

**Upper Molina Powerplant  
0-10 MW**

**Ancillary Services**

**Upper Molina  
Ancillary Services**

Spinning Reserve	No
Non-Spinning Reserve	No
Replacement Reserve	No
Regulation/Load Following	No
Black Start	Yes
Voltage Support	Yes

**Generators**

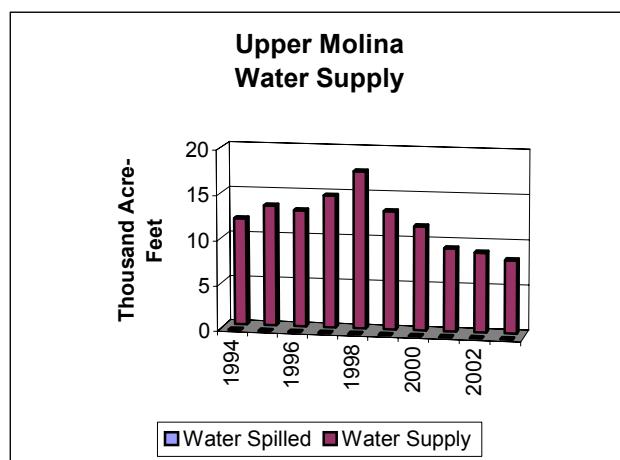
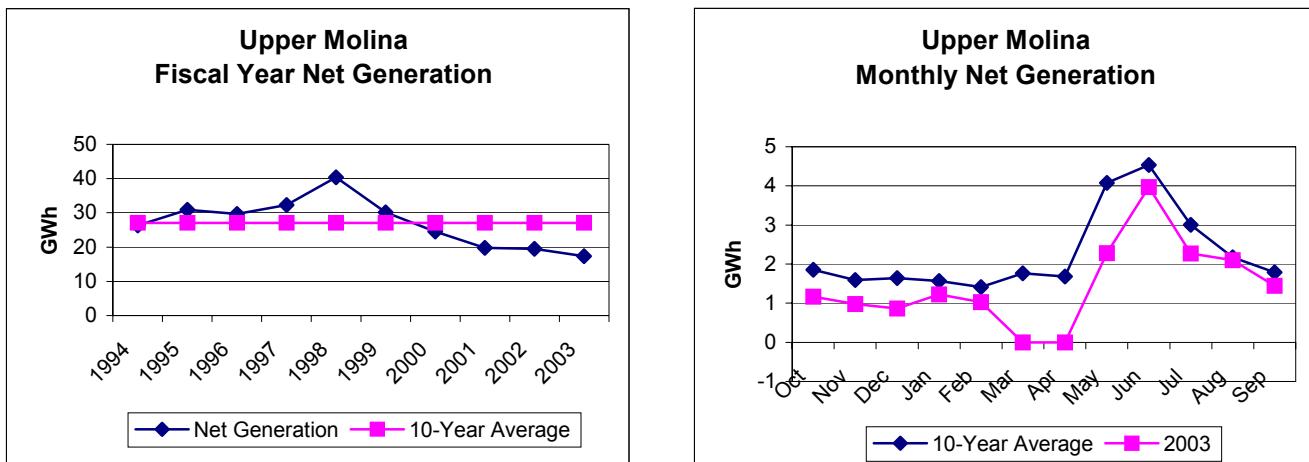
**Upper Molina Generators**

Existing Number and Capacity

Unit #	Original Capacity (kW)	Capacity Increased (kW)	Present Capacity (kW)
1	8,640	0	8,640
1 Unit	8,640	0	8,640

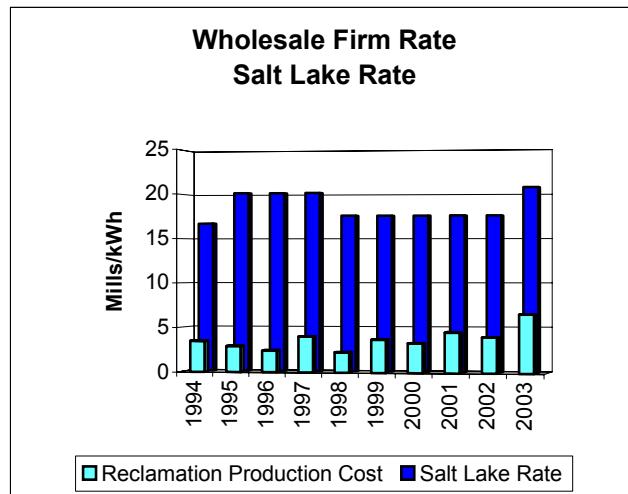
**Upper Molina Powerplant**  
**0-10 MW**

