

**EXHIBIT NO. ___(KO-5HC)
DOCKET NO. UE-06 ___/UG-06 ___
2006 PSE GENERAL RATE CASE
WITNESS: KRIS OLIN**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**Docket No. UE-06 ___
Docket No. UG-06 ___**

**FOURTH EXHIBIT (HIGHLY CONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF
KRIS OLIN
ON BEHALF OF PUGET SOUND ENERGY, INC.**

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FEBRUARY 15, 2006

April 15th, 2004

TO: Ed Schild

FROM: Energy Production & Storage Staff

RE: **Assessment of Baker River Hydroelectric Project Alternatives**

I. Summary

This memorandum updates the Company's analysis of the Baker River Hydroelectric Project ("Project") FERC relicensing alternatives and addresses the merits of the following proposed actions:

- In order to proceed with relicensing, the Company must file an application with FERC on or before April 30, 2004. The draft application proposes terms and conditions for a new license that, if adopted by FERC, would allow the Company to continue to generate 714,060 MWh (annual average output) at a levelized cost of approximately \$█/MWh. The draft application is responsive to applicable legal requirement; however, the application should be viewed as a "best case scenario" in that FERC and other agencies may impose additional requirements that could reduce generation and increase cost.
- Efforts to arrive at a multi-party settlement are ongoing. The Company is now prepared to present its "final offer" (prior to submitting a license application to FERC) to interested parties. If this offer is accepted (and approved by FERC), the new license would allow the Company to continue to generate 709,374 MWh (annual average output) at a levelized cost of approximately \$█/MWh. If accepted, this proposal would substantially reduce regulatory risk associated with a contested licensing proceeding.

Based upon the analysis summarized below, the Company should: (i) file its proposed license application by April 30, 2004, and (ii) present its proposed "final offer" in hopes of securing a preapplication settlement.

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II. Background

The Project (which consists of the Upper Baker and Lower Baker developments) has an install capacity of approximately 170 MW and produces an annual average output of 716,320 MWh. The current cost to generate is approximately \$█/MWh.

The existing license for the Project expires on April 30, 2006. The Company must relicense the Project in order to keep generating. Decommissioning is an alternative; however, the Project has historically been a reliable and below-market generation resource.

To preserve the asset and develop alternatives, the Company embarked upon a relicensing effort approximately four years ago. No final decision has been made with respect to relicensing, decommissioning or any other alternative. These alternatives are matters that will continue to be assessed as events unfold.

The relicensing effort initiated by the Company is a collaborative process involving key resource agencies and other interested parties. Recognizing that new and more stringent environmental requirements would be applied to the Project, the Company initiated this process as a means to develop an application with board support and reasonable conditions. The goal was to develop a multi-party offer of settlement to FERC, but short of achieving this goal, to reduce controversy and narrow the issues to be resolved in the FERC proceeding. The Company has provided FERC with semi-annual progress reports on the relicensing process, and these reports provide a good overview of the work that has been undertaken by the collaborative.

The collaborative has, by and large, been successful. For example, early on, various fishery agencies and tribes advocated fish screens (in lieu of the less expensive fish passage facilities currently employed at the Project). Fish screens would have added approximately \$210 million to the capital cost requirement of the Project (in contrast to what appears to be a consensus proposal for fish passage with an associated capital cost of approximately \$50 million). There have been other significant issues for which consensus proposals have been developed. The general trend has been to bring stakeholder expectations more in line with the Company's expectations.

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While progress has been made in many areas, the parties have not reached consensus with respect to instream flows, flood control and terrestrial habitat (acquisition of mitigation lands). In terms of cost per MWh, the difference is \$█/MWh (PSE's proposed license application) compared to \$█/MWh (the Agency/NGO proposal).

The Company has done extensive analysis of the technical issues bearing upon the terms and conditions of a new license. A list of technical studies (undertaken to date) is attached at Tab A. A compilation of the Company's economic analysis (undertaken to date) is attached at Tab B.

III. Need For the Project

The Project is part of the Company's existing resource portfolio. As noted above, the Project provides an annual average output of 716,320 MWh and accounts for approximately 3% of the company's resource portfolio. The Company needs to retain its existing resources, assuming that they are reliable and remain cost-effective. A further discussion of the Company's resource requirements can be found in PSE's Least Cost Plan and Least Cost Plan Updates, filed with the Washington Utilities and Transportation Commission on April 30, 2003 and August 29, 2003, respectively. A further discussion of the need for the Project is included in the FERC License Application, and this discussion is attached at Tab G.

