

Hoover Powerplant Boulder Canyon Project

Ancillary Services

Hoover Ancillary Services	
Spinning Reserve	Yes
Non-Spinning Reserve	Yes
Replacement Reserve	Yes
Regulation/Load Following	Yes
Black Start	Yes
Voltage Support*	Yes

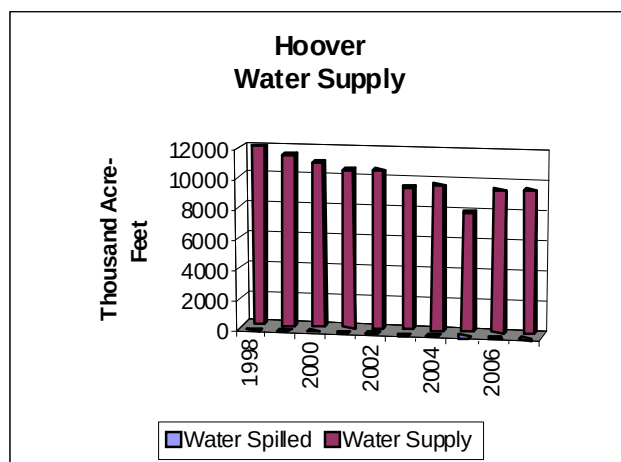
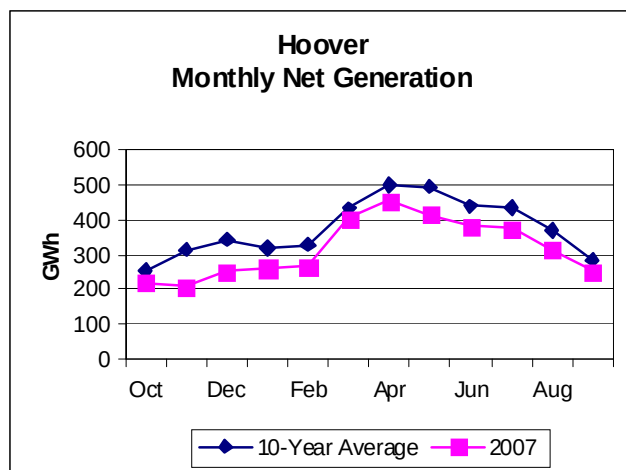
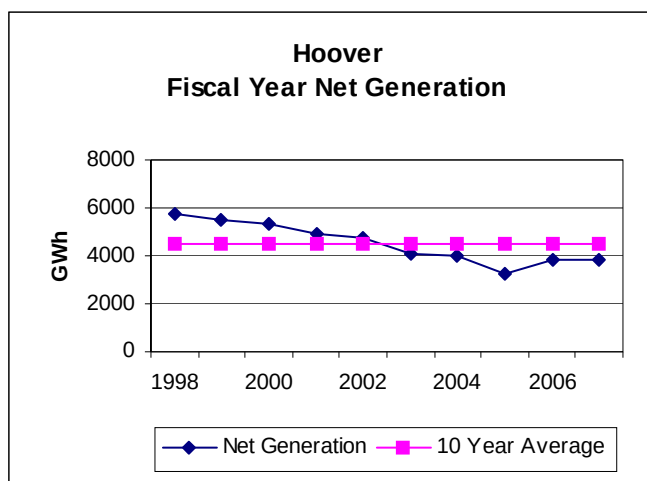
*Customers supply voltage support needed for delivery of capacity and energy to their load centers.

Generators

Hoover Generators			
Existing Number and Capacity			
Unit #	Original Capacity (kW)	Capacity Increased (kW)	Present Capacity (kW)
A0	2,400	-	2,400
A1	82,500	47,500	130,000
A2	82,500	47,500	130,000
A3	82,500	47,500	130,000
A4	82,500	47,500	130,000
A5	82,500	44,500	127,000
A6	82,500	47,500	130,000
A7	82,500	47,500	130,000
A8	40,000	21,500	61,500
A9	50,000	18,500	68,500
N0	2,400	-	2,400
N1	82,500	47,500	130,000
N2	82,500	47,500	130,000
N3	82,500	47,500	130,000
N4	82,500	47,500	130,000
N5	82,500	47,500	130,000
N6	82,500	47,500	130,000
N7	82,500	44,500	127,000
N8	95,000	35,000	130,000
19 units	1,344,800	734,000	2,078,800

