BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

LC 57

In the Matter of	)	
PACIFICORP dba PACIFIC POWER	)	FINAL COMMENTS OF THE
2013 Integrated Resource Plan	)	NW ENERGY COALITION
	)	

I. Introduction

The NW Energy Coalition ("the Coalition") submits the following final comments in LC 57, PacifiCorp's ("the Company") 2013 IRP. In these final comments, the Coalition maintains that PacifiCorp's 2013 IRP is inconsistent with the Oregon Public Utility Commission's ("the Commission" or "OPUC") Guidelines 1.c., 4.l., ("best cost/risk portfolio), 6.b. (best cost/risk portfolio conservation resources) and insufficient with regard to Guidelines 4.g. (identification of assumptions about the future and alternative scenarios considered) and 8.a. (environmental compliance scenarios). The Coalition recommends that the Commission not acknowledge the 2013 IRP Class 2 DSM Action Items 7a. nor the Coal Resource Action Items 8a.-8d.

Recommendations for specific areas of analysis improvement including load control, demand response, and renewable resources for PacifiCorp's next 2015 IRP are also included in the following comments.

II. Recommendation Not to Acknowledge Class 2 Demand Side Management Action Items

The Coalition maintains the position, as presented in our initial comments in this docket, that PacifiCorp targets for energy efficiency programs in states other than Oregon are too low and that Class 2 DSM targets in the 5-year action plan should not be acknowledged or should be increased prior to acknowledgement in the 2013 IRP. Oregon ratepayers are funding higher levels of cost effective conservation relative to energy efficiency achieved in other states. Consequently, Oregon ratepayers are subsidizing ratepayers in other states throughout PacifiCorp territory by paying for supply-side system costs in equal measure.

The Coalition recommends that in order to acknowledge the 2013 Class 2 DSM action items, the Commission require:

1) DSM targets consistent with Case EG-C15, the accelerated DSM portfolio that ranked least cost/least risk. Specifically, the Company should commit to achieving the additional 1,113,250 MWh of Class 2 DSM (as selected in the accelerated DSM case) in the five-year action plan.
2) Regular reporting to the Oregon Commission regarding DSM throughout the Company's territory in the form of updates and reports that include quantitative analysis supporting any reduction in targets or decisions to delay or cancel action items.
3) A requirement that any significant deviation from the DSM action plan targets or action plan items (e.g. changing targets or delaying or canceling action items) be required to be filed with the Commission, including new analysis showing why these changes are least cost/least risk.

The following comments respond to PacifiCorp's reply comments in this docket and provide additional substantiation for the Coalition's position on Class 2 DSM action items.

<u>Accelerated DSM Case is Least Cost/Least Risk</u>

There is no disagreement that case EG2- C15, the accelerated DSM scenario, ranked as the least cost, least risk portfolio when compared to other scenarios in the 2013 IRP (Reply Comments of PacifiCorp, page 47, line 14). The main point of disagreement between the Company and other parties is the reasonableness of utilizing the DSM resource selections from the accelerated DSM case in the 5-year IRP action plan.

The Company states in response comments that they "take the DSM targets in the IRP seriously and hold themselves accountable for delivering on its goals…" (Page 47, lines 20-21). This is precisely why the Coalition argues that the accelerated DSM targets should be included in the 5-

year action plan. The Company should commit to do their best to deliver the least cost/least risk strategy for ratepayers. The history of Pacific Power's achievements in relation to the DSM targets show variability; the target should represent the best least cost/least risk strategy as known by the Company (Oregon IRP Guidelines 1.c., 4.l., 6.b.). There is no prize for setting a conservative target and exceeding it. The 5-year action plan should reflect the least cost/least risk strategy for resource acquisition (Oregon IRP Guidelines 1.c., 4.l.).

The Coalition recommends that the Commission urge PacifiCorp, through specific Class 2 DSM targets in the IRP Action Plan, to continue rapid and robust progress on Class 2 DSM achievements that match those identified in the least cost/least risk portfolio Case EG2-C15. Specifically, the Company should commit to achieving the additional 1,113,250 MWh of Class 2 DSM (as selected in the accelerated DSM case) in the 5-year action plan. Otherwise, the Commission should not acknowledge the 2013 IRP DSM Action Items 7a.

