

Chandler Powerplant Yakima Project

Ancillary Services

Chandler Ancillary Services

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

Black start possible, but it would never be done because of power line constraints.

Generators

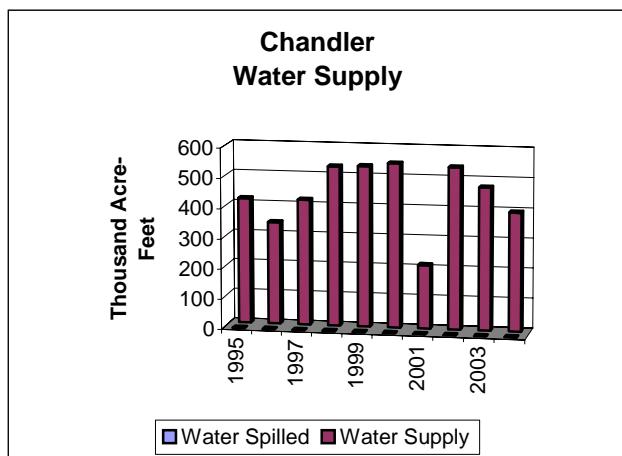
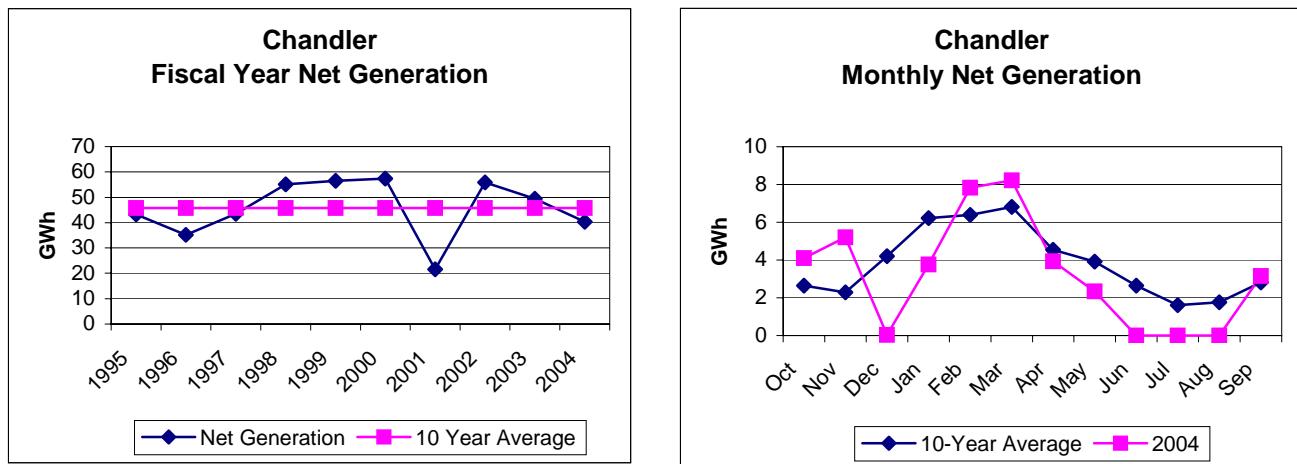
Chandler Generators

Existing Number and Capacity

Unit #	Original Nameplate (kW)	Increased (kW)	Present Name Plate (kW)
1	6,000	0	6,000
2	6,000	0	6,000
2 Units	12,000	0	12,000

