

Heart Mountain Powerplant Shoshone Project

Ancillary Services

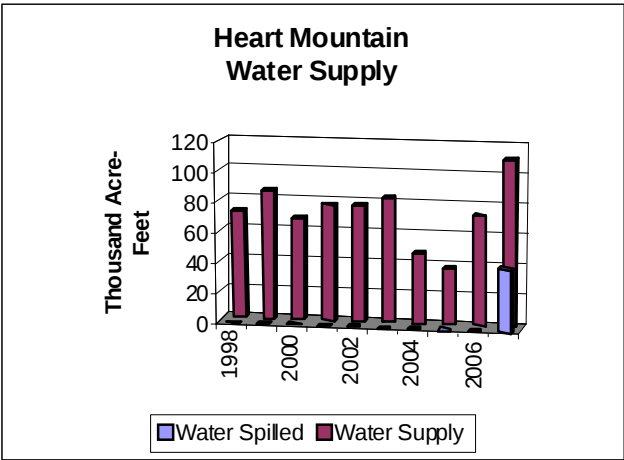
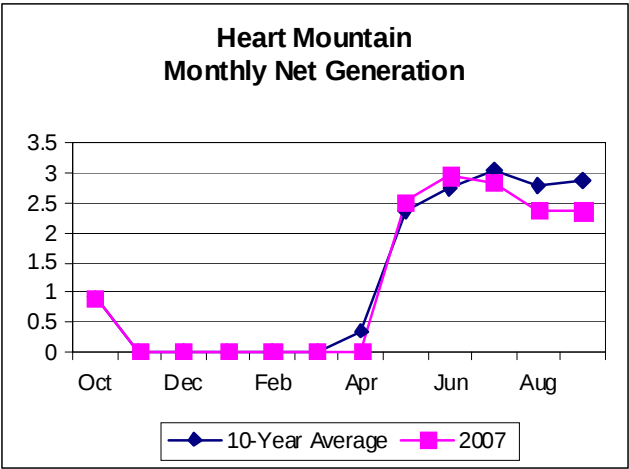
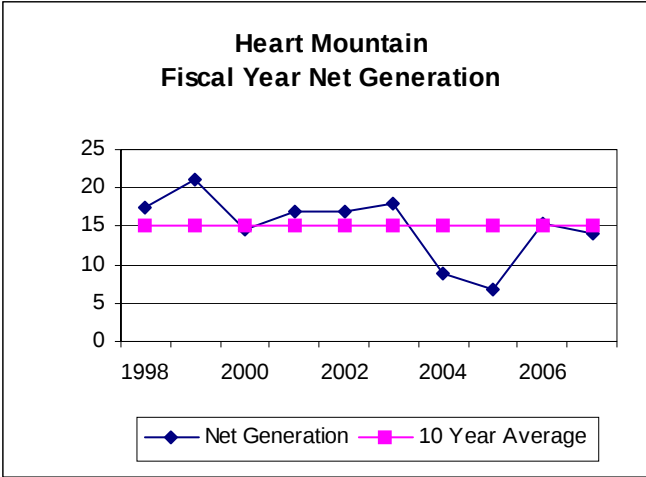
Heart Mountain Ancillary Services	
Spinning Reserve	No
Non-Spinning Reserve	No
Replacement Reserve	No
Regulation/Load Following	No
Black Start	No
Voltage Support	Yes

Generators

Heart Mountain Generators			
Existing Number and Capacity			
Unit #	Original Capacity (kW)	Capacity Increased (kW)	Present Capacity (kW)
1	5,000	-	5,000
1 Unit	5,000	-	5,000

