

## **Yellowtail Powerplant Pick-Sloan Missouri Basin Program**

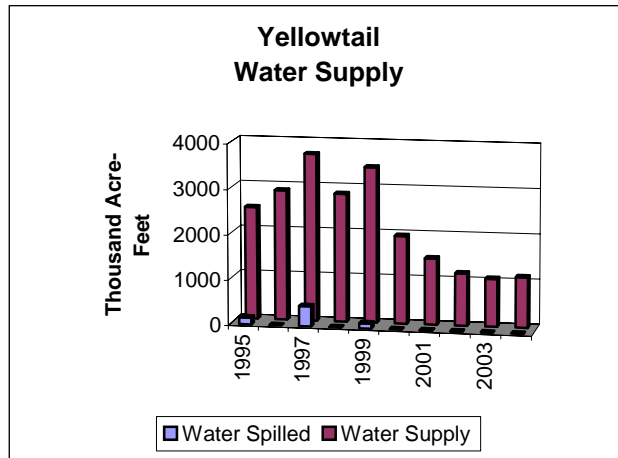
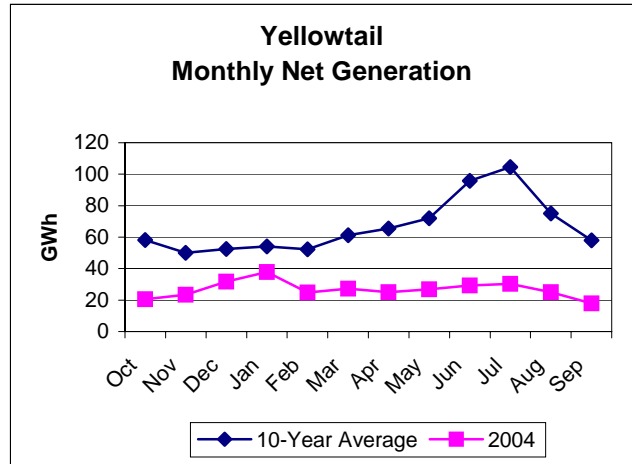
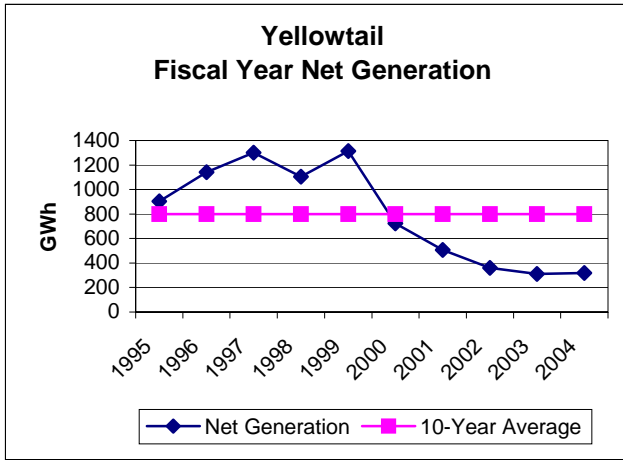
### **Ancillary Services**

<b>Yellowtail Ancillary Services</b>	
Spinning Reserve	Yes
Non-Spinning Reserve	Yes
Replacement Reserve	Yes
Regulation/Load Following	Yes
Black Start	Yes
Voltage Support	Yes

### **Generators**

<b>Yellowtail Generators</b> Existing Number and Capacity			
<b>Unit #</b>	<b>Original Capacity (kW)</b>	<b>Capacity Increased (kW)</b>	<b>Present Capacity (kW)</b>
1	62,500	0	62,500
2	62,500	0	62,500
3	62,500	0	62,500
4	62,500	0	62,500
4 Units	250,000	0	250,000

