

Shasta Powerplant Central Valley Project

Ancillary Services

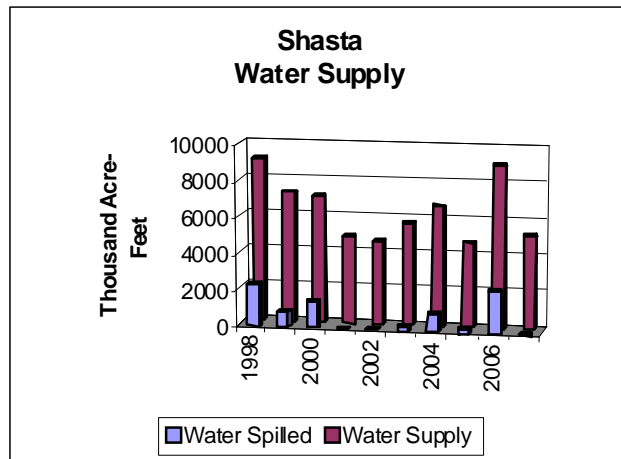
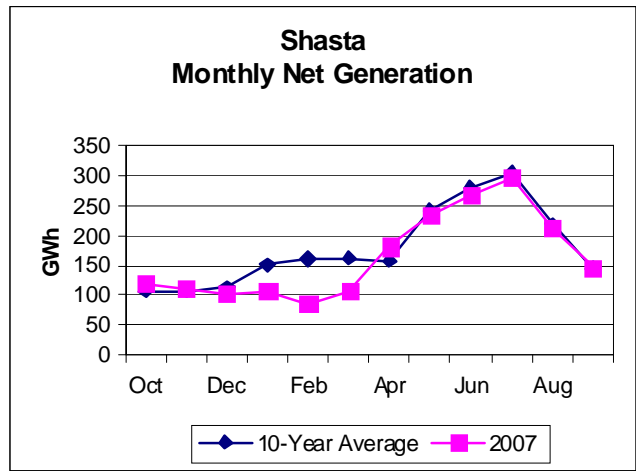
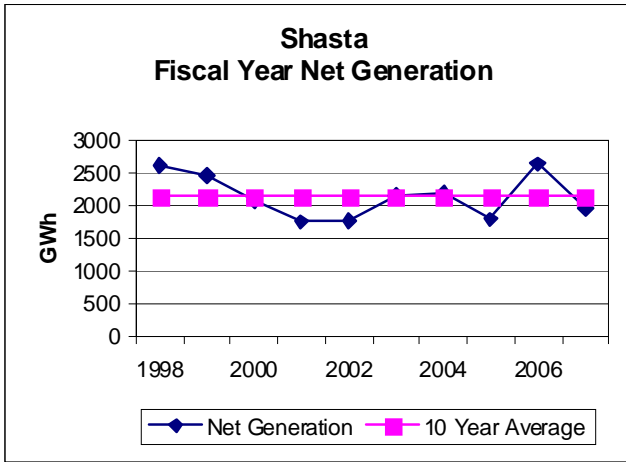
Shasta Ancillary Services	
Spinning Reserve	Yes
Non-Spinning Reserve	Yes
Replacement Reserve	Yes
Regulation/Load Following	Yes
Black Start	Yes
Voltage Support	Yes

Generators

Shasta Generators			
Existing Number and Capacity			
Unit #	Original Capacity (kW)	Capacity Increased (kW)	Present Capacity (kW)
1	75,000	67,000	142,000
2	75,000	50,000	125,000
3	75,000	67,000	142,000
4	75,000	67,000	142,000
5	75,000	67,000	142,000
S1	2,000	-	2,000
S2	2,000	-	2,000
7 Units	379,000	318,000	697,000