Underachieving Class 2 DSM in Non-Oregon States

In this IRP, PacifiCorp is proposing to achieve substantially more DSM acquisition as a percent of retail sales for Oregon than for most of their other states. PacifiCorp's Oregon DSM targets fluctuate between 1-1.4% of projected retail sales over the 5-year action plan. For Wyoming and Idaho, DSM as a percentage of retail sales is between 0.3-0.4% for the same period. California numbers are slightly higher at 0.6-0.7% while Washington and Utah are closer to Oregon's numbers – almost reaching 1%. At the same time, Oregon forecasted retail sales growth rate is lower (0.48%) than all other Pacific Power states except Washington (0.10%) and California (-0.12%). Utah retail sales are expected to grow by 1.12%, Idaho by 0.57% and Wyoming by 1.35%[1].

The Coalition is concerned that methodologies used in the Cadmus study[2], including market ramp rate and measure ramp rate calculations, led to an underestimation of the achievable technical potential in all states (except Oregon). Differences between the Cadmus study and the

[1] PacifiCorp 2013 IRP, Appendix A pp. 17-19
[2] PacifiCorp Assessment of Long-Term, System Wide Potential, March 2013

Energy Trust of Oregon (ETO) analysis for Oregon make it difficult to compare results. However, there is no arguing that the outcome of the Company's DSM analyses lead to more DSM selections as a percent of load for Oregon than for other states.

PacifiCorp should be held accountable to acquire the maximum feasible cost effective conservation available in all states throughout its service territory (IRP Guideline 6.b.).

DSM Action Plan Commitments and Accountability

The Coalition's initial testimony included a discussion of several DSM action items from the 2011 IRP that were canceled or delayed by the Company. The Company responds that these decisions were based on the reduced resource need identified in the 2011 IPR update[3]. The Company provides no quantitative analysis to demonstrate that a reduction in DSM acquisition was justified; no revised modeling that demonstrates rationale for these specific actions. In fact, the 2013 analysis clearly demonstrates, through the superior risk and cost rankings of the accelerated DSM case, that aggressively pursuing as much DSM as possible is the least cost/least risk strategy for the Company regardless of a lack of near-term new resource need. Consequently, the Company's arguments as presented in reply comments are unconvincing.

DSM acquisition is a resource distinct from supply-side resources in that it requires consistent, ongoing effort. This least cost resource is acquired by steady progress building and implementing programs. Hopefully, the results of the accelerated DSM case in this IRP have demonstrated an important lesson to PacifiCorp about the least cost path of aggressive, continuous DSM acquisition, even during periods of slow load growth and a lack of need for new resources in the near term.

The Company states in reply comments (page 24) that it is willing to improve communication with the Oregon stakeholders and the Commission regarding DSM resource activities in other states through periodic updates during Commission meetings similar to the routine updates provided by the ETO. The Coalition recommends that this be noted in the final order on the 2013

[3] The exception to this is the Company's explanation for the production efficiency action item, for which Pacific Power presents a satisfying rationale documenting other modeling challenges.

IRP and/or added to the list of Action Plan items in the final 2013 IRP. Additionally, any significant changes or deviations from DSM targets and/or action items should require thorough quantitative analysis specific to DSM resource acquisition needs.

III. Recommendation to Not Acknowledge Coal Resource Action Items

As the rest of the country moves away from coal resources at an increasing rate, PacifiCorp seems determined to hang onto their coal units. The Company continues to underestimate the cost and risk of continued reliance on coal generation. Failing to adequately address the full range of future regulations impacting coal plants will saddle ratepayers with high environmental upgrade costs, stranded costs, or both.

Furthermore, the Coalition agrees with Staff[4] that the Company failed to analyze several coal units that should have been evaluated in this IRP, continuing the troubling trend, which we have repeatedly addressed in our comments for the last three IRPs, that the Company is not adequately analyzing coal plant upgrades prior to committing to those investments.

