

California Regional Meeting December 13 and 14, 2023

The Guild Hotel 500 West Broadway, San Diego, CA 92101

Host: San Diego County Water Authority and its 24 Member Agencies

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Wednesday, December 13, 2023

| Time | Session | Speakers |
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| 8:30 AM-11:30 AM | Tour: Scripps Institution of Oceanography, University of San Diego Includes transportation from the hotel to the Institution. Maximum Capacity: 50 | Organizer: Katrina Boyd, University of California San Diego |
| | This tour consists of two parts: 1. A briefing at the Institution's Center for Western Weather and Water Extremes (CW3E) where participants will hear about a pilot project called Forecast Informed Reservoir Operations (FIRO), in which researchers are developing enhanced forecast tools to better manage reservoirs. | |
| | 2. A tour of the Ellen Browning Scripps Memorial Pier, a research facility that houses numerous environmental monitoring stations and enables small boat and scientific diving operations. The tour will highlight the pier's history as well as ongoing observations of waves, tides, and meteorological stations and radar units for measuring surface currents. Representatives from CW3E will discuss how pier observations are informing research about extreme weather impacts on floods, droughts, hydropower, ecosystems, and the economy. | |
| 9 AM-12 PM | Invite Only NHA Member Power Producers' Only Meeting | Organizer: Chris Hayes, Senior Advisor, Technical Programs & Training, National Hydropower Association |
| 9:15 AM-12 PM | Bike Ride (Short) – meet at The Guild Hotel | Organizer: Alvin Thoma, Retired, Pacific Gas and Electric Company |
| 9:15 AM-3 PM | Bike Ride (Long) – meet at The Guild Hotel | Organizer: Alvin Thoma, Retired, Pacific Gas and Electric Company |

| 1 PM-5 PM | Dam Safety Workshop: Performing Comprehensive Assessments – Lessons Learned, Best Practices and What Comes Next? | Click HERE to access the detailed agenda and speakers |
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| | This workshop will focus on undertaking Comprehensive Assessments under the Federal Energy Regulatory Commission's new guidelines. Valuable insights will be shared covering the planning process, execution, level of effort, and next steps following a comprehensive assessment, including how to leverage outputs to inform decisions and prioritize work. | |
| | Several perspectives will be shared, including those from independent consultants and state and federal regulators, as well as hydroelectric project owners. | |
| 5 PM-7 PM | Welcome Reception in the Polly Courtyard at The Guild Hotel | |

Thursday, December 14, 2023

| 7 AM-8 AM | Registration and Networking Coffee | |
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| 8 AM | Opening Welcomes | Speakers: Malcolm Woolf, President and CEO, National Hydropower Association Congressman Scott Peters, Representative, California's 50th District (by video) Neena Kuzmich, Director of Engineering, San Diego County Water Authority |
| 8:30 AM | Session 1: California Case Studies: Habitat Restoration, River Connectivity, Fish Passage Hear three case studies about successful "on-the-ground" work throughout the state in: habitat restoration, river connectivity, and fish passage. All three case studies highlight what can be done when people representing hydropower producers, NGOs, and resource agencies work together toward common goals. | Session Leader: Elizabeth (Beth) Lawson, Senior Hydraulic Engineer, North Central Region – Water Program, California Department of Fish and Wildlife Presentations: HABITAT RESTORATION – Hallwood Side Channel and Floodplain Restoration Project - by Jeff Mathews, Senior Project Manager, Habitat Enhancement, Yuba Water Agency |
| | Attendees will benefit from hearing insights and lessons learned from those involved in the case studies, as they consider how the technologies, processes, and communications/collaboration techniques can be adapted to their own situations. | RIVER CONNECTIVITY Battle Creek Collaboration and Restoration by Rebecca Doidge, Principal Strategic Consultant, Pacific Gas and Electric Company (PG&E), and Walter "Redgie" Collins, Legal and Policy Director, California Trout FISH PASSAGE- Improving Downstream Fish Passage through a Novel Hydro Turbine by Abe Schneider, Chief Technology Officer |

