

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

June 11, 2008 Conference Call

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Gumpert

Notes: Erin Halton

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

McNary TSW Hoist Installation

Jim Adams, COE reported on the status of McNary TSW gate hoist installation in gates 19 and 20, to enable operations for summer transportation operations at the project. The work began during the morning of 6/10; the spill gate was set in a fixed position, at 200 kcfs with total flows at the project of 350-365 kcfs and 55-57% spill. Adams said the operation would continue from 0700-1800 hours through Friday, 6/13 and shared the following details of the operation with TMT:

- Work scheduled for 6/12: The gate hoist from spill bay 5 will be removed, requiring outages in bays 4 and 6 for safety. Outages in bays 4 and 6 will last two hours before resuming and bay 5 is expected to be offline for 4-6 hours total.
- For 6/13: Hoist from bay 5 will be moved to 20, which may or may not require an outage during installation. If, for safety reasons, Bay 20 will need to be out of service, the outage would be for 6-8 hours. At Bay 19, a crane will be connected to the gate and therefore will not require an outage.
- Roger Golladay, McNary Project Operator for the COE, provided a status update: the installation is ahead of schedule, with transfer of the bay 5 gate hoist expected to commence during the p.m. of 6/11 and installation of the hoist in bay 19 expected for 6/12.

Adams added that the COE is coordinating with BPA throughout the operation, to provide spill level adjustments as necessary. TMT members expressed an interest in reviewing spill patterns for bays 19 and 20; the COE planned to post the patterns as links to the agenda following the TMT call. The following parties provided input on the operation:

- ID: no objection
- OR: no objection
- WA: no objection
- USFWS: no objection
- NOAA: no objection, appreciate the progress made and expected completion ahead of schedule and, given this, has no concern for outages as outlined during the call.
- BOR: no objection
- BPA: no objection, appreciate shift in schedule.

- Colville Tribe: no objection
- Spokane Tribe: no objection
- CRITFC: no objection

Action/Next Steps: The COE will move forward with their planned operation and will keep TMT apprised of any new developments. The COE will post spill patterns for bays 19 and 20 to the agenda and will provide a report on the operation to TMT members at the 6/18 meeting.

Bonneville Screens Update

Dan Feil, COE, reported that reinstallation of the screens has been delayed, due to the high level of debris observed by project biologists. Flows at the project were near 400 kcfs, with a ten foot head differential on trash racks at the fish unit. TMT members commented on the smolt index, which indicates that guidance through the bypass is occurring without the screens in place. Feil added that the COE's ongoing acoustic tag study will provide data regarding the effect of screens/no screens on fish passage at the project.

Action/Next Steps: The COE will keep TMT apprised of any new developments and this item will be on the agenda for the 6/18 TMT meeting. Data from the tag study will be presented at the TMT year end review meeting in November (as well as the COE's annual AFEP review.)

Other

Russ Kiefer, ID, observed that Lower Monumental spill dropped to 15% of flow and made a request to the COE to closely monitor TDG and spill caps to provide ample daytime flow for fish passage in the Lower Monumental/Ice Harbor areas to the extent possible. The COE reported that coordination with NOAA on 6/6 and anticipation of high winds informed the decision to shift spill caps back up at the project, and that the effect on TDG at the next downstream gauge takes about two days. Wind levels likely contributed to de-gassing of TDG generated at Lower Monumental over the weekend and the COE clarified that conditions were dictating spill levels. The COE acknowledged the concerns raised by ID and the possible idiosyncrasies in tailwater gauge readings; ID acknowledged the complexities associated with managing TDG during over-generation.