For these reasons, the 2013 IRP fails to comply with IRP Guidelines 4.g. and 8.a. and the Coalition recommends that the Commission not acknowledge any action item related to coal resource investments in this IRP.

<u>Recommendations for Future Coal Analysis</u>

Over the last three IRP cycles, the Coalition has recommended, through comments to this Commission, that PacifiCorp improve its analysis of coal fleet investments. The Coalition, Staff and other interveners have repeatedly asked the Company to conduct a thorough analysis of its coal fleet that considers a complete range of flexible compliance options, under an adequate scope of future environmental regulatory scenarios. Despite incremental improvements in the Company's coal fleet investments, the efforts in this IRP still fall far short of expectations.

[4] Referring to comments and materials from OPUC during the Commission LC 57 Workshop October 28, 2013.

CUB, Staff and the Company have recommended initiating a separate docket investigating the Company's coal resource investments. The Coalition is skeptical about whether a separate docket will obtain the adequate analysis we have been seeking in the context of the IRP for the last 6 years. However, because adequate analysis is essential to protecting the interests of Oregon ratepayers, it may be worth exploring the feasibility of a docket focused exclusively on coal analysis. The willingness of the Company to enter into such a process, should not, however, compensate for the inadequate analysis contained in this IRP and the Commission should not, on this basis, acknowledge coal resource action items in this IRP.

The analysis components outlined by Staff in the three one-pagers prepared for the technical workshop held on January 6, 2014, combined with sufficiently stringent environmental compliance and carbon price scenarios, would likely capture the range of options necessary for an adequate analysis. However, during the technical workshop, the Company indicated that this extensive analysis would be burdensome. Staff's option is the most thorough way to conduct the coal analysis, but there may be another option that will ensure sufficient scope.

PacifiCorp could provide Staff and interveners with tools to improve the basic understanding of the coal resource investments. These tools include 1) an updated screening tool, and 2) documentation of timelines and key decision points for expected alternative pollution control options. Subsequently, the Company, Staff and interveners would attempt to reach agreement on a sufficient scope for an updated coal study that would be used to evaluate coal investments on an ongoing basis. This agreement would also need to include more stringent environmental compliance and carbon cost scenarios than those used by the Company in the current analysis.

The updated screening tool is important to the second option because it provides staff and interveners a better tool for understanding the elements of coal unit analysis than the System Optimizer can provide. One complicating factor to the Company's coal analysis, raised by Staff and other interveners during the Commission public meeting on October 28, 2013, is the difficulty that interveners have in evaluating inputs and outputs from the System Optimizer model. System Optimizer is a giant black box, complicated and expensive to run, that makes it difficult or impossible for interveners to be able to fully analyze the various inputs that are influencing particular outcomes. This leads to seemingly never-ending assertions that the Company failed to perform the correct analysis and data requests from parties exploring scenarios in the hopes of hitting upon the right combination of factors to find a least cost/least risk solution. In contrast, the screening tool provided in conjunction with the 2011 IRP coal analysis process allowed interveners to more clearly understand the relationship between inputs and outputs in the coal analysis and look for combinations that might provide insight into least cost/least risk strategies for the coal unit decisions.

At this time, the Coalition continues to recommend that the Commission not acknowledge any coal unit investments contained in the 2013 IRP Action Plan. Additionally, the Company should be required to conduct, with interveners and Staff, an ongoing coal resource analysis that incorporates a broader range of current and future compliance scenarios that can be evaluated for economic and regulatory risk. This coal resource analysis could be conducted under a new OPUC docket or within the existing IRP docket.

IV. Load Control and Demand Response

Load control and demand response resources, similar to Class 2 DSM resources, need to be building incrementally overtime. PacifiCorp's 2013 IPR analysis and strategies undervalue these resources. Citing reduced loads, PacifiCorp simply responds that these resources are not needed. But loads are still growing consistently in some areas, and are projected to grow over the Company's service territory as a whole, in the timeframe analyzed in this IRP. While we do not object to any specific 2013 Action Items related to load control or demand response, we recommend that the Company consider whether demand side resources should be assessed in a manner that more clearly reflects the incremental nature of these resources, as well as the value of the lost opportunity when loads increase, in the 2015 IRP.