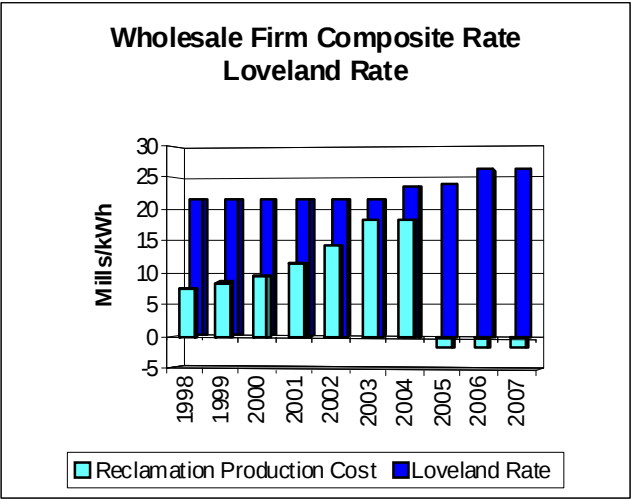
Heart Mountain Powerplant
Seasonal

Generation

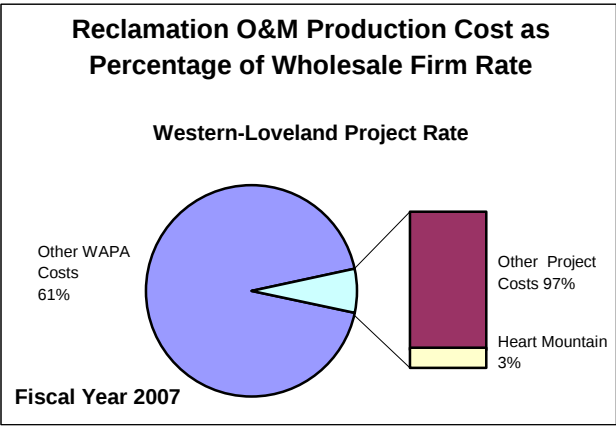


Prime Laboratory Benchmarks

Benchmark 1
Wholesale Firm Rate

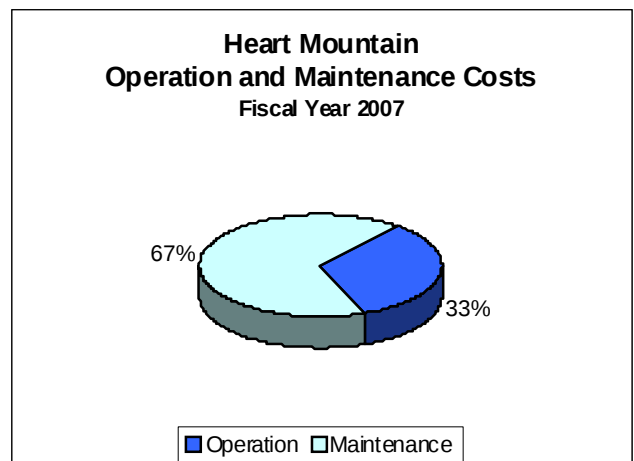
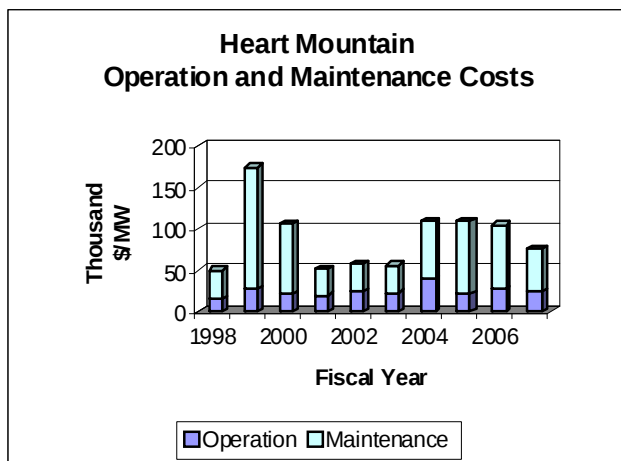
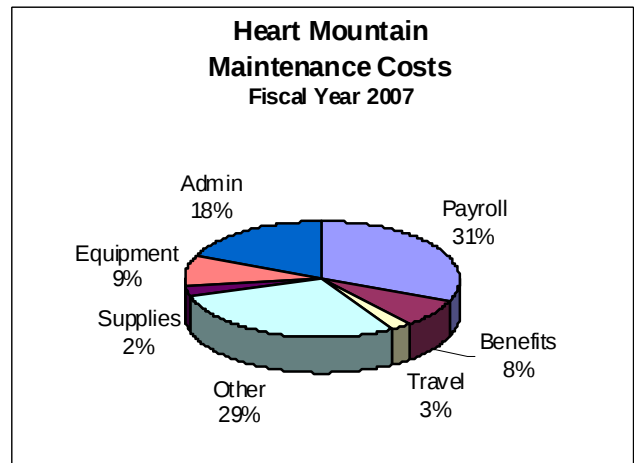
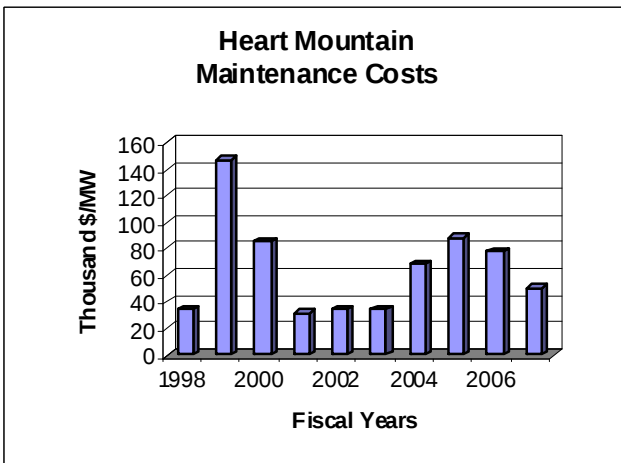
