Ancillary Services

Boise River Diversion
Ancillary Services

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

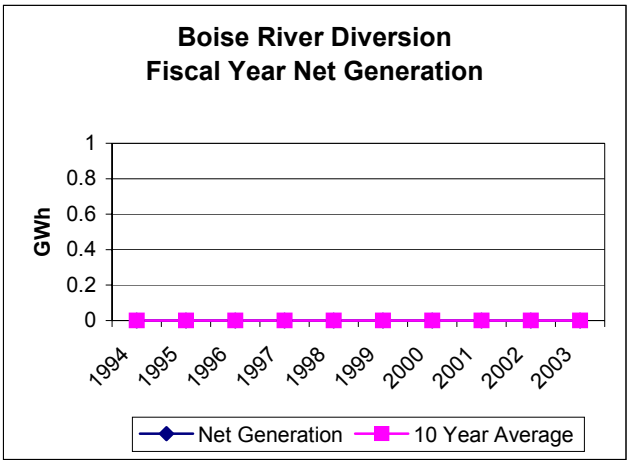
Generators

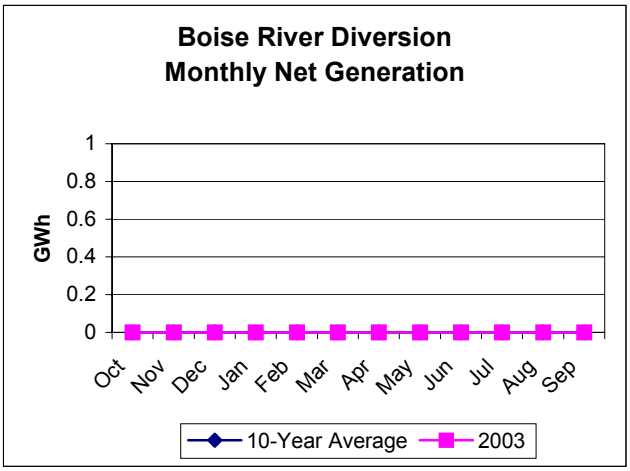
Boise River Diversion
Generators

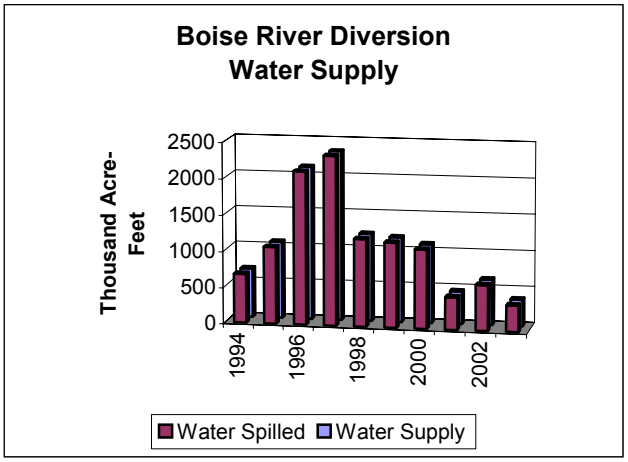
Existing Number and Capacity

Unit #	Original Nameplate (kW)	Increased (kW)	Present Nameplate (kW)
1	500	0	500
2	500	0	500
3	500	0	500
3 Units	1,500	0	1,500

Generation

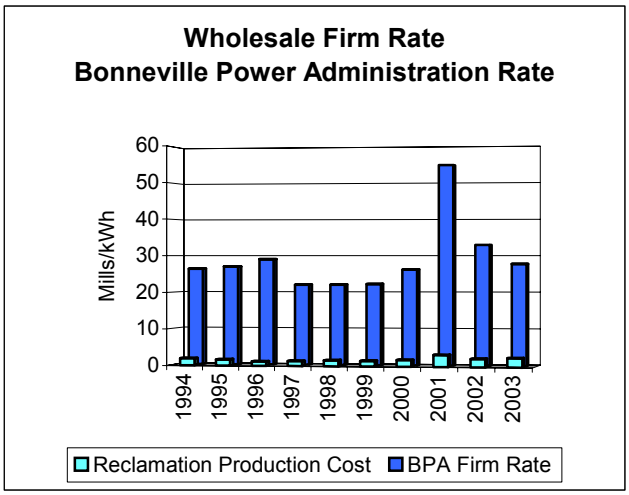

Boise River Diversion
Fiscal Year Net Generation
GWh
1
0.8
0.6
0.4
0.2
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Net Generation
10 Year Average


