BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 52

In the Matter of	)	
	)	OPENING COMMENTS OF THE
PACIFICORP	)	INDUSTRIAL CUSTOMERS OF
	)	NORTHWEST UTILITIES
2011 Integrated Resource Plan.	)	
	)	

I. INTRODUCTION

The Industrial Customers of Northwest Utilities ("ICNU") submits the following comments regarding PacifiCorp's (or the "Company") 2011 integrated resource plan ("IRP"). PacifiCorp has a well documented history of overestimating its resource needs in IRPs and requests for proposals ("RFPs") through faulty assumptions, including overly aggressive planning reserve margins. PacifiCorp has again inflated its resource acquisition plans based upon an unjustified increase in its planning reserve margins to 13%, which should be rejected by the Oregon Public Utility Commission (the "Commission" or "OPUC"). In addition, if the Company pursued all of the costly items included in its IRP, rate shock would occur. The Company needs to moderate its plans and consider the huge impact on rates resulting from its proposals in the IRP. The Commission should take a very careful look at all aspects of this plan and reject those costly components that are not absolutely necessary. PacifiCorp's industrial customers in Oregon have experienced over 17-20% average rate increases in total this year alone, and rate increases of this magnitude are not sustainable.

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The Commission should reject PacifiCorp's proposed 13% planning reserve margin increase because the Company's modeling did not properly reflect that some of its reserves can be met from other balancing authorities under the Northwest Power Pool Contingency Reserve Sharing Program and from transfers or spot sales from other entities, including unprecedented planning reserve levels projected for California during the IRP planning period. In addition, increasing planning reserves is inappropriate because the Company has not reviewed whether a number of regional initiatives and other market and scheduling changes that are being currently considered in the Pacific Northwest will reduce its reserve needs. Finally, the Company does not appear to have considered the relatively constant amount of unserved energy under each of the different planning reserve levels. Since the Company ignored these critical factors, ICNU recommends not modifying PacifiCorp's planning reserve margin at this time. If the Commission believes a change is warranted, then ICNU recommends reducing the planning reserve margin.

II. BACKGROUND

PacifiCorp has consistently overestimated its resource needs since at least 2004. One mechanism the Company uses to justify new resources is increasing its planning reserve margin. PacifiCorp's 2004 IRP proposed increasing its planning reserve margin from 12% to 15%, and the Company's analysis did not appear to consider lower reserve margins. The Commission refused to acknowledge PacifiCorp's inflated 15% planning reserve margin. Re PacifiCorps 2004 IRP, Docket No. LC 39, Order No. 06-029 at 21-22 (Jan. 23, 2006). The Commission concluded that a lower planning reserve margin was less costly, and found numerous faults in the Company's analysis, including that the assumed costs to customers of

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unserved energy and for reducing unserved energy were disputable, and PacifiCorp failed to analyze the cost-risk trade off of actual portfolios. Id. The Commission directed PacifiCorp to conduct more rigorous analysis of planning reserve margins in future IRPs. Id. at 22.

PacifiCorp's subsequent 2007 and 2008 IRPs included controversial proposals to acquire large base load resource acquisitions, which were also not acknowledged by the Commission. Re PacifiCorp 2007 IRP, Docket No. LC 42, Order No. 08-232 at 35 (April 24, 2008); Re PacifiCorp IRP, Docket No. LC 47, Order No. 10-066 at 26 (Feb. 24, 2010). PacifiCorp's 2007 IRP used a 12% planning reserve margin and analyzed planning reserve margins of 12%, 15% and 18%, but the Company did not consider whether a lower planning reserve margin would be appropriate. Order No. 08-232 at 28. PacifiCorp's 2008 IRP used a 12% planning reserve margin and again analyzed higher planning margins, but not lower margins. Order No. 10-066 at 24. The Company selected a 12% planning reserve margin instead of a higher amount because "it was not cost-effective to invest in incremental generation capacity for reserves because the cost premium for such investment is above the assumed [energy not served] cost." Id. While the use of the 12% planning reserve margin was not litigated in the last two IRPs, numerous aspects of the Company's resource planning projects were controversial, and many aspects of the IRPs were not acknowledged or were modified, including the Company's plans to acquire four base load thermal resources in the 2007 IRP. Order No. 08-232.