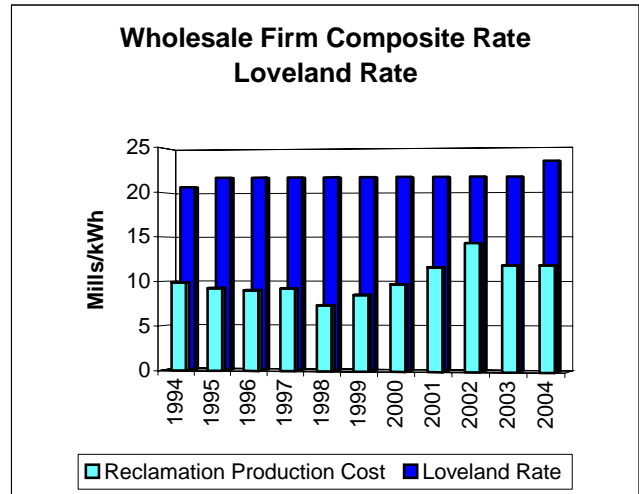
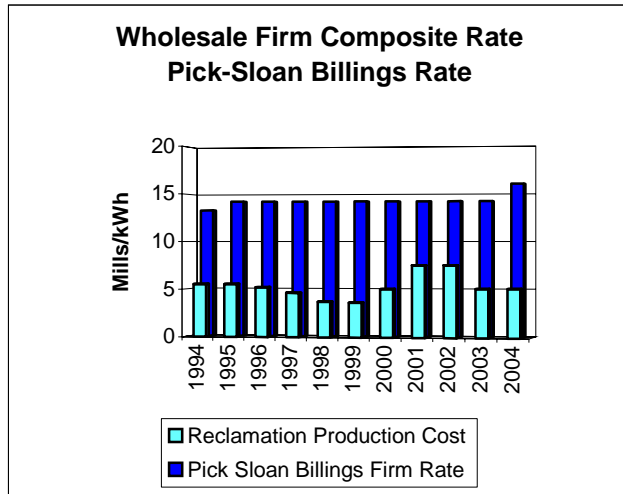
**Generation**



Drought conditions encountered for the fifth consecutive year.

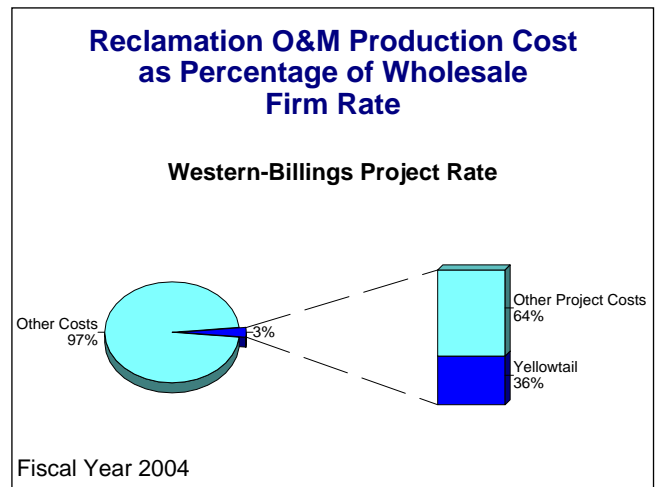
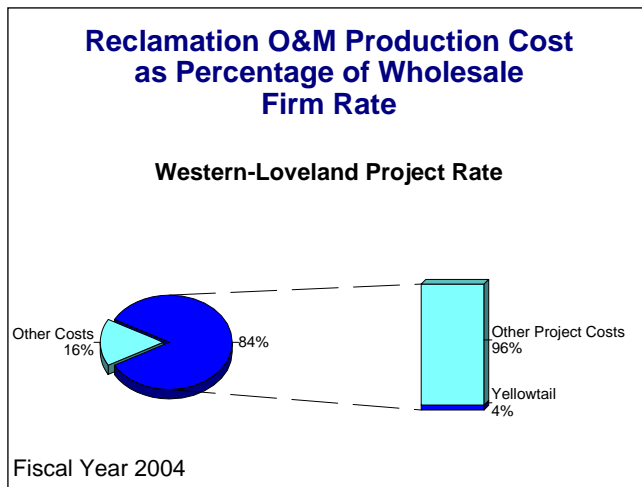
**Prime Laboratory Benchmarks**