Boise River Diversion
Monthly Net Generation
GWh
1
0.8
0.6
0.4
0.2
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
10-Year Average
2003

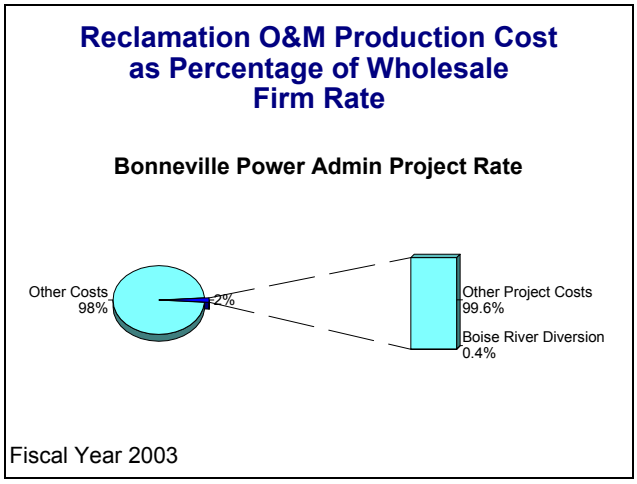

Boise River Diversion
Water Supply
Thousand Acre-Feet
2500
2000
1500
1000
500
0
1994
1996
1998
2000
2002
Water Spilled
Water Supply

Prime Laboratory Benchmarks

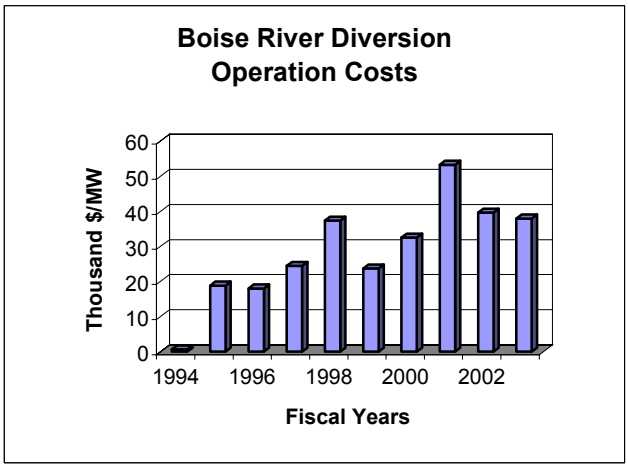
Benchmark 1
Wholesale Firm Rate

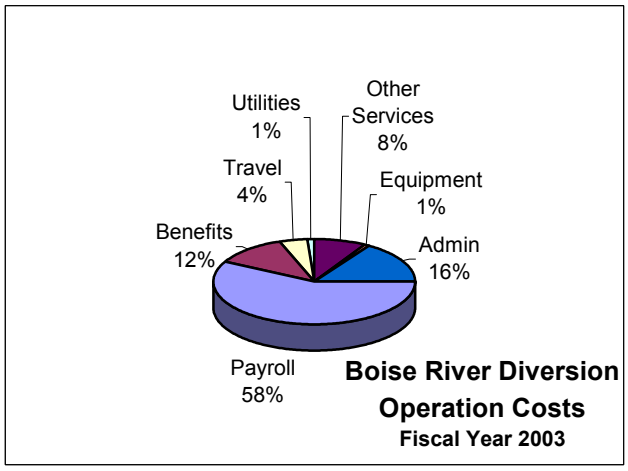


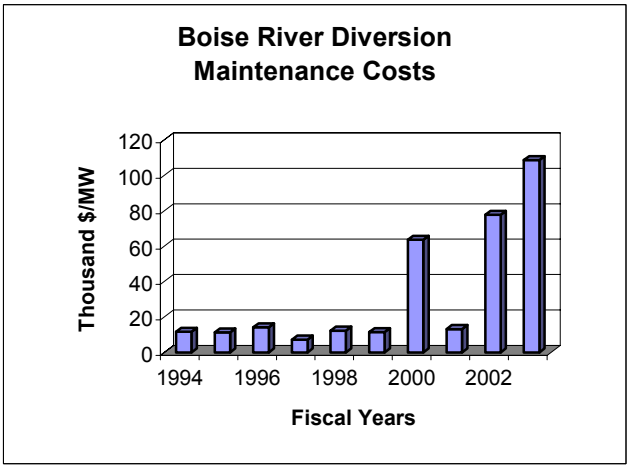
Benchmark 2
Reclamation's Production Cost as Percentage of Wholesale Firm Rate