**Generation**

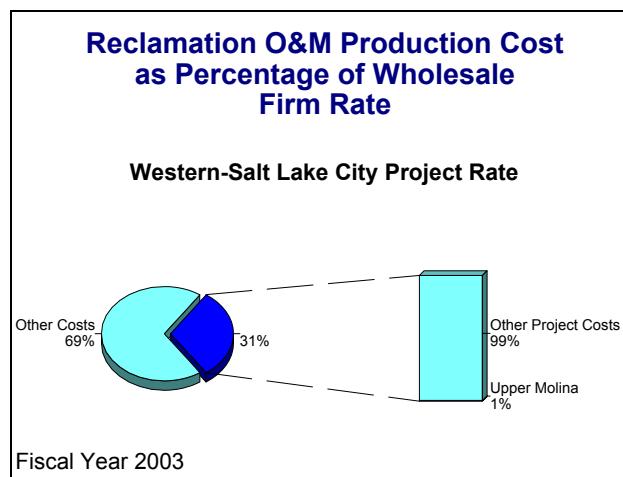


**Prime Laboratory Benchmarks**

**Benchmark 1**  
**Wholesale Firm Rate**

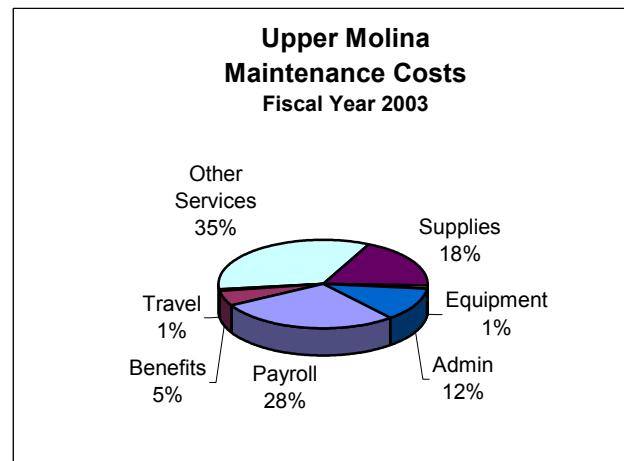
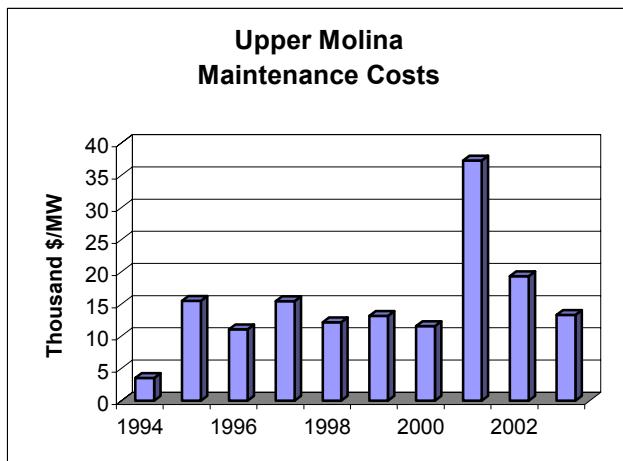
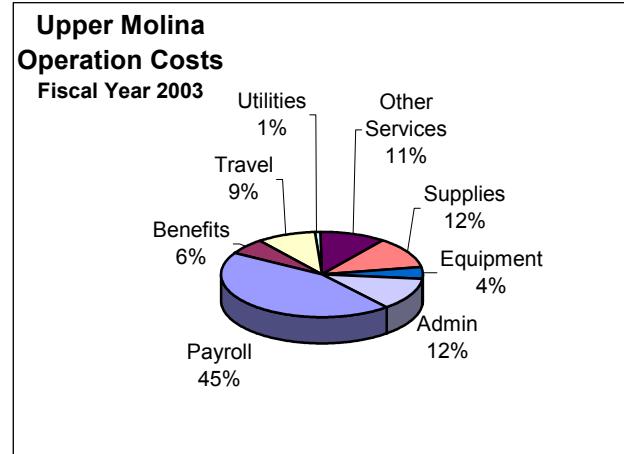
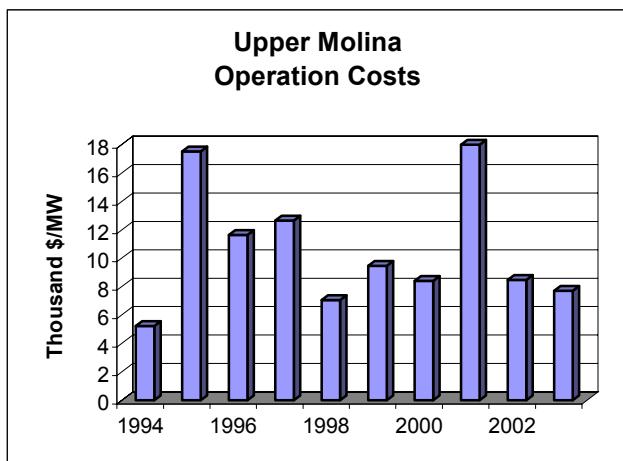


