

## Pilot Butte Powerplant Pick-Sloan Missouri Basin Program

### Ancillary Services

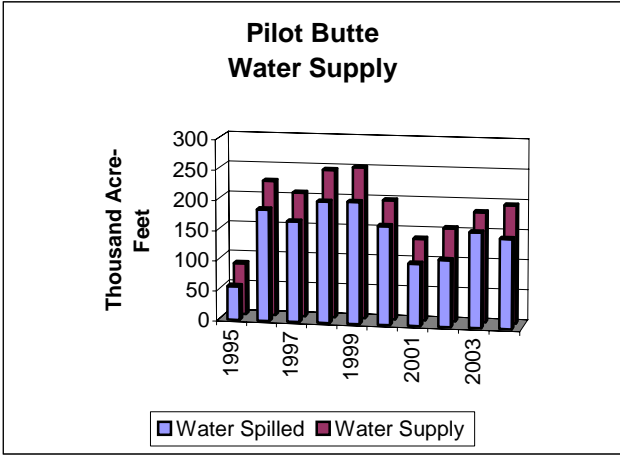
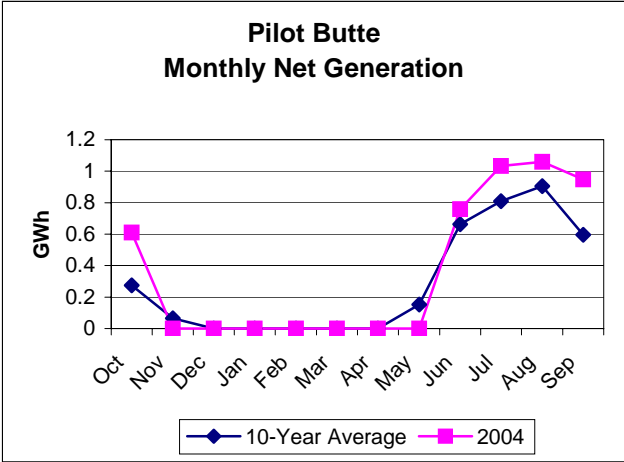
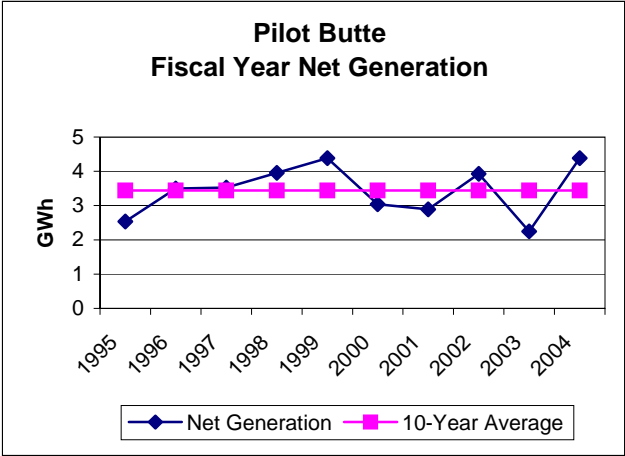
Pilot Butte Ancillary Services	
Spinning Reserve	No
Non-Spinning Reserve	No
Replacement Reserve	No
Regulation/Load Following	No
Black Start	No
Voltage Support	No

### Generators

Pilot Butte Generators Existing Number and Capacity			
Unit #	Original Capacity (kW)	Capacity Increased (kW)	Present Capacity (kW)
1	800	0	800
2	800	0	800
2 Units	1,600	0	1,600