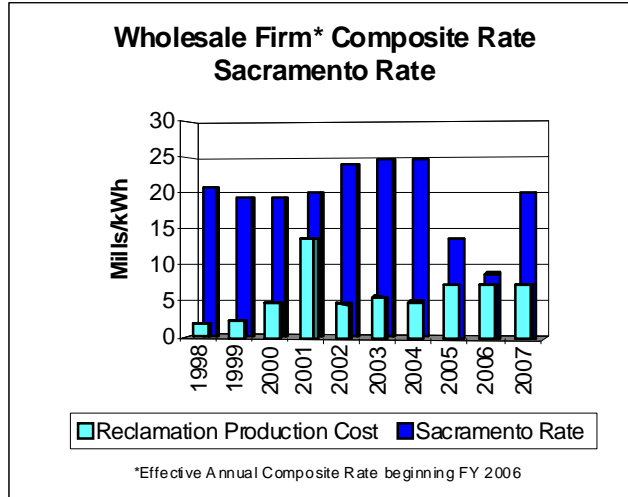
The maximum operational capacity is 612,000 kW.
Units 3, 4, and 5 are presently restricted to 125,000 kW
because of the turbines which will be replaced in 2001.

Generation

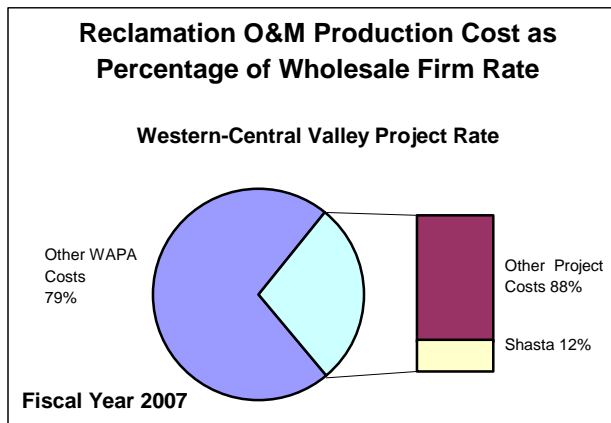


