
BAKER RIVER PROJECT RELICENSE

Aquatic Resources Working Group Technical Sub-committee on Instream Flows

May 24, 2004
9:30 a.m. – 11:30 a.m.
Conference Call

(Call in number 1-866-280-6429, participant number 144995#)

Final Meeting Notes

Meeting Purpose: *Identify an SNF series run and corresponding PSE series run for advancing to Level 4 HYDROPS analysis*

Fish Team Leader: Arnie Aspelund, 425-462-3442, arnie.aspelund@pse.com

PARTICIPATING: Arnie Aspelund, Cary Feldmann (PSE), Phil Hilgert (R2), Mike Stansbury and Jeff McGowan (Skagit County), Gary Sprague (WDFW), Ruth Mathews (TNC), Stan Walsh (Skagit River System Cooperative), Margaret Beilharz (USFS), Steve Fransen (NOAA), and Brad Caldwell (WA DOE).

Next meeting(s):

- **ARWG Meeting:** *June 10th at USFS Mountlake Terrace, 9 a.m.- 3 p.m., Conf. Line # 1-866-280-6429. Participant Code 144995#.*
- **IFTWG Meeting:** *June 24th at USFS Mountlake Terrace, 9 a.m.- 2 p.m., Conf. Line # 1-866-280-6429. Participant Code 144995#.*

Handouts

- SNF 04,06,07,08 IHA analysis [*Draft-IHA summary.SNF04060708.051804.xls*], email sent 5/18
- PSE 20,21,22,23 IHA analysis [*Draft-IHA summary.PSE202122.051804.xls*], email sent 5/18

Summary of Conference Call:

Arnie stated the aim of the conference call was to advance towards finalizing a Baker Project operational scenario that is representative of or a refinement of the SNF04 scenario that the Policy Team agree will be

the basis of our proposed instream flow regime. On May 17, 2004, with a handshake, final measures were tentatively agreed to by the Policy Team. The Policy Team assumed that Settlement would include an operational scenario involving a Lower Baker, 3-turbine powerhouse configuration. An operational scenario termed SNF.04 had been evaluated using the five representative Energy Years. Based on the results of the SNF.04 analysis, several iterations had also been requested for evaluation:

SNF.04 (Lower Baker 3-turbine configuration)

SNF.06 (SNF.04 with USFS reservoir pool levels)

SNF.07 (SNF.04 with three different TNC modifications:

Mod 1) Reduce minimum instream flow (MIF) from 1,200 to 1,000 cfs Oct. 21 to Mar. 1,

Mod 2) May 1 to July 31, increase MIF from 1,200 to 1,500 cfs

Mod 3) High-flow escape hatch April/May, set at Upper Baker 3% exc.flow(5,400 cfs)).

SNF.08 (SNF.04 with USFS and TNC mods)

Details of the results of these runs, the May 12th comparison table and the IHA analysis are posted to the eRoom. All of these runs provided about the same amount of revenue - with SNF.04 providing slightly less revenue to PSE than SNF.07 or SNF.08. For planning purposes, the Policy Team assumed that the total cost of the final agreed-upon scenario would be less than or equal to SNF.04. Conference call participants were charged with identifying the most promising scenario to advance to Level 4 analysis, where a longer term, hourly flow record would be used to confirm that the operational scenario performs as expected over a wider range of hydrologic conditions.

While several participants liked the SNF.08 scenario, some parties were against reducing the fall MIF from 1,200 cfs to 1,000 cfs. After much discussion, a compromise SNF.09 alternative was suggested: (SNF.04 with USFS mods and TNC mods 2 and 3). The next task will be to evaluate SNF.09 using the five representative Energy Years. If SNF.09 provides the same or more total revenue than SNF.04 (is not more expensive), then SNF.09 will be run through the Level 4 analyses. However, if SNF.09 is more expensive than SNF.04 (less PSE revenue), all parties agreed to use SNF.06 as the default scenario and run SNF.06 through the Level 4 analyses.

In addition to running the selected scenario through a Level 4 analysis, a Level 4 analysis will be run on the selected scenario with PSE's flood control proposal (earlier start of the flood control season and adding 29,000 acre-feet of flood control storage in Lake Shannon). The results of these analyses will be compared to a Level 4 analysis of PSE.01 (Existing Conditions) that was started last week. Margaret asked whether the unregulated flow scenario (FS.03b) should also be run through the Level 4 analysis so that the results can be included on any follow up NEPA documentation. Phil reiterated the desire to do no more than three or four Level 4 analyses due to the time commitment required by the Level 4 runs. Phil suggested that we look at the results of PSE.01, the selected scenario, and the selected scenario with expanded flood control and then re-examine the need for a Level 4 analysis of FS.03b.

Mike noted that Skagit County has not agreed to PSE's expanded flood control suggestion; Skagit County still wants to evaluate 150,000 acre-feet of flood control storage at the Baker Project. Skagit County has asked PSE to incorporate 150,000 acre-feet of flood control storage into the SNF runs and run the scenarios through the five representative Energy Years. Mike also noted that in response to the USFS request for specific reservoir pool levels, Skagit County suggested that PSE move the start date for flood control at Upper Baker to October 15th. The October 1 start date would remain at Lake Shannon since it

does not conflict with USFS reservoir pool levels. The request by Skagit County to move the start date for Upper Baker flood storage to October 15 was agreed to and will be applied to future runs.

Key Decisions:

- SNF.09 will be run using the five representative Energy Years. If the results show that SNF.09 provides as much or more revenue to PSE as SNF.04 (is not more expensive to PSE), and provides similar environmental benefits, we will proceed with running SNF.09 and it's equivalent flood control proposal (PSE.24) through Level 4 analyses. If SNF.09 is too expensive (provides less revenue to PSE than SNF.04), the default scenario is SNF.06 and it's flood control equivalent PSE21.
- PSE's expanded flood control proposal will be modified to have the Upper Baker flood control season start October 15 instead of October 1.
- It was also expressed that we include an adaptive management approach on instream flows to address hydrologic variations around special cases of extreme dry and wet seasons that may not be fully represented in the HYDROPS analyses. Adaptive management would help us address a situation where we may not see the benefits by doing the general case and we will need to develop a protocol for dealing with these situations. Cary will draft language around adaptive management for the final measure.

Next Steps

- Powel, PSE and R2 to proceed with Level 4 analyses of PSE.01
- Powel, PSE and R2 to conduct Level 2 analysis on new HYDROPS run SNF.09 using five representative Energy Years. If SNF.09 is economically better than SNF.04, proceed with SNF.09 and corresponding flood control scenario (PSE.24) to Level 4. If SNF.09 is too expensive, default to SNF.06 and run Level 4 on SNF.06 and corresponding flood control scenario (PSE.21).
- Powel, PSE and R2 to work with Skagit County to run a Level 2 analysis adding 150,000 acre-feet of flood control storage to either SNF.09 or SNF.06, whichever is selected for Level 4 analyses.
- Cary to draft adaptive management language for review at the next aquatics meeting.
- Time will be devoted to continuing the instream flow discussions during the June 10th ARWG meeting.