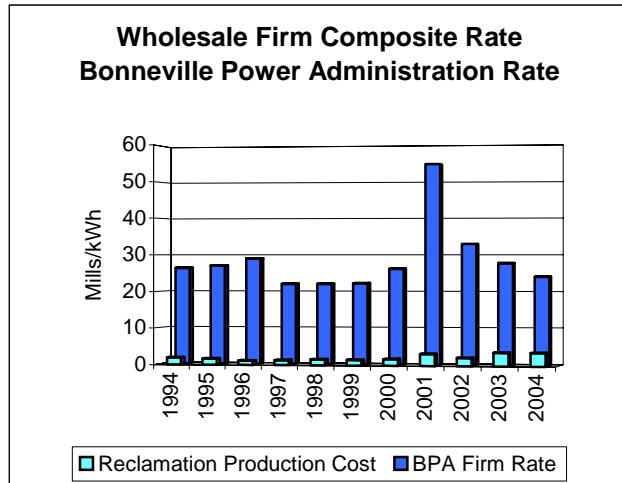
Chandler Powerplant
10-30 MW

Generation

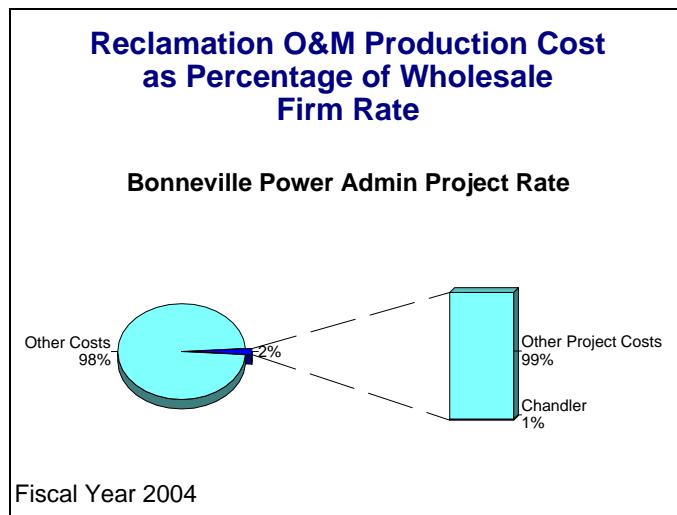


Prime Laboratory Benchmarks

Benchmark 1 **Wholesale Firm Rate**