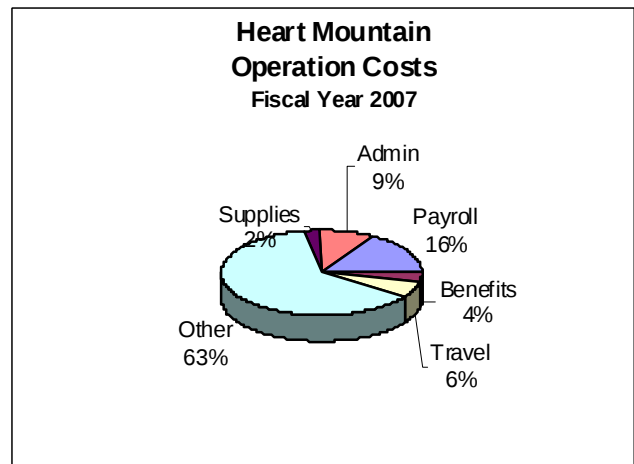
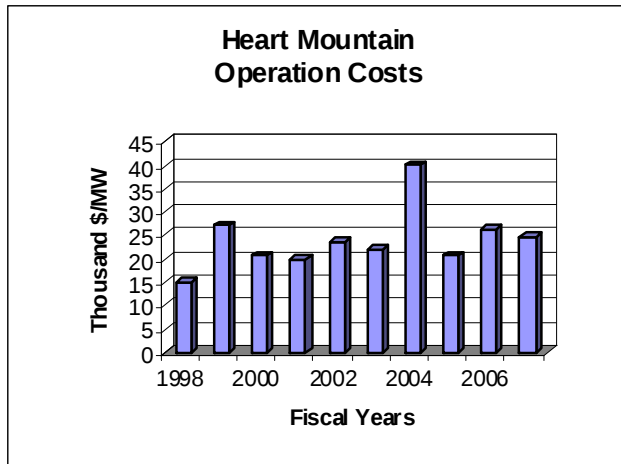


Benchmark 2
Reclamation’s Production Costs as Percentage of Wholesale Firm Rate



Heart Mountain Powerplant Seasonal

Benchmark 3 Production Costs

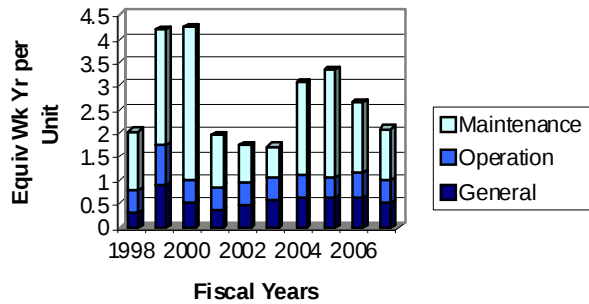


FY-1999 – Penstock repairs and slope stabilization.
FY-2000 – Wicket gate repairs accomplished.

