Twin Falls Powerhouse Redevelopment Agenda

- We Energies Overview
- Project Description
- Project Drivers
- Project Teaming Arrangement
- Implementation and Cost Savings
- Project Outcomes

Original 1919 Twin Fall Powerhouse
WE Energies – Company Overview

- Subsidiary of WEC Energy Group
- Sister Companies:
  - Wisconsin Public Service
  - Wisconsin River Power Company
- Total WEC Hydro Fleet
  - 30 Facilities
  - ~200 MW Capacity

Facilities in Wisconsin and Upper Peninsula of Michigan
Project Description
Project Drivers

- Aging equipment with increasing O&M Costs
- Dam safety issues
  - Penstocks
  - Powerhouse structure
- Opportunity for increased generation capacity

Photo of original Twin Falls powerhouse circa 1930
Project Teaming Arrangement and Agreements

- Separate Engineering and Construction Contracts
- Selected by RFQ focused on:
  - Project Approach
  - Qualifications
  - Total Capital Target agreement
- Agreements
  - Cost Reimbursable
  - Portion of fee subject risk/reward
  - Capital Target Price was basis for Certificate of Authority from Wisconsin PSC

Project Team participated collectively in design, procurement and construction
Implementation and Cost Savings

- Project contingency managed through Risk Register
- Value Engineering
  - Low profile powerhouse
  - Cofferdam design and implementation
- Project Cost Saving Features
  - Reused cofferdam sheetpile for closure dam
  - Fly ash utilization in concrete mix
- Time Saving Feature
  - Three front construction
  - Turbine shop assembled
Project Features

- Turbine/Generator access Skylights
- Closed loop cooling water system
Project Outcomes

- Project Goals – Set in 2013
  - Schedule – Commercial operation by Aug 2016
  - Capital Budget - $64M
    - Included all costs (Owner, Engineer, Contractor/Subcontractors)

- Outcomes
  - Commercially operational July 27, 2016
  - Project closed at $63M as of December 2017
Northwest Hydropower Association

Project Financing
Twin Falls Hydropower Redevelopment
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