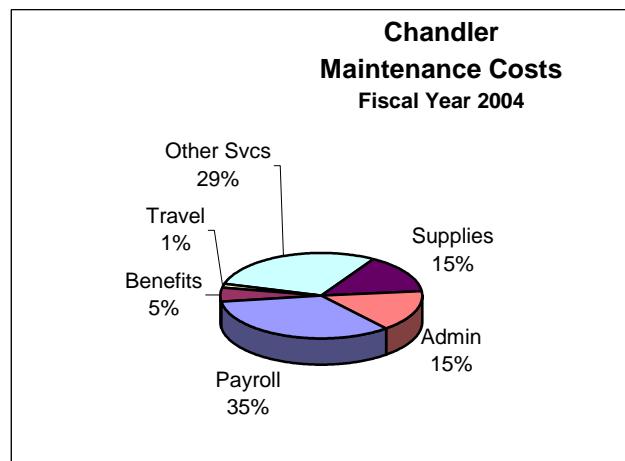
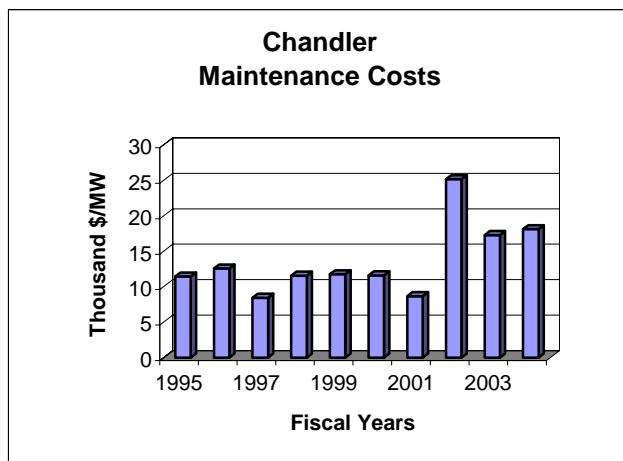
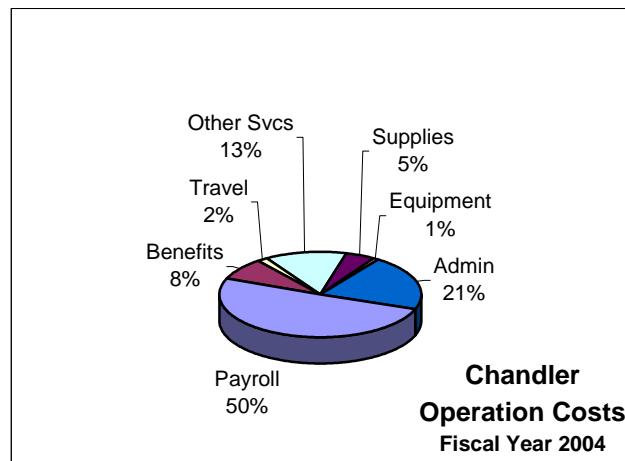
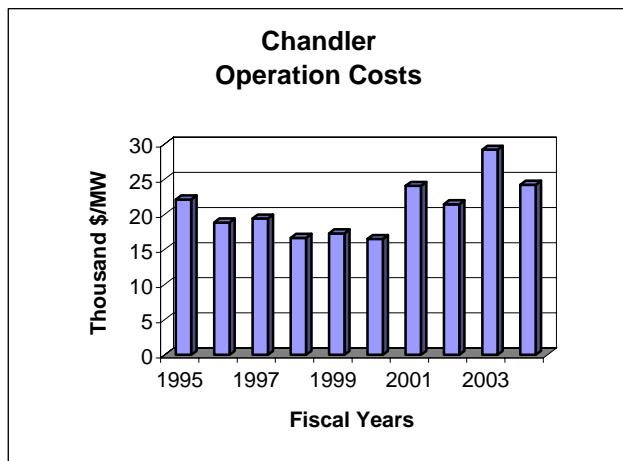