Hoover Powerplant >500 MW

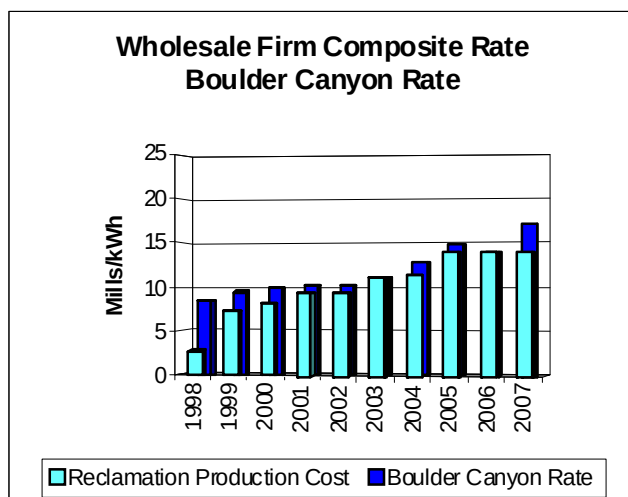
Generation



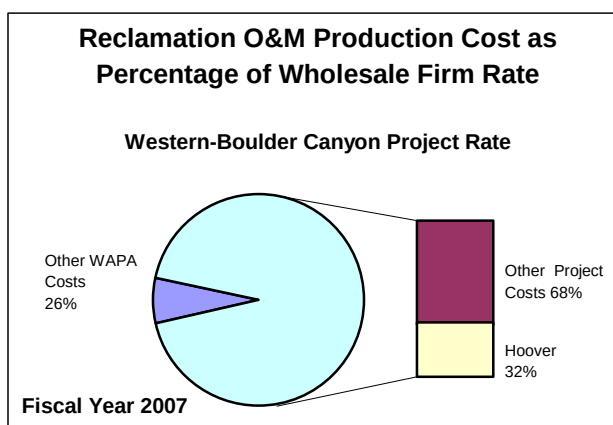
FY 2005 water for generation was 7,934,508 AF
and 190 AF went through the Bypass valves.