Prime Laboratory Benchmarks

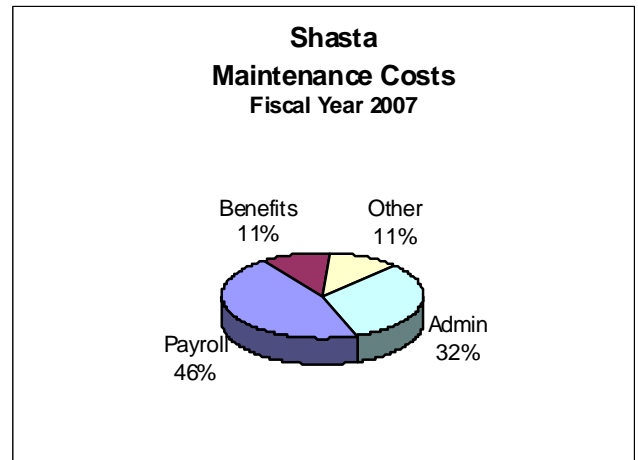
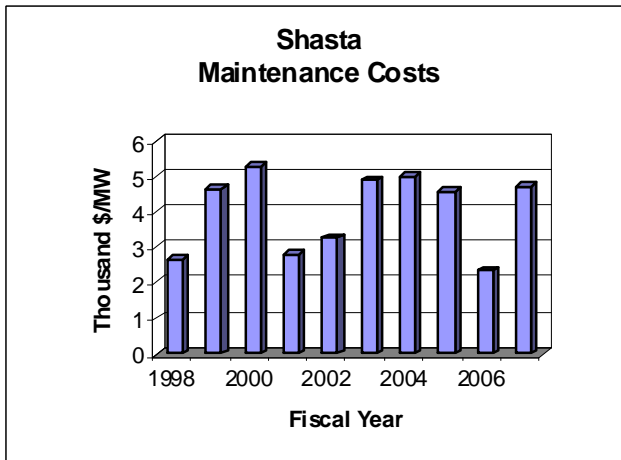
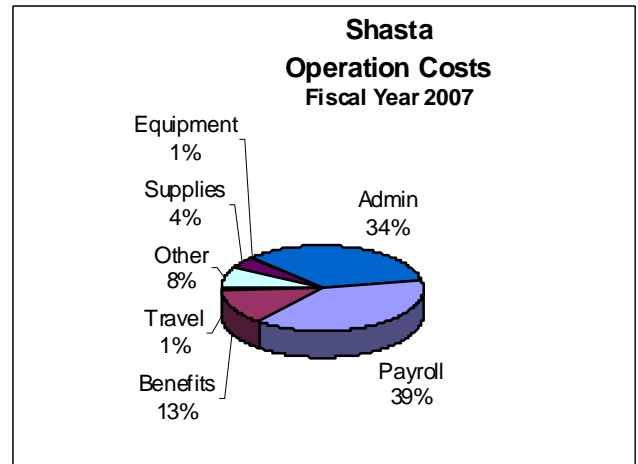
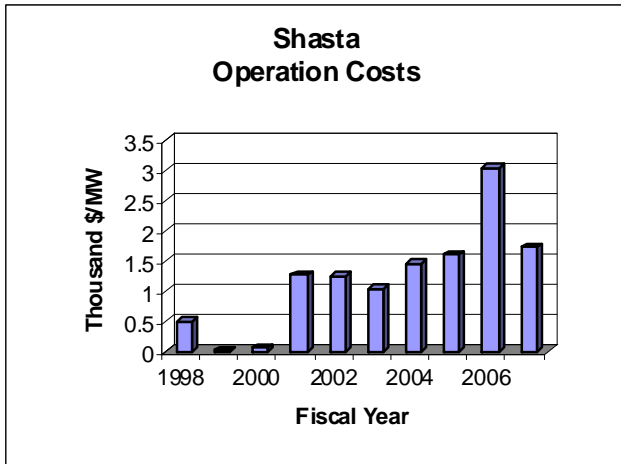
**Benchmark 1
Wholesale Firm Rate**