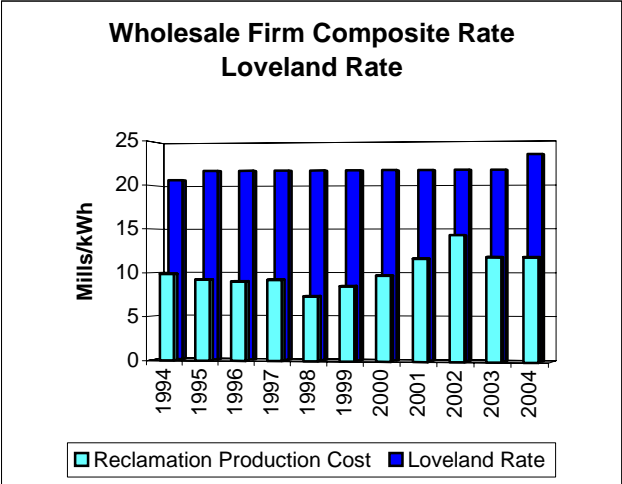
**Pilot Butte Powerplant  
Seasonal**

**Generation**

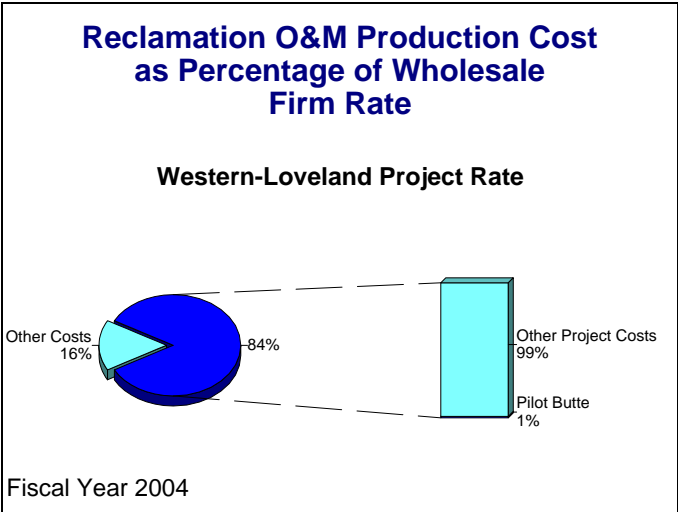


**Prime Laboratory Benchmarks**

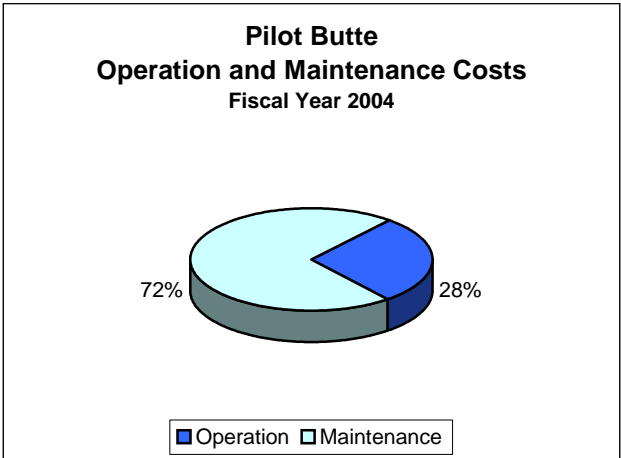