PacifiCorp's recent thermal resource RFPs have suffered from similar problems associated with the Company overestimating its resource needs. In 2007, the Commission rejected PacifiCorp's 2012 draft request for proposal because "PacifiCorp failed to justify the

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need for 1,109 megawatts (MW) of base load resources." Re PacifiCorp Draft 2012 RFPs, Docket No. UM 1208, Order No. 07-018 at 1 (Jan. 16, 2007). The Commission reiterated its previous concerns with the Company's overly aggressive planning reserve margins and concluded that PacifiCorp did not need to acquire two new thermal resources in the eastern side of its system in 2012 and 2013. Id. at 6-7.

PacifiCorp shortly thereafter filed what it characterized as its "2008 RFP" seeking to acquire or build up to 2,000 MWs of base load resources. The Commission approved the 2008 RFP with conditions, but did not acknowledge the need to acquire 2,000 MWs of base load resources. Re PacifiCorp 2008 RFP, Docket No. UM 1360, Order No. 08-310 at 3 (June 5, 2008). After issuing the RFP and obtaining bids from third parties, PacifiCorp eventually realized that it did not need all the resources it was requesting and sought to suspend the 2008 RFP. PacifiCorp Notice of Suspension of 2008 RFP (Feb. 27, 2009). PacifiCorp eventually restarted its RFP process and selected Lakeside II as the winning resource. See Docket No. UM 1360, Order No. 10-494 (Dec. 27, 2010); Attachment 1, PacifiCorp response to ICNU Data Request 3.2.

PacifiCorp's 2011 IRP proposes to use a 13% planning reserve margin. PacifiCorp 2011 IRP at 4. The increase to a 13% planning reserve margin is based on a stochastic loss of load study ("LOLP Study") that was conducted in 2010. Id. The Company states that the previous comprehensive LOLP Study was conducted for its 2004 IRP; that study was rejected by the Commission because of its overly high planning reserve margins. Id. at App. J at 245; Order No. 06-029 at 21-22. The use of a higher planning reserve margin helps

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drive PacifiCorp's claimed need to build or purchase three (instead of two) combined cycle combustion turbines by 2019. PacifiCorp 2011 IRP at 9 and App. J at 247.

Consideration of PacifiCorp's IRP proposals, including the planning reserve margin, should weigh the potential rate impacts against assumed reliability or other benefits. Since PacifiCorp was acquired by Mid-American Energy Holdings Company ("MEHC"), the Company has focused on making significant capital investments which has resulted in devastating impacts on customers through constant rate increases. When seeking Commission approval to acquire PacifiCorp, MEHC stated that its investments should reduce rate pressures and that annual rate increases would be less than 4% per year. Re MEHC and PacifiCorp Application, Docket No. UM 1209, PPL/312 at Gale/6-7 (Dec. 7, 2005). PacifiCorp's Oregon rate increases have far exceeded 4% a year, with industrial rates increasing about twice as much annually (7% per year) and around 50% overall since January 2006. Recent rate increases have been particularly high, with Oregon industrial rates increasing about 23% over the past two years.

III. COMMENTS

The Company's proposal to increase its planning reserve margin is based on the LOLP Study that suffers from a number of significant flaws. PacifiCorp relies upon its LOLP Study to evaluate its planning reserve margin because the study reviews the number of hours over a time period in which load is not expected to be met. PacifiCorp's 13% planning reserve margin should not be acknowledged because the LOLP Study did not: 1) properly model the region's existing contingency reserve program; 2) account for the many regional initiatives being considered and implemented for changing the manner in which power is scheduled and balanced;

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and 3) rely on transfers or spot purchases from other entities, including the Northwest spring run-off and the unprecedented levels of surplus capacity in California during the planning horizon. Finally, the Company does not appear to give any weight to the fact that the unserved energy amounts are relatively constant across all planning reserve levels. These issues demonstrate that the Company's 13% planning reserve margin is inflated and will result in PacifiCorp planning to acquire more resources than are needed.