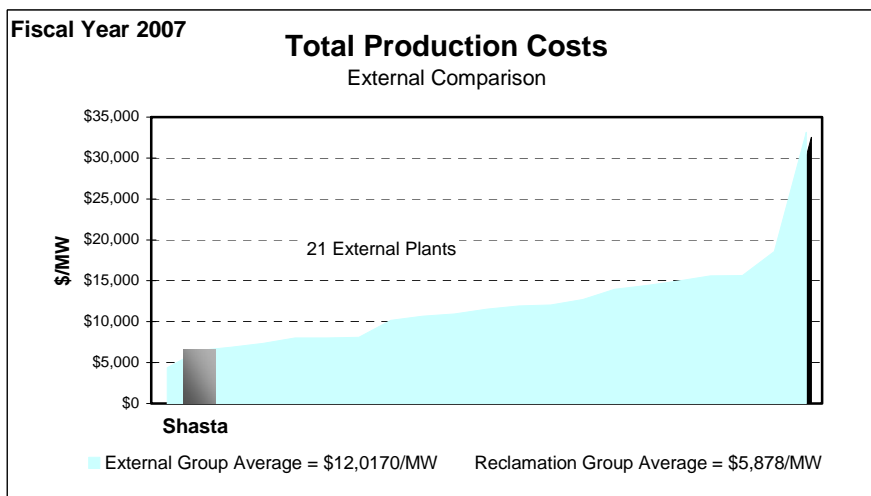
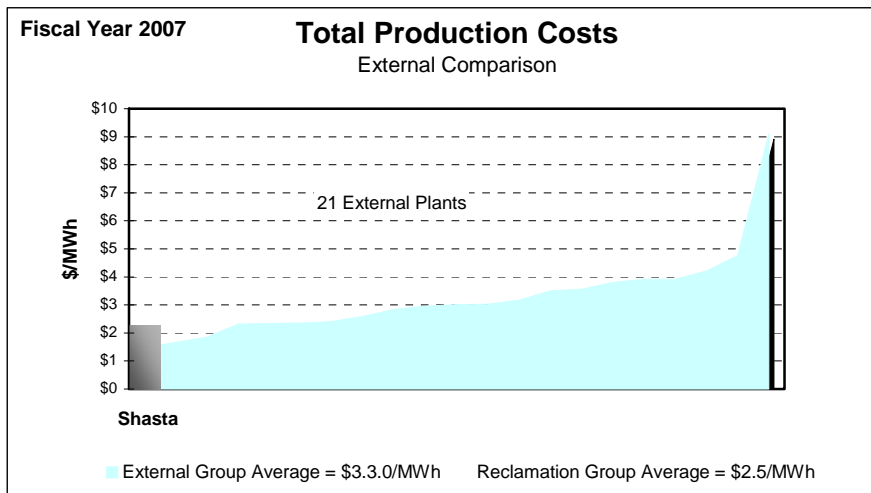
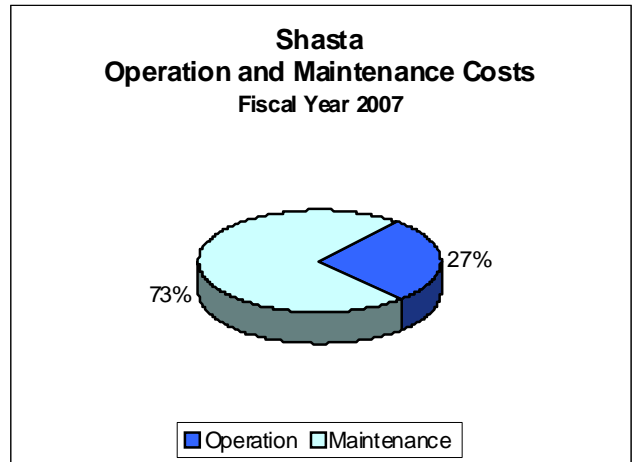
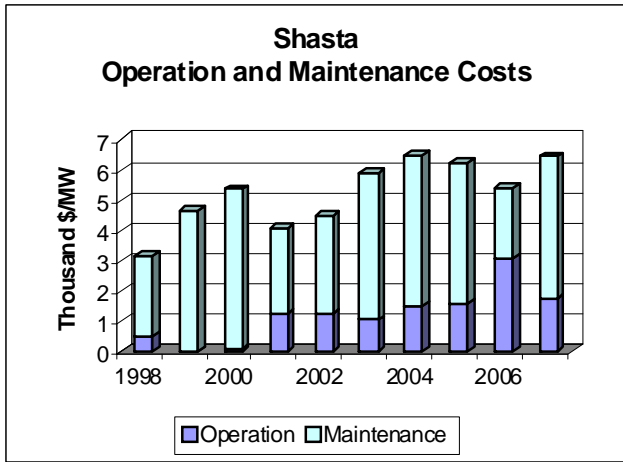
**Benchmark 2
Reclamation's Production Cost as Percentage of Wholesale Firm Rate**



