



BAKER RIVER PROJECT RELICENSE

Technical Scenario Teamlet Conference Call

May 21, 2003

1:00 p.m. – 3:00 p.m.

Dial in: (866) 280-6429

Guest #: 144995

OBC-14N Conference Room

AGENDA

| | |
|---|-------------|
| 1) Review Notes | 1:00 – 1:10 |
| 2) Review Action Items | 1:10 – 1:40 |
| 3) Datum Discussion | 1:40 – 2:00 |
| 4) Hydroclimate Scenarios | 2:00 – 2:30 |
| 5) Energy Price Schedules | 2:30 – 2:45 |
| 6) HYDROPS Status | 2:45 – 2:50 |
| 7) Set Agenda for May 30 teleconference | 2:50 – 3:00 |

May 21, 2003



BAKER RIVER PROJECT RELICENSE

Technical Scenario Teamlet

May 21, 2003

10:00 to noon

PSE Office (One Bellevue Center)

Bellevue, WA

FINAL DRAFT MEETING NOTES

Teamlet Leader: Paul Wetherbee, 425-462-3746, paul.wetherbee@pse.com

PRESENT: Paul Wetherbee, Lloyd Pernela, and Bob Barnes (PSE), Stan Walsh on phone (Skagit System Cooperative), Ruth Mathews on phone (The Nature Conservancy), Margaret Beilharz on phone (USFS), Mark Killgore (The Louis Berger Group), Chuck Howard on phone (Consultant), Gary Sprague on phone (WDFW), Phil Hilgert and Stuart Beck on phone (R2), and Lyn Wiltse, facilitator (PDSA Consulting, Inc.).

FUTURE REGULAR WORKING GROUP DATES/LOCATIONS

NOTE: *The May 30 meeting will be only an hour long (from 1:00 to 2:00 PM and will focus on a limited Agenda)*

May 30 (changed 10 to noon to 1:00 to 2:00), June 6 from 10:00 to 2:00 at Louis Berger Office in Bellevue.* Phone number there is 425-467-6111 or 425-451-7400.

* Driving directions to Louis Berger Office at 12011 Bellevue-Redmond Road, Suite 200, Bellevue WA:

Heading SOUTH on 405: Take Exit #13B and take the NE 8th East ramp, and merge onto NE 8th. Turn left onto Bellevue-Redmond Road. The office is on the south side of the road just beyond Barrier Motors and on the second floor.

Heading NORTH on 405: Take Exit #13B and keep right at the fork in the ramp. Merge onto NE 8th. Turn left onto Bellevue-Redmond Road. The office is on the south side of the road just beyond Barrier Motors and on the second floor.

To Attend these meetings by conference call: Dial 1-866-280-6429. Enter participant code 144995#.

AGENDA FOR MAY 21, 2003

10:00 – noon at PSE Office in Bellevue (14th floor conference room)

1. Review Notes
2. Review Action Items
3. Datum Discussion
4. Hydroclimate Scenarios
5. Energy Price Schedules
6. HYDROPS Status Report
7. Set agenda for May 30 meeting

NEW ACTION ITEMS

- Paul: By May 28, send out background information on soft constraints.
- Paul: By May 28, send out suggested approach for ranking implementation.
- Phil: Generate new time series for unregulated flows for the Baker River. Include updated area-volume curves for both reservoirs and historic hydrologic data including flows and reservoir elevations. Make these data available on CD for those interested.
- Phil: Prepare memo outlining when SCL fisheries settlement was actually implemented. Review and revise if necessary the rankings of the biologically-based ratios for selection of periods of analysis.
- Mark: Analyze Phil's selected periods (see above) for their reasonableness in supporting economic analyses. Identify additional periods of analysis if necessary.
- Paul/Mark: Send out seasonal analysis with transmittal memo for Lower Baker inflows (1981 – present).
- Paul: Send out example sensitivity runs to demonstrate the effects of the soft prioritizing.
- Lloyd: Talk with Gary about why power prices jump around so much in 2006 and 2007 (according to Appendix K).
- Paul: Send out sample scenarios (proposed base-case) run and results.
- Paul: Send out list of all HYDROPS technical background information available on the website.
- Paul: Check back with Powel to see when they can update and distribute HYDROPS demonstration PowerPoint slides.
- Paul: Analyze sensitivity of spawning/incubation flow calculation method, prepare short brief and present to TST at next meeting.
- Paul: Complete example model run request form using Margaret's changes, distribute to group, and discuss at the next meeting.