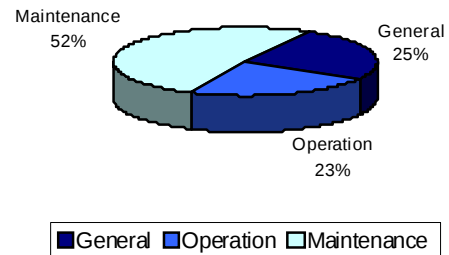
**Benchmark 4
Workforce Deployment**

Heart Mountain 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	0.45	0.05	0.02	0.52	0.52	0.10
Operation	0.44	0.05	0.00	0.49	0.49	0.10
Maintenance	0.97	0.11	0.00	1.08	1.08	0.22
Total Staffing	1.86	0.21	0.02	2.09	2.09	0.42

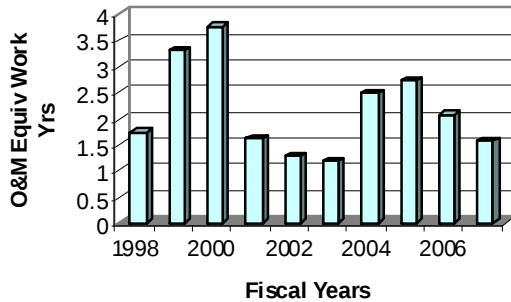
**Heart Mountain
Equivalent Work Year per Unit**



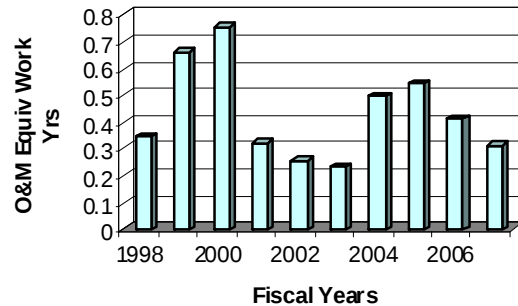
**Heart Mountain
Equivalent Work Year per Unit
2007**



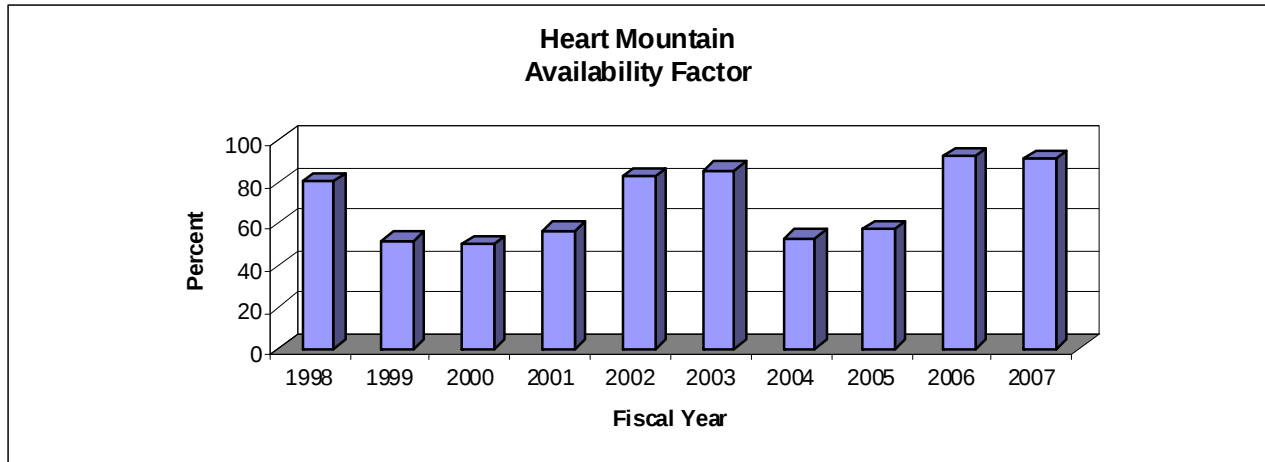
**Heart Mountain
O&M Equivalent Work Years per Unit**



**Heart Mountain
O&M Equivalent Work Years per MW**



**Benchmark 5
Plant Availability Factor**



FY-1997 – Governor and wicket gate repairs.

