

# **COLUMBIA RIVER REGIONAL FORUM**

## **TECHNICAL MANAGEMENT TEAM**

### **MEETING NOTES**

**August 1, 2001**

### **CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE PORTLAND, OREGON**

**TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>**

### **FACILITATOR'S NOTES ON FUTURE ACTIONS**

Facilitator: Richard Forester

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.

#### **Implementation Team Update:**

Summer Spill proceeding as approved after some initial confusion. Started at The Dalles on July 24<sup>th</sup> at 2pm, and at Bonneville on July 24<sup>th</sup> from 8 pm to 1am. Spill had used 46 MW-months as of midnight July 31. At the current rate of spill, it will use about 200 MW- months by August 26, 2001.

#### **Status o hydrosystem storage /reliability:**

Scott Bettin reported no essential change in status. 32,000 MW-months storage projected to be at 28,000 MW-months by the end of September, with Coulee down to 1278 feet by the end of August. Power Council projects another system reliability report in mid-October, WNP2 scheduled to be back on line this week (1100 MW).

#### **Libby operation – algae flush and august priorities:**

Rudd Turner reported on the partial success of the algae flush (higher flow and longer duration more would have removed more algae). See e-mail from Brian Marotz for more details. Libby reservoir elevation is at 2436+ feet (2439 called for in the BiOp) and likely to remain there or lower. The 10 kcfs flush operation has been ramp down back to 6 kcfs minimum and it was the consensus to draft down at 6 kcfs through August. TMT agreed that, under current conditions, holding Libby at 6 kcfs through August was a higher priority than having the reservoir reach 2439 ft.

**ACTION:** Maintain 6 kcfs at Libby.

#### **Review of Current Conditions:**

Reservoir operation, water supply, and fish migration status were summarized. (see relevant web pages for details). Mr. Cassidy discussed water temperatures impacted by

Dworshak operations. Significant impact was noted approximately two weeks after full powerhouse releases started, coinciding with cooler weather and a rain storm even on the 14<sup>th</sup> of July. (see relevant web pages for details). Dworshak now 1559'. Lower Snake has been recorded at or below 70F for most of July.

**No new operations requests.**

**Develop recommended operations.**

Dworshak continues to discharge at 10 kcfs. Ramp down to 1520 elevation to be discussed at the next TMT meeting. Libby continues at 6 kcfs as discussed.

**Review of TMT Emergency Protocols (WMP Appendix 2)**

Christine Mallette led the discussion which started with the question: Does the current emergency fit the definition(s) used in the protocol. Some felt that “generation emergency” on page 2 came close to defining it, especially in conjunction with definition 3 “other emergency”. Christine expressed a concern that long term reliability based emergency might not be covered in this definition, and wondered what TMT’s role was in defining such an emergency event. Paul Wagner volunteered to provide language for a new improved definition. It was decided to refer to IT the question of “What is the role of TMT in defining, developing and implementing 2001 emergency mitigation?”

It was also decided to change “as soon as practicable”(second line, page 4) to conform to flow chart language for yellow alert “as soon as reasonably possible”. Finally a request was made to cross-reference reminder to the “goals” of the protocols on page 2, in the opening of Appendices, paragraph 2., so as to remind the decision makers in making choices for response actions as to what the goals of the actions are to be.

**ACTION:** Refer to IT the question of “What is the role of TMT in defining, developing and implementing emergency mitigation?”

**Other:**

**AGENDA FOR AUGUST 15, 2001 (9am to 12 face to face)**

- Review the emergency Protocols with revisions
  - McNary Mixers Report
  - IT follow-up
  - Report on benefit of Summer Spill
  - Compare the model weather with this Summer’s weather.
  - Year end review agenda (identify data desired)
  - Dworshak ramp-down schedule
- (August 8 Conference call only if needed or requested)
- Post TMT meeting with Seattle District COE to discuss TMT process

**Meeting Minutes**

## ***1. Greeting and Introductions***

The August 1 Technical Management Team meeting was chaired by Cindy Henriksen of the Corps and facilitated by Richard Forester. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Henriksen at 503/808-3945.

Forester welcomed everyone to the meeting, then led a round of introductions and a review of the agenda.