**Benchmark 2**  
**Reclamation's Production Cost as Percentage of Wholesale Firm Rate**



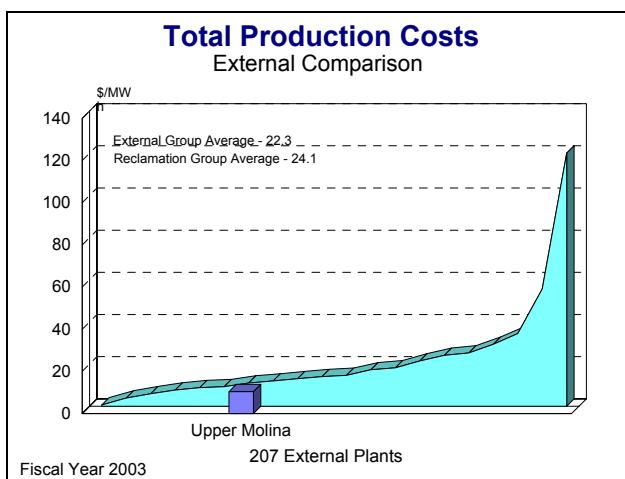
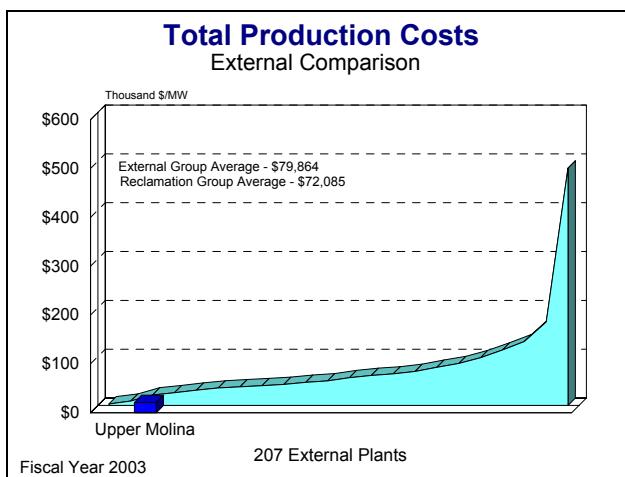
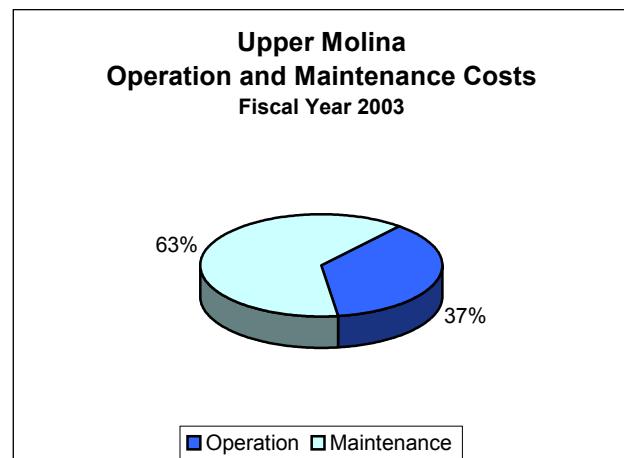
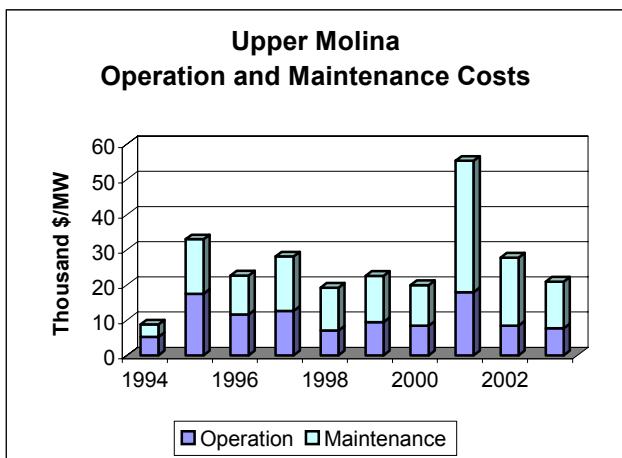
**Upper Molina Powerplant**  
**0-10 MW**