Next TMT Meeting: 6/18 face-to-face

Agenda Items include:

- Finalize facilitator notes / official minutes
- TMT Guidelines – Finalize Draft
- Dworshak Summer Operations/Temperature Modeling
- Priest Rapids Operations Report
- McNary TSW Hoist Installation Update
- Bonneville Screen Update
- Libby Sturgeon Flows Operation
- Libby/Hungry Horse Summer Operations
- Operations Review

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Technical Management Team Conference Call
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1. Introduction

Today's TMT call was chaired by Jim Adams (COE) and facilitated by Robin Gumpert (DS Consulting) with representatives of BPA, USFWS, COE, BOR, NOAA, FPC, Oregon, Washington, Idaho and others participating. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at the meeting. Anyone with questions or comments about these notes should provide them to the TMT chair or bring them to the next meeting.

2. McNary TSW Gate Hoist

Adams and Roger Golladay (COE), who is overseeing installation of gate hoists at McNary Dam, reported to TMT. The gate hoists will allow the TSWs in bays 19 and 20 to be turned on and off for fish transportation purposes.

Preparation for the gate hoist installation began yesterday when all the spill gates were set in a fixed position to release a constant volume across the spill bay. This was done as a precaution for worker safety. Yesterday the fixed spill rate at McNary was 200 kcfs, with 55-57% spill and total flows of 350-365 kaf. The fixed spill operation began yesterday and will continue daily, from 7 am-6 pm, through Friday, June 13.

The initial plan was to use the first two days (Tuesday and Wednesday) to prepare for the removal of the gate hoist from gate 5 and installation of that hoist onto gate 20. In addition, gates 5 and 19 were being prepared for the use of a gantry crane to operate these two gates. On Thursday, the hoist from gate 5 would be removed in preparation to install it onto gate 20 on Friday. While removing the hoist from gate 5, gates 4 and 6 would need to be closed for worker safety for a total of about 2 hours. Gate 5 would need to stay closed for a total of 6-8 hours. It was uncertain whether gate 20 would need to be closed for worker safety during the installation of the hoist from gate 5. It would be a decision made at the moment. If the gate had to be closed, it was expected that it would be out for no more than 6-8 hours.

In an update, Roger Golladay reported that the work was ahead of schedule and that the removal of the hoist in gate 5 might occur today instead of tomorrow.

Rick Kruger asked, during times when spill is uniformly set at all gates, what happens to involuntary spill? Will the powerhouse absorb excess capacity? BPA has been estimating flows and communicating with the project operator, Adams said. If the estimates turn out to be in error, there will be opportunities to adjust the spill rate such as during the lunch hour. In addition, the project

operator may give the contractor 30 minutes to move personnel into a safe zone if necessary.

Dave Wills (USFWS) asked whether problems with spill patterns in bays 4-6 are anticipated. An outage of only a few hours would have minimal impact, Wagner replied. Adams will post to the TMT web page the spill pattern to be used if the outage in gate 20 lasts for a full day. He asked TMT to respond quickly if they see a problem because the installation is proceeding ahead of schedule. NOAA will internally review the spill pattern before gate 20 is scheduled for possible closure. A spill level above 40% like this generally has a flat spill pattern, with flows evenly spread out across the bays, Feil said. The effects on egress should be negligible.

{Supplemental Note: At 2:05 pm on Wednesday June 11th, Paul Wagner communicated through E-mail that Gary Fredricks had reviewed the spill patterns to be used during the McNary spillbay outages and indicated that he had no problem with them.}

USFWS, NOAA, BOR, BPA, CRITFC, Idaho, Oregon, Washington, the Colville Tribe, and the Spokane Tribes voiced no objections to this operation. Adams will notify TMT if bay 20 must be closed. TMT will check in on this installation at its June 18 meeting.

3. Bonneville Screen Status

Dan Feil gave an update on debris accumulation at Bonneville Dam. On Monday, flows decreased to around 300 kcfs, and the COE briefly considered reinstalling the STS guidance screens. However, over the weekend significant debris accumulated on the trash racks in the fish units. The trash racks provide a good indication of what would happen if the vertical barrier screens were reinstalled because they both tend to trap finer debris that has been observed in the gatewells. In light of these findings the COE postponed the screen installation, and flows subsequently rose back up to 400 kcfs. Monitoring of debris accumulation at the project continues, as does daily debris removal.