Prime Laboratory Benchmarks

Benchmark 1 Wholesale Firm Rate

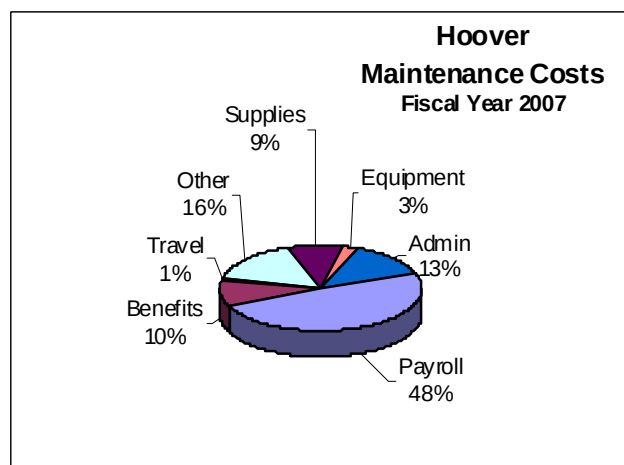
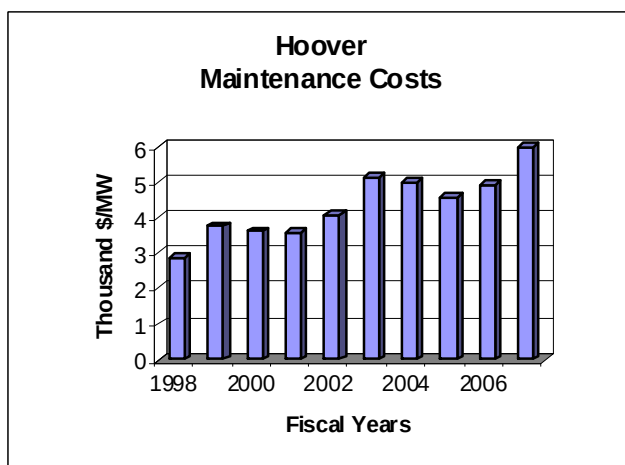
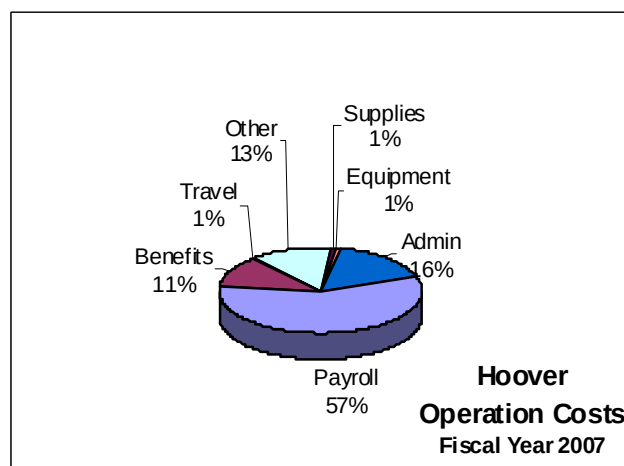
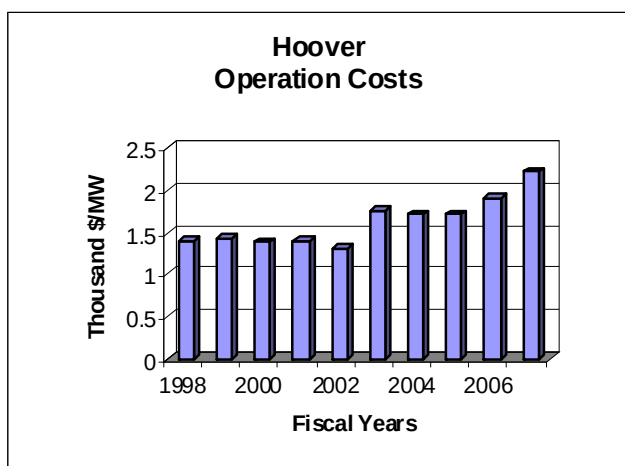


