

ITEM NO. 1

PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: September 7, 2010

REGULAR  CONSENT  EFFECTIVE DATE \_\_\_\_\_ N/A \_\_\_\_\_

DATE: August 12, 2010

TO: Public Utility Commission

FROM: Kelcey Brown <sup>KB</sup> and Linnea Wittekind <sup>LW</sup>

THROUGH: Lee Sparling <sup>LS</sup> and Maury Galbraith <sup>MG</sup>

SUBJECT: IDAHO POWER COMPANY: (Docket No. LC 50) Acknowledgment of 2009 Integrated Resource Plan.

**STAFF RECOMMENDATION:**

Staff recommends the Commission acknowledge Idaho Power Company's (Idaho Power or Company) 2009 Integrated Resource Plan (IRP or Plan) with requirements for Idaho Power's 2011 IRP, by adoption of the attached proposed order.

**DISCUSSION:**

Idaho Power Company filed its 2009 IRP on December 30, 2009. The filing was in accordance with Oregon Public Utility Commission (Commission) Order No. 07-002<sup>1</sup> that directs all energy utilities to file an IRP within two years of Commission acknowledgement of the previous plan.<sup>2</sup> The Commission "acknowledges" resource plans that satisfy the procedural and substantive requirements of the order and that seem reasonable at the time acknowledgement is given.

The proposed order, attached to this memo, summarizes Staff's and parties' comments and a Commission resolution regarding the load forecast, the preferred portfolio for the first and second ten-year planning periods, the Boardman to Hemingway transmission project (B2H project), demand-side management (DSM) & energy efficiency programs, policy and general issues.

<sup>1</sup> As corrected in Order No. 07-047.

<sup>2</sup> The original due date for Idaho Power's 2009 IRP was June of 2009. That date was extended by Commission order to December of 2009.

Based on Staff's analysis of the IRP and responses to data requests, Staff recommends the Commission acknowledge Idaho Power's 2009 IRP with eight agreed-upon requirements.

### Resource Needs

Electric utilities forecast incremental resource needs based on expected loads, reserve margin and existing resources – accounting for contract expirations and plant retirements. Following is a summary of Idaho Power's resource needs assessment.

*Energy* – Using an August 2009 load forecast, average system load, or average-energy consumption, is forecasted to grow by an average of 13 MW, or 0.64 percent on an average annual basis over the twenty-year planning period. Idaho Power projects that its system will become short by 2014.

*Capacity* – Based on the 2009 load forecast, Idaho Power forecasts that its system will become short on capacity in 2013. Idaho Power's 2009 IRP projects peak-hour load will grow at an average annual rate of 53 MW or 1.5 percent.

Idaho Power compared its 2009 load forecast to the Northwest Power and Conservation Council's (NPCC) sixth Power Plan forecast and found that the council's peak average annual growth rate of 2.13 percent over the twenty-year time period compared favorably with its projected growth rate of 2.02 percent.<sup>3</sup> In its forecast of average system load, Idaho Power projects an average annual growth rate of 1.4 percent<sup>4</sup>, versus the NPCC forecast of 1.96 percent.

### Boardman to Hemingway Transmission Project (B2H)

In the 2009 IRP, the B2H project is modeled as a 300 mile, single-circuit, 500 kV electric transmission line between northeast Oregon and southwest Idaho. Idaho Power has modeled the line with an export capability of approximately 1,400 MW from east to west and an import capability of 850 MW from west to east, for a total modeled capacity of 2,250 MW.

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<sup>3</sup> The Idaho Power load forecast for both peak and average energy includes a reduction in load due to its demand side management (DSM) program of approximately 323 MW and 259 MWh respectively. When comparing the average annual growth rates of Idaho Power and NPCC it is necessary to add back the reduction in load due to DSM. The Idaho Power 2.02 percent and 1.4 percent average annual growth rates do not include the aforementioned DSM effects.

<sup>4</sup> See footnote three above.