FY-1998 – Penstock and wicket gate repairs.

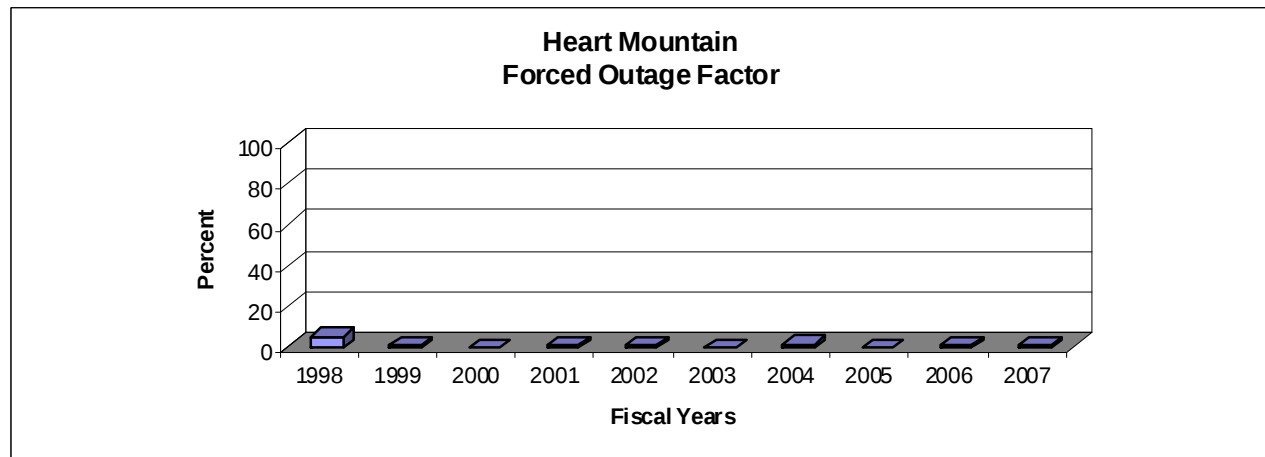
FY-1999 – Penstock repairs and slope stabilization.

FY-2000 – Wicket gate repairs.

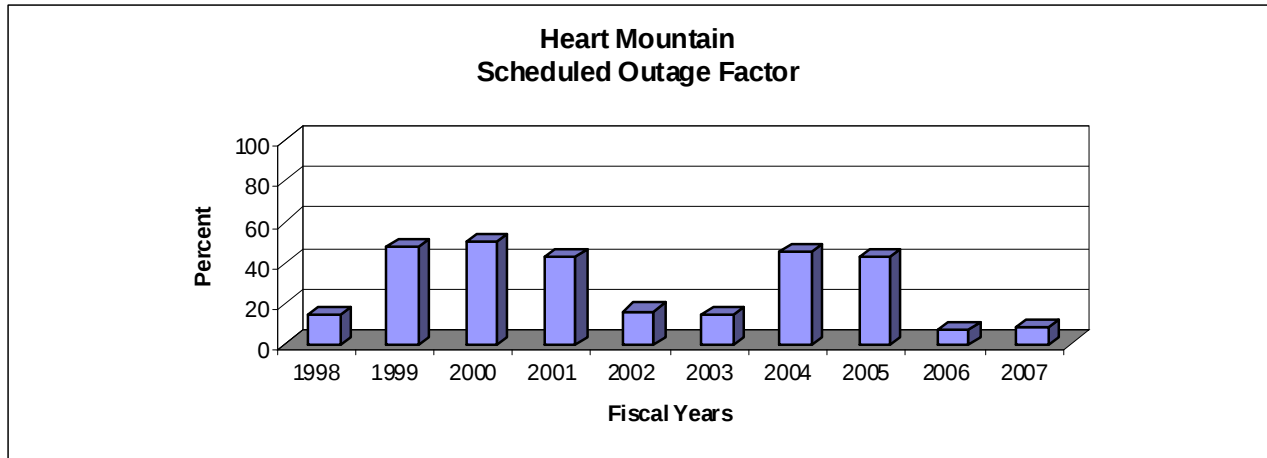
FY-2001 – Buffalo Bill Powerplant penstock and Spirit Mountain sleeve valve re-coating resulted in an extended outage at this plant.