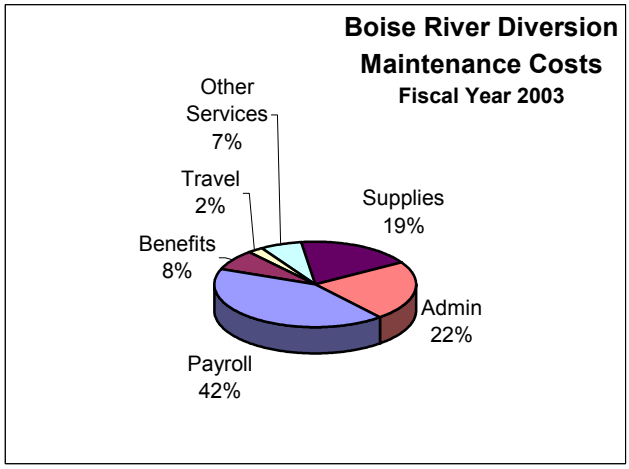


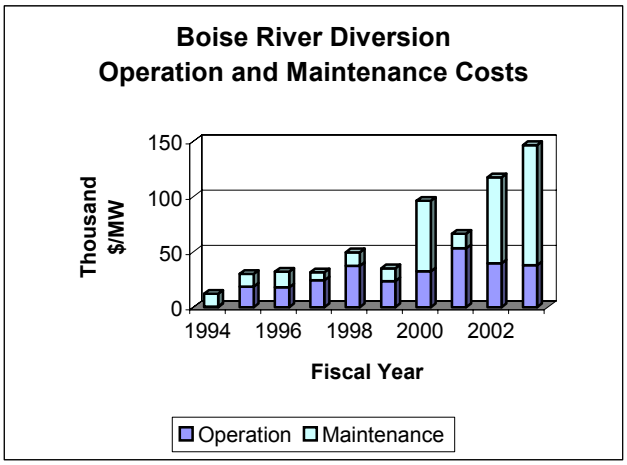
Benchmark 3
Production Cost

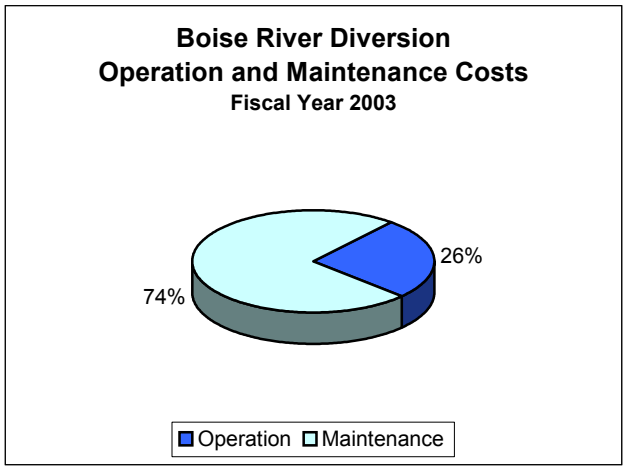








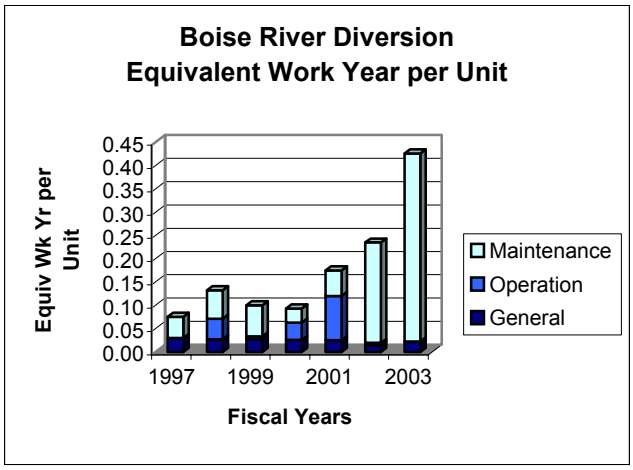


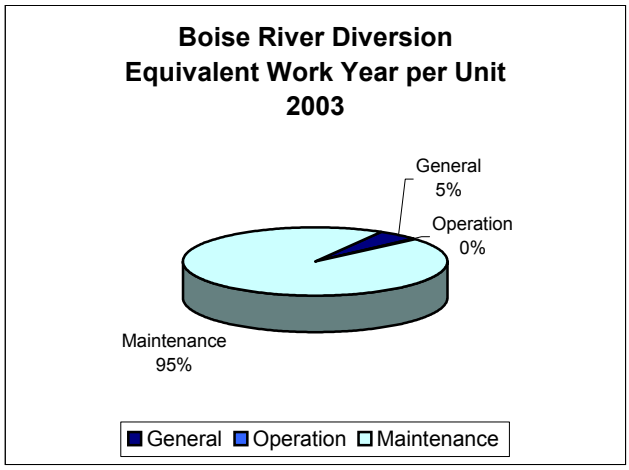


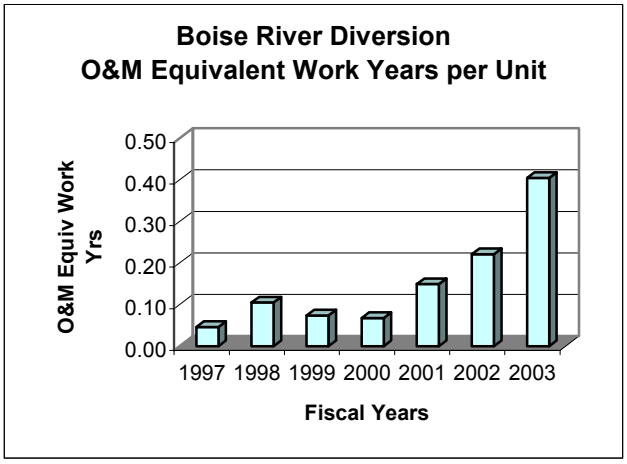
Benchmark 4
