

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

August 25th, 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.

Lower Snake Low Flow Operations

Cathy Hlebechuk, COE, referred TMT to language on pages 8 and 14 of the Fish Operations Plan (FOP), directing the Action Agencies, during low flow operations in the Lower Snake, to operate one unit at minimum generation and spill the remainder of flow coming into the project and to coordinate with TMT if there are alternative low flow operations for the Lower Snake River that require a change from planned spill and/or minimum generation. Bill Berry, BPA, reported that Lower Monumental was operating in the bottom .1' of MOP, Little Goose was in the bottom .5' of MOP elevation and Lower Granite tailwater was also very low. Given the current low flow levels and “dead band” effects the projects experience, the Action Agencies are having trouble operating Ice Harbor, Lower Monumental, Little Goose and Lower Granite to meet MOP, minimum generation and spill levels. Berry clarified that this low flow condition was expected to continue through at least 8/31. The COE reviewed the current spill levels for each of the four projects and reiterated the FOP requirements; Ice Harbor and Lower Monumental had dropped below the FOP required minimums. Ron Boyce, OR, requested that the COE distribute a written assessment of the actual spill levels, the requirements per the FOP and rationale for the inability to meet the spill program.

TMT members discussed options for addressing the issues, including “no unit” operations at Lower Monumental and/or Little Goose; staying with the current course of meeting spill criteria at Little Goose by cutting spill downstream; adjusting or setting a fixed flow (e.g. 11 kcfs) out of Little Goose to minimize the effects and stabilize MOP pools. TMT members acknowledged that there are uncertainties around impacts to adult fish passage with this last option. Mike Viles, BPA, shared information regarding grid stability concerns associated with the “no unit” operation and said it would take two days to run an analysis for this option. Cathy Hlebechuk, COE, added that coordination with all the Columbia River tribes regarding MOP operations at Little Goose was still underway; Kyle Dittmer, CRITFC said that he would assist with the communication process.

As an FPAC call was scheduled for later in the day and TMT members needed more time to consider the options, TMT members scheduled a call for 9 a.m. on 8/26 to revisit this issue.

Action/Next Steps:

- TMT discussion on Lower Snake River Operations will continue during an 8/26 TMT conference call at 9 am.
- In the interim, the COE planned to continue to operate the Snake River projects as follows:
 - Ice Harbor and Lower Monumental at minimum generation/spill until forebays reach upper .5' of MOP.
 - Little Goose at 30% spill, toggling between a 1 and 2 unit operation.
 - Lower Granite in compliance with the spill program, at 18.4 kcfs plus spill.

Other:

- John Roache, BOR, reported on a drowning in the South Fork below Hungry Horse; flows out of Hungry Horse were temporarily reduced for retrieval of the body. Roache said that flows were back in the range of 6.4-6.5 kcfs as of 8/25, and the project would likely be just above the 20' draft end of August elevation target.
- Cathy Hlebechuk, COE, reported that Dworshak Regulating Outlets 1 and 3 were functioning, with openings of 2.5 and 1.5 feet, respectively; total outflows were 12.5 kcfs.

Next TMT: Conference Call at 9 a.m. on 8/26.

8/27/08 TMT Face to Face Meeting

Agenda items will include:

- Finalize notes/minutes
- Autumn Treaty Fishing SOR
- Dworshak Update
- Libby Operations Update
- Lower Snake River Operations
- Timing for end of MOP
- Operations Review

**Columbia River Regional Forum
Technical Management Team Conference Call
Aug. 25, 2008**

1. Introduction

Today's conference call was chaired by Cathy Hlebechuk (COE) and facilitated by Robin Gumpert (DS Consulting), with representatives from BOR, BPA, COE, NOAA, FPC, CRITFC, Idaho, USFWS, Montana, the Nez Perce and Colville tribes, and others attending. 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. Managing Low Flows at Lower Snake River Projects

Today's unscheduled call was a discussion of how to meet minimum generation, minimum spill and MOP requirements at Lower Snake projects while inflows are down as they are now. The COE is currently operating the projects in accordance with the Fish Operations Plan. The FOP also says the possibility of alternative operations needs to be coordinated through TMT. Therefore, the COE asked TMT to consider alternative operations to those that are already being conducted in accordance with the FOP.

Inflows at Little Goose are currently 30-32 kcfs which falls in the "dead band" area, meaning that it's difficult to meet minimum generation requirements at Lower Granite and Ice Harbor dams while also remaining within MOP, Bill Berry (BPA) reported. The dead band at Little Goose has been either above or below inflows recently, meaning the project has to toggle between spill stops which impacts projects downstream. At 30% spill and 1% generation at Little Goose and current flows, it's possible to spill 7 kcfs with one unit at the upper end of 1% loading, or 11 kcfs with two units at the next spill stop up. Low flow conditions are expected to last through August. If meeting the other FOP requirements means that Little Goose has to cycle between one and two units, there could be more days when flows at Lower Monumental have to be reduced. Cycling between 7 and 11 kcfs outflows at Little Goose tends to create spill variances because of physical limitations in the system, Laura Hamilton (COE) explained.

