



BAKER RIVER PROJECT RELICENSE

Economics/Operations Working Group

May 7, 2003

9:00 a.m. – 2:00 p.m. Cotton Tree Inn Mt. Vernon, WA

FINAL MEETING NOTES

The Economics Working Group Mission Statement:

"To ensure that alternative project proposals, operations and emergency plans for the Baker River Project and its components provide for: (1) Public health and safety; and (2) Thorough analysis and evaluation of the economic costs and benefits (including non-market and economic impacts.)"

Team Leader: Lloyd Pernela (PSE), 425-462-3507; lloyd.pernela@pse.com

Note: Please let the team leader know if you are unable to attend a meeting. If something comes up at the last minute, please call Lyn prior to the meeting. Lyn's cell phone is 425-890-3613.

PRESENT

Lloyd Pernela and Paul Wetherbee (PSE), Linda Lehman, Steve Hocking, and Keith Brooks (FERC) by phone, Bob Helton (interested citizen), Chuck Howard (Independent consultant) by phone, Ken Brettmann (USACE), Stan Walsh (Skagit Systems Cooperative), Dave Brookings (Skagit County Public Works Department), Gary Sprague (WA Dept. Fish & Wildlife), Chuck Steele (WA Dept. of Ecology), Margaret Beilharz (USFS) on phone, Mark Killgore (Louis-Berger Group) by phone, Mary Jean Bullock, note-taker, and Lyn Wiltse, facilitator (PDSA Consulting Inc.)

The next CROSS RESOURCE WORKSHOP MEETING will be MAY 14, 8:00 – 5:00 at the EMBASSY SUITES in LYNNWOOD. Please notify Connie Freeland (425-462-3556) if you have not yet confirmed your participation.

DATES OF FUTURE MEETING DATES/LOCATION

June 11, July 9, August 13, September 10, October 8, November 12, December 10, 2003 at PSE Office, 1700 East College Way, Mt. Vernon.

AGENDA

May 7, 2003 at Mt. Vernon, WA

9:00 to 2:00 PM

- 9:00 9:05 Introductions
- 9:05 9:10 Review/revise minutes and agenda
- 9:10 10:00 HYDROPS demo and TST Report
- 10:10 10:15 Review Action Items
- 10:15 10:20 Prep for May 14 Cross Resource Workshop
- 10:20 10:35 PDEA Update
- 10:35 11:00 Status of PMEs
 - Status of 5.01: CZMA, 5.02: Instream Flows and Water Rights, 5.03: Submerged Lands, 5.07 Drought conditions
- 11:00 12:00 5.06: Flood Control (management)
- 12:00 12:15 Break/Lunch
- 12:30 1:00 Review Study Requests
 - R-01 –Low Flow Augmentation from Baker Project Continuing discussion
 - R-03 –Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000
- 1:00 1:10 Set June 11, 2003 agenda (at PSE Office in Mt. Vernon at USFS)
- 1:10 1:15 Evaluate Meeting
 - What's hot?
 - Studies report for Baker Solution Team

NEW ACTION ITEMS

- Lloyd: Set up presentations on how PSE operates/traders and planners, etc for June/July timeframe.
- Lloyd: Set up a presentation on PSE Least Cost Plan with planner(s).
- Dave: By May 10 send to Lloyd a summary of what is decided between the Corps and Skagit County at the May 9th meeting so he can distribute to Working Group members. Also send, if appropriate, a revised flood control study request for discussion at our June 11th meeting.
- ALL: Review PDEA to see that issues have been adequately identified and that the affected environment has been adequately described. Give feedback to Mark Kilgore prior to our June 11 meeting.
- Lloyd: Invite Paul to do a more in depth demo of HYDROPS from 1:00 to 2:00 at the end of our June 11 meeting.

INTRODUCTIONS

We welcomed Chuck Steele of DOE, sitting in for Rod Sakrison.

HYDROPS DEMO AND TECHNICAL SCENARIO TEAMLET REPORT

Paul distributed the Specification Matrix developed in the USFS review of HYDROPS (Revised by Stetson on January 13, 2003 and Comments by PSE/Powel on January 24, 2003.) He also distributed the updated version of the Technical Scenario Teamlet (TST) Functional Flow Diagram (Version 2.0 –May 7, 2003) and the Discussion of Recent Conditions (PRE-Interim Protection Plan) which was revised based on a 4/25 TST discussion.

Paul reported that currently 85-90% of the programming for the model has been done. Programming to allow for multi-year runs (a recent request for additional capability in the model) is still under way. Paul said he anticipated receiving the final beta version of the model for additional testing May 7, 2003.