**Benchmark 3**  
**Production Cost**



**Upper Molina Powerplant**  
**0-10 MW**

**Benchmark 3**  
**Production Cost**



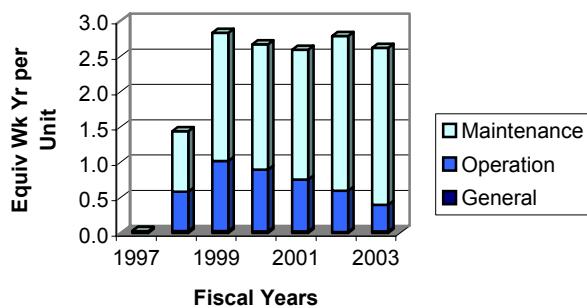
**Upper Molina Powerplant**  
**0-10 MW**

**Benchmark 4**  
**Workforce Deployment**

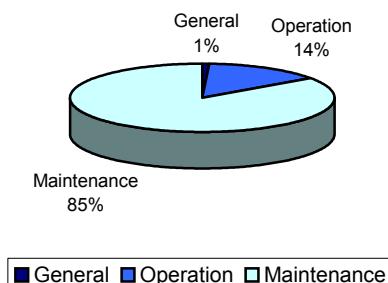
**Upper Molina  
2003 Equivalent  
Work Year Levels**

	Equiv Work Year Charged to Powerplant	Leave Additive	Denver and Washington Equiv Work Year Additive	Total Equiv Work Year Allocated to Powerplant	Total Equiv Work year per Generating Unit	Total Equiv Work Year per Megawatt
General	0	0	0.02	0.02	0.02	0.003
Operation	0.34	0.04	0	0.38	0.38	0.044
Maintenance	1.98	0.24	0	2.22	2.22	0.257
Total Staffing	2.32	0.28	0.02	2.62	2.62	0.3

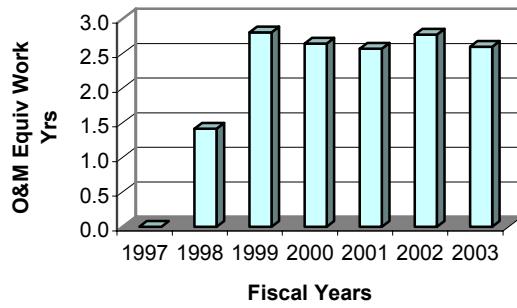
**Upper Molina  
Equivalent Work Year per Unit**



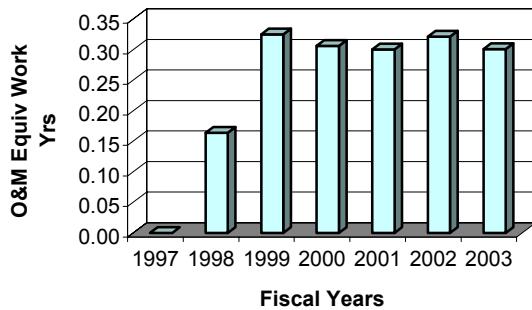
**Upper Molina  
Equivalent Work Year per Unit  
2003**