**Benchmark 1  
Wholesale Firm Rate**

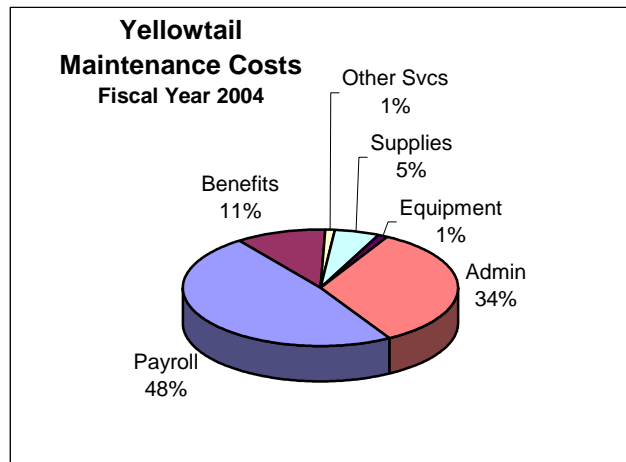
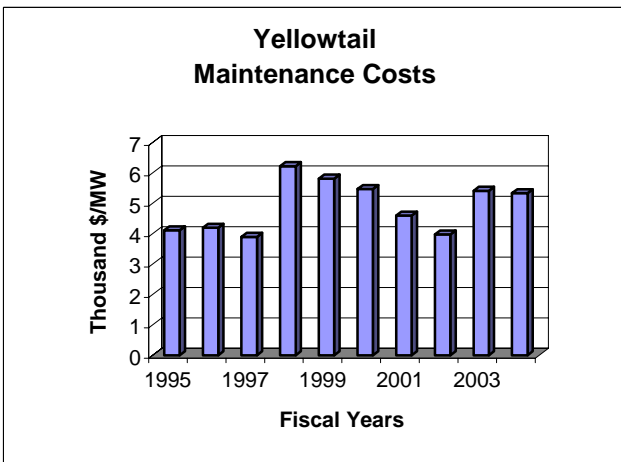
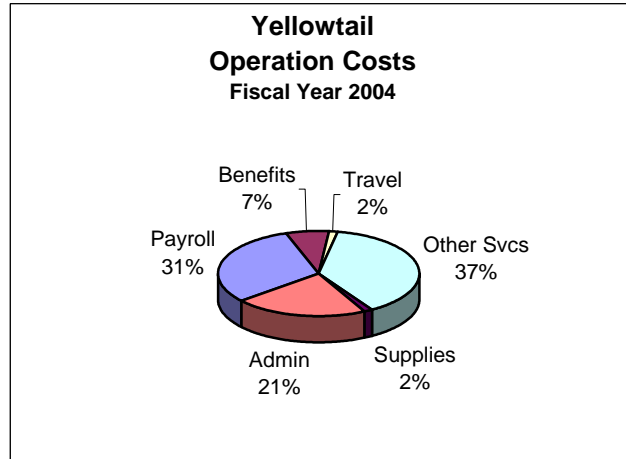
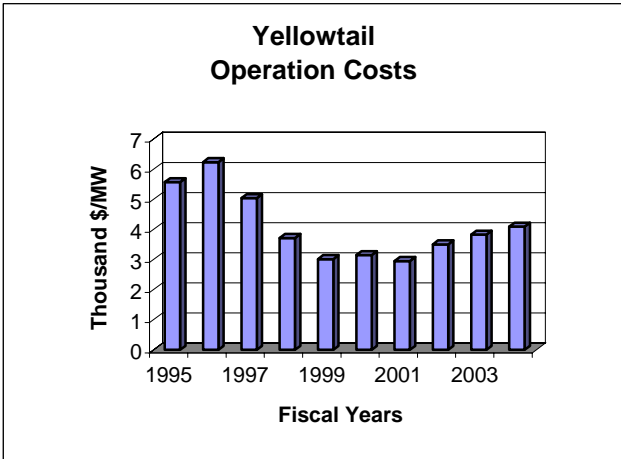


Yellowtail Units 1 and 2 are part of the Pick-Sloan Billings Rate and Yellowtail Units 3 and 4 are part of the Pick-Sloan Loveland Rate.

