Reservoir System Modeling Technologies Conference

February 21-22, 2012 Portland, Oregon

Agenda

Tuesday, February 21

08:00-08:45 Welcome and Introduction
Steve Barton, BPA

08:45-10:15 Session 1

- ***Experience with Hydroelectric Operations Decision Support Systems***
  Chuck Howard
- ***A Goal Programming Algorithm to Incorportate the Columbia River Non-Power Flow Requirements in the BC Hydro Generalized Optimization Model***
  Ziad Shawwash, Ph.D., University of British Columbia

10:15-10:30 Break

10:30-12:00 Session 2

- ***Joint use of Large-scale Stochastic Optimization Techniques and Hydrologic Modeling applied to the Columbia River System***
  Stefan Söderberg, Thomson-Reuters and Raphael Chabar, PSR
- ***Adjoint Modeling Framework for Real Time Control of Water Systems***
  Dirk Schwanenberg, Deltares

12:00-1:00 Lunch

1:00-3:15 Session 3

- ***Integrated Modeling as a Tool for Long Term Planning: Reservoir Operations Analysis in the Willamette Water 2100 Project***
  Matt Cox, Oregon State University
- ***Decision Support Systems to Maximize Operational Efficiency of Dams while Maintaining Regulatory Compliance***
  Mark Morehead, Ph.D, Idaho Power Company
- ***Decision Support System for Hydropower Dam Operation***
  Arnold Engelmann, DHI Water & Environmental, Inc.

3:15-3:30 Break

3:30-5:45 Session 4

- ***Development of Stream Flow Forecasting System within a Highly Regulated River***
  Kresta Davis-Butts, Idaho Power Company
- ***Optimization of Water and Power Objectives using RiverWare***
  Edie Zagona, Tim Magee, and Mitch Clement, University of Colorado, Center for Advanced Decision Support for Water and Environmental Systems (CADSWES)
- ***A Computationally Efficient and Robust Approach for Multi-objective operation of Multi-reservoir systems subjected to Multiple Constraints***
  Arturo Leon, Oregon State University

Wednesday, February 22

08:00-10:15 Session 5

- ***WRIMS-Water Resources Integrated Modeling System***
  Nancy Parker, U.S. Bureau of Reclamation
- ***CalLite 2.0 Screening Model***
  Tom FitzHugh, U.S. Bureau of Reclamation
- ***Hydro Planning by Stochastic Programming with Forward Scenario Aggregation***
  Bernard Lamond, Université Laval
- ***Using the GENESYS Model to Assess the Impacts of Wind on the NW Power Supply***
  John Fazio, NW Power and Conservation Council

10:15-10:30 Break

10:30-12:00 Session 6

- ***Renewable Integration Tool for Wind Power on Idaho Power's Electrical System***
  Kevin Wade and Ron Tarkowski, Idaho Power Company
- ***Future Developments of MODSIM; Integrating River Basin Operations Modeling with Power Systems Economic Dispatch***
  André Dozier, Colorado State University

12:00-1:00 Lunch

1:00-3:15 Session 7

- ***Financial Analysis of Hydro-power Load Following and Improvement of System Operational Flexibility through Wind Farm Participation in AGC***
  Michael Antonishen, Oregon State University
- ***Tree-based Model Predictive Control for Optimizing Hydro Power with Uncertainty***
  Dirk Schwanenberg, Deltares
- ***Towards Reduction of Uncertainty in the Operation of Reservoir Systems***
  Nathan Gibson, Oregon State University

3:15-3:30 Break

3:30-5:00 Session 8

- ***Displays and Data Management to Support Real Time Operations with Delft FEWS***
  Edwin Welles, Deltares USA
- ***A New Framework for Mult-Reservoir Operations and Management***
  Robert Annear, Ph.D., Geosyntec Consultants