Benchmark 2 Reclamation's Production Cost as Percentage of Wholesale Firm Rate

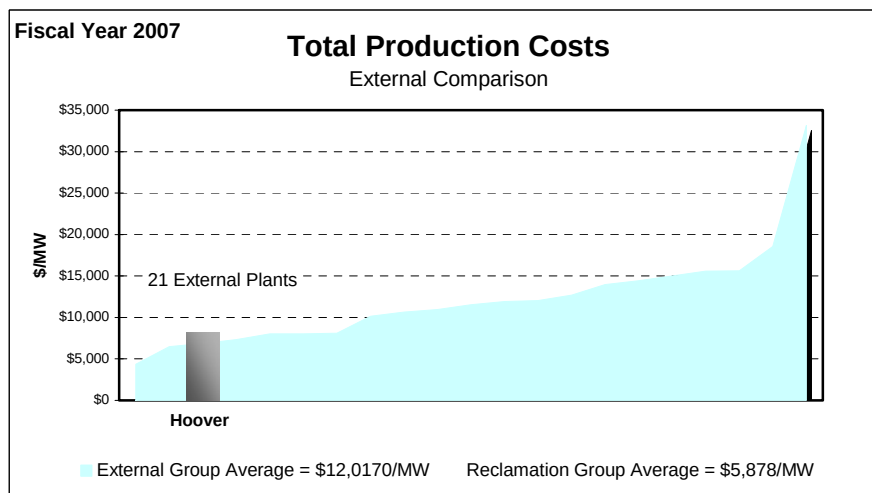
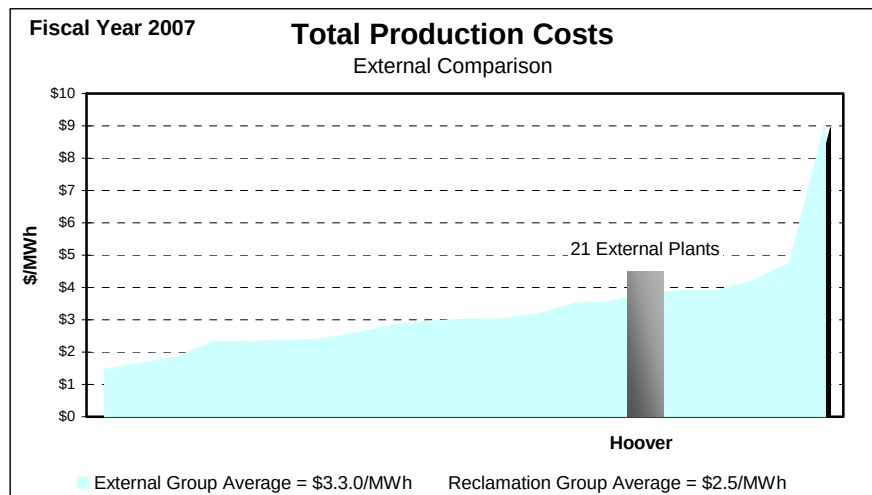
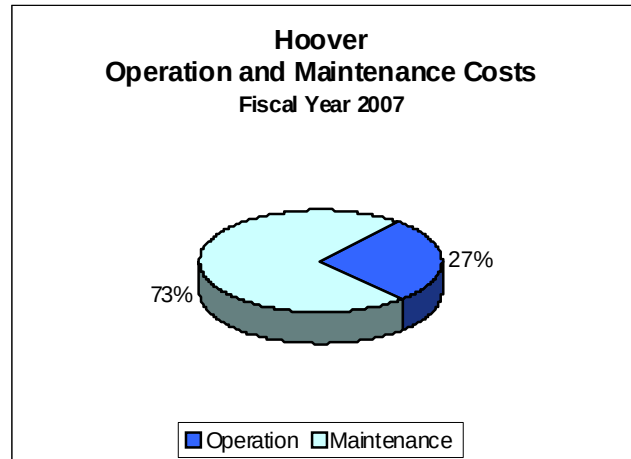
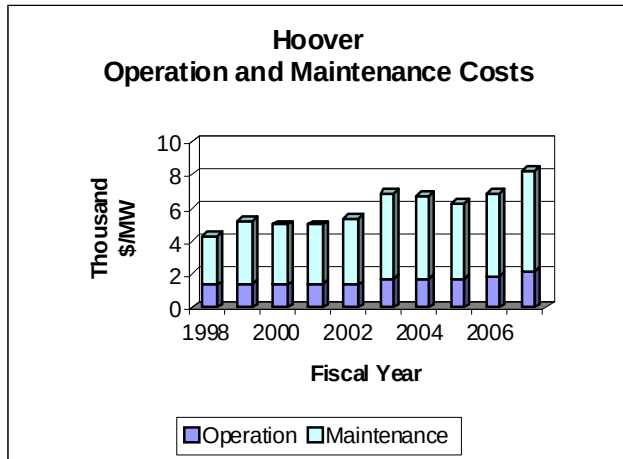