Transmission projects inherently carry a significant level of risk due to long-lead times, large capital investments and an uncertain stream of wheeling revenues. Idaho Power analyzed the impact of varying third-party subscription rates and capital construction costs of the B2H project. In support of its subscription rate assumptions, Idaho Power pointed out significant demand for transmission capacity on its Idaho-Northwest transmission path. Idaho Power also stated that it has entered into an agreement with PacifiCorp to negotiate the joint ownership and development of the B2H Project.

### Preferred Portfolio

For the first time, Idaho Power has bifurcated the required twenty-year planning period into two ten-year planning periods, 2010-2019 and 2020-2029. The Company believes this approach prevents near-term decision making from being unduly influenced by resource decisions in the second ten-year planning period.

Originally evaluated in the 2006 IRP and common to all resource portfolios as "committed" resources in the 2009 IRP are (1) the Langley Gulch combined-cycle combustion turbine (CCCT), (2) up to 150 megawatts (MW) of wind generation and (3) two 20 MW increments of geothermal energy coming on-line in 2012 and 2016.

Idaho Power's selection of Portfolio 1-4 (Boardman to Hemingway) for the first ten-year planning period (2010 – 2019) and Portfolio 2-4 (Wind and Peakers) for the second ten-year planning period (2020 – 2029) as the overall preferred portfolio is based on the Company's conclusion that the portfolios provide the best combination of expected costs and associated risks for customers.

The Company requests acknowledgement of the following action items:

- 2010 Irrigation Peak Rewards program increases to 220 MW  
FlexPeak Management program increases to 40 MW
- 2011 Irrigation Peak Rewards program increases to 250 MW  
FlexPeak Management program increases to 45 MW
- 2012 Wind project on-line 150 MW  
Langley Gulch CCCT on-line 300 MW  
Geothermal project on-line 20 MW
- 2013 Boardman to Hemingway construction begins  
Shoshone Falls Upgrade Project construction begins
- 2015 Shoshone Falls Upgrade Project on-line 49 MW  
Boardman to Hemingway completed for market purchases of 250 MW
- 2016 Geothermal project on-line 20 MW
- 2017 Boardman to Hemingway capacity for market purchases of 175 MW

The Action Plan includes activities for decisions the Company intends to make in the next one to ten years. Lastly, Idaho Power believes that the flexibility to adjust to changes during the present period of uncertainty with regard to carbon regulation is very important.

#### Parties' Recommendations

Parties' concerns throughout the IRP process focused on the following topics: the preferred portfolio, the B2H project, the load forecast, and demand-side management. For a full summary of parties concerns please see the attached Proposed Order, pages 4 –12.

In its final comments, Renewable Northwest Project (RNP) supported Staff's conclusions, and agreed with Staff that the Company's Preferred Portfolio 1-4 will foster growth of new renewable resources in the Northwest. RNP further clarified that its previous support for Portfolio 1-3 in its opening comments, is now extended equally to Portfolio 1-4.

In its final comments, the Oregon Department of Energy (ODOE) supported Idaho Power's load forecast estimates in its 2009 IRP. ODOE agreed with the Staff comments associated with Idaho Power's load forecast, and reiterated Staff's concerns regarding the stagnant load growth forecast beyond 2019. ODOE recognized the need for Idaho Power to develop more portfolios, and suggested that the Company should consider taking uncertainty into consideration in its future analyses.

With regard to the B2H project, ODOE supported the IRP's identification of a need for an affordable and reliable supply of energy resources. ODOE also supported Staff's recommendation for more information and analyses in future IRP planning cycles. Lastly, ODOE sought clarification from Staff on its recommendation in final comments for "conditional acknowledgement" of the B2H action item.

In its reply comments, Idaho Power questioned Staff's recommendation of conditional acknowledgement. In its critique, Idaho Power pointed out that in Staff final comments, Staff supported the B2H project based upon three criteria; (1) comprehensive and thorough analysis, (2) the Company's preferred portfolio, inclusive of B2H, represented the best mix of expected costs and associated risk for the utility and its customers, and (3) the Company's IRP satisfied the Commission's procedural and substantive requirements. Idaho power believes that Staff's proposal, to defer acknowledgement of the 2009 IRP until particular uncertainties regarding B2H are resolved, is unreasonable and unwarranted.