NOAA approved of this approach. Kiefer asked why there's been little change in the smolt index at Bonneville, despite the STS guidance screens being out. The large numbers of smolts in the 2nd powerhouse bypass system available for monitoring has been surprising, Feil said. The reasons for this phenomenon are unknown, inviting speculation that passage could be equally good with the screens out or in. The COE will do follow-up analysis via an acoustic tagging study underway to monitor passage at Bonneville. The study may provide insight into how the screen removal affected fish passage.

The COE will continue to monitor this situation, and TMT will revisit it at the next TMT meeting June 18.

4. Spill Caps at Lower Monumental

Yesterday the spill cap at Lower Monumental was down to only 15% of flow, Russ Kiefer (Idaho) said. He requested consideration of whether that level of spill is unnecessarily low, given that present gas levels are the result of overgeneration spill at night. Yesterday Lower Monumental spilled 30%, with a tailrace reading of 119.2% TDG. Today the Ice Harbor forebay went back down to 112%, indicating that Lower Monumental should be spilling more than 50%.

Last week the spill cap was set at 22 kcfs because of high TDG levels, Adams replied. Surprisingly, Ice Harbor tailwater TDG levels appeared to drop when Lower Monumental was spilling at the increased rate of 35 kcfs. However, it appears that the lower TDG readings were caused by lateral variations in the TDG levels of water hitting the gage and were not a reliable indication of actual TDG production in the river.

After consulting with NOAA, the COE investigated this phenomenon by conducting an experiment. The Lower Monumental spill cap was raised, and two days later TDG levels in the Ice Harbor forebay increased by 1-2%. This finding confirmed the COE's hypothesis that TDG levels being generated by 35 kcfs spill were actually higher than those generated by 22 kcfs spill, despite the misleading tailwater gage readings. Yesterday the COE dropped the Lower Monumental spill cap back down to 22 kcfs, then subsequently raised it to 30 kcfs because wind throughout the Columbia and Snake basins was degassing the river.

Once the wind stops degassing the river, whatever TDG goes into the water at Lower Monumental will show up at the Ice Harbor gage about two days later, Adams explained. The setting of spill caps is done in consultation with NOAA on a daily basis. In order to keep TDG levels within state criteria at Ice Harbor forebay, the COE estimates daily how much TDG the Lower Monumental powerhouse is passing, plus how much the spillway is generating, then factors in the prevailing weather conditions two days in advance.

Today's Ice Harbor tailwater readings of 119.2% and 119.4% for 8 am and 9 am respectively, with Lower Monumental spill levels of 30.8 kcfs and 30.7 kcfs respectively, are right on target for TDG management, Adams said. TMT will revisit this issue at its next meeting.

5. Next Meeting

The next regularly scheduled TMT meeting will be June 18, with Dworshak summer operations, a Priest Rapids update, Libby sturgeon flows, the TMT guidelines, Libby and Hungry Horse summer operations, Bonneville fish screens, McNary construction work, and the usual operations review on the agenda. This summary prepared by consultant and writer Pat Vivian.

Name	Affiliation
Scott Bettin	BPA
Dave Wills	USFWS
Jim Adams	COE
Roger Golladay	COE McNary Dam
Dan Feil	COE
Tim Heizenrader	Centaurus
Holli Krebs	JP Morgan
Ben Houseman	COE Bonneville Dam
Russ George	WMC
Glen Trager	Shell Energy
Tom Le	Puget Sound Energy
Rick Kruger	Oregon
Sherry Sears	Colville Tribe
John Roache	BOR
Margaret Filardo	FPC
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Cindy LeFleur	Washington
Paul Wagner`	NOAA
Russ Kiefer	Idaho
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