

Roza Powerplant Yakima Project

Ancillary Services

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

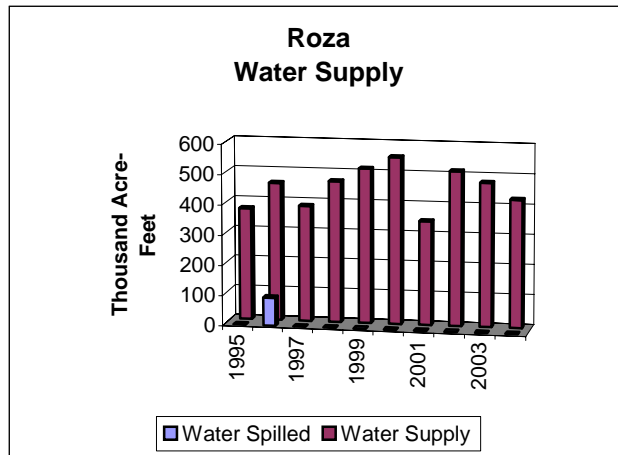
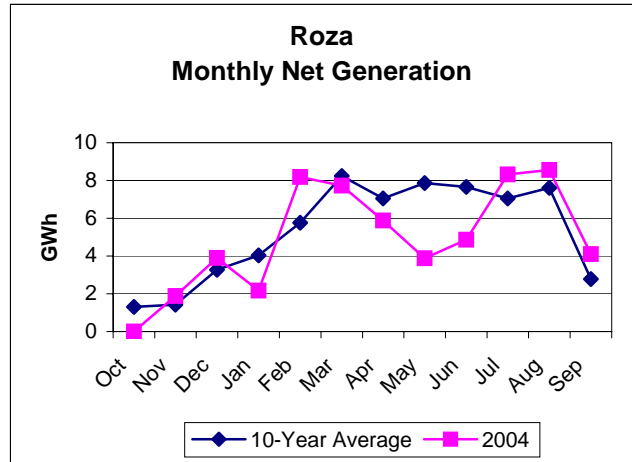
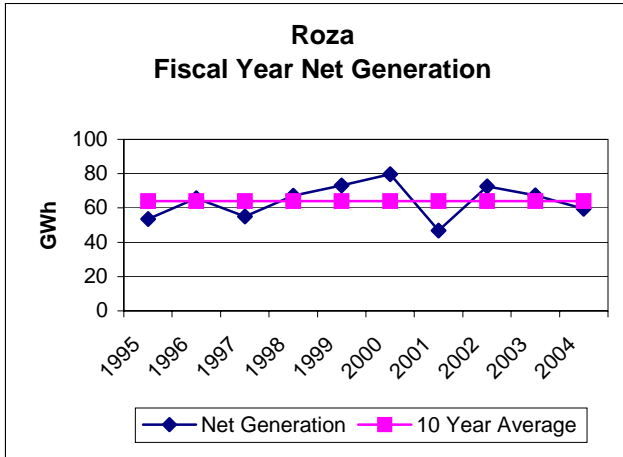
The Roza Powerplant is capable of black start, but it has doubtfully ever been done. The canal feed makes it impractical to operate separate from BPA.

Generators

| Roza Generators | | | |
|------------------------------|-------------------------|----------------|------------------------|
| Existing Number and Capacity | | | |
| Unit # | Original Nameplate (kW) | Increased (kW) | Present Nameplate (kW) |
| 1 | 10,660 | 2,277 | 12,937 |
| 1 Unit | 10,660 | 2,277 | 12,937 |

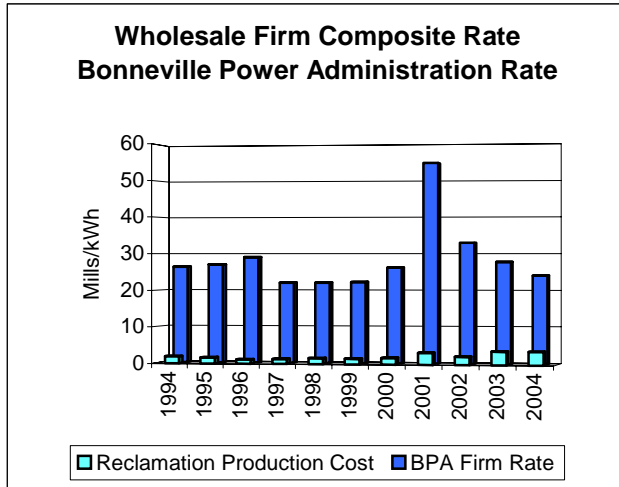
Winding capacity is 12,937 kW, but actual capacity of plant is 11,845 kW due to canal restrictions on load rejection.