Idaho Power agreed with Staff, that if there are significant deviations from the IRP assumptions on issues such as construction costs, equity ownership, and subscription rates, the Company needed to be prepared to explain these deviations in its 2011 IRP. However, given that Staff found the Company's estimates to be reasonable at this time, Idaho Power does not believe that conditional acknowledgment is necessary. The Company agreed to provide additional analyses of the B2H project, as prescribed in the eight conditions of Staff's proposed order.

With regard to the remaining issues: the load forecast, DSM and energy efficiency, and renewable energy credits, Idaho Power supported Staff's conclusions on these issues in its final comments.

In conclusion, Idaho Power recommended that full acknowledgement of its 2009 IRP with requirements is appropriate and consistent with past Commission practice relating to acknowledgement of plans that include linear resource acquisition. The Company agreed to each of the Staff proposed items in its proposed order, and further clarified that Idaho Power understands that acknowledgment of the 2011 IRP will be dependent on the Company addressing each of these requirements. Idaho Power recommended that the Commission adopt its revised proposed order and acknowledge the Company's 2009 IRP.

With Idaho Power's commitment to the eight proposed requirements in the proposed draft order, Staff believes that adoption of its attached proposed order, incorporating many of the changes suggested by Idaho Power, is reasonable. The purpose of Staff's recommendation for acknowledgement with conditions was to have the ability to review the B2H project as an uncommitted resource, with further evidence of cost and revenue estimates in the 2011 IRP. Idaho Power has committed to providing this information, and has further clarified its understanding that acknowledgement of the 2011 IRP will be dependent on the Company meeting each of these requirements.

Staff appreciates the comments of ODOE and RNP, and their support of the Staff findings and recommendations. With regard to ODOE's request for further clarification of the Staff proposed order, the preceding comments explaining the intent of Staff's recommendations hopefully accomplishes that needed clarity.

#### Staff's Final Recommendations

Staff recommends the Commission acknowledge Idaho Power's 2009 IRP with the following agreed-upon requirements for the Company's 2011 IRP:

1. The Company has committed to filing its next IRP no later than June 30, 2011.

2. In its 2011 IRP, Idaho Power will treat B2H as an uncommitted resource and accordingly will update its B2H project analysis and include progress the Company has made towards securing equity partners, updated estimates of construction costs and quantitative estimates of third-party subscription on the B2H line and future wheeling revenues. In addition, Idaho Power will provide third-party documentation in support of its construction cost estimates.
3. In its next planning cycle, Idaho Power will analyze coal curtailment and the costs associated with coal plant retirement.
4. In its next planning cycle, Idaho Power will develop significantly more portfolios for the second ten-year planning process, including portfolios designed to evaluate the benefits of a combined cycle combustion turbine versus a single cycle combustion turbine.
5. In its next planning cycle, Idaho Power will analyze any potential EPA, state and other federal agency regulations associated with air quality, fly ash, and water that may affect its generation facilities. These results will be included in the next IRP analysis.
6. In its 2011 IRP, Idaho Power will provide a more robust justification for its load forecast for the second half of the planning period. In addition, Idaho Power will provide additional analysis and a description of its estimated price response related to future carbon regulation for each customer class in its next IRP planning cycle.
7. In its 2011 IRP, Idaho Power will devote specific chapters explaining the selection of the Preferred Portfolio in greater detail and as compared to an alternative portfolio. This narrative will include an explanation of the relative performance of each portfolio within each of the modeled risk measures, including charts and matrices showing the relative ranking of each portfolio using cost and risk metrics. Idaho Power will provide an explanation of how each portfolio performed with regard to the qualitative measures the Company considered in its selection process.
8. In the 2011 IRP, Idaho Power will model the full range of possible futures for its updated risk variables. Idaho Power will model both a high and low future for each variable.

Idaho Power's 2009 Integrated Resource Plan  
August 10, 2010  
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**PROPOSED COMMISSION MOTION:**

Idaho Power's 2009 Integrated Resource Plan, with eight agreed upon requirements for the 2011 IRP, be acknowledged by adoption of the attached proposed order.

Attachment

LC 50 Staff Report