The HYDROPS Demonstration involved three areas: 1. Set up – Descriptions of Input Screens, Output Screen available in Reports; 2. Runs; 3. Review output. The operator can set hard and soft constraints for desired runs. The TST is developing standardized input/output for model runs.

The TST has already met several times since its inception a month ago. One of their next major tasks will be establishing default ranking of soft constraints to be used for comparative purposes. Paul reported that the May 9th TST meeting will be cancelled so he can concentrate on ensuring that the software is complete and ready for our purposes.

PSE anticipates the model should be beta tested and completely operational by the end of May! Starting in June, let Paul know if you would like to schedule some time with the model at PSE offices in Bellevue.

5.06 FLOOD CONTROL

Dave reported that the May 2nd Skagit Flood Control Executive Committee meeting was cancelled. Another meeting has been scheduled for May 8th with policy level folks of Skagit County and the USACE to discuss the issue of flood control including at Baker Project.

At the last Solution Team meeting, it was agreed that PSE is not a flood control management entity and that the responsibility for this lies with the Corp of Engineers.

Lloyd distributed a copy of the USACE proposed article 32. Status quo calls for a 16,000 acre feet base and 58,000 additional for a total of 74,000 acre feet. There is flexibility at the direction of the District Engineer to go to 100,000 acre-feet and modify the reservoir rule curve, if a cost-benefit analysis so indicates. The USACE proposes that this article be included in the new license. Skagit County may present its own draft for our consideration. The issue of compensation needs to be worked out between PSE and the USACE. FERC is neutral on this, as long as the current flood storage occurs.

The role of FERC and the USACE around in possibly increasing flood control at Baker Project should become clearer in the next few couple of months.

In the meantime, Skagit County is embarking on a serious study effort of this issue. Dave reported that they would like to integrate this effort into this re-licensing process to the extent possible. This schedule is extremely tight. They have retained a specialist attorney, Craig Gannett {Davis Wright Tremaine}. Dave will send his contact information to Keith Brooks. The status of Skagit County's Study Request on flood control will be determined at our June meeting.

ENERGY VALUES

Lloyd showed a copy of PSE's Draft Least Cost Plan. The final version of this document is available on www.PSE.com/account/rates/rates.html. This plan was put together by PSE for the WUTC. It covers both the gas and electric side of PSE's business, looking at short, medium and long term forecasts, supply technologies, etc.

Currently Hydro constitutes 40% of PSE's energy supply. Baker represents 10% of that Hydro.

PSE is looking at acquiring a couple of combustion turbines to add to their portfolio. Their existing portfolio is 2,300 megawatts. They estimate the energy demand to increase by about 1.4% a year. Lloyd distributed a graph showing the Aurora Market Power Price Forecast (dated March 31, 2003) for the Least Cost Plan.

The Least Cost Plan developed PSE's projected peak and off peak power values *that may vary by month*. Lloyd indicated that PSE would use these specific power values in the economic analysis leading to preferred alternative.

Mark reported those numbers are very consistent with FERC's mandated approach for doing the economic analysis. He also stated that the Least Cost Plan will be a significant reference for Exhibit H of the license.

Lloyd explained that the Plan also reflects PSE policy to consider alternative energy sources (e.g., wind) and conservation.

REPORT ON OLD ACTION ITEMS

- ☑ Lloyd: Gave Dave B. contact information for those who should receive PIE flood control report.
- ☑ Lloyd: Distributed PIE report to Working Group members.
- ☑ Lloyd/Mark: Drafted drought PME and distributed to Working Group members to review.
- ☑ Paul: Emailed out handout on Aquatics Working Group Run Requests to team members.
- ☑ Lyn: Added time frames to May 7 agenda.
- \square All: Study A-24 review period was extended to May 22^{nd} . Comments to Sue Madsen at R2.

PREPARATION FOR MAY 14 CROSS RESOURCE WORKSHOP

Paul agreed to present changes made in the PME since the initial draft proposed actions at the May 14 workshop. The morning of the workshop will be devoted to these updates from each of the resource working Groups. The afternoon will be devoted to discussing how to resolve apparent cross-resource conflicts.

PDEA UPDATE

Mark reported that the initial, partial PDEA was sent out for review last week. Much of the analysis from the HYDROPS runs will be included in the fall version of the PDEA, along with the economics, *assuming* runs are available in June.

PMEs

5.01 CZMA

This is not an actual PME. It is a checklist of what needs to be done. We will revisit this over time.