## ***2. Implementation Team Update – Summer Spill for Fish.***

Henriksen reminded the group that there have been a series of TMT and IT conference calls over the past two weeks, convened to discuss the summer spill issue elevated at the TMT's July 18 meeting. On Tuesday, July 24, the TMT and IT reached agreement on a summer spill program at Bonneville and The Dalles Dams. As a result of that agreement, Henriksen said, the Corps began spilling at The Dalles at 2 p.m. Tuesday, July 24, with the understanding that spill at The Dalles would continue around the clock as long as total river flow is at least 71 Kcfs at that project. The minimum spill volume at The Dalles is 15 Kcfs; the maximum is 30% of total river flow. Henriksen noted that, since the spill program started, there have been some light-load hours when total river flow dropped below 71 Kcfs and no spill occurred. There have also been some hours when total river flow at The Dalles dropped as low as 69 Kcfs, but we were still able to provide 15 Kcfs spill at the project, Henriksen added.

At Bonneville Dam, she continued, spill also began, as agreed, on the evening of July 24. The desire was to provide a minimum of 45 Kcfs spill from 8 p.m. to 1 a.m. There are some hours when the spill volume at Bonneville has dropped as low as 43 Kcfs, Henriksen said; during other hours, the spill volume is 47 Kcfs. This is due to the spill pattern NMFS has recommended, she said; overall, the average spill volume at Bonneville is very close to 47 Kcfs. In general, the project is doing a pretty good job of keeping spill up to the desired level.

As of midnight last night, according to the Corps' calculations, the summer spill operation has used the equivalent of about 40 MW-months so far, Henriksen added. If spill continues at this rate, the Corps anticipates that the 2001 summer spill program will reach the equivalent of 200 MW-months by about August 26.

Paul Wagner added that the intent is to continue the spill operation through the end of August; that is contingent, however, on the continued availability of reasonably-priced energy for purchase.

## ***3. Status of Hydrosystem Storage and Power System Reliability.***

Scott Bettin reported that total federal storage is now just over 32,000 MW-months; the plan is to maintain a volume of at least 28,000 MW-months through September 30, he said. Grand Coulee will draft to elevation 1278 by August 31, so we will get all of the salmon water out prior to that date, Bettin said.

When can we expect to see the new Power Planning Council system reliability re-evaluation requested at one of the recent IT conference calls? Wagner asked. Mid-October, Bettin replied, adding that it may be helpful for the TMT to formally request that the schedule for this analysis be accelerated.

What about the status of WNP-2? asked Christine Mallette. It is scheduled to come back on line tomorrow, Bettin replied; it should be back up to full power by this Saturday.

#### ***4. Libby Operation.***

Rudd Turner reported that Libby discharge was increased, as requested, to 10 Kcfs on the morning of July 19; discharge was maintained at this volume for 24 hours. Libby discharge was back down to 6 Kcfs on Sunday, July 21. Ramp rates, both up and down, were consistent with the USFWS Biological Opinion. According to Montana Fish, Wildlife and Parks field personnel, the flushing operation was partially successful, removing at least some of the algae that had accumulated below Libby Dam. It is likely that a greater percentage would have been removed if we could have sustained the operation for longer, at a higher rate of flow, but the fact of the matter is that we did what we could do, Turner said. He also stated that the body of the 16-year-old boy who drowned near Kootenai Falls was recovered early the week following the flush operation.

Turner noted that, according to this week's SSARR run, if Libby outflow is held at 6 Kcfs through August 31, the project will miss its end-of-August target elevation of 2439 by about 2 ½ feet. He noted that 6 Kcfs is the BiOp minimum flow for bull trout during the summer period; on the other hand, said Turner, we need to balance that against the desire to fill to elevation 2439 by the end of August. Basically, this is food for thought, Henriksen said; we should probably talk at some point about whether the TMT wants to consider reducing Libby outflow to 5 Kcfs. Wagner said NMFS would prefer to maintain 6 Kcfs outflow from Libby through the end of the summer period, given the fact that Libby will be drafted to elevation 2411 by the end of December anyway. Mallette said Oregon agrees with NMFS that there is no biological justification for reducing Libby outflow at this time. Bettin stated that this operation would be acceptable in terms of power system operation. TMT agreed that, under the current conditions, maintaining the 6 kcfs discharge is a higher priority than having the reservoir reach 2439 ft. by the end of August. Thus, the group agreed to continue with the 6 kcfs discharge at Libby.

#### ***5. Current System Conditions.***

Tony Norris said Reclamation increased Hungry Horse outflow to 1.5 Kcfs on August 1; on August 16, Hungry Horse discharge will be increased to 1.8 Kcfs in order to meet the project's August 31 elevation target of 3540 feet. Kerr continues to discharge 4 Kcfs, said Norris; the current elevation at Hungry Horse is 3543 feet. Grand Coulee is now at elevation 1282 feet; Reclamation plans to draft that project to 1278 plus the operating range by August 31. Norris added that, due to problems with the pump generator units, Banks Lake has been drafting recently; current Banks Lake elevation is 1566.5 feet. Reclamation plans to draft Banks Lake to elevation 1565 feet by August 6, as specified in the Biological Opinion; once that elevation is achieved, Reclamation plans to hold Banks Lake at 1565 through August.