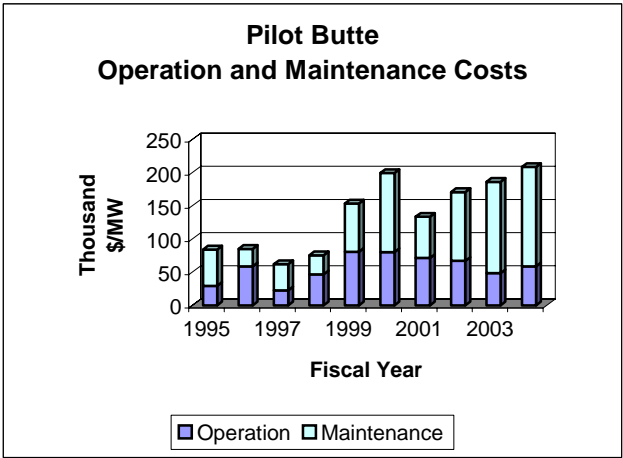
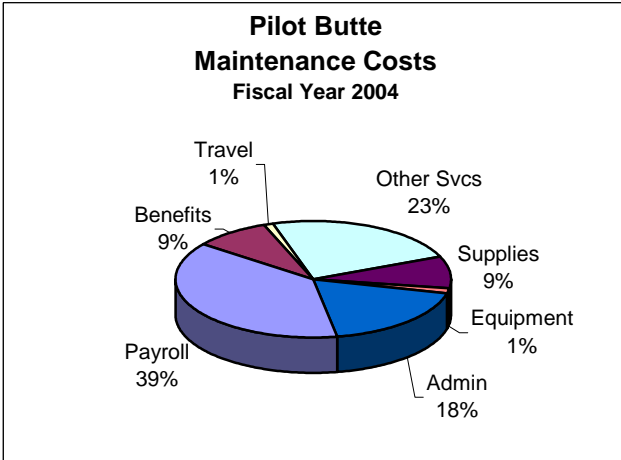
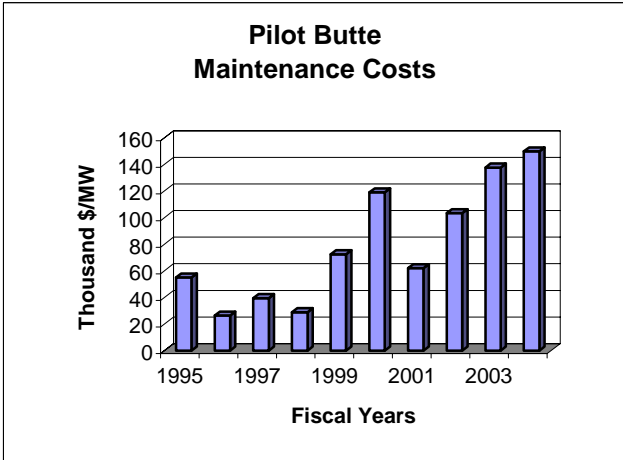
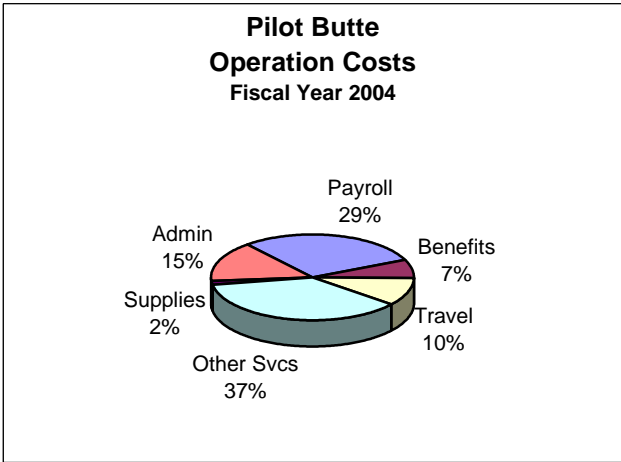
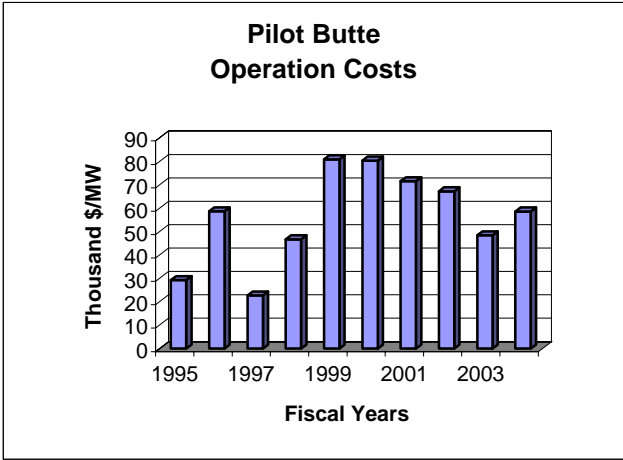
**Benchmark 1  
Wholesale Firm Rate**



