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Memorandum

To: Public Service Commission

From: Division of Public Utilities
Constance White, Director
Artie Powell, Manager, Energy Section
Elizabeth Brereton, Utility Analyst
Andrea Coon, Technical Consultant

Subject: In the Matter of the Acknowledgment of PACIFICORP Integrated
Resource Plan 2004; Docket 05-2035-01

Date: May 5, 2006

Background

On November 3, 2006, PacifiCorp (Company) filed an update to its 2004 Integrated Resource Plan (IRP) with the Public Service Commission (Commission). In the past, the filed updates have been for informational purposes only, so no response from any party has been necessary. This update, however, is different in that the Commission has requested that interested parties file comments on the update. The following analysis and recommendations are intended to serve as the response of the Division of Public Utilities (Division) to the Commission's request.

Recommendations

The Division makes the following recommendations regarding the IRP Update:

- When an IRP update will be guiding resource procurement, the public process prior to the update's release should be intensified to more closely resemble the information exchange that exists in a full IRP process.
- Guidance from the Commission should be considered non-binding in terms of the upcoming RFP and the right of parties to challenge planning prudence in that docket.
- The Action Plan from the 2004 IRP Update should not be acknowledged as it cannot be shown to be an optimal resource plan.

Analysis

In its request for comments, the Commission specifically requested that inputs, assumptions, analysis, and conclusions with special emphasis on the Action Plan be addressed. In addition, the Commission requested comments regarding how the Update should be used in accordance with the upcoming RFP. The Division has also added a category, public process, that it feels deserves some examination. The Division will be ordering its comments by category as follows: Public process, RFP implications, inputs and assumptions, analysis and conclusions, and Action Plan. Some overlap of issues will occur due to the natural interconnection between them.

Public Process

SB 26, which outlines the resource procurement procedures PacifiCorp is required to follow, clearly promotes a competitive bid process. Therefore, in order to identify the proxy resource that will be bid against, it is necessary to identify the type, timing, and size of resource that the Company believes to be ideal in terms of cost and risk for serving future load requirements. The process currently in place for identifying the aforementioned requirements is the Integrated Resource Planning Process (IRP). During a year in which a full IRP is being produced, the Company holds numerous public input and technical meetings to explain the manner in which the plan is being developed. Since the Update was not necessarily intended to stand up to the rigors of a public review process and the Commission acknowledgement process that is required of an IRP, the public input process was somewhat less rigorous than that associated with a full IRP. Between the filing of the 2004 IRP and the filing of the 2004 IRP Update, only three public meetings were held over the course of approximately eleven months. This is in sharp contrast to the six public meeting held thus far in the current IRP cycle over only five months. This comparison is not necessarily meant to be a criticism of the manner in which PacifiCorp conducted its public process during the “off” year, but to demonstrate that the public process for an update is considerably less rigorous by design. By design, the IRP Update is not a completely new IRP but a selective update of the previous year’s IRP. This means that it may or may not be a sufficient indicator of the appropriate type, timing, and size of needed resource because not all inputs that are necessary to determine these factors are updated. In the future, the Division recommends that when it appears a resource decision may need to be based upon an IRP Update rather than a full IRP that

the Company should intensify its “off” year public process so that it more closely resembles the information exchange that exists in a full IRP process.

RFP Implications

With the enactment of SB 26 and its attached pre-approval of significant resource decisions, the landscape of energy resource acquisition has changed. The solicitation process and the RFP are for the pre-approval of a specific resource cost. Once the Company reaches the point where it embarks on the solicitation process, little can be done to address imprudence or flaws in the Company’s planning process, especially where it concerns the choice between resources that have differing lead times. Given a set of circumstances, a selected resource might be prudent despite imprudent or flawed planning up to that point. For example, if the planning process is flawed or imprudent, a less than optimal resource may be selected through the RFP because there is insufficient time prior to the load requirements to allow for a more optimal resource to be constructed. The nature of the solicitation process is such that a resource is selected and costs are pre-approved based on the context of current circumstances. The RFP and the solicitation are designed to address and pre-approve costs related to a specific resource proposal. It is not constructed to adequately address planning prudence or lack thereof.