Ron Boyce (Oregon) asked about minimum spill requirements, which are currently 8.5 kcfs at Ice Harbor, 6.6 kcfs at Lower Monumental, and 18 kcfs at Lower Granite. Whenever flows drop below 30 kcfs, and especially to 25 kcfs, physical limitations affect operation of the hydrosystem, Hamilton said. Two of the Lower Snake dams have dropped to minimum spill, Lower Monumental and Ice Harbor, Berry said. Current spill amounts are in accordance with the FOP, Hlebechuk noted. Little Goose is the only project with two units operating.

Boyce requested a written explanation of spill levels and other requirements under current conditions. BPA and COE representatives explained this problem happens every year whenever low flows occur. Berry asked the Salmon Managers to think about whether they would prefer to maintain 30% spill at Little Goose for as long as possible and risk cutting spill at Lower Monumental, or would the preference be for a flatter spill at Little Goose that doesn't impact Lower Monumental operations?

Russ Kiefer (Idaho) recommended spilling a daily average of 30% at Little Goose, rather than an hourly percentage of 30%, and using a flat spill pattern. There's a spill operation at Little Goose that can allow spill of 30% down to low amounts effectively, Hamilton noted. Going to fixed spill at Little Goose would probably mean having to exceed minimum generation there. Berry asked whether the Salmon Managers would prefer that Little Goose go to minimum generation and spill the rest, or spill at 9 or 11 kcfs and generate that amount? Spilling more than 30% at Little Goose can impact adult passage, Rudd Turner said. Boyce asked for data to support this finding; Berry asked the Salmon Managers to provide BPA with more information.

Rudd Turner (COE) suggested a couple of options: **(1)** going to zero powerhouse at Lower Monumental and 100% spill at Little Goose; or **(2)** stopping spill at Little Goose for a few hours to address egress conditions, then starting up again at minimum spill. Paul Wagner (NOAA) didn't favor a zero spill option. There was discussion of whether MOP operations are still needed at all the projects. The COE has been trying to contact the Colville, Salish, Kootenai, Spokane, Kalispell and Shoshone tribes for their positions on MOP; Kyle Dittmer (CRITFC) offered to expedite that process. Ron Boyce (Oregon) said MOP operations are definitely needed for fish. He asked how turning a unit on and off at Lower Monumental would impact grid stability.

Transmission engineer Mike Viles (BPA) joined the call to address the grid stability question. Because voltage stability problems can appear anywhere on the grid at any time, BPA studies assume that all projects have at least one unit operating. Viles will ask researchers how long they need to study a no-spill scenario at any of the four Lower Snake projects. In general there isn't a better or worse time for turning off spill in terms of voltage stability, he said. Turning off spill at Lower Monumental would have the most impact on voltage stability of all the lower Snake projects. It also could do the most to solve the current operational dilemma.

Another option **(3)** would be changing Little Goose to a flat spill operation, which would create better conditions at Lower Monumental, Berry said. That would also deal with the unresolved question of whether to operate Little Goose within the top half foot of MOP.

The Salmon Managers planned to caucus at a Fish Passage Advisory Committee meeting later this morning and report back to the Action Agencies.

Until FPAC makes a recommendation, the Action Agencies will continue to operate lower Granite and Lower Monumental at minimum generation and spill the remaining volume until forebay elevations are high enough to spill within the upper half foot of MOP. Little Goose will continue to operate at 30% spill, toggling between one and two units. Lower Granite operations are in compliance with the FOP, releasing 18.4 kcfs for generation. TMT scheduled another conference call for 9 am tomorrow, Aug. 26, at which the Salmon Managers will present their recommendations.

3. Hungry Horse and Dworshak Updates

Hungry Horse. On Saturday, Aug. 23, there was a drowning below Hungry Horse Dam. Flows were reduced for searchers to retrieve the body, John Roache (BOR) reported. Outflows then returned to 5.6 kcfs. A problem with one of the units was repaired this morning, so three units are running now, and outflows are back up to 6.4-6.5 kcfs. The current forecast shows the reservoir ending at about 0.8 ft above elevation 3,540 feet on Aug. 31.

Dworshak. The two spill gates were closed Friday, Aug. 20; RO 1 and 3 are still operating, Hlebechuk reported. Walla Wall chiefs of Engineering and Operations agreed to open RO 3 an additional foot. At present, RO 1 is open 1.5 feet and RO 3 is open 2.5 feet, with a total of 12.5 kcfs outflows, which exceeds expectations.

4. Next Meeting

The next meeting will be tomorrow morning, Aug. 26, at 9 am. This summary prepared by consultant and writer Pat Vivian.

<i>Name</i>	<i>Affiliation</i>
John Roache	BOR
Dave Statler	Nez Perce
Dave Benner	FPC
Paul Wagner	NOAA
Russ Kiefer	Idaho
Kyle Dittmer	CRITFC
Dave Wills	USFWS
Margaret Filardo	FPC
Tony Norris	BPA
Daniel Spear	BPA
Steve Smith	Colville Tribe
Jim Litchfield	Montana
Steve Kerns	BPA

Rudd Turner	COE
Laura Hamilton	COE
Scott Boyd	COE
Cathy Hlebechuk	COE
Ron Boyce	Oregon
Bill Berry	BPA
Mike Viles	BPA