**Benchmark 2  
Reclamation's Production Cost as Percentage of Wholesale Firm Rate**



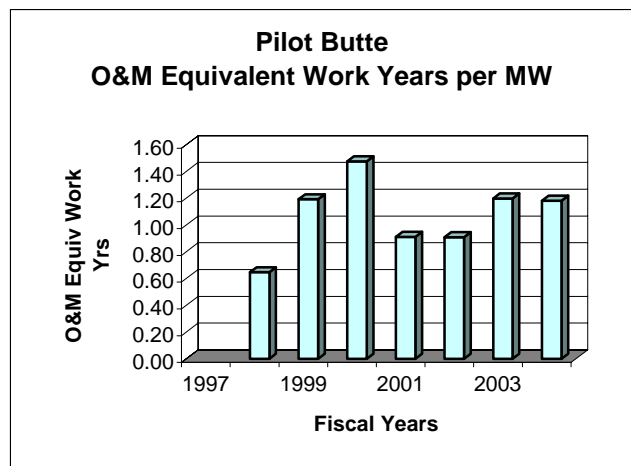
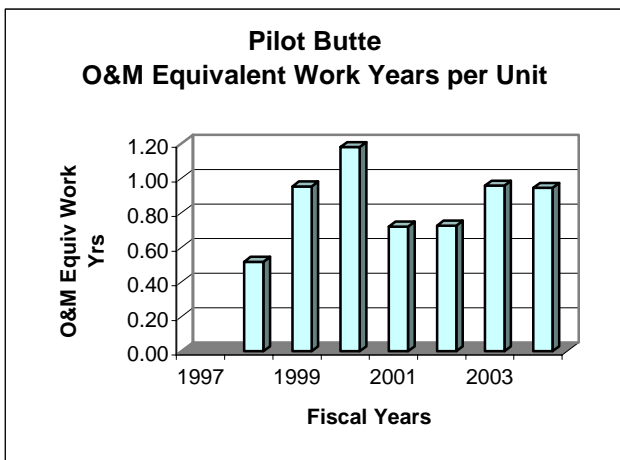
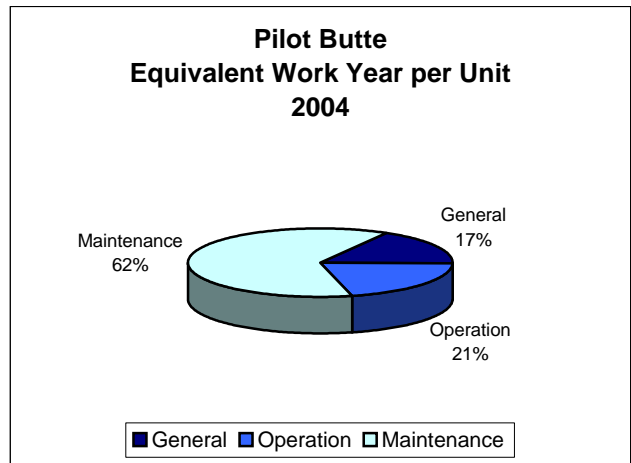
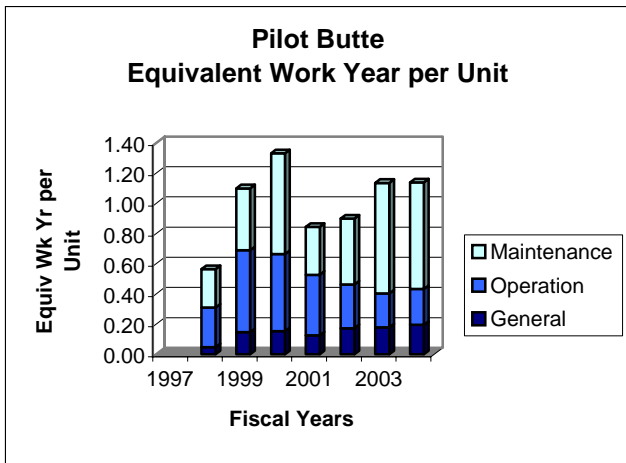
**Benchmark 3  
Production Cost**



FY 03- Include costs for significant repair of the stator winding for Unit 2.