Generation

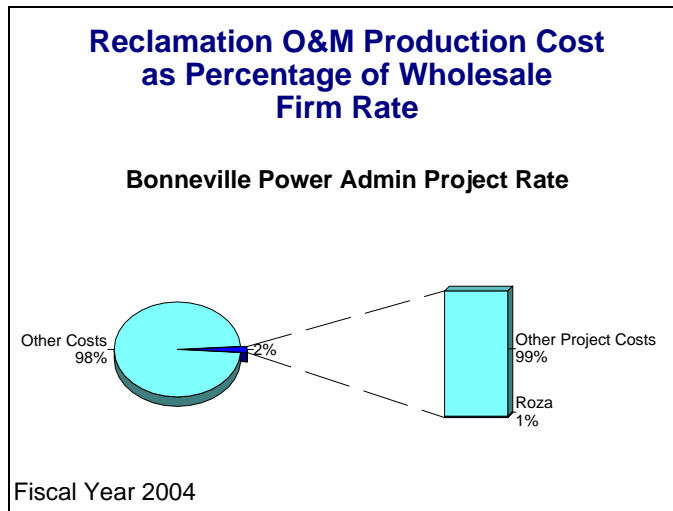


Prime Laboratory Benchmarks

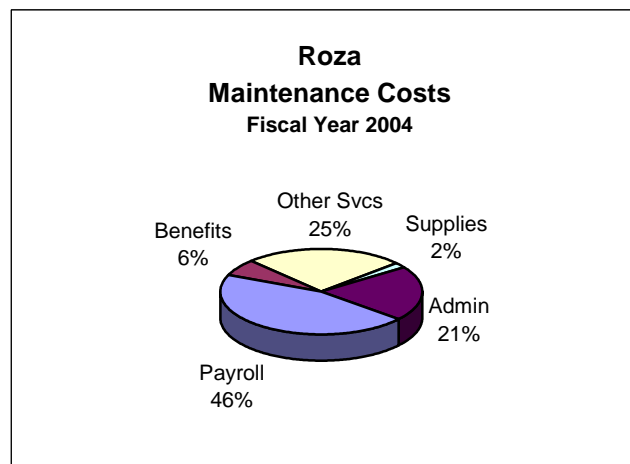