FY-2004 – Transformer and switchgear replacements.

**Benchmark 6
Plant Forced Outage Factor**



Benchmark 7
Plant Scheduled Outage Factor



FY-97 - Governor and wicket gate repairs

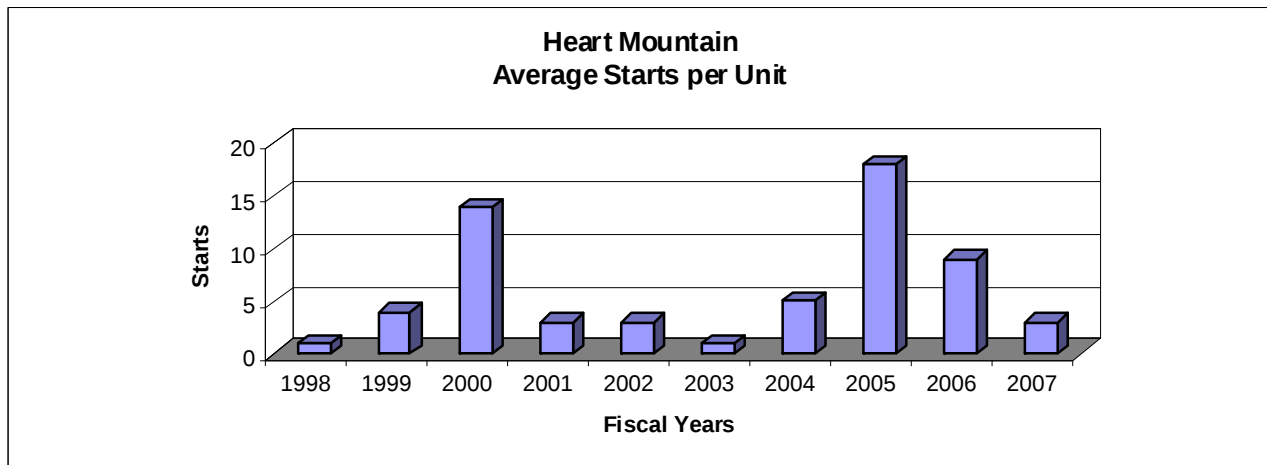
FY-98 - Penstock and wicket gate repairs

FY-99 - Penstock repairs and slope stabilization

FY-00 - Wicket gate repairs.

FY-01- Buffalo Bill Powerplant penstock and Spirit Mountain sleeve valve re-coating resulted in an extended outage at this plant

Unit Starts



**Heart Mountain Powerplant
Seasonal**

Benchmark Data Comparison				
Fiscal Year 2007	Heart Mountain Powerplant	Total Reclamation Average	Industry Average	Best Performers
Wholesale Firm Rate Mills/kWh	23.9	*22.45	Not Available	Not Available
Production Cost as Percentage of Wholesale Firm Rate	0.9%	12.1%	Not Applicable	Not Applicable
O&M Cost \$/MWh	26.95	2.76	Not Applicable	1.00
O&M Costs \$/MW	75,126	7,847	Not Applicable	2,897
O&M Equiv Work Year per MW	0.31	0.03	Not Available	0.0
Availability Factor	91.0	82.3	**88.64	98.5
Forced Outage Factor	0.81	2.6	**2.61	0.0
Scheduled Outage Factor	8.2	15.1	**8.74	0.0

*Weighted by Net Generation

**2006 NERC Average