Once a project has been licensed by FERC, it must either be relicensed or retired in accordance with the FERC decommissioning proceeding. This Project has historically been reliable and cost-effective. It is currently producing power at a cost well below market. Relicensing efforts are being pursued with the expectation that this asset can be retained within the Company's resource portfolio as a reliable and cost-effective resource. However, as noted above, no final decision has been made with respect to relicensing the Project.

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IV. Alternatives

There are three relicensing alternatives currently presented to the Company, as well as the fourth alternative of project decommissioning. All alternatives, in theory, seek to preserve the value of the asset (whether or not the Project is owned by the Company or subsequently sold to a third party). However, the costs and benefits of each alternative, as currently understood, differ substantially. The alternatives are summarized as follows:

- PSE's Draft License Application: The Company has prepared a license application that proposes a variety of measures necessary to obtain a new FERC license. A more detailed description of this proposal, and a corresponding economic analysis, is attached to this memorandum at Tab C. This proposal takes into account all project elements necessary for a meritorious and defensible application responsive to applicable regulatory requirements (e.g., the Federal Power Act and various related and/or subsidiary regulatory requirements addressing matters such as fish and wildlife, water quality, flood protection, cultural resources, and listed species). If implemented, the cost of power under this alternative would be approximately \$█/MWh (levelized) over the thirty-year term of a new FERC license.¹
- Agency/NGO Proposal: Resource agencies, tribes and other interested parties have formulated their preferred terms and conditions for a new FERC license. This proposal and a corresponding economic analysis are attached to this memorandum at Tab D. As with the Company's proposal, the parties supporting this alternative believe that it reflects meritorious and defensible conditions that are responsive to applicable legal requirements. If implemented, the cost of power would be approximately \$█/MWh (levelized) over the thirty-year term of a new FERC license.
- Settlement Proposal: The Company has developed a proposal (that draws from the above-described alternatives) to achieve settlement. There is value to be achieved by eliminating or substantially reducing regulatory risk through settlement. Moreover, FERC favors multi-party settlements,

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¹ FERC economic analysis methodology requires use of a thirty-year term even though it may issue a license with either a thirty, forty or fifty-year term.

so long as they are responsive to appropriate legal requirements and have broad support among interested parties. FERC staff is participating in the collaborative. FERC staff have encouraged efforts to arrive at a settlement. A more detailed description of this proposal and a corresponding economic analysis is attached to this memorandum at Tab E. If implemented, the cost of power would be approximately \$█/MWh (levelized) over the thirty-year term of a new FERC license.

- Decommissioning Alternative: The Company is also considering the alternative of decommissioning the project and acquiring replacement power. This alternative would come into play if a new FERC license could not be secured on favorable terms. However, this alternative is difficult to quantify. Costs that might be associated with decommissioning are speculative. There are also offsetting revenues to be considered in connection with the sale of surplus properties, and these are also somewhat speculative. Thus, for purposes of assessing this alternative, without considering the cost of replacement power or the regulatory treatment of licensing costs and net plant, the Company has currently determined an estimated range of decommissioning costs that extend from \$15 million to \$400 million. The high end of this range addresses a scenario where the Company is required to remove both the Upper Baker and Lower Baker dams and restore the basin to its pre-project condition. The lower end of this range addresses a scenario where both dams stay in place, assets are sold to a third party, and the Company is left with a small net cost associated with decommissioning, plus the cost of replacement power. An economic assessment of this alternative is attached to this memorandum at Tab F. Nothing has occurred, to date, in connection with the relicensing efforts that would cause the Company to conclude that decommissioning is preferable to pursuing a license application. There appears to be general acceptance among all stakeholders that the Project provides sufficient benefits that it ought to continue in operation.

V. Analysis

The following analysis compares costs associated with the foregoing licensing alternatives and project decommissioning. There are also costs and risks associated with the continued ownership and operation of the Project that are given under any licensing alternative. These costs (e.g., dam safety expenditures and flood control) are not called out below, but are addressed in the backup materials attached to this memorandum.

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PSE Draft License Application: In order to pursue a new licenses, the Company must file its application by April 30, 2004. This application will reflect the elements of the "PSE Draft License Application" discussed above. As noted above, were such an application to be favorably acted upon by FERC, the result would be a 40-year license that would allow the Company to continue to generate 714,060 MWh per year at a cost of approximately \$█/MWh (levelized based on 30-year analysis). Absent settlement, this application would be pursued in a contested FERC proceeding.