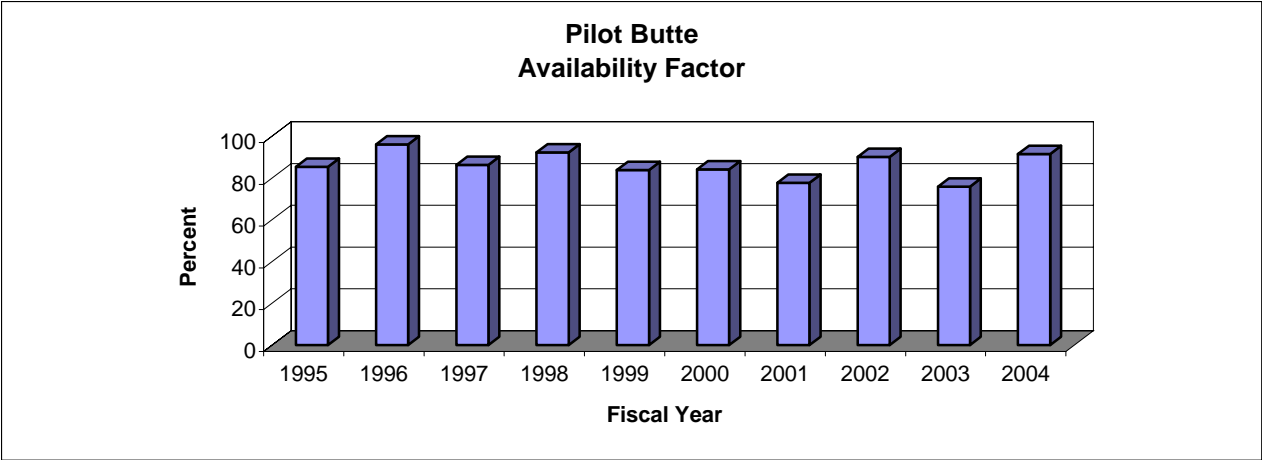
**Benchmark 4  
Workforce Deployment**

<b>Pilot Butte 2004 Equivalent Work Year Levels</b>						
	Equip Work Year Charged to Powerplant	Leave Additive	Denver and Washington Equip Work Year Additive	Total Equip Work Year Allocated to Powerplant	Total Equip Work Year per Generating Unit	Total Equip Work Year per Megawatt
General	0.32	0.04	0.03	0.39	0.19	0.24
Operation	0.43	0.05	0.00	0.47	0.24	0.30
Maintenance	1.27	0.15	0.00	1.41	0.71	0.88
Total Staffing	2.01	0.23	0.03	2.28	1.14	1.42



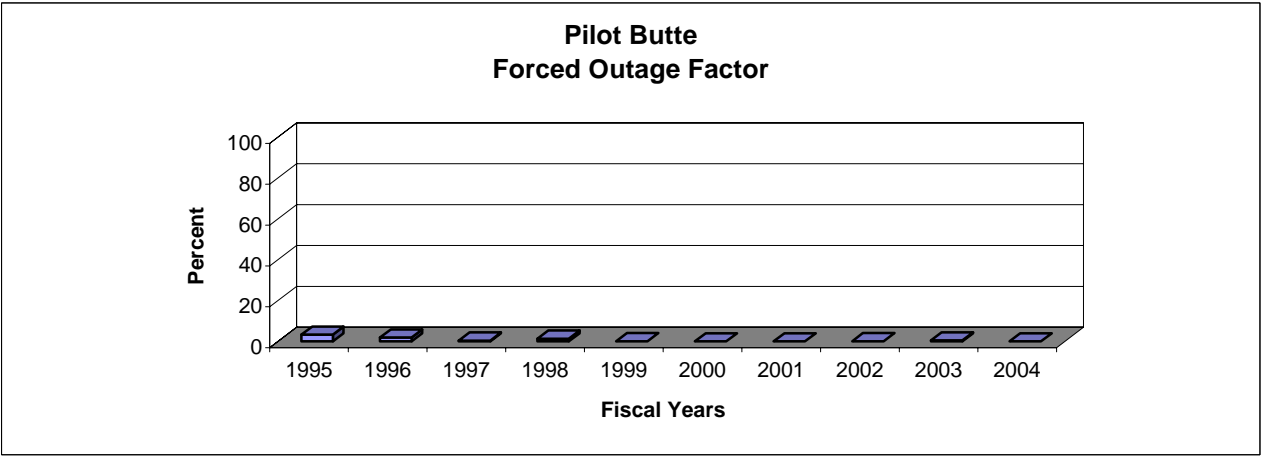
Distributive Account not available for FY-97

**Benchmark 5  
Availability Factor**



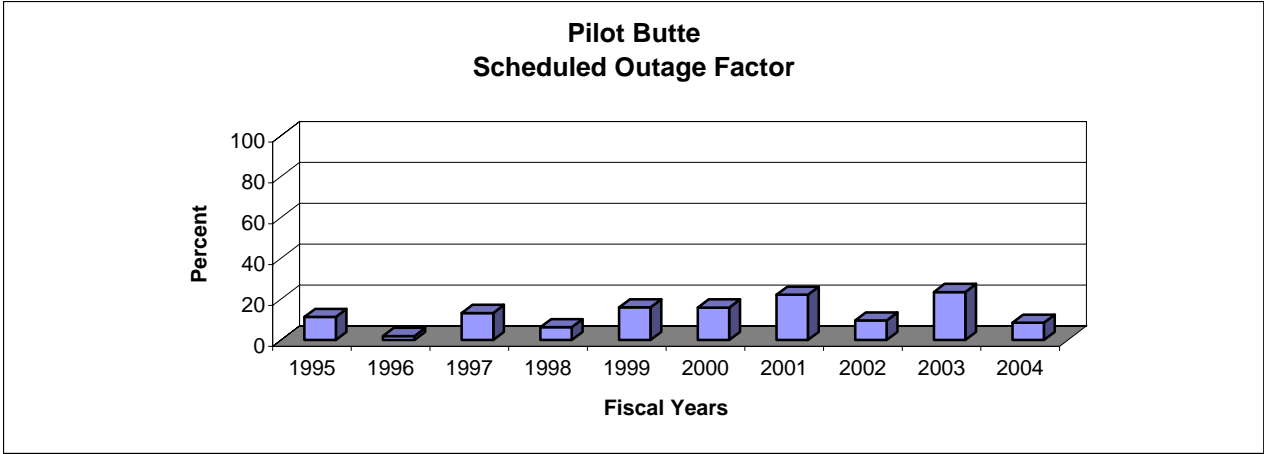
FY 03 – Extended outage for significant repair of the stator winding for Unit 2.

