# **Hydro-Optimization Team Meeting**



November 9, 2016 12:30 pm – 4:00 pm (PST)

@ BPA Headquarters Rm. 678

#### Webex Meeting

https://usdoe.webex.com/usdoe/j.php?MTID=m92966d743d9df4efda3218f6138762cb

Meeting number (access code): 998 011 028

Meeting password: cbMjr253

**1-650-479-3208** Call-in toll number (US/Canada)

Co-chairs: Andrew Long (USACE-HDC); George Brown (BPA); Bent Mouritsen (USBR)

## Agenda

## 12:30 pm - 4:30 pm

• Introductions (5 min)

All

• Review actions (15 min)

George Brown

• JOC/ESC meeting summary (15 min)

Andrew/Bent/George

• Flaming Gorge Performance Testing Update and other topics (15 min)

Erin Foraker

- The Dalles index tests, GBO validation (10 min)
- Andrew Long/George Brown

- o Funding status update.
- Energy Efficiency Discussion (15 min)

Andrew Long

- Status of scope development for a pilot project
- Status of Ongoing Projects:
  - o GBO Status FY16 Progress (15 min)

Dan Patla

- Brief status update of work that is underway
- Lessons learned to share with HOT?
- o 3D CAM Ops Surveys Share results of latest survey (10 min) Dan Patla
- o Stand Alone T2 Software (10 min)

Bent Mouritsen

Lessons learned to share with HOT?

- Feedback from project operators?
- Estimates of the plant efficiency improvements resulting from T2.
- GDACS/T2-Optimization (20 min)

Shawn Martin?

- o Follow up to prior meetings discussion of T2 adoption and use.
- o Strengths and weaknesses of existing T2 tools
- o Potential improvements
- o Tracking plant operations vs. T2 recommendations
- Break (10 min)
- Digital governor inputs into GDACS (15 min)

Shawn Martin?

- o Detail the additional information that will be flowing into GDACS.
- o Methods to move the data out of GDACS for analysis?
- Discussion of new ideas/initiatives potential topics: (up to 1.5 hrs)

A)

- Review new ideas/initiatives discussed during last meeting. Review last meeting notes.
  - Transformer no-load losses
  - Relays
  - Automatic or real time optimization status tools. Are the optimization sub-systems functioning correctly (i.e. governors, 3-D cams, Kaplan blade position, head sensors, etc).
- o Discuss any other new ideas/initiatives
- Wrap Up (10 min)

George Brown, Andrew Long, Bent Mouritsen

- o Review actions items today
- Set next meeting date
- Add new topics for next meeting

\*\*\*\*\* NEXT MEETING APRIL 19, 2017 at BPA\*\*\*\*

### **Hydro Optimization Team Consensus Decision Levels**

- 1. I can say an unqualified "yes" to the proposed decision. I am satisfied that the decision is an expression of the wisdom of the group.
- 2. I find the proposed decision perfectly acceptable.
- 3. I can live with the proposed decision, although I am not especially enthusiastic about it.
- 4. I do not fully agree with the proposed decision and need to register my view about it. However, I do not choose to block the decision. I am willing to trust the wisdom of the group.
- 5. I do not agree with the decision and feel the need to stand in the way of acceptance.
- 6. I feel we have no clear sense of unity in the Team. We need to do more work before consensus can be reached.