As noted above, the primary issues in dispute are instream flows, the scope and extent of flood control measures to be provided, and scope and extent of lands to be acquired for wildlife habitat. Pursuing the proposed application in a contested FERC proceeding entails significant regulatory risk, particularly in view of the outstanding issues. Some agencies that are pursuing higher demands have decision-making authority (and/or significant influence upon the decision that FERC ultimately makes). For example, in a case of instream flows, the instream flow for the Project will likely be established by the Washington State Department of Ecology ("Ecology") in a Water Quality Certification ("WQC") issued pursuant to § 401 of the Clean Water Act. When issuing a WQC, Ecology must consider the need to protect beneficial uses other than hydropower. Ecology is likely to significantly weigh its decision to favor fish and wildlife requirements. Once issued, the WQC is binding on FERC (although Ecology does have an appeal procedure), and FERC must issue a license that incorporates these instream flows.

Similarly, the U.S. Forest Service is a leading advocate for acquiring large quantities of resource lands. The Forest Service has authority under Section 4(e) of the Federal Power Act to establish mandatory conditions that the Forest Service believes are necessary to address its interests. As with the WQC, FERC must accept these conditions (although the Forest Service does provide appeals procedures).

Unresolved issues with respect to flood control are also troublesome. The concern here is not just the risk of burdening the Project with operational constraints and capital expenditures for additional flood control. There is a further risk that additional flood control measures will trigger additional--and expensive--measures to protect aquatic resources. Legal memoranda discussing the authorities of various agencies participating in the FERC proceeding are attached at Tab H.

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FERC *does not* exercise its discretion in a manner that ensures that the applicant is issued a license that provides economic benefits. Conditions that limit generation or add cost to address environmental concerns may well render a project uneconomic. FERC leaves it to the applicant to evaluate the economics, and the applicant is free to accept or reject the license.

Based upon positions asserted by various agencies in the relicensing proceeding to date, the risk associated with a contested FERC proceeding (and subsidiary proceedings associated with mandatory conditioning) is a Project cost anywhere from \$█/MWh (levelized, "PSE's Draft License Application") to \$█/MWh (levelized, "Agency/NGO Proposal"). It should be noted that the "Agency/NGO Proposal" does not set an upper limit on what could come out of a contested FERC process. However, the Agency/NGO Proposal does reflect what various agencies and stakeholders can be expected to advocate in a contested proceeding and provides a clear point of reference for what could come out of a contested proceeding.

Settlement Proposal: If the Company's "Settlement Proposal" were accepted by interested parties and approved by FERC, the result would be a project with an annual output of 712,447 MWh, at a cost of approximately \$█/MWh (levelized). While this is a significant increase in cost when compared to the proposed license application, it falls well within an acceptable range of costs that could result from the FERC process and significantly reduces the risk of a bad result (\$█/MWh). However, it is critical to any settlement that all (or substantially all) interested parties commit to a comprehensive settlement agreement.

It remains to be seen how the parties will respond to PSE's proposal, and depending upon this response, further analysis may be required. It is clear, however, that an opportunity for settlement is now presented, and the opportunity to secure a new license on favorable terms through settlement should be pursued.

Agency Alternative: Based upon the current assessment of the alternatives, there is no reason at this juncture to pursue a license application or a settlement on the terms proposed by the agencies. However, this alternative will be reassessed, from time to time, as the licensing proceeding continues.

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Decommissioning Alternative: Based upon current assessment of the alternatives, and the fact that relicensing alternatives present a reasonable opportunity to obtain a new license that will secure a reliable and cost-effective resource for an additional 40 years, the decommissioning alternative is not viable at this time. However, as with other alternatives, this alternative will be reassessed as the FERC proceeding continues.

VI. Selection of Alternatives

The Company should proceed to file its license application on or before April 30, 2004, proposing terms and conditions outlined in the "PSE Draft License Application" discussed above. The Company should also continue to pursue settlement negotiations and seek a comprehensive settlement on the terms described in the "Settlement Proposal" discussed above. This proposal should be pursued in the context of a settlement agreement that substantially reduces the Company's regulatory risk of less favorable license terms and conditions.

VII. Reevaluation

The foregoing analysis and associated conclusions should be reevaluated after the Company has had the opportunity to present its settlement proposal and determine the viability of an acceptable settlement.

cc: Eric Markell
George Pohndorf
Wayman Robinette
Joel Molander
Cary Feldmann
Kendall Fisher
Mark Quehrn