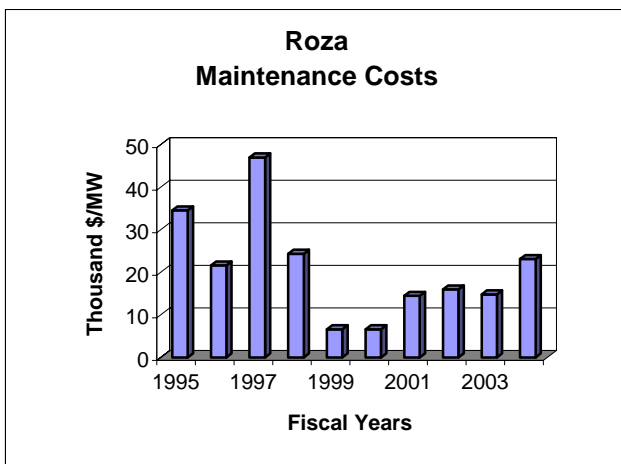
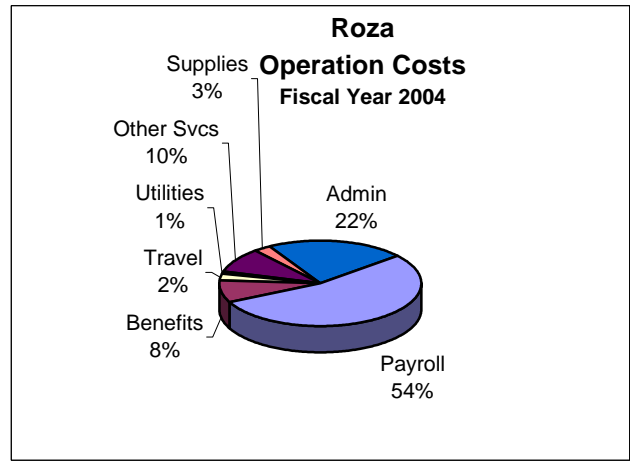
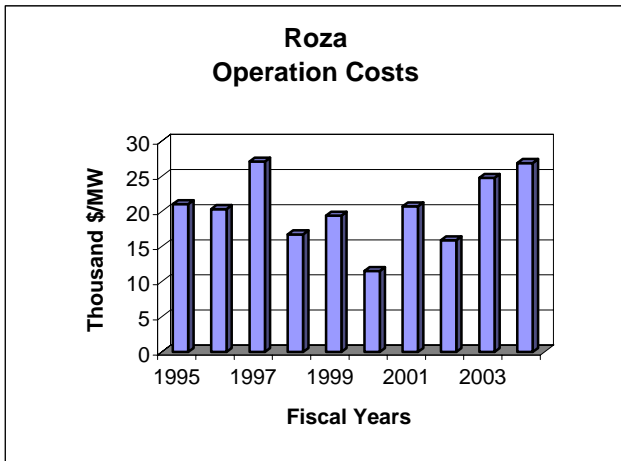
**Benchmark 1
Wholesale Firm Rate**