Benchmark 2 **Reclamation's Production Cost as Percentage of Wholesale Firm Rate**



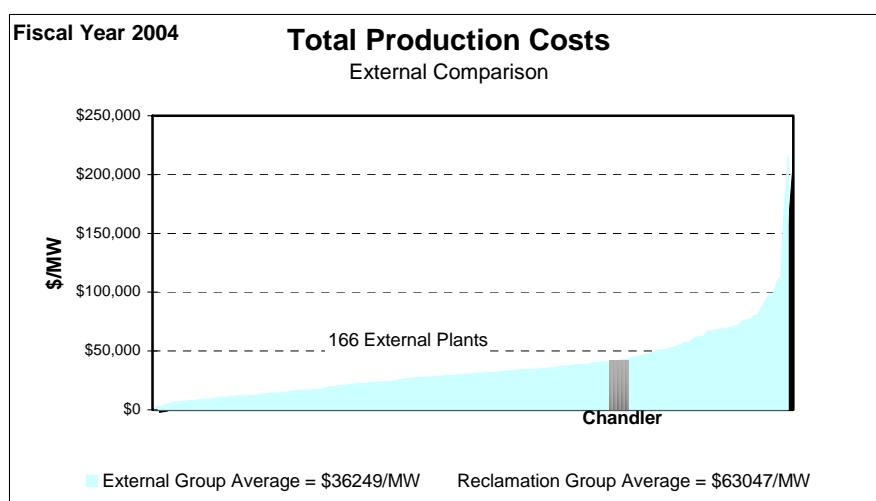
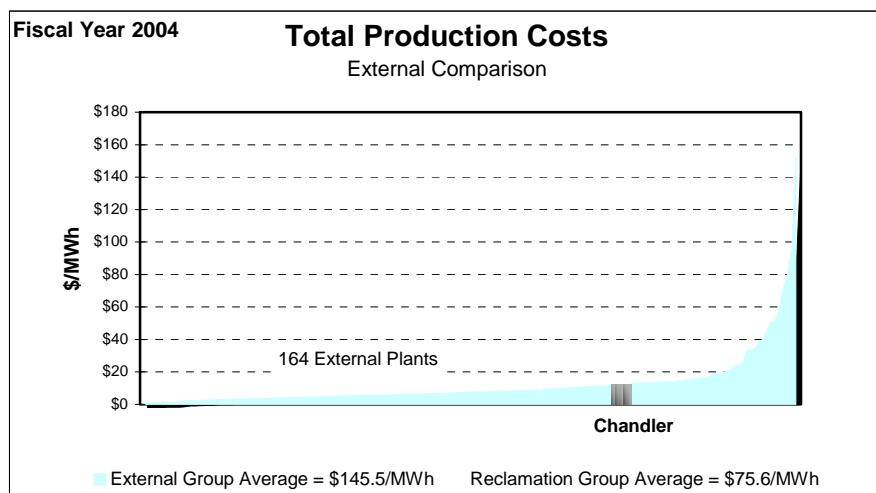
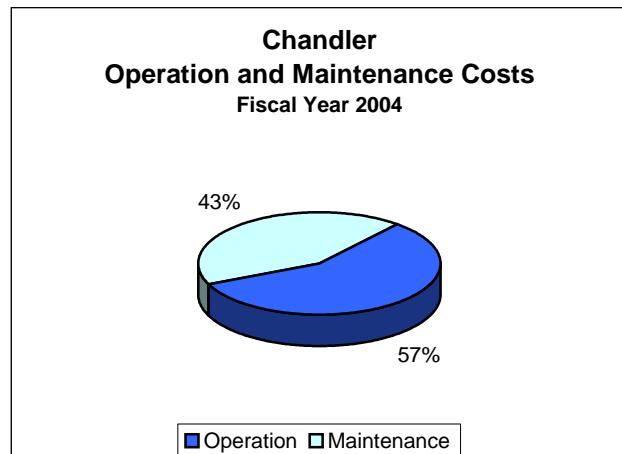
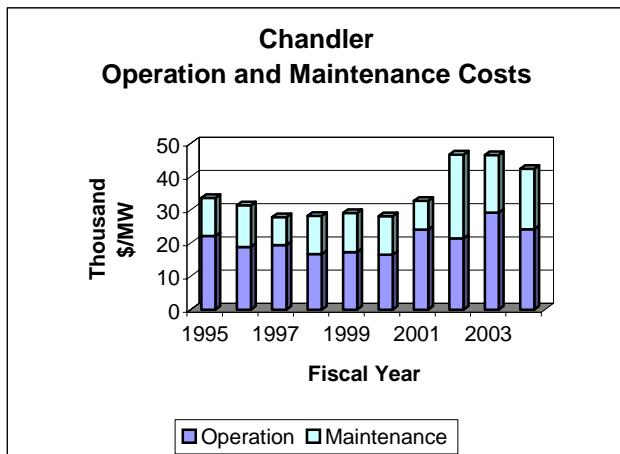
Chandler Powerplant
10-30 MW