| | | (CTO), Co-Founder, Natel Energy |
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| 9:30 AM 9:50 AM | Session 2: Aging Infrastructure: How to Prioritize Investments? Many hydro projects in California are aging and could benefit from investments in rehabilitation/modernization to improve reliability, ensure safety, and decrease maintenance costs. License surrender is also being considered in some cases. Learn about methods for "mapping out" an asset improvement plan, making investment decisions between electromechanical-related and civil/dam safety improvements and when to divest of assets. | Moderator: Tamara Jenkins, Director of Project Delivery, Environment, Generation and Technical Services, Seattle City Light Panelists: Chris Hawkins, P.E., Senior Mechanical Engineer, Hetch Hetchy Water & Power Russ Cruzen, Director of Project Execution, Pacific Gas and Electric Company (PG&E) Suzanne Biddle, General Manager, Hydro Generation, Power Operations, Tennessee Valley Authority (TVA) |
| 10:50 AM | Special Guest Lecture: Climate Change – Impacts Specific to California | Speaker: Sunny Wescott, Lead Meteorologist, Infrastructure Security Division, Cybersecurity & Infrastructure Security Agency (CISA), U.S. Department of Homeland Security |
| 11:20 AM | Session 3: Changing Climates and Weather Extremes in California – How to Mitigate? How to Minimize Risk? Based on Sunny Wescott's talk, panelists will participate in a "fireside chat" to talk through climate impacts to projects in California that are at the forefront of most asset owners' thinking. The facilitated discussion will focus on various strategic options, mitigation measures, and forecasting practices that can be employed to minimize risk. | Facilitator: Michael McMahon, Climate Practice and Resiliency Lead, HDR Panelists: John Yarbrough, State Water Project Assistant Deputy Director, Executive Office, California Department of Water Resources (DWR) Julia Souder, Executive Director, Long Duration Energy Storage Council (LDES) Sunny Wescott, U.S. Department of |

| | | Homeland Security |
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| 12:15 PM | Networking Lunch | |
| 1 PM | Informal Regulatory Roundtable: Sharing and Networking This time is set aside for attendees specifically interested in informally connecting with others who work in regulatory-related job functions. Bring your hot topics and regulatory challenges you want to share with others to get insights and ideas for solutions. | Roundtable Facilitator: Charles Vertucci, Hydropower Relicensing Business Class Leader, HDR |
| 1:30 PM | Session 4: Pumped Storage in California: Where Are We Now? What Else Is Needed? What Can We Learn from Other Storage Technologies? In the state of California's electricity market, there's a clear need for long-duration energy storage technologies. Pumped Storage Hydro is recognized by state policy makers as a long-duration storage solution. So, what does this mean for development of new pumped storage in the state? In this insightful discussion, panelists share their views regarding: • Current situation with specific pumped-storage projects, including San Vicente • How state legislation is affecting this progress? • What's needed beyond this current-day situation? • What's the current thinking about long-duration storage by state policy makers? • What can be learned from other storage technologies' advocacy efforts – both in California and worldwide? | Co-Moderators: Katia Debain, Hydro Account Leader, Southeast US, GE Vernova Michael Manwaring, Principal Hydropower & Energy Consultant, Stantec Panelists: Julia Souder, Executive Director, Long Duration Energy Storage Council (LDES) Neena Kuzmich, Director of Engineering, San Diego County Water Authority Diana Gallegos, Principal Manager, GreenGenStorage |
| 2:30 PM | Networking Break | |
| 3 PM | Session 5: Fire Protection System Replacement/Upgrade and Alternatives Analysis Fire protection strategies have long been debated and require consideration around many factors, including worker life safety, protection of assets, responsiveness, insurance requirements and costs. This session will review case studies, explore loss prevention strategies and decision-making factors behind them as well as emergency response, available technologies, and standardization across a fleet. | Moderator: Chris Martin, Hydroelectric Department Manager, Turlock Irrigation District Panelists: Desmond Feher, Office Manager: Mechanical Engineering Services, Operations and Maintenance – Mechanical, California Department of Water Resources (DWR) Dan Ensminger, Safety Program Manager, Principal / Fire Controls Program Manager, Asset Management Excellence, Pacific Gas and Electric Company (PG&E) |
| 4 PM | Session 6: How to Utilize Water Conveyance Systems for Power Generation | Session Leader: Brandi McKuin, Project Scientist, University of California Merced |
| | As California looks to find more kilowatts of electricity generated from non-fossil sources, many power producers are getting | <u>Speakers:</u> |

| creative. This session introduces the audience to some interesting | Jed Jorgensen, Advisor – Electricity |
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| "hybrid" approaches, and the associated regulatory processes, in | Infrastructure, Pacific Northwest National |
| which existing water conveyance systems are being used to | Laboratory (PNNL), U.S. Department of |
| generate additional electricity. One such example is installing | Energy |
| floating solar panels on irrigation canals. | |
| | Bill Penney, Senior Civil Engineer and Nexus |
| | Project Manager, Turlock Irrigation District |
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| | Tom Cuthbert , Chief Technology Officer |
| | (CTO), Emrgy, Inc. |
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| | Elizabeth McCormick, Associate, Troutman |
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| Closing Remarks | |
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| Event Wrap-Up Happy Hour | |
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