

Hydropower Conference

Hydropower Unleashed: Tools, Trends &
Tactics for a Resilient Future



7:00 - 8:30 AM BREAKFAST | Exhibit Hall Young Professionals Networking Breakfast - TBD

8:30AM WELCOME PLENARY - ALL TRACKS | Harbor Ballroom A-F

Opening Remarks: Catherine Rhea, CEATI

Keynote Presentation: The Story of Firsts! Tom Bugert, Helion Energy & Brett Bickford, Chelan County PUD

9:45 - 10:30 AM COFFEE BREAK | Exhibit Hall

DAY 1
TUESDAY MARCH 17th,
2026

Session A1: Dam Safety | Risk Intelligence
Session Chair: Jason Clere, Brookfield Renewable

10:30AM **An interactive Digital Project Archive to Support Dam Safety Performance**
Doug Raigosa, Southern California Edison & Jenny Ramirez, Geosyntec

11:15AM **LifeSim in Action: Reducing Flood Risk Without Lifting a Shovel**
Erin Gleason, Denver Water and Jaime Lubeck & Jason Needham, HDR

Session B1: Hydro Plant Equipment | Tech Demo Stage

TBD
TBD

TBD
TBD

Session C1: Hydro Operations & Planning | Modelling
Session Chair: Nathalie Voisin, USDOE-PNNL

Enhancing Hydropower Decision-Making Through Integrated Hydrologic, Hydraulic, and Ice Forecasting Tools
Shane Wruth & Milan Bijeljanin, Manitoba Hydro

Short-Term Hydroelectric Dispatch Model for Head-Dependent Units with Restricted Operating Zones
Carlos Lopez Salgado, USDOE-Argonne National Lab

Session D1: Workforce Development
Session Chair: Ronda Strauch, Seattle City Light

Growing Capability and Succession Planning: Learnings from New Zealand Dam Owners
Peter Fox, Meridian and Katy Cottingham, Meridian/Dam Safety Intelligence

Plugging into the Pipeline: Connecting Academia with the Hydropower Industry
Elise DeGeorge, USDOE-National Lab of the Rockies

12:00-1:30 PM NETWORKING LUNCH | Exhibit Hall

Session A2: Dam Safety | Safety Management
Session Chair: Paul Lennemann, Tacoma Power

1:30 PM **From Damage to Operational Adaptations: Enhancing Safety and Reliability of the Lake Almanor Low Level Outlet**
Randy Presleigh & Abbas Dorostkar, PG&E

2:15 PM **Lessons from a Troubled Siren System: Emergency Management and Public Alerting Challenge**
Ali Firoozfar, Seattle City Light & Greg Richards, GFT

Session B2: Hydro Plant Equipment | Turbine-Generator Alignment & Structural Interaction
Session Chair: Robert Gordon, Seattle City Light

Effects of Concrete Movement on Turbine-Generator Alignment
David Elwood, GE Vernova & Wenbo Jai, Chelan PUD

Case Study: Stator Thermal Expansion Analysis - Boundary Dam Power Plant Unit U51
Enzo Cloutier, VibroSystM & Patrick Doyle, Seattle City Light & David Elwood, GE Vernova

Session C2: Hydropower Operations & Planning | Tech Demo Stage

TBD
TBD

TBD
TBD

Session D2: Workforce Development
Session Chair: Marcel-Paul Raymond, CEATI

Assessing the Impact of Robotics and AI (RAI) on Workforce Transformation in Hydropower
Haijing Liu & Elise DeGeorge, USDOE-National Lab of the Rockies

Strengthening Dam Safety through Skills Transfer and Succession: Lessons from Nalubale Kiira
Harriet Orishaba, Uganda Electricity Generation

3:00 - 3:45 PM COFFEE BREAK | Exhibit Hall

Session A3: Dam Safety | Tech Demo Stage

3:45 PM **TBD**
TBD

4:30 PM **TBD**
TBD

Session B3: Hydro Plant Equipment | Materials, Lubrication & Manufacturing Quality
Session Chair: Jean Pellerin, CEATI

Oil Replacement Fluid for Turbine Runners (Kaplan) for Reduction of Friction
Klas Olsson, Fortum