Benchmark 3
Production Cost



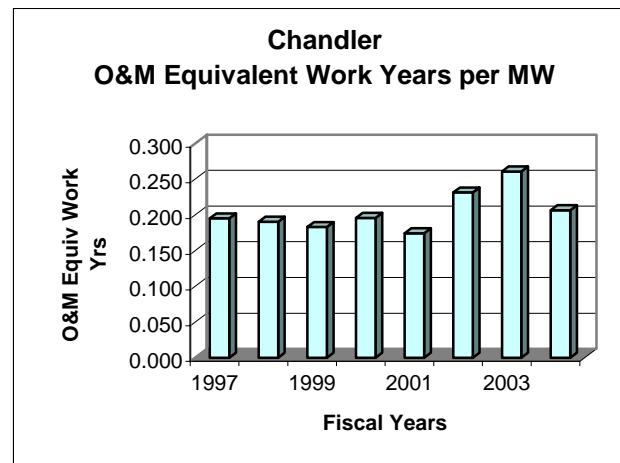
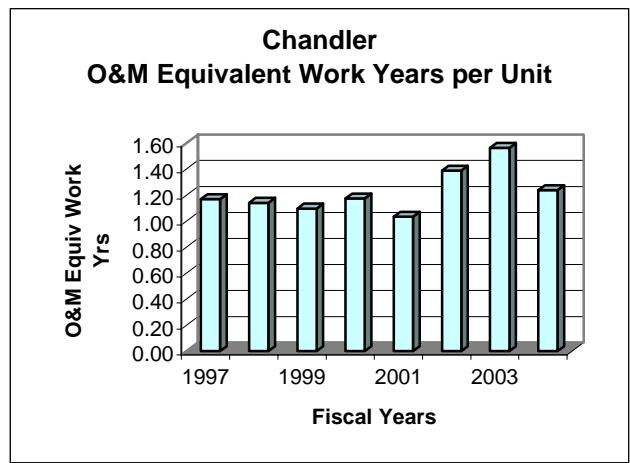
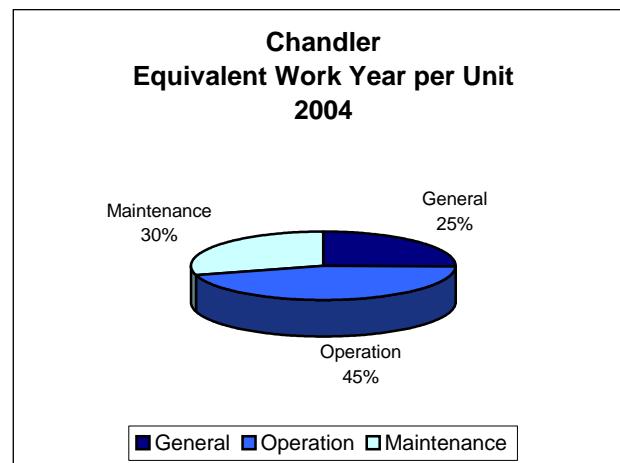
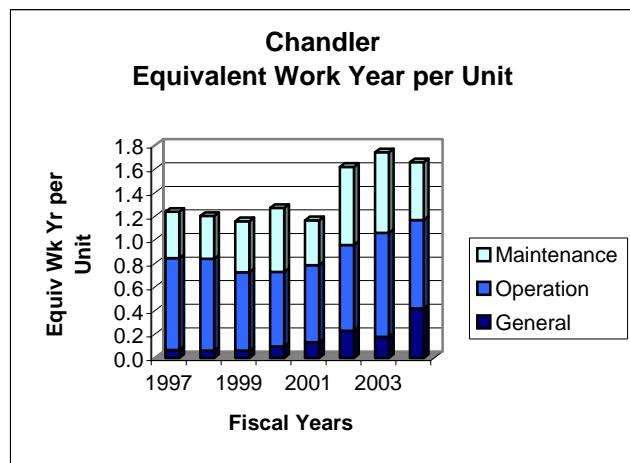
Chandler Powerplant
10-30 MW