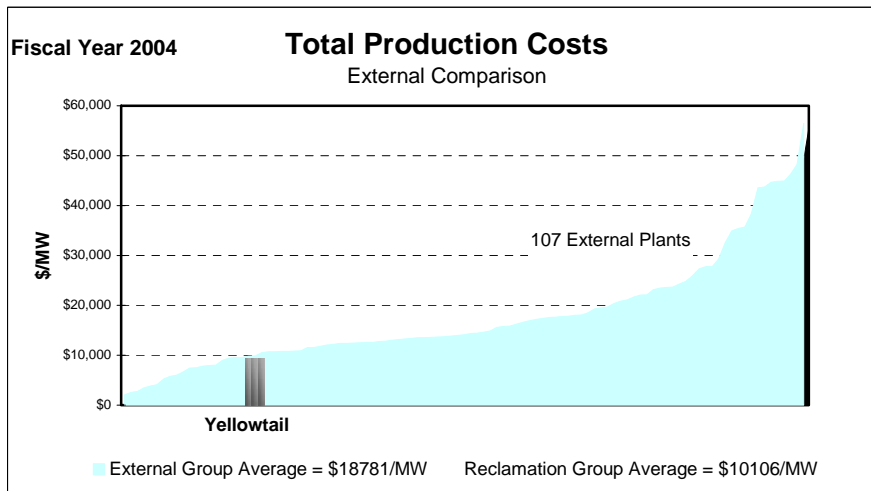
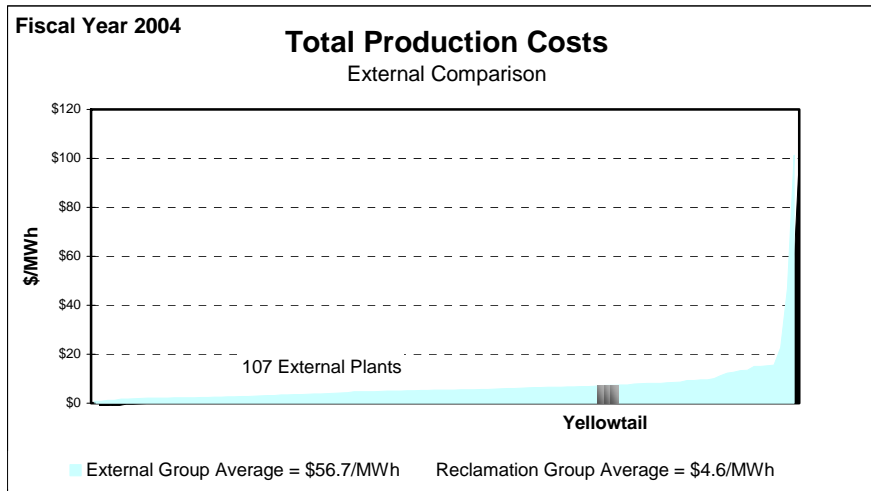
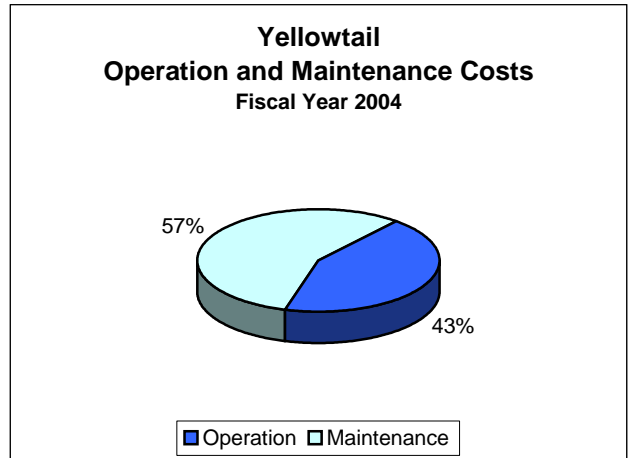
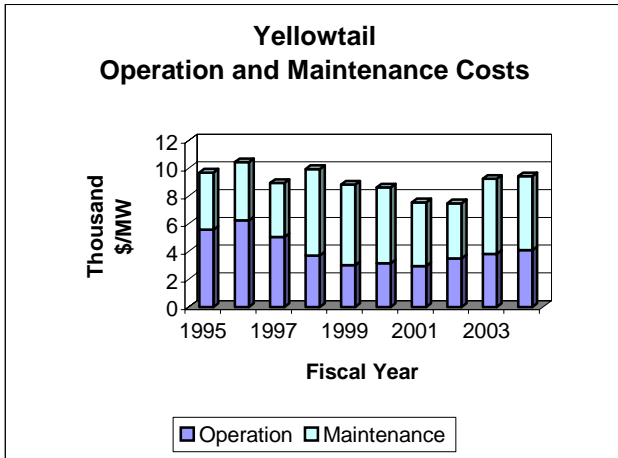
**Benchmark 2  
Reclamation's Production Costs as Percentage of Wholesale Firm Rate**