5.02 INSTREAM FLOWS/WATER RIGHTS

The legality of this is currently being debated in external forums. We will discuss this topic at future meeting(s). It will probably not be a PME. R-E01- Low Flow Augmentation from Baker Project.

5.03 SUBMERGED LANDS

Lloyd reported that we are waiting for DNR in Olympia to engage in discussions on this. There remain questions about ownership of the Baker riverbed and Baker lakebed and associated NPR fees. This is a

requirement of the licensee to control *{own or have secured perpetual easements}* the inundated *lands* and other lands *within the project boundary*. Consequently this will not be a PME.

5.07 DROUGHT CONDITIONS

Mark put together a white paper on the issue of dependable capacity, which kicks in during drought conditions. It has been distributed to the TST members for review. We will get an update at our June meeting. If, after it is discussed at the next TST meeting, it is deemed appropriate, this paper (as revised by the TST) will be distributed to this Working Group. The sense is that a drought PME is not needed.

STUDY REQUESTS

ER03-SPAWNING AND INCUBATION FLOWS

This is a complex issue that will affect Operations. We are most concerned about Skagit River flows. The Baker project has limited influence on these. Stan sees this Study Request as having relevance in both this Working Group and the Aquatics Working Group. He will bring it up for discussion at the May 8, Aquatics Working Group meeting and we will discuss its status at our June 11 meeting.

HANDOUTS (bolded handouts will be posted on the website)

- Specification for Operations Model to be Used in Baker Project Re-licensing and Current Capability of HYDROPS to Meet the Specification (Revised by Stetson on January 13, 2003- Comments by PSE/Powel on January 24, 2003.
- Technical Scenario Teamlet (TST) Functional Flow Diagram (Version 2.0- 05-07-03)
- Discussion Recent Conditions (Pre-Interim Protection Plan). Revised based on 4/25-teamlet discussion.
- USACE DRAFT- November 19, 2002 Article 32
- PSE Hydroelectric Reports: FERC Form 1 for years 1997-2002
- Aurora Market Power Price Forecast- Source: Draft Least Cost Plan, March 31, 2003
- RE03- Baker River Project Re-licensing Study Request

PARKING LOT

- New Baker EAP Inundation maps are available at end October 2002
- Consider who will be the number cruncher for this team: PSE? Other?
- Presentations:

USFS Baker Watershed Analysis Wild and scenic river 101 Jon Vanderheyden

Fisheries/Hydraulics 102

FEMA

• How will we define and share economic analysis (methods, assumptions re: unit costs, etc.) across Working Groups?

EVALUATION OF THE MEETING

Well Done

- Lunch was outstanding!
- Meeting was well run
- FERC participation
- Finished early

Change for Next Time

- Needed more time for HYDROPS discussion
- Better phone technology?

What's Hot?

- Flood control
- Getting draft fall EA out with proper content
- 11 months ...and counting!

Study Report for Solution Team

• Flood Control and Spawning Incubation Flow Study Requests on hold until our June 11 meeting.

TENTATIVE AGENDA FOR NEXT MEETING

June 11, 2003 at PSE Office, Mt. Vernon, WA 9:00 to 2:00 PM

9.00 -	9.05	Introductions
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- 9:05 9:10 Review/revise minutes and agenda
- 9:10 9:15 Review Action Items
- 9:15 9:35 HYDROPS and TST Update
- 9:35 9:50 Debrief of May 14 Cross Resource Workshop: Next steps
- 9:50 10:15 Role of this Working Group
- 10:15 10:30 PDEA Update
- 10:30 10:45 Status of PMEs

5.01: CZMA, 5.02: Instream Flows and Water Rights, 5.03: Submerged Lands.

- 10:45 11:00 Break
- 11:15 11:45 PME 5.06: Flood control (COE proposal and current Article 32)

Update on USACE/Skagit County flood coordination and integration into this process? R-E02 Skagit County Flood Control Study Request

- 11:45 12:15 Review Study Requests:
 - R-E01 –Low Flow Augmentation from Baker Project Continuing discussion
 - R-E03 –Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence from 1990 to present.
- 12:15 12:30 Lunch
- 12:30-12:45 Update on dependable capacity.
- 12:45 12:50 Set July 9, 2003 agenda (at Mt. Vernon or at the USFS in Mountlake.)
- 12:50 1:00 Evaluate Meeting
 - What's Hot?
 - Studies Report for Baker Solution Team
- 1:00 2:00+ HYDROPS Demo (for those who are interested)