Henriksen said the current elevation at Libby is 2436 feet, 22 ½ feet from full; the project is essentially passing inflow. Albeni Falls is full and passing inflow of about 8 Kcfs. Dworshak is currently at elevation 1559 feet, 41 feet from full; the project is releasing its full powerhouse capacity of about 10 Kcfs, and should reach its draft limit on about August 31. We should probably start talking at the next TMT meeting about what sort of rampdown operation is needed to achieve elevation 1520 at Dworshak on August 31, Henriksen said.

Snake River flow at Lower Granite is currently about 23 Kcfs, Henriksen said; Columbia River flow at McNary is currently about 70 Kcfs. Dick Cassidy provided recent water temperature information, noting that July weather was, fortunately, cooler than normal. However, water temperatures at Lower Granite and McNary have risen steadily through the month; they are now in the low 70-degree F range at McNary. Cassidy spent a few minutes going through some of the current water temperature data available from the Corps website, including recent tri-level thermograph information. Overall, Cassidy noted that the cold-water releases from Dworshak are having the anticipated cooling effect at Lower Granite, where tailwater temperatures have been below 70 degrees F during the entire month of July and are currently about 66.5 degrees F.

Moving on to the status of the fish migration, Wagner reported that Billy Connor's wild marked Snake River subyearlings continue to arrive at Lower Granite dam in small numbers; the peak of the wild subyearling migration at Lower Granite occurred in early July, however. These fish are now distributed throughout the Snake and Columbia Rivers; to date, however, very few have passed Bonneville Dam. Subyearling chinook indices continue to decline at McNary Dam, but are on the increase at John Day, where the index exceeded 79,000 yesterday, one of the highest daily totals of the year. Wagner said adult steelhead passage also looks good for this time of year, with about 10,000 adult steelhead passing Bonneville Dam daily. Wagner added that sockeye numbers continue to be lower than expected throughout the system.

#### ***6. New System Operational Requests.***

No new System Operational Requests were submitted prior to today's meeting. In response to a question from Mallette, Henriksen said the maintenance work on the

transmission system at Bonneville Dam, as well as Powerhouses 1 and 2, went forward as scheduled beginning today. However, Vern Parry noted that the maintenance schedule has been modified so that Powerhouse 1 will not need to be operated until the first week in September.

### ***7. Recommended Operations.***

Henriksen summarized by saying that Libby will continue to release 6 Kcfs; Dworshak will continue to release full powerhouse capacity, but the TMT will need to discuss the Dworshak ramp-down operation at its next meeting. Norris said Grand Coulee will continue to draft slowly toward elevation 1278 (plus operating range) by August 31; Hungry Horse will release 1.5 Kcfs through August 16, at which point discharge will be increased to 1.8 Kcfs.

### ***8. Review of TMT Emergency Protocols.***

Henriksen distributed copies of the most recent draft of the TMT Emergency Protocols; she asked Mallette, who had requested this agenda item, if she had any specific concerns or changes to offer at today's meeting. Mallette said her main question was how the current emergency declaration fits into the TMT emergency protocol matrix.

The group spent a few minutes discussing this question; ultimately, it was agreed that a new paragraph, designed to address operational decision-making under an ongoing power system emergency declaration such as the one the region is currently experiencing, would be a useful addition to the protocols. Wagner offered to draft this new language; he said he will distribute it for TMT consideration and discussion at the August 15 TMT meeting.

Bettin noted that BPA expects the current power system emergency to continue through this fall; then, if precipitation returns to normal this winter, the emergency will end and system operations will return to normal as well.

The group also discussed the way mitigation is addressed in the emergency protocols, offering a variety of suggestions and changes. Ultimately, it was agreed that all of these changes will be incorporated into a new version of the emergency protocols, which will be distributed, reviewed and discussed further at the August 15 TMT meeting.

### ***9. Other.***

The group spent a few minutes discussing the TMT's annual post-season review; it was agreed that this process will begin at the TMT's September 26 meeting.

The next meeting of the Technical Management Team was set for Wednesday, August 15.

Meeting notes prepared by Jeff Kuechle, BPA Writer-Editor Pool.