Workforce Deployment

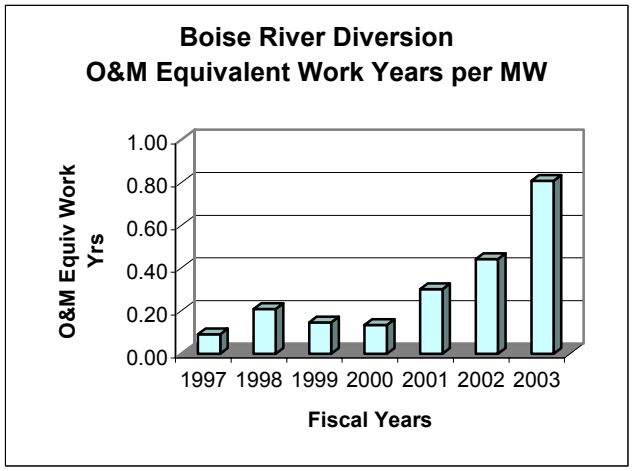
Boise River Diversion
2003 Equivalent
Work Year Levels

	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	0.07	0.07	0.02	0.044
Operation	0	0	0	0	0	0.001
Maintenance	1.09	0.12	0	1.21	0.4	0.807
Total Staffing	1.09	0.12	0.07	1.28	0.43	0.85