**Benchmark 3  
Production Costs**

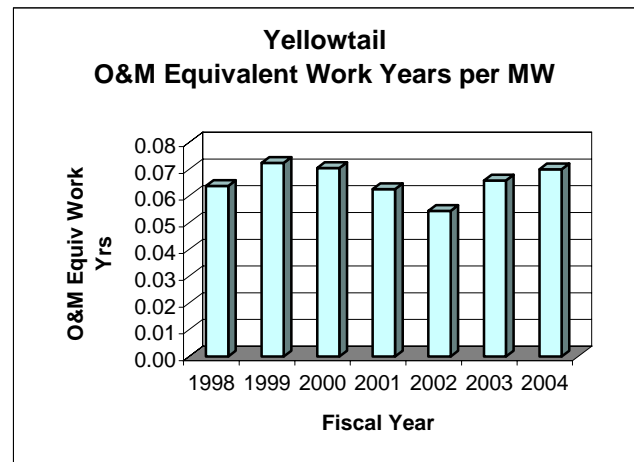
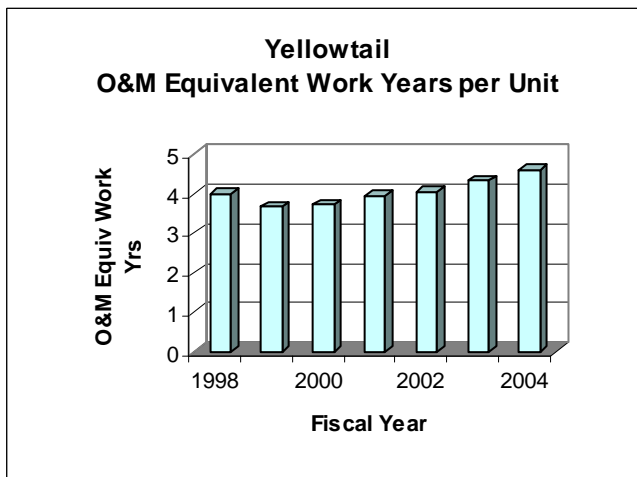
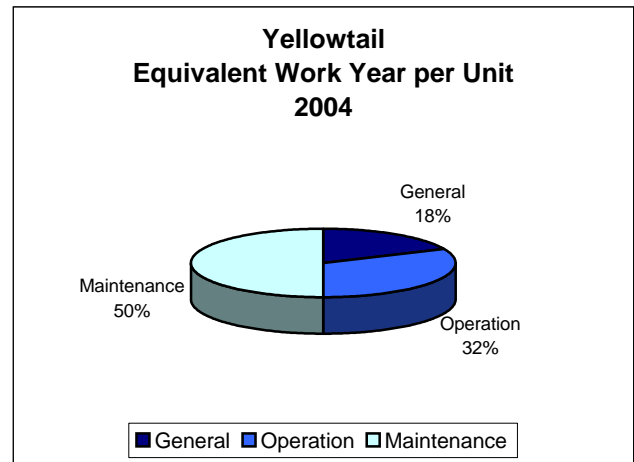
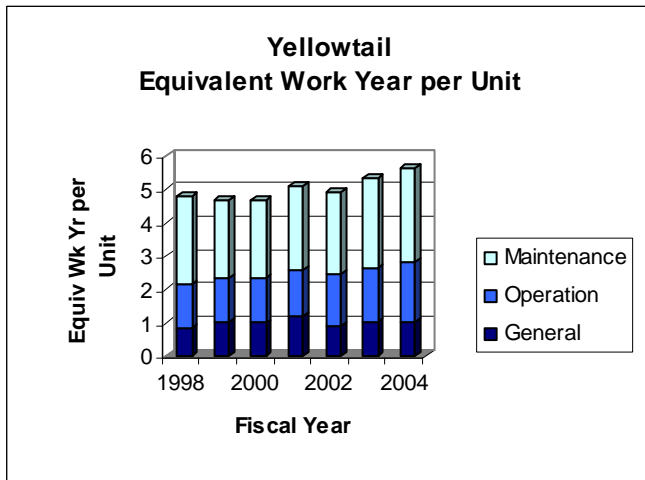