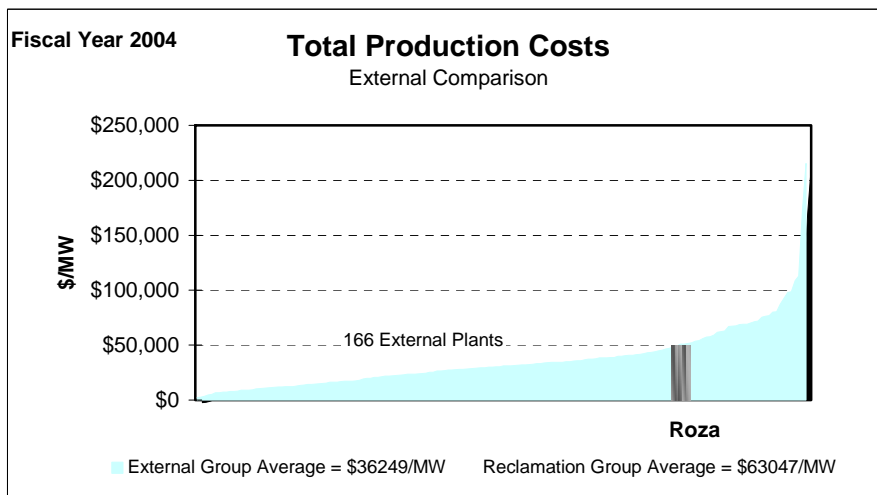
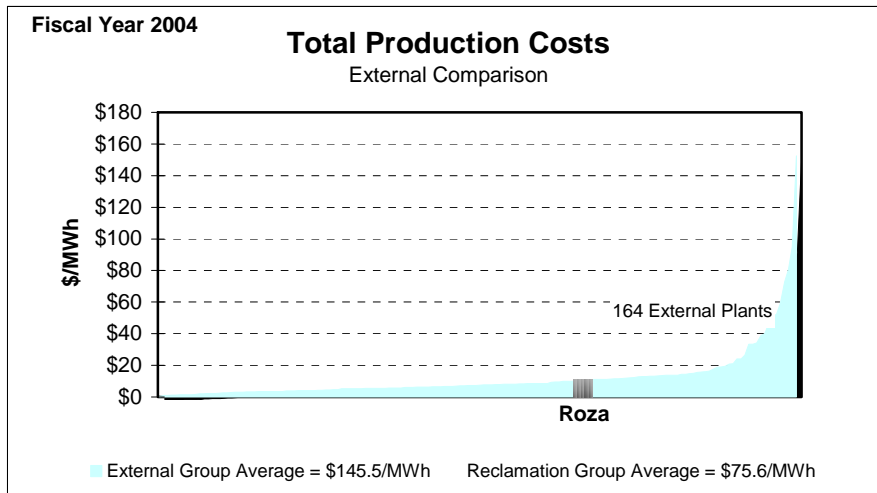
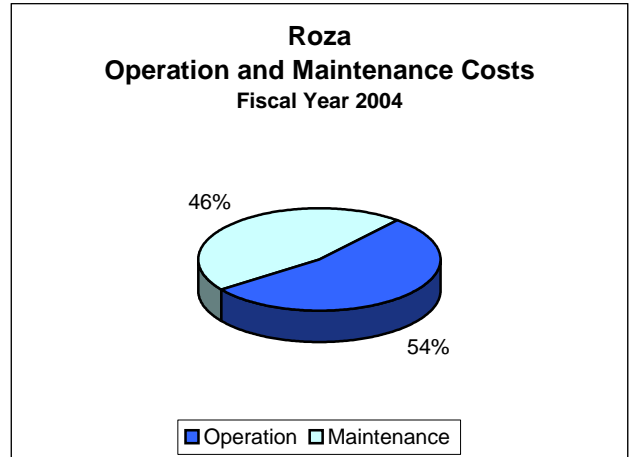
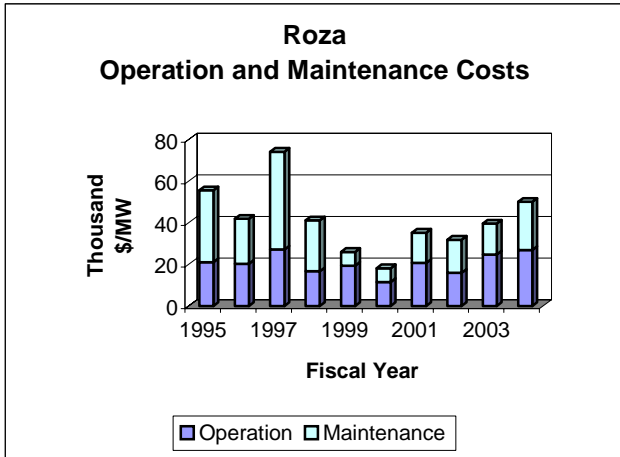
**Benchmark 2
Reclamation's Production Costs as Percentage of Wholesale Firm Rate**