Managing Quality in International Manufacturing
Stuart Bonnington, Snowy Hydro

Session C3: Hydro Operations & Planning | Decision-Making Under Uncertainty
Session Chair: Connor Werstuck, OPG

Beyond P50: Quantifying Portfolio Volatility for Multi-Asset Regime
Aashish Bhardwaj & Julien Otis-Laperrière, Brookfield Renewable

What is MCP and Why Does it Matter? Context-Rich Interactions for Smarter Hydropower Operations
Cody Kupferschmidt & Craig MacRitchie, Erode AI

Session AB1: Dam Safety & Hydro Plant Equipment | Flow Control
Session Chair: Bruce Muller, CEATI

Gates Refurbishment or Replacement – Choosing the Right Approach
Jenny Ramirez, Terry Sullivan, Geosyntec & Chris Manley, USACE

Summer Dam Radial Gate Modernization
Jon East, U.S. Bureau of Reclamation

5:30-7:00PM NETWORKING RECEPTION | Exhibit Hall

CEATI 

7:00 - 8:30 AM BREAKFAST | Exhibit Hall

8:30AM **PANEL SESSION - ALL TRACKS - Harbor Ballroom A-F**

Hydropower Unleashed: Tools, Trends & Tactics for a Resilient Future
Paul Slangen, Landsvirkjun; Denis Obiang, LADWP; Dan Forster, Meridian; Brian Saez, NYPA

9:45 - 10:30 AM COFFEE BREAK | Exhibit Hall

DAY 2
WEDNESDAY MARCH
18th, 2026

Session AB2: Dam Safety & Hydro Plant Equipment | Flow Control

Session Chair: Matt Muto, SCE

Life Extension of an Aging Penstock using Carbon Fiber Reinforced Polymer Lining

Gary Brunet, TransAlta

ASCE MOP 79 for Steel Penstock Design & CEATI Guidance on Inspection & Maintenance

John Bambai & Arne Nervik, ASCE Steel Penstock Committee; Bruce Muller, CEATI

Session B4: Hydro Plant Equipment | AI & Predictive Maintenance

Session Chair: Joe First, Lewis County PUD

From Signal to Strategy: Ultrasonic Data in Fitness-for-Service Evaluations

Sam Stephens, Quest Integrity

Enhancing Generator Reliability Through Offline Diagnostic Tools: A Case Study of a 32MW Hydro Generator

Krzysztof PYC, Kinetrics

Session AC1: Hydro Operations & Planning & Dam Safety

Session Chair: Chuck Bach, CEATI

Leveraging a Platform for Hydrological Prediction to Support Dam Safety Monitoring

Kin Sun Lam, Deltares & Chris Rogers, SunWater

Integrated Hydrologic and Hydraulic Evaluation for Spring Flood Management and Dam Safety Planning

Zahra Zahmatkesh, KGS

Session D3: Pumped Storage

Session Chair: Robert Gordon, Seattle City Light

Pumped Hydro Storage as a Transmission Asset in Brazil: The Coastal Paranaí Case Study

Rodrigo Fader Parana, COPEL

Multi-metrics Valuation of Future Craig-Hayden Pumped Storage Hydropower Plant

Rodney Itiki, Srijib Mukherjee, & Arjun Bhattacharya, USDOE-Oakridge National Lab

12:00-1:30 PM NETWORKING LUNCH | Exhibit Hall

Session A4: Dam Safety | Risk & Uncertainty

Session Chair: Bruce Muller, CEATI

California State Water Project: Quantitative Risk Analysis Plans, Workshops, and Risk Reduction Measures

Genny Schrader & Daniel Osmun, HDR; David Sarkisian, California Department of Water Resources

Managing Foundation Uncertainty for the Stability of Dams

Ramy Saadeldin, Portage Power

Session B5: Hydro Plant Equipment | Mechanical Integrity

Session Chair: Brian Luffman, Duke Energy

Spiral Casing Integrity: Inspection, FFS Analysis & Risk-Based Repair Strategy

Jamie Scanlan, Quest Integrity

Root Cause Analysis of Rotor Pole Connectors Failure in a Small Hydro-Generator

Ibrahim Gadala & Eric Seetoh Powertech Labs, Geoff Dunbrack & Colton Davies, Yukon Energy