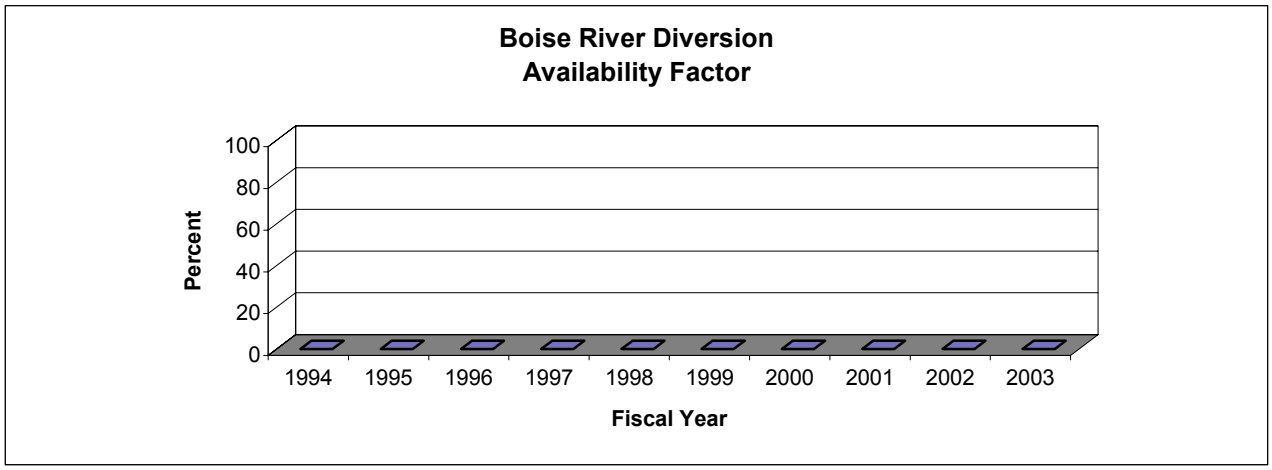




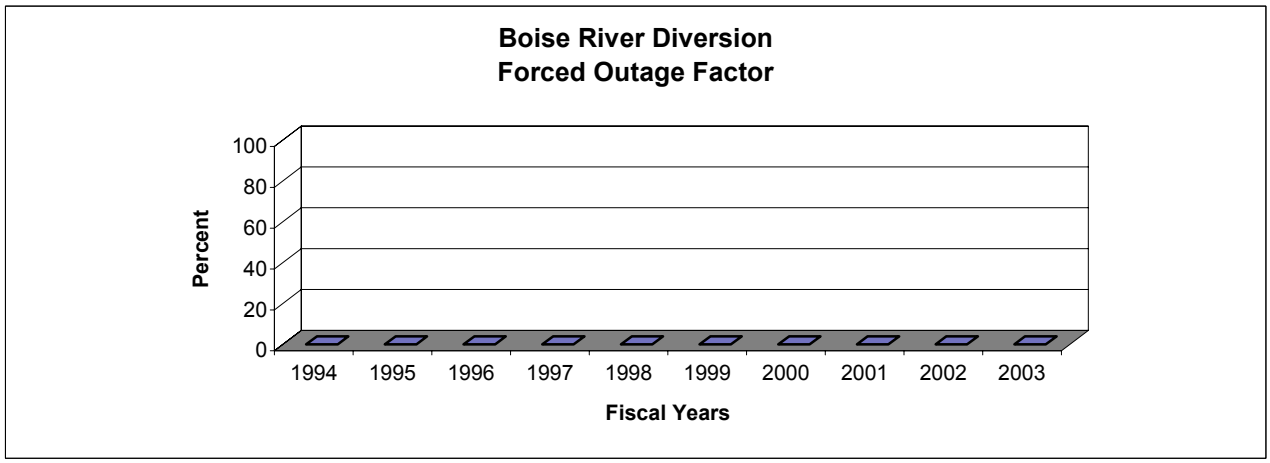




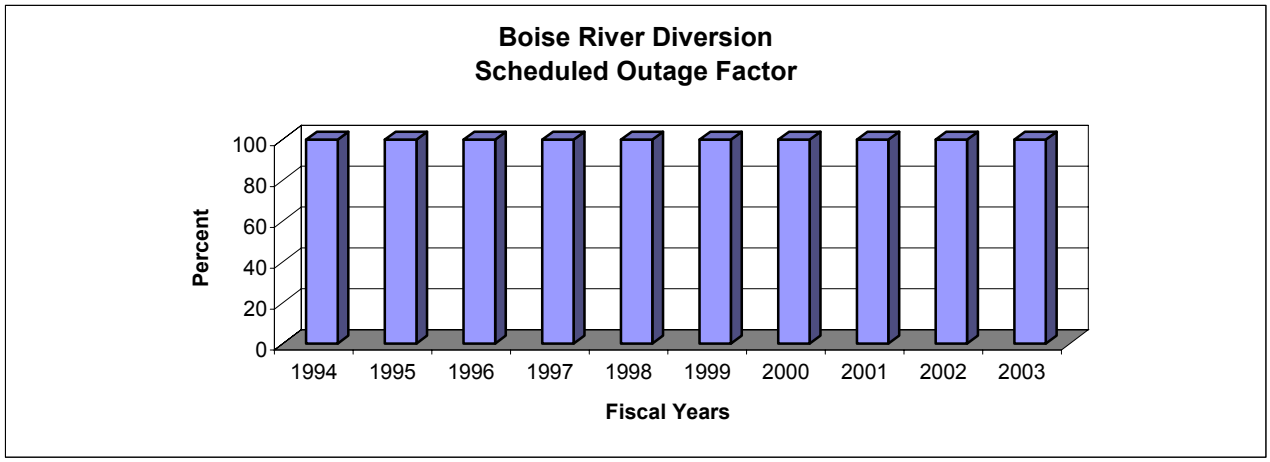
Benchmark 5
Availability Factor



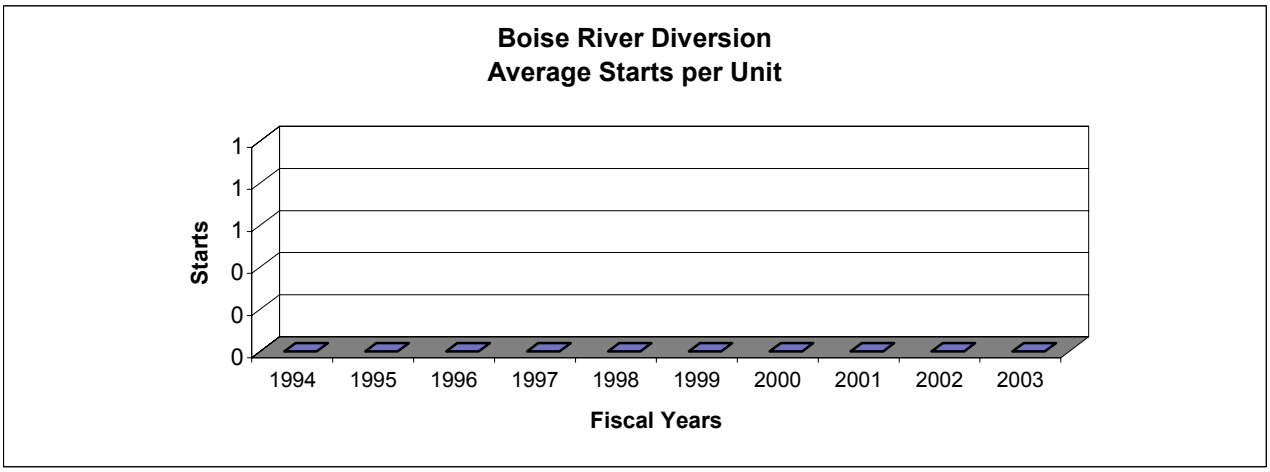
Benchmark 6
Forced Outage Factor



Benchmark 7
Scheduled Outage Factor



Starts



Benchmark Data Comparison

Fiscal Year 2003	Boise River Diversion	Total Reclamation Average	Industry Average	Best Performers
Wholesale Firm Rate Mills/kWh	27.7	*23.1	Not Available	Not Available
Production Cost as Percentage of Wholesale Firm Rate	0.008%	12.0%	Not Applicable	Not Applicable
O&M Cost $/MWh	Not Applicable	2.7	22.3	1.1
O&M Costs $/MW	146,555	7,315	79,864	3,108
O&M Equiv Work Year per MW	0.8	0.04	Not Available	0.01
Availability Factor	0.0	83.6	**88.9	99.1
Forced Outage Factor	0.0	1.5	**2.4	0.0
Scheduled Outage Factor	100.0	14.9	**8.7	0.0

*Weighted by Net Generation
**2002 NERC Average