**Benchmark 3  
Production Costs**

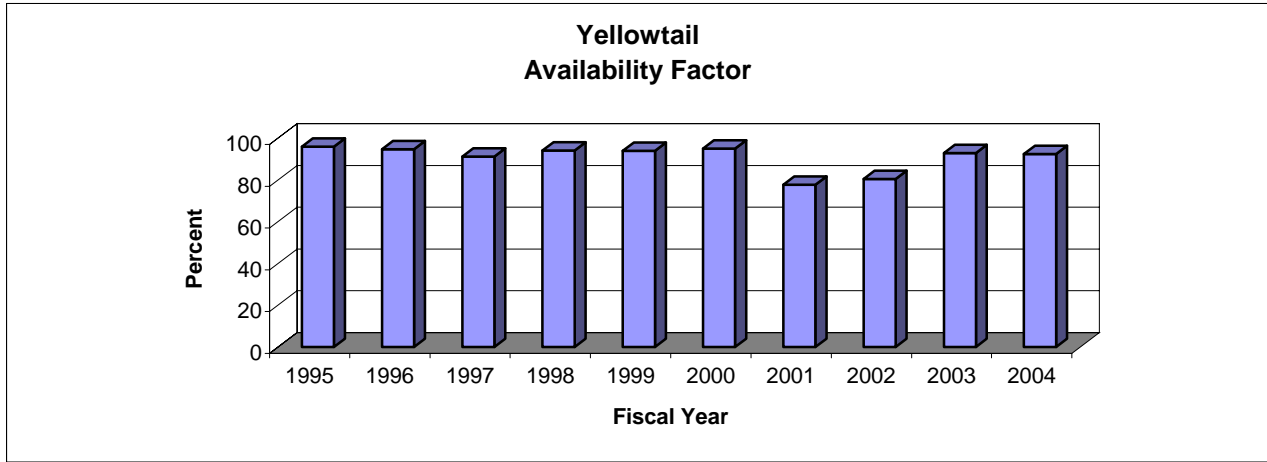


**Benchmark 4  
Workforce Deployment**

<b>Yellowtail 2004 Equivalent Work Year Levels</b>						
	<b>Equiv Work Year Charged to Powerplant</b>	<b>Leave Additive</b>	<b>Denver and Washington Equiv Work Year Additive</b>	<b>Total Equiv Work Year Allocated to Powerplant</b>	<b>Total Equiv Work Year per Generating Unit</b>	<b>Total Equiv Work Year per Megawatt</b>
General	3.66	0.42	0.07	4.15	1.04	0.02
Operation	6.36	0.73	0.00	7.09	1.77	0.03
Maintenance	9.30	1.07	0.00	10.38	2.81	0.04
Total Staffing	19.32	2.23	0.07	21.61	5.62	0.09