**Benchmark 3
Production Costs**

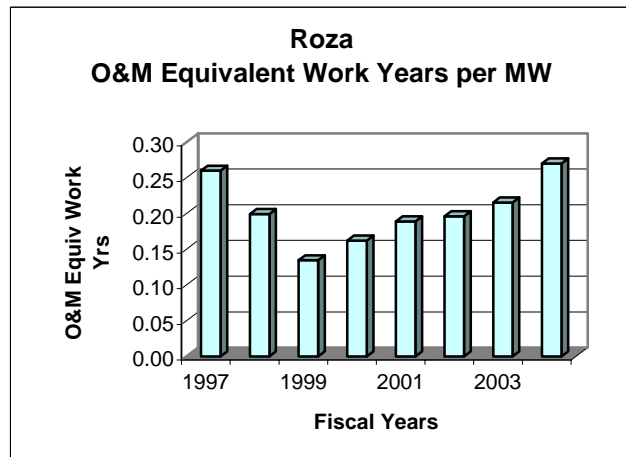
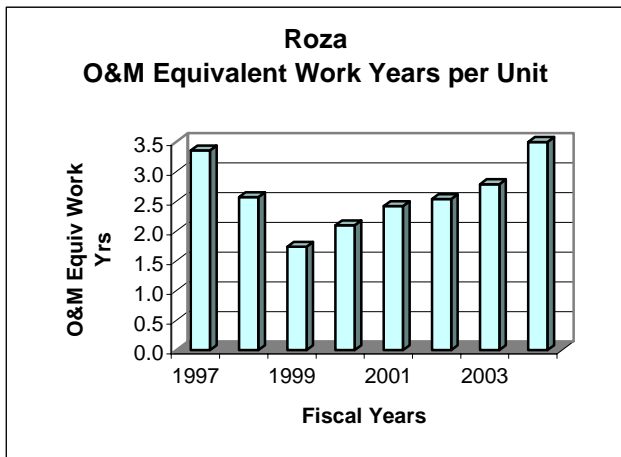
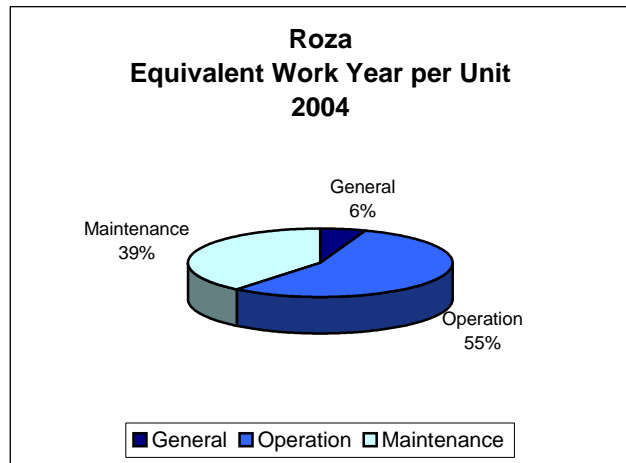
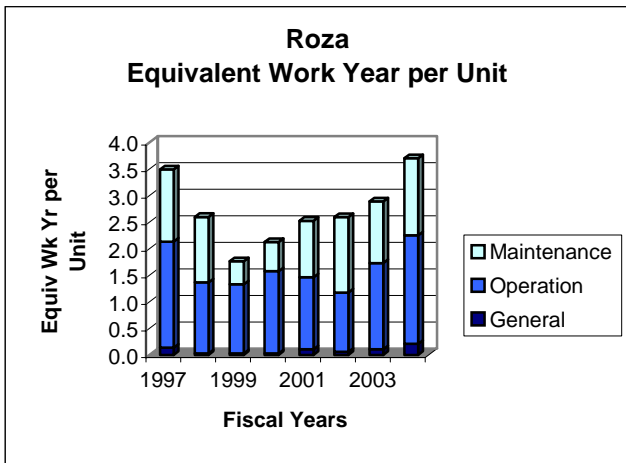


