



## Development, Operation, and Maintenance of Non-Federal Hydro Generation at Army Corps of Engineer Dams

Joint HUG and NHA Central/Midwest Regional Meeting  
Wausau, Wisconsin  
April 2, 2009



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## Vision & Mission

Be the premier stewards of entrusted hydropower resources.

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Provide reliable hydroelectric power services at the lowest possible cost, consistent with sound business principles, in partnership with other Federal hydropower generators, the Power Marketing Administrations, and Preference Customers, to benefit the Nation.

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## Presentation Objectives

- Program Overview
- Non-Federal Development Philosophy
- Funding for Corps Districts FERC Coordination
- District-Developers Coordination Issues
  - Sharing of Technical Information
  - Corps/FERC MOU
- Regulatory Issues
  - Section 10 Rivers & Harbors Act
  - Sections 404 & 408 Clean Water Act
- Existing Development Potential
- Future Challenges
- Questions/Discussion



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## Hydropower Capability

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- 75 power plants with 350 generating units in 5 Divisions and 16 Districts
- 21,000 MW of Capacity - 22% of total US hydro capacity
- Generates approximately 70 billion KWh of energy annually, enough energy to electrify 10 cities the sized of Seattle, WA
- Generates over \$3-4 billion in annual gross revenue  
Total capital investment ~\$20B
- Over 90 FERC licensed power plants at Corps dam with 2,300 MW capacity

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# Corps of Engineers Policy on Non-Federal Hydropower Development

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“The Corps supports hydropower development at its projects that is consistent with authorized project purposes and water control and water quality management objectives. This support neither relieves the developer of any risks and responsibilities nor suggests that the needs of other users be compromised to suit developer demands.”

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# Funding for Corps Districts FERC Coordination

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- Pre-2005
- Corps Office of Counsel Decision
- Current and Future Funding



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# District-Developers Coordination Issues

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- Sharing of Technical Information
  - Engineering & Construction Bulletin No. 2008-8 dated 18 Mar 2008
- Corps-FERC Memorandum of Understanding
  - Outdated!
  - Initial discussions to update MOU



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## Regulatory Issues

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- Section 10 Rivers & Harbors Act
- Sections 404 Clean Water Act
- 33 USC 408 (Modifications to Gov't Facility)



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# Potential Hydroelectric Development At Existing Federal Facilities

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- Section 1834 of the 2005 Energy Policy Act
- Required the Secretaries of Energy, Interior, and Army to “jointly conduct a study assessing the potential for increasing electric power production at federally owned or operated water regulation, storage, and conveyance facilities.”
- DOE Participants: SEPA, SWPA, WAPA, BPA
- DOI Participants: Reclamation, BLM, BIA, NPS, USF&WS
- DOA Participant: Corps of Engineers

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# Potential Hydroelectric Development At Existing Federal Facilities

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- 871 existing federal facilities, with and without generation, were evaluated for their physical capacity for generation and their economic viability based on regional power rates
- 3-tier screening process
- Sites >1 MW and/or at least 10 feet of head
- Sites without institutional constraints that would not preempt development were eliminated

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# Potential Hydroelectric Development At Existing Federal Facilities

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- Only the Bureau of Reclamation and the Corps of Engineers identified potentially feasible sites
- Reclamation identified 6 sites
- Corps of Engineers identified 58 sites
- Total additional capability is estimated at 1,230 MW

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## Future Challenges

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- Communicate, Coordinate, Communicate!
- Revising the MOU
- Sustaining Coordination Funding



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# Questions!

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