Session C4: Hydro Operations & Planning | Forecasting

Session Chair: Ronda Strauch, SCL

Advancing Inflow Forecasting with CIROH and Reclamation

Chris Frans, USBR & Shaun Carney, RTI

Data-Driven Flood Mitigation for the Lower Volta Basin: Leveraging Modelling, Geospatial Intelligence, and Emerging Technologies

Abdul Noor Wahab & Kwadwo Asante Addo, Volta River

Session D4: Pumped Storage

Session Chair: Robert Gordon, Seattle City Light

A Modern Digital Delivery Framework for Pumped Storage Hydropower Projects

James O'Reilly, Knight Piesold

Taum Sauk Dam Failure – 20 Years Later

Gene Campbell & Bryan Moore, Ameren

3:00 - 3:45 PM COFFEE BREAK | Exhibit Hall

Session A5: Dam Safety | Emergency Preparedness & Long-Term Recovery

Session Chair: Jennifer Dodd, TVA

Evaluating Structural Failure Modes and Stabilization Alternatives Guided by High-Level Structural Analysis

Jim Rutherford, Hatch & Ian Hunter, Chelan County PUD

Nolichucky Dam Stability Assessment & Hydraulic CFD Modeling: Lessons from the 2024 Overtopping Event

James Bryant, TVA & Gurinderbir Sooch, Hatch

Closing Remarks

Session B6: Hydro Plant Equipment | Reliability & Cost Strategies

Session Chair: John Yale, CEATI

Establishing a Standard Methodology to Evaluate Start/stop and Cycling Costs and Impacts

Chris Brown, Scanning Solutions & Jim DeHaan, U.S. Bureau of Reclamation

Applicable Test Criteria for Generator Bars Submitted to Cycling

Alexander Schwery, GE Vernova

Closing Remarks

Session C5: Hydro Operations & Planning | Hydrologic Data for Risk-Informed Water & Hydropower Management

Session Chair: Marcel-Paul Raymond, CEATI

Accurate, Basin-Wide Snowpack Mapping is a Critical Resource for Reservoir Management & Power Generation Optimization

Jeffrey Deems, Airborne Snow Observatories

A Hydropower Drought Monitor and Outlook

Vincent Tidwell & Nathalie Voisin, USDOE-Pacific Northwest National Lab; Elizabeth Ossowski & Jason Gerlich, National Oceanic and Atmospheric Administration

Closing Remarks

5:30-7:00 PM WOMEN IN POWER NETWORKING RECEPTION | TBD

CEATI

Event Overview:

For more than 15 years, CEATI has gathered utility leaders, experts and influencers at this prestigious event to share practical insights and breakthrough developments shaping the future of hydropower. Our 2026 event will host over 700 utility professionals from a variety of leadership roles, including Dam Safety Engineers, Hydro Plant Managers, Engineering Directors, Hydrologists, Water Resource Managers and Business Executives.

The event will feature presentations on the following themes:

- Dam Safety
- Hydropower Plant Equipment
- Hydropower Operations & Planning

Within These Tracks, Our Conference Planning Team Will Prioritize Content Related To:

- Hydro equipment and facility life cycle planning
- Hydropower facility adaptation and retrofitting initiatives (ex. upgrades, restorations to facilities)
- Implementation of new technologies & techniques through innovation
- Recruitment, skill building and succession planning
- Risk management and enhanced planning
- Innovation and transferrable learnings from other industries
- Informed business decision making around our assets, programs and operations under greater uncertainty & constraints
- Cyber security – implementation, risk & mitigation

Additional tracks will be featured this year:

- Tech Demo Stage
- Pumped Storage
- Workforce Development
- Flow Control Equipment

Who should attend:

- Electric Utilities and Dam Owners
- Consultants
- Equipment Manufacturers and Suppliers
- Research Facilities and Laboratories
- Academics

Event Details:

- [Week at a Glance Schedule](#)
- [Participating CEATI Utility Members](#)
- [Member Registration](#)
- [General Registration](#)
- [Event Website](#)