Benchmark 3
Production Cost

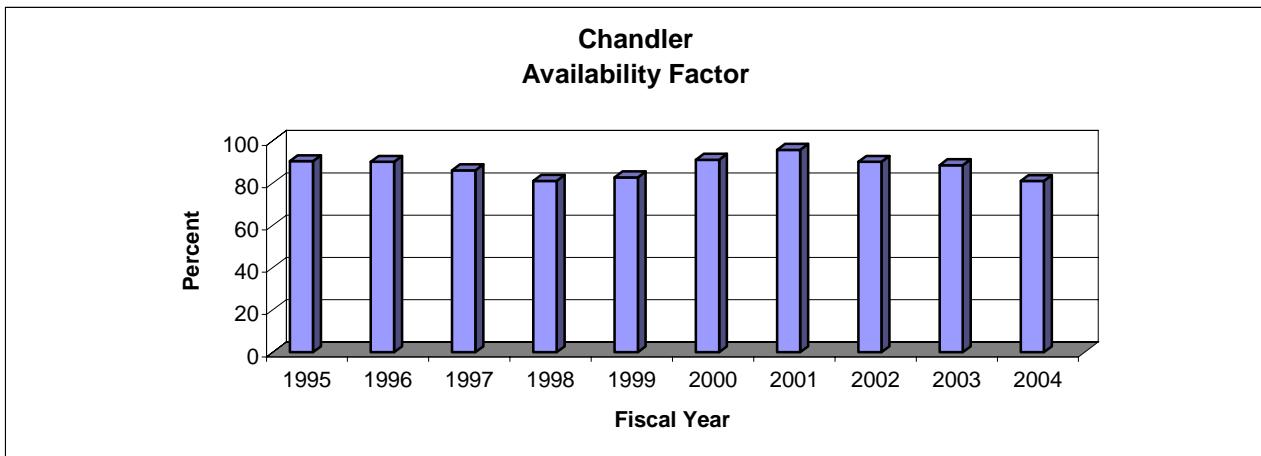


Benchmark 4
Workforce Deployment

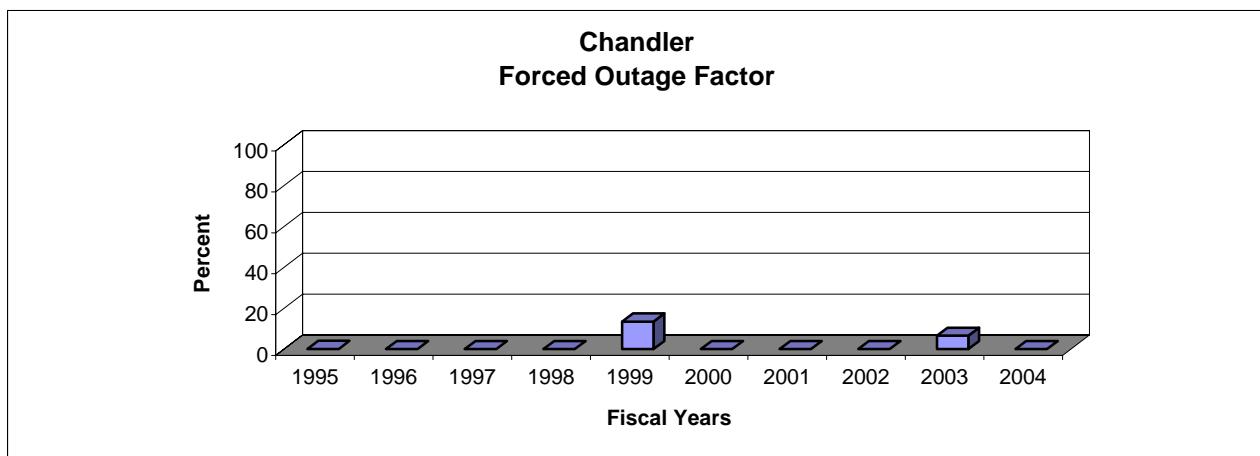
Chandler 2004 Equivalent Work Year Levels						
	Equiv Work Year Charged to Powerplant	Leave Additive	Denver and Washington Equiv Work Year Additive	Total Equiv Work Year Allocated to Powerplant	Total Equiv Work Year per Generating Unit	Total Equiv Work Year per Megawatt
General	0.73	0.08	0.03	0.84	0.42	0.07
Operation	1.35	0.14	0.00	1.50	0.75	0.12
Maintenance	0.89	0.09	0.00	0.98	0.49	0.08
Total Staffing	2.97	0.31	0.03	3.32	1.66	0.28