**Benchmark 3
Production Cost**

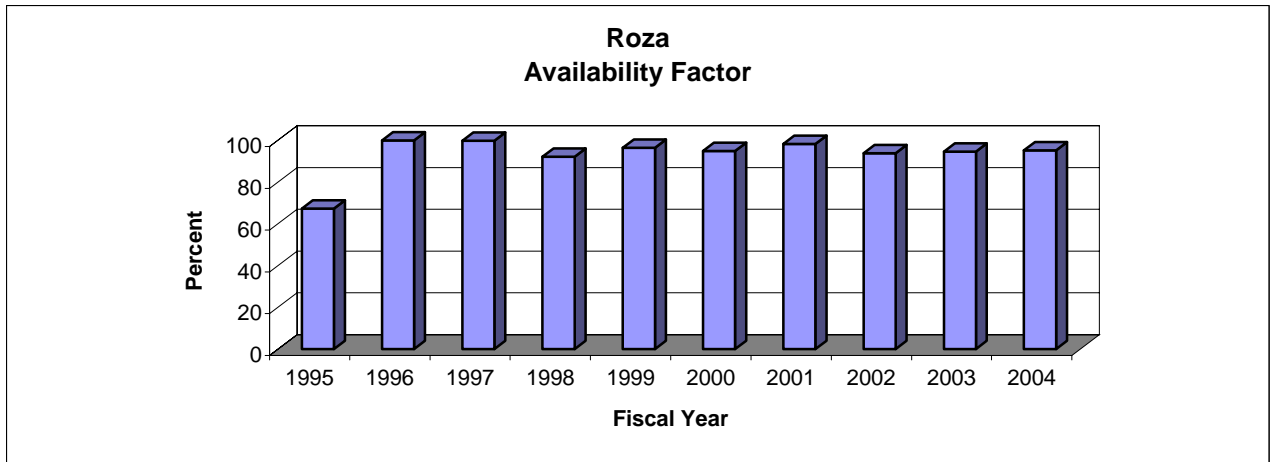


**Benchmark 4
Workforce Deployment**

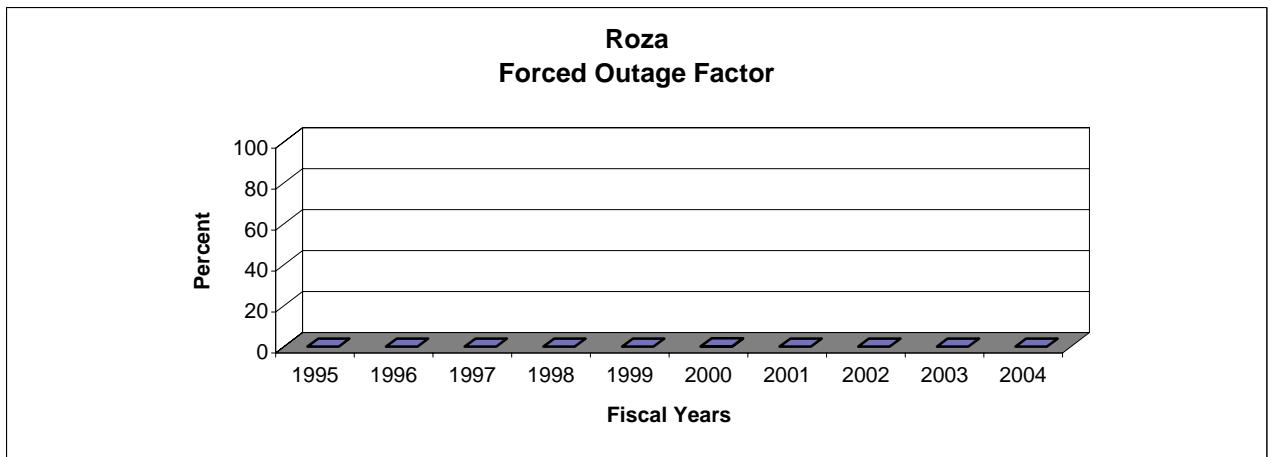
| Roza 2004 Equivalent Work Year Levels | | | | | | |
|--|--|-----------------------|---|--|--|---|
| | Equiv Work Year Charged to Powerplant | Leave Additive | Denver and Washington Equiv Work Year Additive | Total Equiv Work Year Allocated to Powerplant | Total Equiv Work Year per Generating Unit | Total Equiv Work Year per Megawatt |
| General | 0.17 | 0.02 | 0.02 | 0.21 | 0.21 | 0.02 |
| Operation | 1.84 | 0.20 | 0.00 | 2.04 | 2.04 | 0.16 |
| Maintenance | 1.32 | 0.14 | 0.00 | 1.46 | 1.46 | 0.11 |
| Total Staffing | 3.33 | 0.35 | 0.02 | 3.70 | 3.70 | 0.29 |