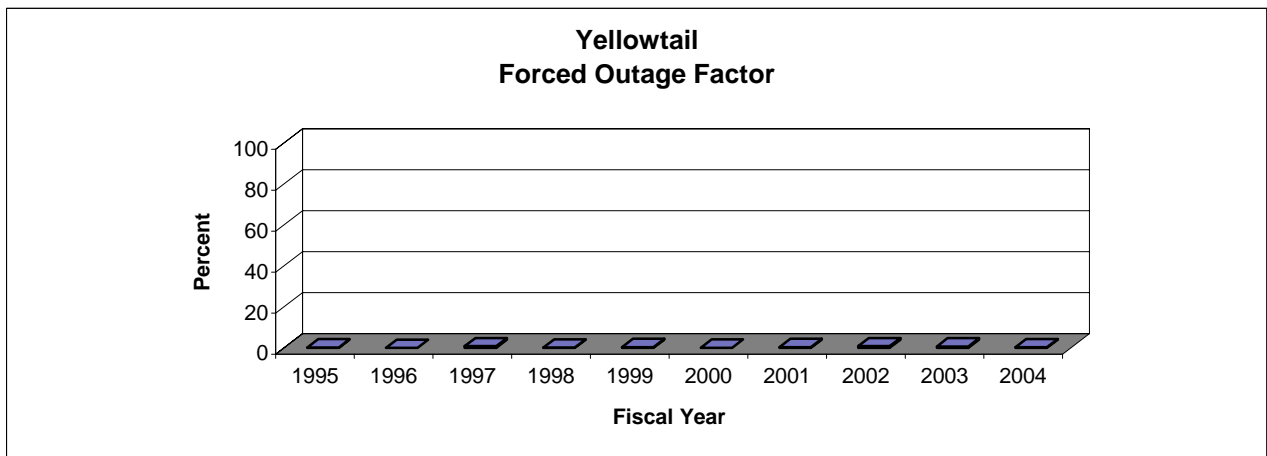


**Benchmark 5  
Plant Availability Factor**

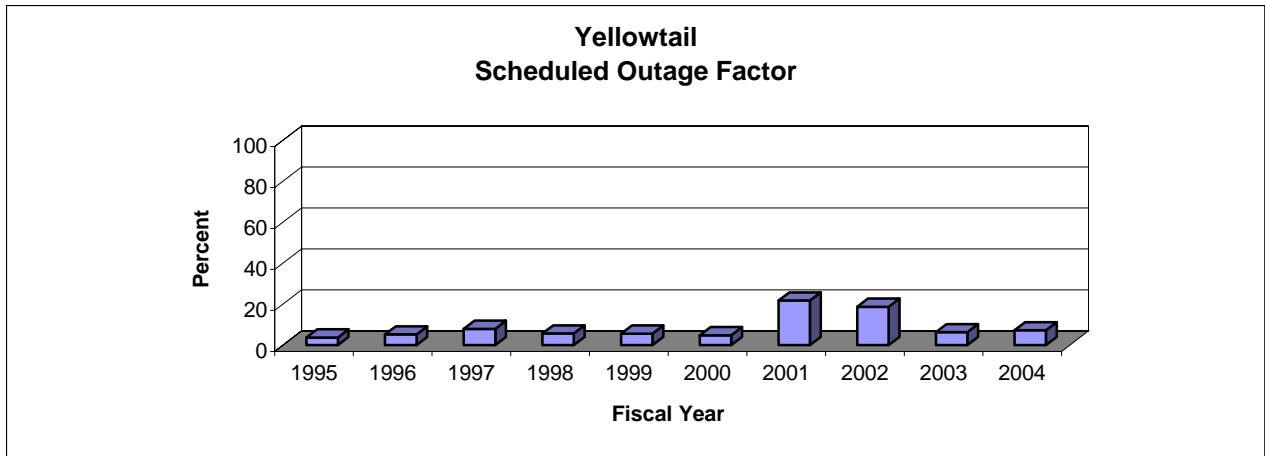


FY-2001 and FY-2002 – Extended outages occurred for replacing of the turbine runners on Units 3 and 4, and for replacing the governors and excitation systems on Units 1, 2, 3, and 4.

