

Agenda Date: January 6, 2014
Item Numbers:

Dockets: UE-120767 and UG-120768
Company: Puget Sound Energy

Staff: Deborah Reynolds, Assistant Director, Conservation and Energy Planning

Recommendation

Direct the Executive Director and Secretary to issue a letter acknowledging that PSE's 2013 Integrated Resource Plan complies with WAC 480-100-238 and 480-90-238. The letter should include attachments with comments consistent with this memorandum.

Discussion

On May 31, 2013, Puget Sound Energy (PSE) filed its 2013 Integrated Resource Plan (IRP) with the commission. The commission received approximately 3,000 comments in response to the IRP. On October 10, 2013, the commission held an all-day hearing at its open meeting. At this hearing, PSE presented the findings contained in its IRP, and the commission heard over six hours of public comments. Staff and commission policy advisors worked with each commissioner to assist in the commissioner's consideration of the contents of PSE's IRP and the Colstrip study included in the IRP.

PSE's analysis of resource needs over a 20-year planning horizon is expansive and based on sound modeling approaches. PSE introduced two new types of analysis into this IRP. A typical IRP assumes the continued operation of existing resources until the end of the resource life. At the direction of the commission, PSE modeled the costs of continued operation of the Colstrip power plant under different environmental regulatory scenarios. PSE developed a comprehensive modeling approach to integrate the Colstrip analysis with the rest of the plan. This IRP also included an "operational flexibility" analysis, which evaluated the adequacy of PSE's system to meet hourly and intra-hourly fluctuations of variable renewable resources. This is a promising start and the company should continue to refine and integrate new types of analysis into the IRP.

After consideration, commission staff recommends the following determinations by the commission regarding the IRP:

1. With regard to the electric component of the next IRP, PSE must:
 - a. Include a nonzero cost of CO₂ emissions in the Base Case;
 - b. Model distributed generation, providing a detailed explanation of its contribution to meeting peak and energy demand and the expected production curve;

- c. Quantify the amount of interruptible gas capacity used in the model by peakers, and provide the details of the analysis for assuming that these amounts of interruptible gas capacity will be available when needed;
 - d. Explain how changes in the load ratio (peak to base) affect the relative economics of different types of generation resources;
 - e. Provide more detailed justification for any assumptions or inputs into the load forecasting model;
 - f. Model demand response separately from energy efficiency in the portfolio screening model as well as the conservation potential assessment; and
 - g. Evaluate transmission constraints in the Puget Sound region and its impact on resource selection.
2. With regard to the gas component of the next IRP, PSE must assess whether early acquisition of specific blocks of pipeline capacity will impact the timing of selection of other resources.
 3. With regard to public participation, PSE will:
 - a. Make information and models available to allow advisory group participants to examine PSE's planning reserve margins;
 - b. Use an outside facilitator;
 - c. Provide written responses to all advisory group questions; and
 - d. As part of the draft and final IRP, file input data necessary to allow staff to examine the IRP, using existing rule provisions to protect confidential information.

Commission staff recommends the following determinations by the commission regarding the Colstrip study included as part of the IRP:

1. Based on the information presented in the Colstrip study, it is unclear whether continued operation of Colstrip should or should not be a component of the Resource Plan selected by PSE.
2. In some places, the inclusion of more information would clarify the analysis. In other places, the adjustment of just one or two variables within the range of possible reasonable values would render an early closing date of some or all Colstrip units more cost-effective for customers than continued operation. For example:
 - a. The assumption of zero CO₂ cost in the Base Case over the 20-year plan is unrealistic in light of state and federal action on greenhouse gases as well as CO₂ costs currently reflected in the market.
 - b. The projected level of load growth in the Base Case, which supports the economics of Colstrip, lacks sufficient explanation and justification.

- c. The analysis is limited to the expected costs of current non-carbon environmental regulations, and makes no attempt to quantify the future risks of additional, stricter environmental regulation.
 - d. The study did not contain the quantification of decommissioning costs or the potential to mitigate environmental compliance costs through settlement.
 - e. Some cost projections are based on assumptions that PSE will be successful in administrative or court challenges to proposed EPA rules. If PSE challenges environmental requirements in court, it should expect to justify its challenge, and the costs associated with it, as being in the best interests of ratepayers.
3. To embark on major investments in Colstrip with so much uncertainty could be harmful to PSE, its ratepayers and the broader public interest. Historically, post-investment prudence review has been used to protect ratepayers from excessively risky investment. Reliance on that regulatory mechanism may not serve the public interest in this unique situation.
 4. Any commission decisions on the economic viability of the continued operation of Colstrip or an alternative closure or partial-closure plan would be made in the context of a separate proceeding, but not in the context of an IRP.

Conclusion

Direct the Executive Director and Secretary to issue a letter acknowledging that PSE's 2013 Integrated Resource Plan (IRP) complies with WAC 480-100-238 and 480-90-238. The letter should include two attachments with comments consistent with staff's memo.