Benchmark 3
Production Cost

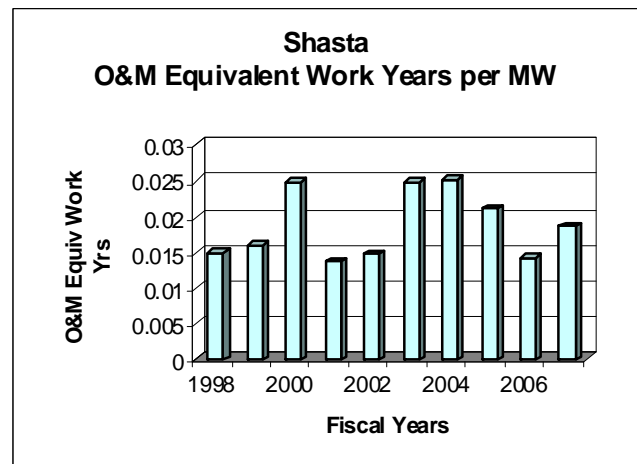
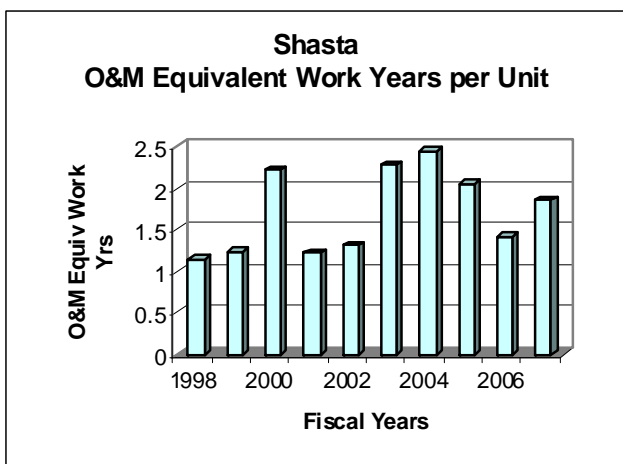
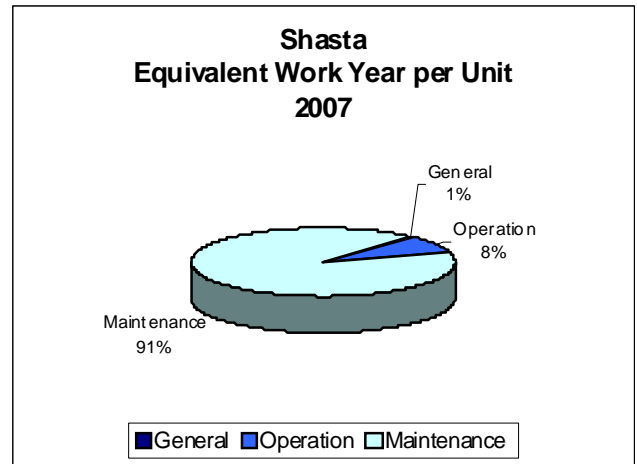
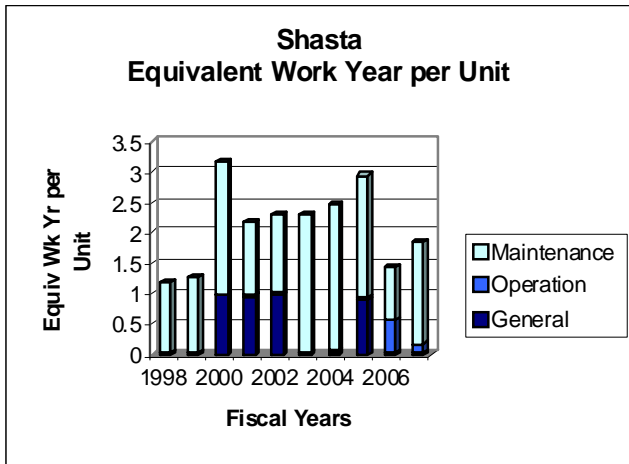