**Benchmark 6  
Forced Outage Factor**



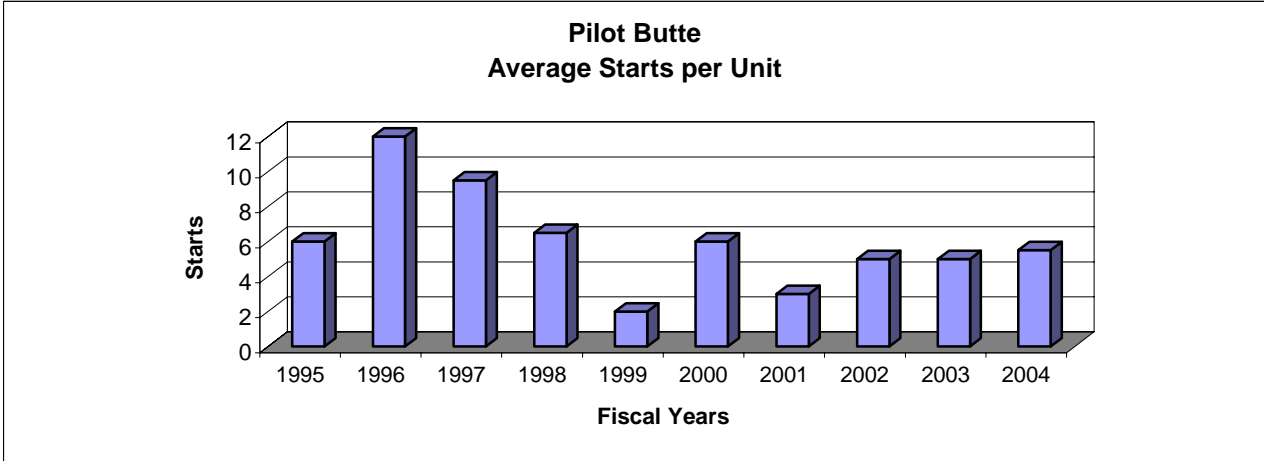
FY-94 - Unit 1 field loss and thrust bearing problem

**Benchmark 7  
Scheduled Outage Factor**



FY 94 - Unit 2 turbine surge valve repair  
FY 03 - Extended outage for Significant repair of the stator winding for Unit 2.

**Starts**



Pilot Butte Powerplant  
Seasonal

<b>Benchmark Data Comparison</b>				
<b>Fiscal Year 2004</b>	<b>Pilot Butte Powerplant</b>	<b>Total Reclamation Average</b>	<b>Industry Average</b>	<b>Best Performers</b>
<b>Wholesale Firm Rate Mills/kWh</b>	21.7	*21.06	Not Available	Not Available
<b>Production Cost as Percentage of Wholesale Firm Rate</b>	0.9%	13.5%	Not Applicable	Not Applicable
<b>O&amp;M Cost \$/MWh</b>	76.11	2.77	Not Applicable	1.23
<b>O&amp;M Costs \$/MW</b>	208,383.82	7,316.97	Not Applicable	2,951.22
<b>O&amp;M Equip Work Year per MW</b>	1.18	0.04	Not Available	0.000
<b>Availability Factor</b>	91.5	86.9	**89.2	99.97
<b>Forced Outage Factor</b>	0.00	0.7	**1.9	0.00
<b>Scheduled Outage Factor</b>	8.5	12.4	**8.9	0.02

\*Weighted by Net Generation

\*\*2003 NERC Average