A. Contingency Reserves Must Be Properly Modeled

The Pacific Northwest has in place—through the Northwest Power Pool—a Contingency Reserve Sharing Program ("CRSP") that requires balancing authorities within the region to supply reserves for the first hour following a generating forced outage or transmission line failure if the utility has inadequate reserves. While the Company has the analytical capability to properly model the CRSP, this source of supply was not modeled by the Company in its LOLP Study. See PacifiCorp 2011 IRP at App. J at 251 and 252. Instead, the Company merely assumed the results from a different analysis for a different utility with a different contingency reserve obligation would be a "reasonable proxy" for the CRSP impact.

ICNU's expert has reviewed the LOLP Study unserved energy results for each of the 100 Monte Carlo simulation runs for each planning reserve percentage scenario by month. This review indicates that the associated energy level is quite modest for the vast majority of hours when the energy needs are not met. This means that PacifiCorp might be able to rely upon the CRSP to meet some of its planning reserve needs. The Company should have accounted for the region's existing contingency reserve program because proper modeling could reduce PacifiCorp's estimated planning reserve margin.

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B. Regional Initiatives Can Reduce PacifiCorp's Reserve Needs

There are a host of ongoing collaborative regional initiatives investigating how variable generating resources can be accommodated in the Pacific Northwest and the Western Electricity Coordinating Council. These initiatives are applicable or will provide system benefits beyond simply integrating variable resources into the electricity system through greater coordination of the western power system. One example of these many efforts is the collaborative efforts of the Columbia Grid, Northern Tier Transmission Group and the West Connect transmission planning groups ("Joint Initiative"). The Joint Initiative is considering significant market changes, including the introduction of an intra-hour transmission purchasing and scheduling system, an intra-hour market, and a dynamic scheduling system. Another example is the Northwest Power Pool's Combined Reserve Task Force, which is ascertaining if additional events should be considered as qualifying under the CRSP. All these efforts are likely to impact the level of PacifiCorp's required reserves because they are targeted to facilitate short-term transactions between parties. It would be inappropriate to increase the Company's planning reserve margin until the region has completed all these coordination efforts and knows the impact on the region's system.

C. Planning Reserve Margins Should Recognize that PacifiCorp Can Rely on Short-term Purchases to Meet Some Energy Needs

PacifiCorp fails to recognize that spot purchases are a potential resource to serve loads. Spot market purchases should not be the primary manner to meet load or avoid reliability problems, but they should be one of a number of factors a utility should consider when evaluating whether it will be able to reliably meet its loads. It is particularly important for a

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Pacific Northwest utility to consider the availability of market purchases that historically occur during the spring hydro runoff and the future electricity surpluses that are expected to occur in the Western region.

The Company's LOLP Study does not rely on spot purchases as a potential resource to serve loads or prevent unserved energy events. This is readily apparent from a cursory review of the monthly unserved energy amounts set forth in the table provided as Attachment 2, Summary of Expected Unserved Energy, to these comments. This table is a monthly summary of the expected unserved energy associated with each of the five planning reserve scenarios (8.3%, 10.2%, 12.8%, 15.5% and 18.3%). Except for an anomalous and inappropriate value in the month of July under the 12.8% scenario, the month of May has the highest amount of unserved energy under every scenario. The May and June amounts account for about 50% of PacifiCorp's total unserved energy needs.

Appropriate modeling should have recognized the regional surplus is an available source of supply because of the substantial amount of surplus hydro energy within the region, even under extreme critical conditions. This is especially true for the months of May and June. Evaluating the appropriate planning margin needs should consider PacifiCorp's ability to acquire spot purchases to serve short-term emergency needs, especially during the spring hydro run-off.