**Benchmark 3
Production Cost**

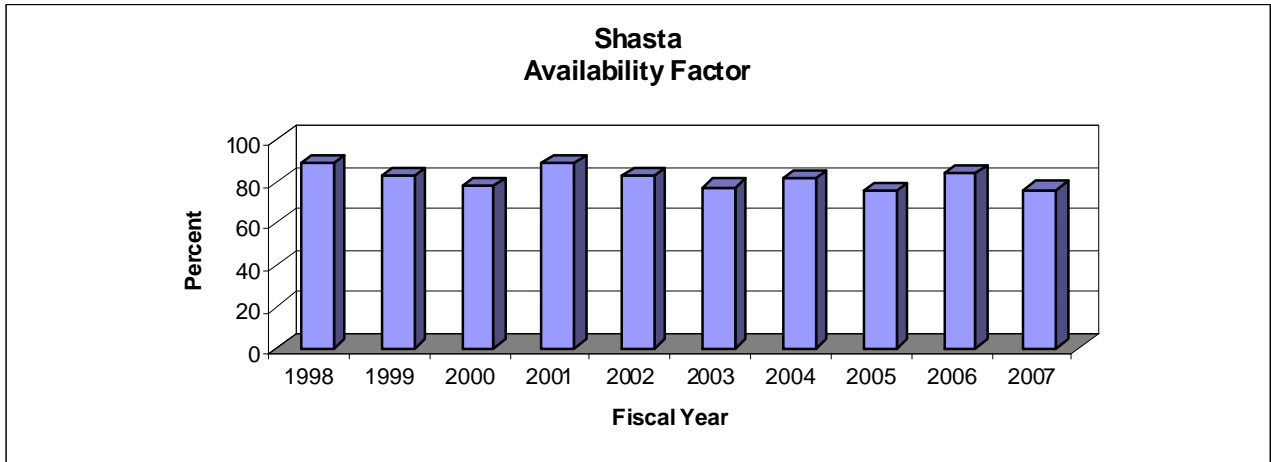


Benchmark 4
Workforce Deployment

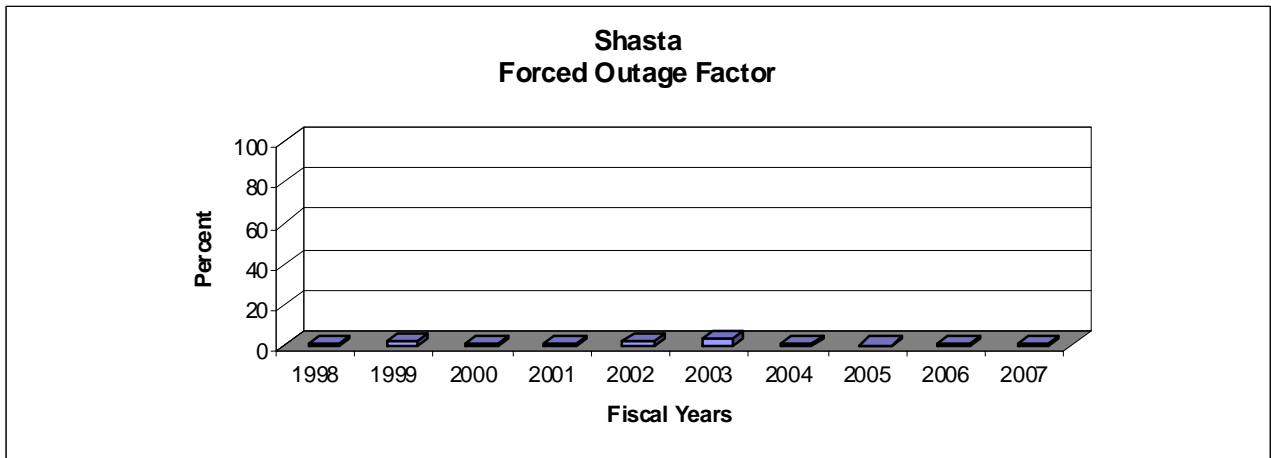
Shasta FY 2007 Equivalent Work Staffing Year Levels						
	Equivalent Work Year Staffing Charged to Powerplant	Leave Additive	Denver and Washington Equivalent Work Year Staffing Additive	Total Equivalent Work Year Allocated to Powerplant	Total Equivalent Staffing Work Year per Generating Unit	Total Equivalent Work Year Staffing per Megawatt
General	0.00	0.00	0.12	0.12	0.02	0.00
Operation	0.98	0.09	0.00	1.07	0.15	0.00
Maintenance	10.84	1.05	0.00	11.89	1.70	0.02
Total Staffing	11.82	1.14	0.12	13.08	1.87	0.02