The statute contemplates issues of planning and timing by calling for the Commission to “make rules providing a process for its review of an action plan.” Per USC § 54-17-301 an affected electric utility is required to file an action plan; and, with a review process in place the Commission is then “enabled” to review and provide guidance to the utility regarding its Action Plan. Absent a process through which an

action plan is reviewed, however, the significance of Commission “guidance” as it pertains to Docket No. 05-035-47 is unclear.

The current Action Plan Update before the Commission has not been through the process contemplated in USC § 54-17-301. The Division has serious concerns regarding the modeling of loads and forecasting methodologies. The load forecasts have not been updated since the last IRP. Public participation regarding the Action Plan Update has been limited to three public input meetings during the course of the past year. In short, the current “process” through which the Action Plan Update was reviewed is insufficient and has not provided a means through which issues of planning prudence as they pertain to an RFP can be fully assessed.

Absent rulemaking that establishes a process for Commission review, it is not clear to the Division that the Commission “must define for the pending Docket No. 05-035-47 solicitation approval proceeding, a process to ensure appropriate review” of the company’s Action Plan Update. The statute requires that the Company “shall file with the commission any action plan developed as part of the affected electrical utility’s integrated resource plan to enable the commission to review and provide guidance (USC 54-17-301(1)).” While the Commission “shall make rules providing a process for its review of an action plan,” it is not required to establish a separate process for this Action Plan Update outside the current rulemaking process for an action plan review process. .

As SB 26 rulemaking moves on to USC § 54-17-301 rulemaking, the Division is eager to explore a more formalized action plan review process. Pre-approval of significant energy resources, demands a greater level of scrutiny of the Company’s IRP. Within the current context of the 2004 Action Plan Update, however, the significance of

any Commission guidance should be limited. The guidance called for by SB 26 is informed by a process that does not exist. And, absent said process, any guidance issued by the Commission should be limited to this docket and should not constitute a pre-approval of any resource plan; nor should it preclude the discussion of issues regarding planning prudence and timing in the Company's upcoming RFP or any other relevant docket.

Inputs and Assumptions

The general purpose of an IRP is to determine the type, timing, and size of resources required to optimally fulfill system resource needs. The type, timing, and size of resources are largely driven by a few main model inputs including, load forecast, market price forecast, gas price forecast, and available resources. These are the input categories that the Division will be discussing. This does not imply that any other inputs are unimportant to the Division, merely that the four inputs listed above have a large effect on Company decisions in the near term, such as the resource to provide as a self-build option in the upcoming RFP.

For this IRP Update, only three of the four inputs listed above were altered. The first input, load forecast, uses a 20 year load forecast that the Company does not produce on a yearly basis. Therefore, the load forecast being used in this Update, at the time the Update was produced, was already more than 20 months old. It is highly implausible to assume that no changes would have occurred to any factor driving loads over a more than 20 month period. That being said, without an updated forecast it is difficult to determine what if any effect on the type, timing, or size of resources would arise out of an updated forecast.

The second input from above, market price forecast, was updated to utilize information from the Company's June 2005 forward price curve. The most interesting thing to note about the market price curve is that the shape is very similar to that of the gas price forecast. This implies that the market prices are largely being set by gas fired plants. It also implies that market prices will experience similar amounts of volatility as the gas price curve, making significant amounts of, especially spot, market purchases very risky. Given the Company's use of front office transactions as load serving planned resources, the Division looks forward to a more lengthy discussion of volatility related risk assessment in the IRP during the current cycle.

