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Managing Water in the West

Reclamation's Power Asset Management Strategy

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Overview

- 58 Powerplants
- 2nd Largest Hydropower Producer in United States
- 42 Million MWH Annual Average Generation
- 10 Percent of Power in West

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High Performing

- O&M Cost \$/MWh-\$2.86
- O&M Cost \$/MW-\$7,541
- Availability Factor-86.9
- Forced Outage Factor- 0.7
- Scheduled Outage Factor-12.4
- Rank in Best Quartile in Costs

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Strengths

- Great people
- Solid plants
- Maintenance standards & practices
- Can-do attitude

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Challenges

- Aging workforce
- Average age of plants-46 years
- Industry changing
- Pressure to keep costs low
- Doing the right thing at the right time

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Vision for Power Program

- A cohesive power community that positions Reclamation's Power Program to meet today's and tomorrow's challenges.
- Strategic Business Plan for Power Program

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Key Initiatives

- Long-Term Viability and Reliability
- Respond to Emerging Issues and Trends
- Maintain Power Personnel Expertise
- Build Partnerships

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Long-Term Viability

- Power Reviews of O&M
- Refurbishment and Replacement Activities
- Hydro Asset Management Process (HydroAMP) Risk-Based Condition Assessment
- WECC Reliability Management System and NERC Self-Certification
- New FISTS & Power Equipment Bulletins
- Benchmarking
- Training

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Long-Term Viability

- Power Reviews of O&M
 - Standardized reviews of all Reclamation facilities each year
 - Standards-based
 - Sixth year of six-year cycle
 - Re-establish Reclamation expectations
 - Focus on four areas Electrical, Mechanical, Operations and Management
- Corps has used reviews in Northwest

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Refurbishment and Replacement Activities

- Refurbishment and Replacement Activities
 - One-third of Reclamation powerplants have been upgraded
 - Added 1800 MW of capacity
 - <\$100/kw installed
- Average increase in capacity of uprated units of 48.1 percent
- Represents 12 percent of Reclamation's power
- Bulk of remaining refurbishment opportunities will result in increase in efficiency, resulting in more energy

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System Reliability

- Access to Receipts for Power O&M Authority
- WECC Reliability Management System and NERC Self-Certification
- Reliability Standards Under Development
- Hydropower Opportunities Study
- Environmentally Preferable Power & Renewable Energy Credits

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Corporate Standards

- Power Policy, Directives & Standards
- Facility Instructions, Standards and Techniques Manuals (FIST)
- Power Equipment Bulletins
- Guidebooks
- http://www.usbr.gov/power/data/fist_pub.html
- Jointly developing Arc Flash Protection FIST & Training with Corps
- Developing new Incident Reporting Guidebook

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Power Benchmarking

- Completed National Performance Review Laboratory
- Developed Power Program benchmarks with stakeholders
- Compile Reclamationwide benchmarking data by plant, by size category, and all plants
- Information available on web at:
<http://www.usbr.gov/power/data/data.html>

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Maintain Corporate Expertise and Core Power Competency

- Power Personnel Succession Planning
- Knowledge Transfer through Power Review of O&M Training
- Developing Principles of Hydropower Course & Seeking Accreditation
- Work with HR on Facility Manager Development Program
- Power Leadership Course

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Power Community

- Corps of Engineers Partnership
- Power Marketing Administration Partnerships
- Regional and Plant Participation in Key Products and Initiatives
- Power Website
- Hydro Quebec Partnership
- Developing TVA Partnership

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Thank You!

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