<th>Reclamation Average 100-500 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>13.7</td>
<td>Not Applicable</td>
<td>22.45</td>
<td>Not Available</td>
<td>Not Available</td>
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<tr>
<td>Production Cost as Percentage of Wholesale Firm Rate</td>
<td>3.2%</td>
<td>Not Applicable</td>
<td>12.1%</td>
<td>Not Available</td>
<td>Not Available</td>
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<tr>
<td>O&amp;M Cost $/MWh</td>
<td>5.16</td>
<td>4.44</td>
<td>2.76</td>
<td>63.88</td>
<td>1.00</td>
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<tr>
<td>O&amp;M Costs $/MW</td>
<td>9,020</td>
<td>10,502</td>
<td>7,847</td>
<td>21,167</td>
<td>2,897</td>
</tr>
<tr>
<td>O&amp;M Equiv Work Year per MW</td>
<td>0.01</td>
<td>0.04</td>
<td>0.03</td>
<td>Not Available</td>
<td>0.0</td>
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<tr>
<td>Availability Factor</td>
<td>57.8</td>
<td>83.5</td>
<td>82.3</td>
<td>88.64</td>
<td>98.5</td>
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<tr>
<td>Forced Outage Factor</td>
<td>0.8</td>
<td>1.2</td>
<td>2.6</td>
<td>2.61</td>
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<tr>
<td>Scheduled Outage Factor</td>
<td>41.3</td>
<td>15.4</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