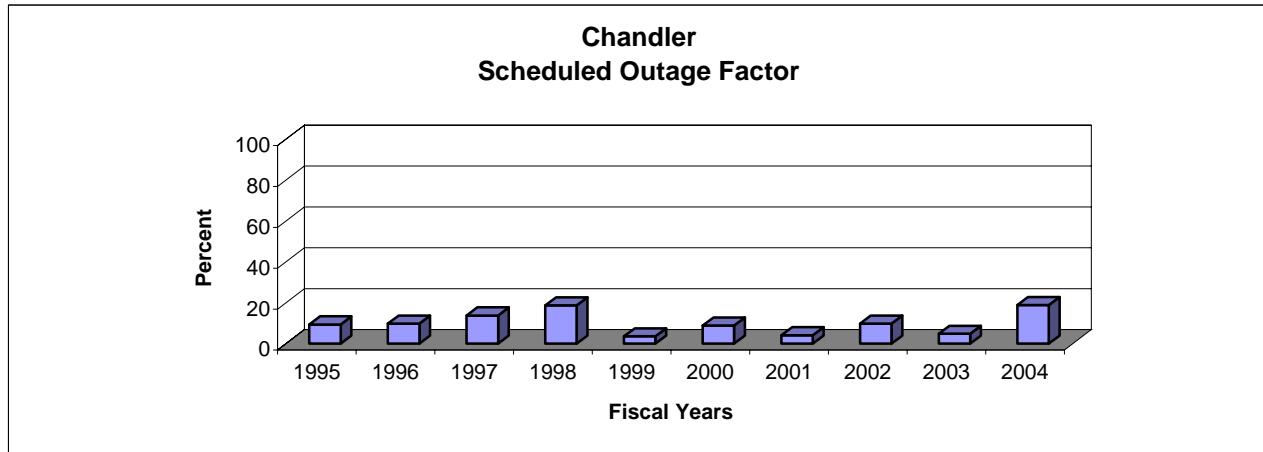
Benchmark 5
Availability Factor



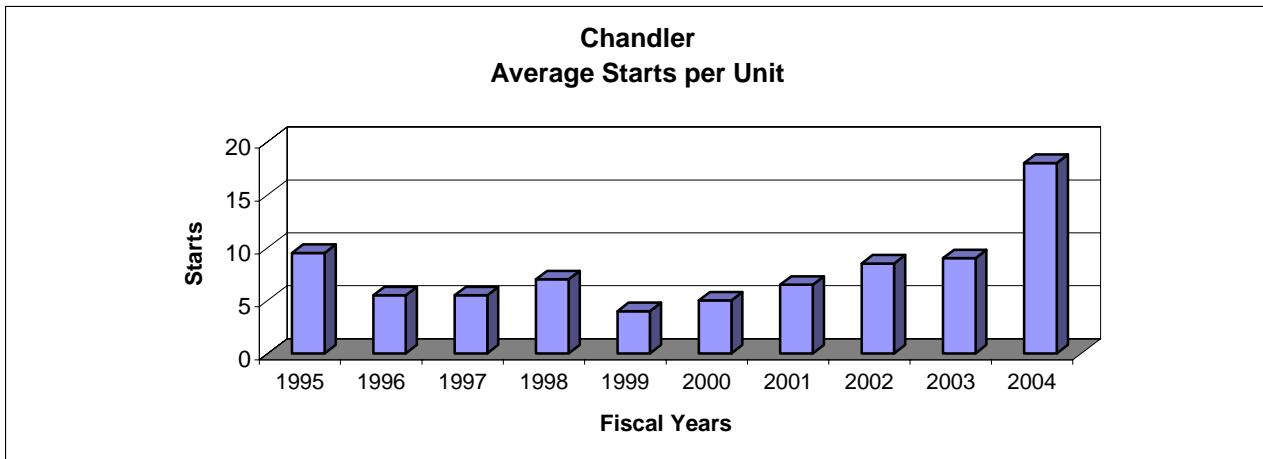
Benchmark 6
Forced Outage Factor



Benchmark 7
Scheduled Outage Factor



Starts



Chandler Powerplant
10-30 MW

Benchmark Data Comparison					
Fiscal Year 2004	Chandler Powerplant	Reclamation Average 10-30 MW Group	Total Reclamation Average	Industry Average	Best Performers
Wholesale Firm Rate Mills/kWh	27.7	Not Applicable	*21.06	Not Available	Not Available
Production Cost as Percentage of Wholesale Firm Rate	0.02%	Not Applicable	13.5%	Not Applicable	Not Applicable
O&M Cost \$/MWh	12.58	24.61	2.77	145.47	1.23
O&M Costs \$/MW	42,353.59	65,356.27	7,316.97	36,248.69	2,951.22
O&M Equiv Work Year per MW	0.21	0.33	0.04	Not Available	0.00
Availability Factor	81.1	71.0	86.9	**89.2	99.97
Forced Outage Factor	0.0	0.1	0.7	**1.9	0.00
Scheduled Outage Factor	18.9	28.9	12.4	**8.9	0.02

***Weighted by Net Generation**

****2003 NERC Average**