Hoover Powerplant >500 MW

Benchmark 3 Production Cost

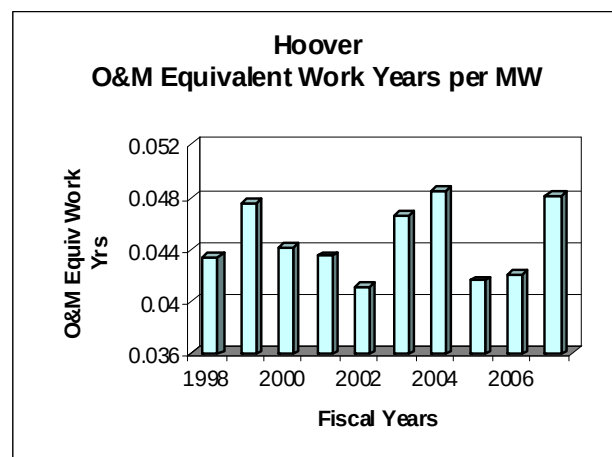
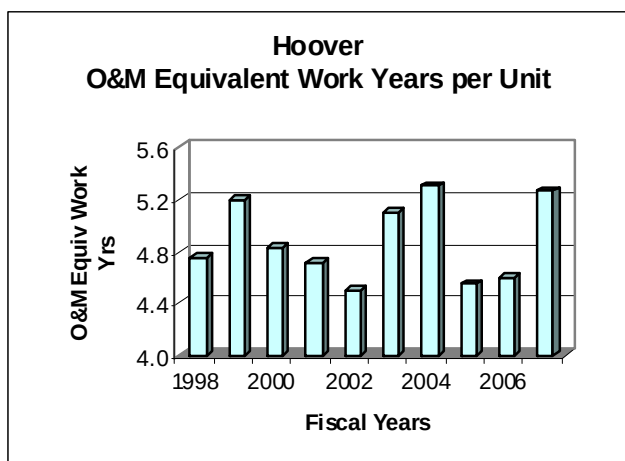
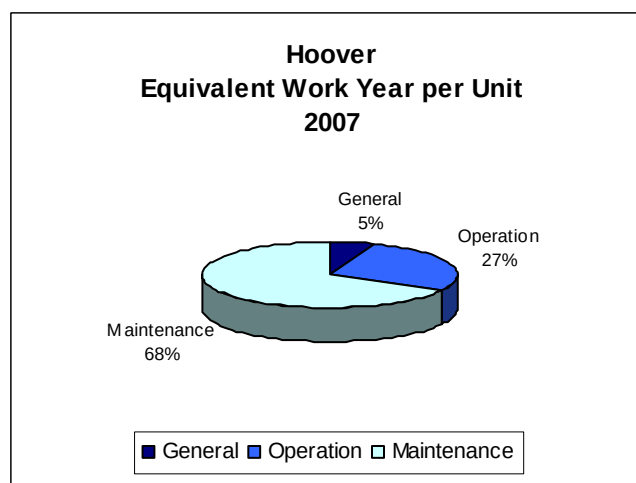
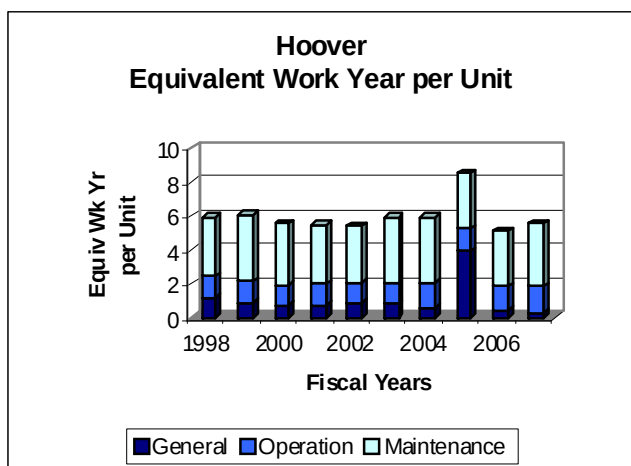