**Benchmark 6  
Plant Forced Outage Factor**

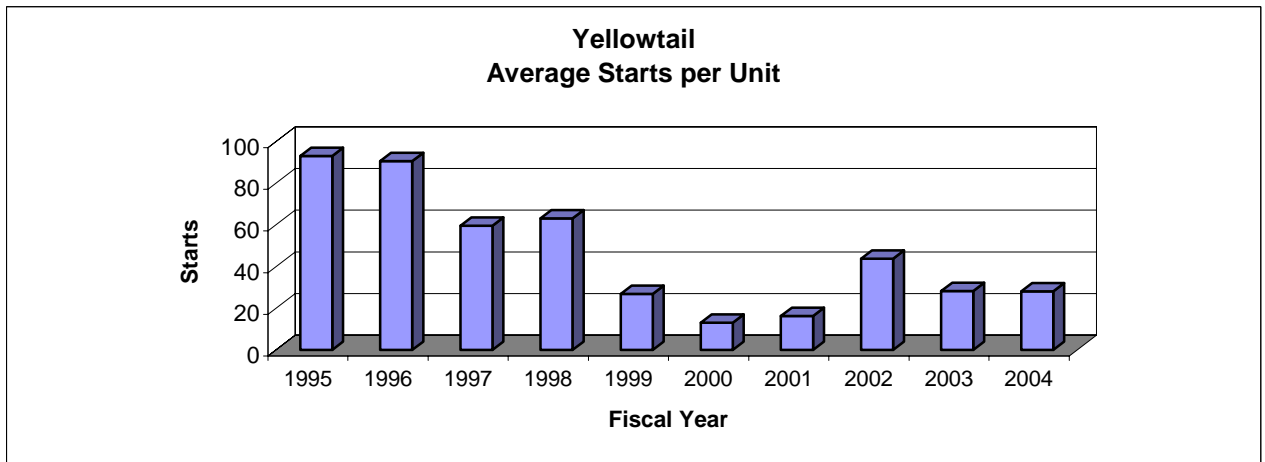


**Benchmark 7  
Plant Scheduled Outage Factor**



FY-2001 and FY-2002 – Extended outages occurred for replacing the turbine runners on Units 3 and 4, and for replacing the governors and excitation systems on Units 1, 2, 3, and 4.

**Unit Starts**





**Yellowtail Powerplant  
100-500 MW**

<b>Benchmark Data Comparison</b>						
<b>Fiscal Year 2004</b>	<b>Yellowtail Powerplant</b>	<b>Reclamation Average 100-500 MW Group</b>	<b>Total Reclamation Average</b>	<b>Industry Average</b>	<b>Best Performers</b>	
<b>Wholesale Firm Rate (Mills/kWh)</b>	U 1&2 21.7? U 3&4 14.2?	Not Applicable	*21.06	Not Applicable	Not Applicable	
<b>Production Costs as Percentage of Wholesale Firm Rate</b>	U 1&2 3.4? U 3&4 0.9?	Not Applicable	13.5?%	Not Applicable	Not Applicable	
<b>O&amp;M Costs (\$/MWh)</b>	7.37	3.59	2.77	56.68	1.23	
<b>O&amp;M Costs (\$/MW)</b>	9,424.67	8,960.28	7,316.97	18,781.34	2,951.22	
<b>O&amp;M Equivalent Work Year (Staffing per MW)</b>	0.07	0.05	0.04	Not Available	0.00	
<b>Availability Factor (%)</b>	92.44	91.0?	86.9?	**89.2?	99.97	
<b>Forced Outage Factor (%)</b>	0.33	0.6?	0.7?	**1.9?	0.00	
<b>Scheduled Outage Factor (%)</b>	7.23	8.4?	12.4?	**8.9?	0.02	

\*Weighted by Net Generation

\*\*2003 NERC Average

The Bighorn River Basin experienced its fifth consecutive year of drought conditions in FY-2004, which resulted in below average generation.

Yellowtail Units 1 and 2 are part of the Pick-Sloan Billings Rate and Yellowtail Units 3 and 4 are part of the Pick-Sloan Loveland Rate.