The third input, gas price forecast, was updated to reflect the Company's June 2005 information. This means that the curves used did not show the temporary distortions caused by the August and September hurricanes. It is interesting to note that the forecasts are significantly higher than those used in the 2004 IRP. In fact the curves seem to show that prices are now anticipated to be about 33% higher on average for the next 20 years than the prices forecast in the 2004 IRP. This being the case, the Division finds it strange that the Company did not attempt to test other types of resources for the 2012 West side need. While the Company did test several different options for the East side resource which ultimately ended with the 2009 gas fired resource being canceled, the options to replace a gas fired West side resource in 2012 do not appear, from Chapter 4 on portfolio analysis, to have been tested at all. The Division is very concerned that the Company did not examine options for each gas resource that is planned but not procured. The Division feels that the large amounts of price volatility risk associated with a growing amount of

gas fired resources on the system is a very serious issue that deserves in depth analysis. This analysis was lacking.

The final input, available resources was both updated and refined to more closely reflect the true capacity and energy availability from various resources. The Division appreciates the efforts taken by the Company to ensure that the available resource tally is accurate as possible. That being said, there were several refinements made that the Division believes should be examined further to ensure that the refinements are correct as to actual resource operating procedures. For example, the Division would like to have further discussion on how QF contracts are now being modeled so a determination can be made as to whether the modeling of these resources matches the actual historical availability. The Division would also like to have renewable resource modeling continue to be updated and refined as more information comes in as to the actual operating characteristics of the resource. For example, the modeling of the Wolverine Creek wind farm is currently based upon wind profile data gathered from anemometers, as actual operational data is obtained, the Division would like to see refinements to the manner in which this resource is modeled.

Analysis and Conclusions

For this section, the Division will focus on a couple of specific issues, but this does not imply that no other issues are of importance or that all other analysis and conclusions within the document were reasonable. Instead, the Division is choosing to focus on the issues that could have large current or near future implications in terms of choosing resources in the upcoming RFP.

As discussed above, all inputs to the model were not updated for the 2004 IRP Update. In addition, automatic resource addition logic, currently in the Company's possession, was not utilized in updating the resource portfolio. Instead, a manual method was used in which only select resources were even examined for a possible change.

Even though gas prices in the forecast went up by around a third, the large gas fired resource on the West side of the system was not tested for possible changes even though the variable costs associated with this plant had increased significantly. The Division is unsure of whether the reasoning behind this decision was ever discussed in the public meetings. The Division is also very concerned that one of the new resource possibilities examined was a 340 MW sub-critical pulverized coal unit with very little discussion. Given the concerns with pollutants, offering up older technology without a significant discussion of the tradeoff between cost and pollutant controls is a very poor choice. Additionally, a sub-critical pulverized coal unit presents risk of cost disapproval in other jurisdictions; this risk was not adequately addressed. Even though the portfolios containing the sub-critical resource were not selected as low cost, the Division is aware that the Company is participating in the development of IPP3. The Division is concerned that the selection of this resource as a self-build option as part of the next RFP could meet with considerable opposition because the resource was not selected as part of the Company's chosen optimal resource plan and was never fully vetted during the IRP public meetings.

Action Plan

The DPU remains unsure that the resource portfolio selected in the 2004 IRP Update constitute an optimal portfolio because the automatic resource logic model that the Company owns was still not used. Instead, manual “tweaks” to the chosen portfolio from the 2004 IRP were made to account for changes in the resource balance. Various parties within Utah have been asking the Company to use automatic resource addition logic since at least the spring of 2002. Because the Update was by no means comprehensive and not intended to be, however, the issue was not seriously pressed with the Company during the period in which the Update was being prepared. Without the automatic resource selection, based upon realistic and recent assumptions, the Division cannot state that the 2004 IRP Update Action Plan is in any way optimal, because we lack the analysis that would be necessary to do so.

For the current IRP cycle, the Company has indicated that all “planned resources” that have not yet been procured, such as front office transactions and wind, will be taken out of the resource mix to allow the automatic resource logic to select an optimal portfolio. The Division finds it unfortunate that the Company did not take such an action for the Update, particularly as the Company was probably aware that the Update would have an effect on resources to be procured prior to the release of a new IRP.

Cc: Committee of Consumer Services
Dave Taylor, PacifiCorp