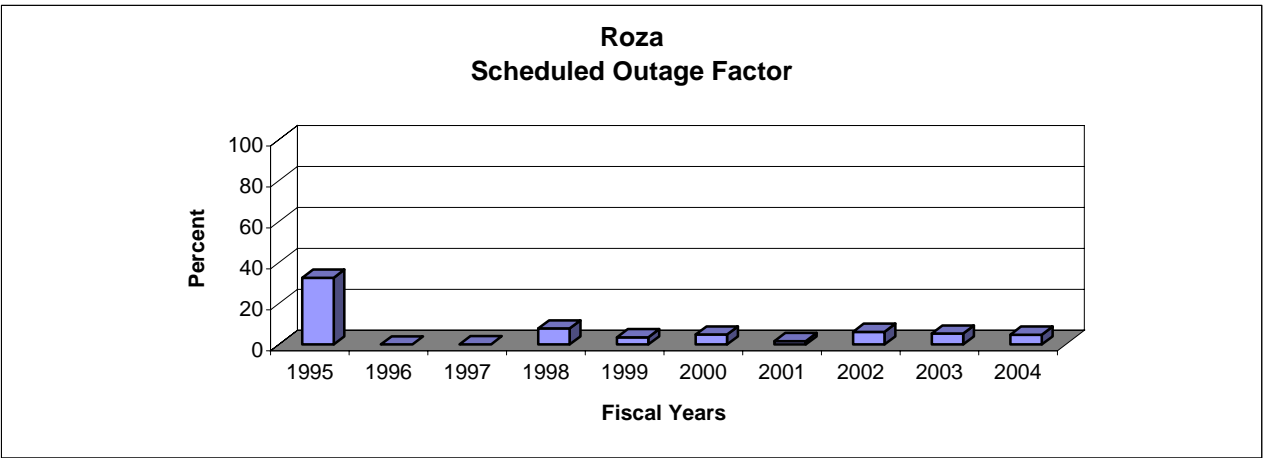
**Benchmark 5
Availability Factor**



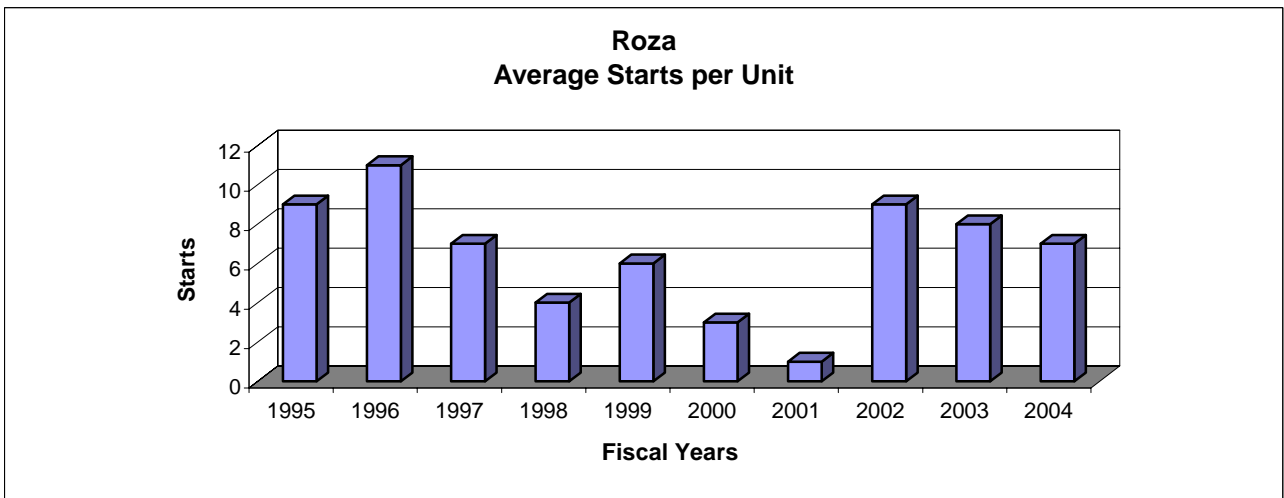
**Benchmark 6
Force Outage Factor**



**Benchmark 7
Scheduled Outage Factor**



Starts



| Benchmark Data Comparison | | | | | |
|---|------------------------|---|----------------------------------|-------------------------|------------------------|
| Fiscal Year 2004 | Roza 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 | 10.89 | 24.61 | 2.77 | 145.47 | 1.23 |
| O&M Costs \$/MW | 50,032.32 | 65,356.27 | 7,316.97 | 36,248.69 | 2,951.22 |
| O&M Equip Work Year per MW | 0.27 | 0.33 | 0.04 | Not Available | 0.00 |
| Availability Factor | 95.2 | 71.0 | 86.9 | **89.2 | 99.97 |
| Forced Outage Factor | 0.0 | 0.1 | 0.7 | **1.9 | 0.00 |
| Scheduled Outage Factor | 4.8 | 28.9 | 12.4 | **8.9 | 0.02 |

*Weighted by Net Generation

**2003 NERC Average