**Benchmark 3
Production Cost**

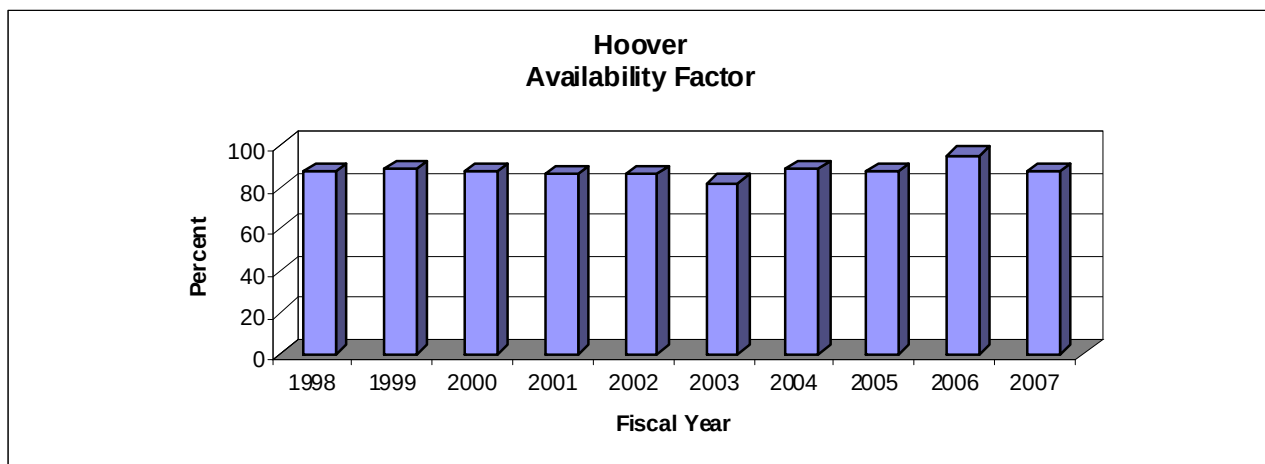


**Benchmark 4
Workforce Deployment**

Hoover FY 2007 Equivalent Work Staffing Year Levels						
	Equivalent Work Year Staffing Charged to Powerplant	Leave Additive	Denver and Washington Equivalent Work Year Staffing Additive	Total Equivalent Work Year Allocated to Powerplant	Total Equivalent Staffing Work Year per Generating Unit	Total Equivalent Work Year Staffing per Megawatt
General	4.96	0.52	0.34	5.81	0.31	0.00
Operation	26.31	2.74	0.00	29.05	1.53	0.01
Maintenance	64.24	6.70	0.00	70.94	3.73	0.03
Total Staffing	95.51	9.96	0.34	105.80	5.57	0.05