REPORT ON OLD ACTION ITEMS

- Stuart: Met with Bob Barnes to resolve the geographic datum issue and reported back.
- Stuart/Bob: Developed updated area-volume curves for both reservoirs.
- Paul: Distributed meeting notes from 5/2/03 meeting of the Instream Flows Technical Teamlet to TST members.

- Paul/Mark: Investigated the ability of HYDROPS to model reserve capacity and reported that some of the information on this is available on the PSE website, in the Least Cost Plan that they submitted to the UTC the end of April. Note: The information in the Plan is not specific to any Combustion Turbine or Hydro plant. HYDROPS is limited in its capacity to do this.
- Paul/Lloyd: Distributed whiter paper or other supporting information on the energy pricing schedules to be used in the model.
- Paul: Distributed brief on what has been done to define representative hydroclimate sequences in the Econ/Ops and Aquatic Resource Working Groups.

DATUM DISCUSSION

All have received Kris Olin's memo on how moving to the 1988 North American Vertical Datum (NAVD) will affect various aspects of the relicensing process.

Stuart reported that he first checked how converting to the new datum would affect Upper Baker. He noted that there was not much change between the storage volume vs. elevation curve. The flood control level of 707.8 might change by a fraction of a foot. There is still 74K acre-feet between that level and full pool.

When he checked Lake Shannon, he found some significant differences in volume below the elevation of 420 ft. He performed a sensitivity analysis and found that for high flow regimes there was not much difference. With corrected values to account for the changes in the stage-volume curve, there was a difference in the annual low flow regimes and low flows are likely to increase. This will be important for incubation periods and also for winter power generation

R2 will generate a new time series for unregulated flows for the Baker River.

HYDROCLIMATE SCENARIOS

We agreed that it made sense to revise the range of years we use to select representative high, median, and low flow years to the period between the implementation of the SCL fisheries agreement (in the early 1990's) to the present. This will give us more accurate indicators going forward since it would include the current SCL regime as well as the current flood control regime which was set in the early 1980's. We are fortunate that during the last decade, we have experienced a full range of water conditions!

Phil explained that the fish WG is concluding that spawning flows and subsequent incubation flow levels are critical. They have looked at the ratio of flows during the fall spawning period to flows during the subsequent incubation period. These ratios can be ranked (exceedance) and excellent fish years, medium and poor fish years identified. We agreed to use this approach. We also decided to reconsider our water years to range from August 1 through July 31. This makes more sense from a fish point of view since it encompasses spawning and incubation periods.

We will look at selecting our new representative subset of post SCL settlement agreement energy years based on Phil's recommendations at our June 6 meeting.

HYDROPS STATUS REPORT

Paul reported that he is in the midst of rigorous quality testing on the latest version of the HYDROPS Software delivered by the Powel Group. We will get a more detailed report at our June 6 meeting.

FUTURE ISSUES TO ADDRESS

Dependable Capacity

Fisheries Definition: Tie to R2 outputs format (flow sections from A24)

DRAFT AGENDA FOR MAY 30, 2003

1:00 – 2:00 at PSE Office in Bellevue (14th floor conference room)

1. Review Notes
2. Discussion of Soft Constraints and ranking
3. Set agenda for June 6 (in-person) meeting
4. Set additional future meeting dates and times

PARKING LOT

- The capability to construct artificial periods of record by selecting seasons within selected/different years for analysis purposes.