PacifiCorp should have also evaluated the ability to acquire spot purchases on an emergency basis from all available interconnected markets. For example, due to the state requirement to serve 33% of its energy needs from renewable resources by 2020, California is projecting unprecedented reserves or surpluses over the planning horizon of 2011-2020. Attachment 3 to these comments is one such recent projection performed by the California

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System Operator ("CAISO") dated April 29, 2011. For 2014, it shows a surplus above the planning reserve level of 18,834 MWs under the CAISO assumptions for the peak summer season. For 2014—based on the CAISO assumptions—California will have surplus energy available to meet a 59% planning reserve margin, significantly above the targeted need. The Company's failure to account for the large amount of energy available during May and June in the Northwest and the surplus energy in interconnected markets demonstrates that PacifiCorp did not evaluate all possible resource options beyond building new power plants.

D. Unserved Energy Analysis Demonstrates that PacifiCorp's 13% Planning Reserve Margin Is Inflated

In deciding upon a planning reserve margin, the two most widely used metrics are the loss of load probability and the expected unserved energy value. The expected unserved energy value is the amount of energy that is not served during these hours, which is a different analysis in the LOLP Study that focuses on the number of hours over a given period of when load was not met. The Company's recommendation to increase its planning reserve margin above its current level appears to be predicated solely on achieving a one-in-ten year loss of load probability with no consideration given to the amount of energy unserved during these events.

Small improvements in unserved energy are extremely costly to ratepayers. The total amount of unserved energy hardly changes from the 10.2% reserve level (517 MWhs) to the 18.3% reserve level (499 MWhs). Attachment 2. Yet the difference in reserves for these two scenarios increases the Company's fixed costs by almost $170 million per year. PacifiCorp 2011 IRP at App. J at 254. This is far too great a price to pay for such a small increment improvement in unserved energy value (over $9 million/MWh).

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Another weakness of relying solely upon a loss of load probability study at various planning reserve margin levels is that the results are dependent upon where the resources are added (location, location, location) and the kind of resources added (size and/or configuration). This is demonstrated by comparing the results of the 8.3%, 10.2% and 12.8% scenarios. Under the 12.8% scenario, there are 484 MWs of additional resources available to serve the same load as under the 8.3% scenario and 288 MWs of additional resources as compared to the 10.2% scenario. The expected unserved energy, however, is greater under the 12.8% scenario than either the 8.3% or the 10.2% scenario. This counter-intuitive result of having more unserved energy with more resources calls into question the location and type of resources assumed in the analysis.

A review of the loss of load hours under the various planning scenarios by control area provides some insight into why there is more unserved energy when planning reserve margins are increased. The following table summarizes the expected loss of load hours by the Company's western ("WCA") and eastern ("ECA") areas.

Comparison of Loss of Load Hours

Reserve Scenario	WCA	ECA	System Total
8.3%	5.9	14.1	20.0
10.2%	2.4	9.9	12.3
12.8%	2.4	4.4	6.9
15.5%	0.4	1.9	2.2
18.3%	0.1	0.7	0.8

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This table shows that under the 10.2% scenario, the Company has already achieved a one day in ten year loss of load index for the WCA.[1/] Any additional resources assumed beyond this level are required to achieve a better reliability index for the ECA. If more careful attention had been given to the assumed location of the additional resources and the type of resource, then it is likely that a greater level of reliability (measured either by hours or unserved energy amounts) could have been achieved at a lower reserve margin. The Commission should not acknowledge PacifiCorp's approach of solely relying upon a LOLP Study and should require the Company to analyze unserved energy that accounts for the location and size of new resources.

IV. CONCLUSION

ICNU recommends the Commission reject the higher 13% planning reserve margin the Company is seeking in its 2011 IRP and, at a minimum, maintain the current 12% margin. Due to concerns over the manner in which the LOLP Study was performed and the fact that there are many regional initiatives being considered to gain operating efficiencies between balancing areas, PacifiCorp's planning reserve margin should not be increased beyond its previously authorized level. Indeed, given the expected unserved energy amounts and excess power projected from California, if anything, the Company's planning reserve margin should be lowered.

[1/] An expected 2.4 hours of inadequate resources. 2.4 hours per year x 10 years = 24 hours or 1 day in 10 years.

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Dated this 25th day of August, 2011.

Respectfully submitted,

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