**Upper Molina  
O&M Equivalent Work Years per Unit**

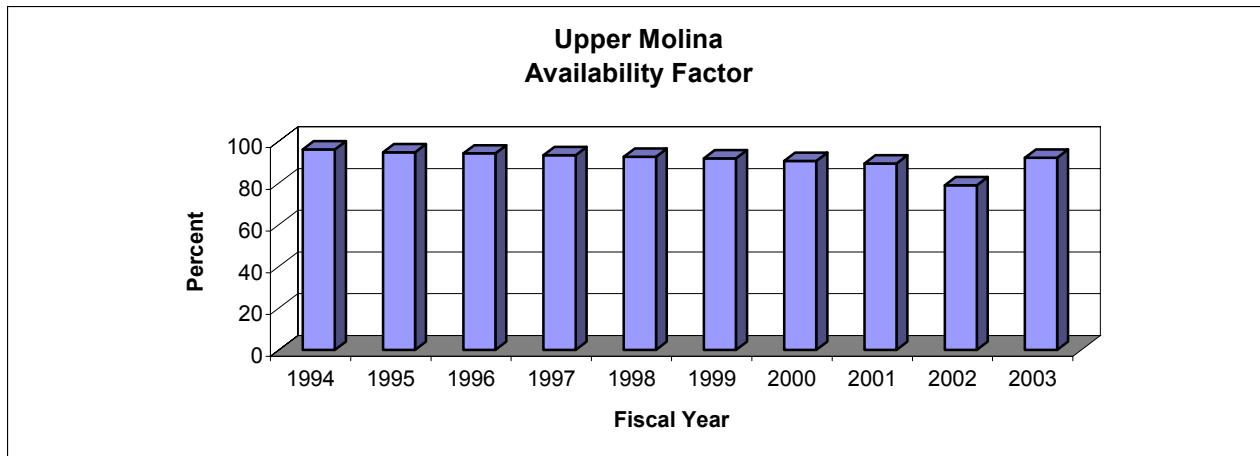


**Upper Molina  
O&M Equivalent Work Years per MW**

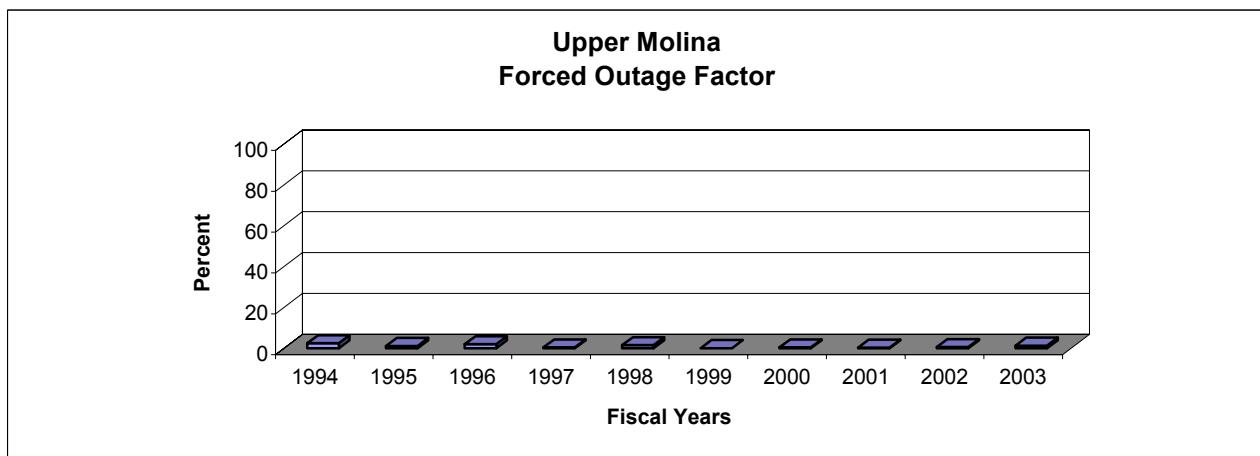


**Upper Molina Powerplant  
0-10 MW**

**Benchmark 5  
Availability Factor**

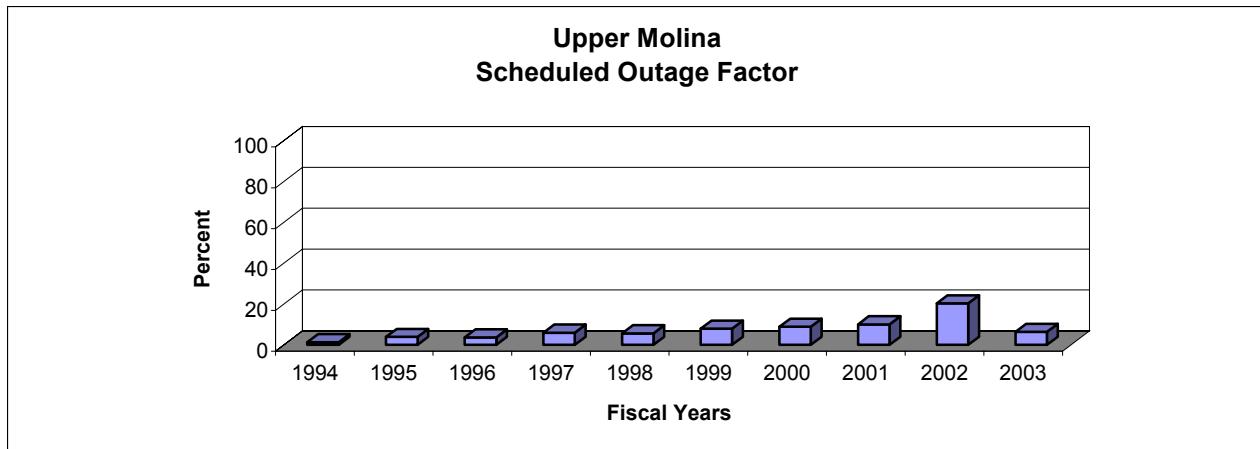


**Benchmark 6  
Forced Outage Factor**

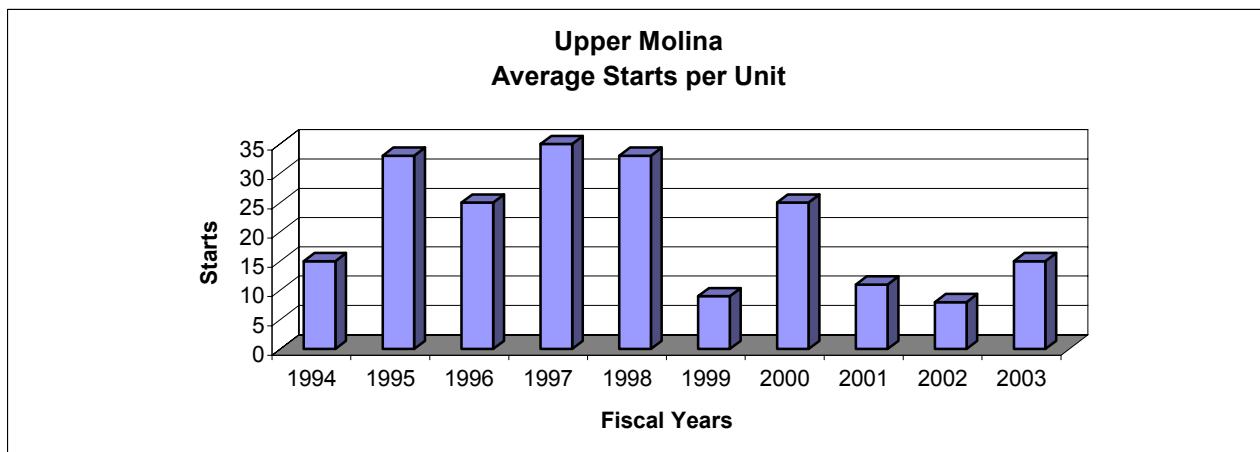


**Upper Molina Powerplant  
0-10 MW**

**Benchmark 7  
Scheduled Outage Factor**



**Starts**



## Benchmark Data Comparison

Fiscal Year 2003	Upper Molina Powerplant	Reclamation Average 0-10 MW Group	Total Reclamation Average	Industry Average
<b>Wholesale Firm Rate Mills/kWh</b>	20.7	Not Applicable	*23.1	Not Available
<b>Production Cost as Percentage of Wholesale Firm Rate</b>	0.2%	Not Applicable	12.0%	Not Applicable
<b>O&amp;M Cost \$/MWh</b>	36.9	23.2	2.7	22.3
<b>O&amp;M Costs \$/MW</b>	75,752	55,590	7,315	79,864
<b>O&amp;M Equiv Work Year per MW</b>	0.30	0.55	0.04	Not Available
<b>Availability Factor</b>	92.2	84.2	83.6	**88.9
<b>Forced Outage Factor</b>	1.3	0.7	1.5	**2.4
<b>Scheduled Outage Factor</b>	6.4	15.1	14.9	**8.7

\*Weighted by Net Generation

\*\*2002 NERC Average