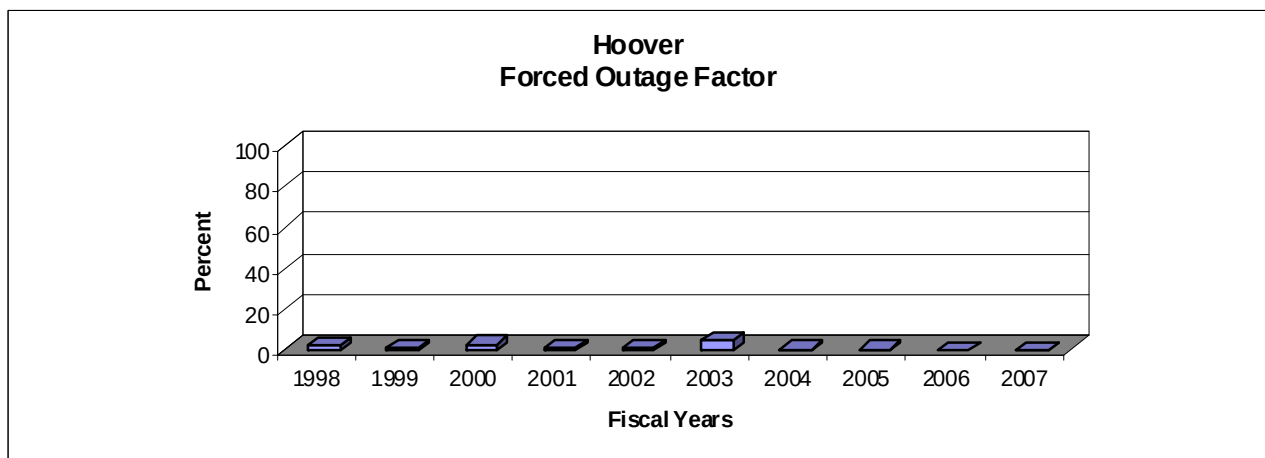


Benchmark 5
Availability Factor

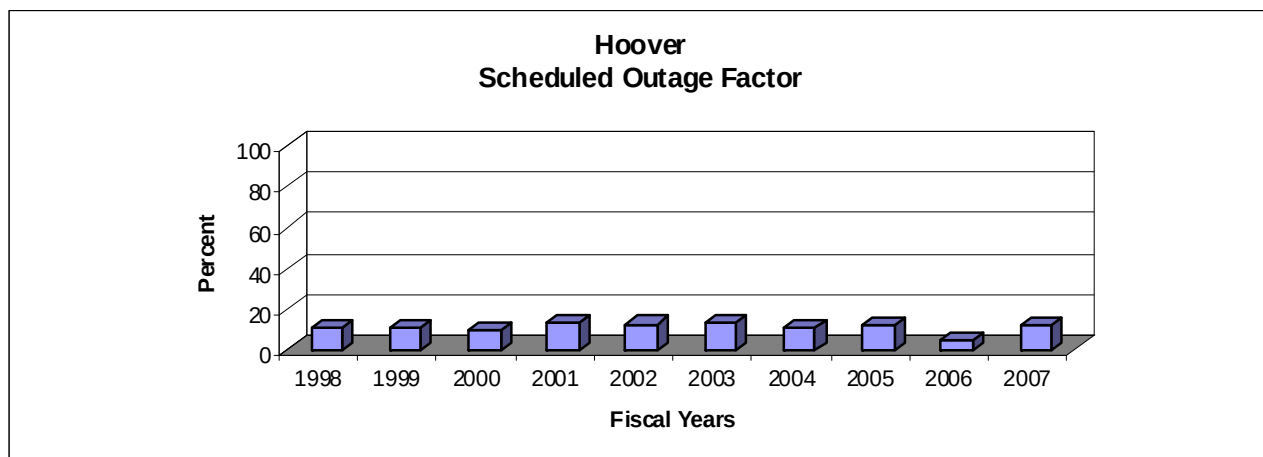


FY-1999 to FY-2012 – Turbine overhauls – Program ongoing

Benchmark 6
Forced Outage Factor

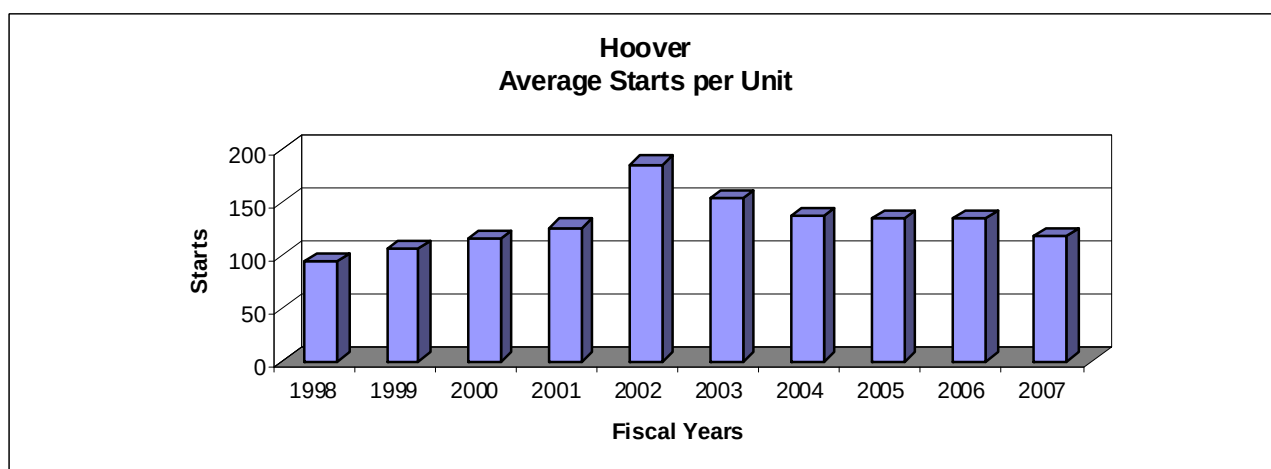


**Benchmark 7
Scheduled Outage Factor**



FY-1999 to FY-2012 – Turbine overhauls – Program ongoing

Starts



FY-2002 increase due to deregulation.

Benchmark Data Comparison					
Fiscal Year 2007	Hoover Powerplant	Reclamation Average 500+ MW Group	Total Reclamation Average	Industry Average	Best Performers
Wholesale Firm Rate Mills/kWh	14.8	Not Applicable	*22.45	Not Available	Not Available
Production Cost as Percentage of Wholesale Firm Rate	29.2%	Not Applicable	12.1%	Not Applicable	Not Applicable
O&M Cost \$/MWh	4.49	1.65	2.76	***3.28	1.00
O&M Costs \$/MW	8,223.91	4,863.16	7,846.62	***12,0170	2,897.28
O&M Equiv Work Year per MW	0.05	0.02	0.03	Not Available	0.0
Availability Factor	87.7	81.93	82.3	**88.64	98.5
Forced Outage Factor	0.2	3.15	2.6	**2.61	0.0
Scheduled Outage Factor	12.1	14.92	15.1	**8.74	0.0

*Weighted by Net Generation

**2006 NERC Average

***Energy Information Administration Data