**Benchmark 5
Availability Factor**



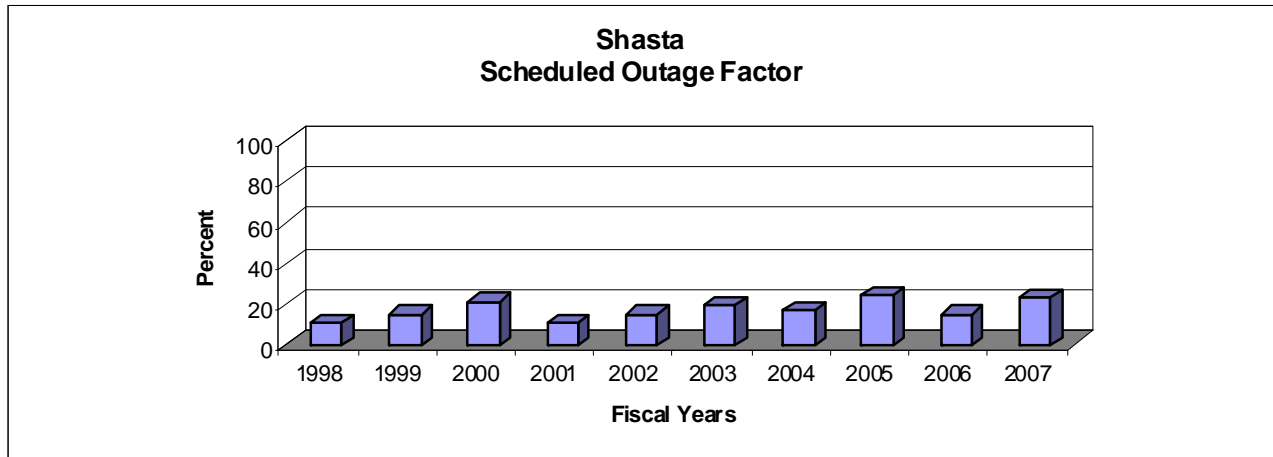
**Benchmark 6
Forced Outage Factor**



FY-99 – Unit 5 rewind - generator failed due to faulty contractor installation

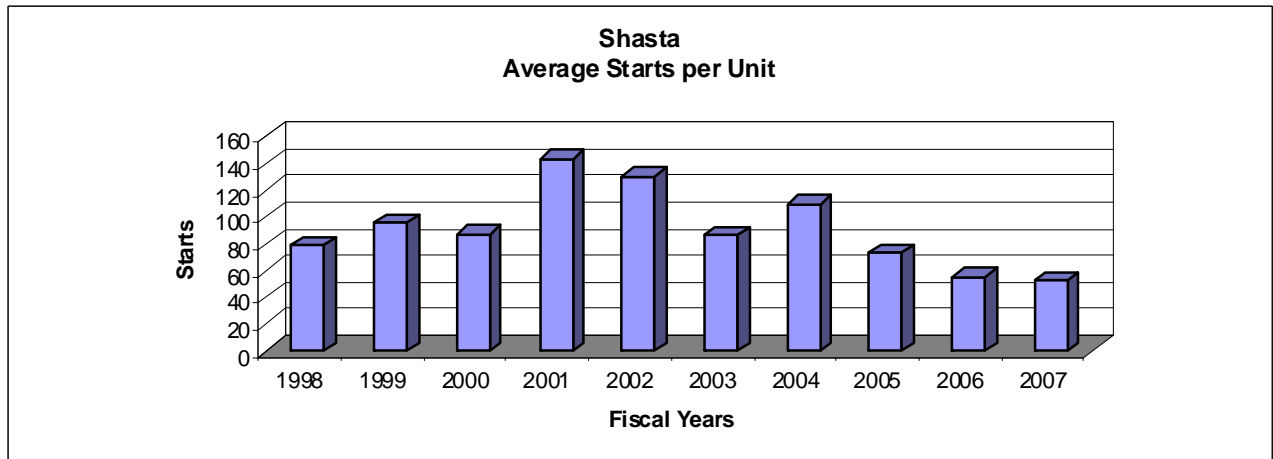
FY-03 – Unit 5 had in-service failure of a generator field winding that resulted in an outage from November 2002 – January 2003. The failure was due to faulty contract work during the rewind and was repaired under warranty by the contractor.

**Benchmark 7
Scheduled Outage Factor**



FY-97 - Units out for temperature control device
FY-97 and FY-98 – Unit 4 rewind
FY-99 – Unit 5 rewind
FY-99 to FY02 – Transformer re-gasketing
FY-00 – Unit 3 rewind
FY-03 – Unit 4 turbine runner replacement

Starts



Benchmark Data Comparison					
Fiscal Year 2007	Shasta Powerplant	Reclamation Average 500+ MW Group	Total Reclamation Average	Industry Average	Best Performers
Wholesale Firm Rate Mills/kWh	13.7	Not Applicable	*22.45	Not Available	Not Available
Production Cost as Percentage of Wholesale Firm Rate	5.3%	Not Applicable	12.1%	Not Applicable	Not Applicable
O&M Cost \$/MWh	2.27	1.65	2.76	***3.28	1.00
O&M Costs \$/MW	6,443	4,863	7,847	***12,0170	2,897
O&M Equip Work Year per MW	0.02	0.02	0.03	Not Available	0.0
Availability Factor	76.0	81.93	82.3	**88.64	98.5
Forced Outage Factor	1.2	3.15	2.6	**2.61	0.0
Scheduled Outage Factor	22.8	14.92	15.1	**8.74	0.0

*Weighted by Net Generation

**2006 NERC Average

***Energy Information Administration Data