V. Renewable Resources

The Coalition and other interveners expressed serious concerns about assumptions for solar PV during IRP workshops and conference calls. We provided further detail to clarify recent developments on current costs and future projections in our initial comments, highlighting the robust downward cost trends of the last decade and why market expansion and experience curve analysis strongly suggests those trends will continue indefinitely (NWEC Initial Comments, pp. 6-8).

In response, the Company refers to the Cadmus study and notes, “stakeholder input was used to test and refine the Cadmus assumptions. Although consensus on these assumptions was not achieved, the numbers provided were rational estimates of both the market potential and solar PV costs based on the best information available.” We do not agree with that conclusion. Our submitted references showed that the Cadmus analysis relied on older studies for current costs and did not properly incorporate an experience curve assessment for future costs. Consequently, the assumptions used in the IRP modeling basically assumed flat costs for the next decade.

PacifiCorp next references a recent leveling and uptick in solar modules prices during 2013. The market data we have seen supports this conclusion, but suggests it is temporary in duration.
In this instance, the very rapid price drops of 2011-12, which we did not suggest would continue indefinitely, were part of an industry shakeout that resulted in the exit of some competitors, shifts in market focus and product mix, and a rebuilding of balance sheets. Many incumbent producers are now using improved margins to consolidate, attract more capital and invest in the next phase of product development and cost reduction.

Short term fluctuations are not extensible to medium and long term cost trends, which will continue in a downward fashion because the underlying drivers are the same: global market growth, manufacturing and supply chain optimization, and new product entry. For example, a comprehensive report by the European Photovoltaic Industry Association projects that the global PV market will grow from 31.1 GW in 2012 to between 48 and 84 GW in 2017, depending on public policy support in key countries.[5] On the cost side, First Solar, a major global solar module and engineering firm, provided investor guidance in April 2013 that its module production cost will fall from 66 cents to 40 cents per watt by 2017.[6]

[5]Global Market Outlook for Photovoltaics 2013-2017, p. 5, http://www.epia.org/fileadmin/user_upload/Publications/GMO_2013_-_Final_PDF.pdf
[6]http://www.greentechmedia.com/articles/read/First-Solar-Surprises-With-Big-2013-Guidance-40-Cents-Per-Watt-Cost-by-2017

Indeed, these developments in the competitive market are spurring increased investment, project activity and decreasing costs in the western US as well as globally. For example, in 2012 MidAmerican Solar purchased the 550 MW Topaz project from First Solar. They also partnered with competitor SunPower, and on January 9, 2014, announced that, only a year from starting construction, "the first portion [57 MW] of the 579-megawatt Solar Star development - two projects co-located in Kern and Los Angeles counties in California - was successfully synchronized and is now delivering energy to the California ISO grid."[7] These developments in the competitive utility-scale market are happening in parallel with a different set of market players in the distributed PV market.

In these circumstances, the least likely outcome is that the level price trend projected for solar in the IRP will play out. Far more likely is that prices will continue to trend downward.
We agree with the Company's conclusion that the context for distributed solar is "rapidly transforming" and support its proposal to reassess solar resource cost assumptions on an ongoing basis and review the most recent market data available during preparation of the 2015 IRP.

VI. Conclusion

The Coalition appreciates the opportunity to comment on the PacifiCorp 2013 IRP. The Coalition recommends that the Commission not acknowledge Class 2 DSM and Coal Resource Action Items in the 2013 IRP. Anticipating continued dialog on the path forward for future coal resource analysis, the Coalition reserves the right to submit further comments, either written or through discussion, in this docket.

Respectfully submitted this 10th day of January 2014,

/s/Wendy Gerlitz

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[7] http://www.energycentral.com/news/en/31161305/MidAmerican-Solar-SunPower-Corp-Synchronize-Solar-Star-Development-to-the-Grid

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused **Final Comments of NW Energy Coalition** to be served by electronic mail to those parties whose email addresses appear on the attached service list, and by First Class Mail, postage prepaid and properly addressed, to those parties on the service list who have not waived paper service from OPUC Docket No. LC 57.

DATED this 10th day of January, 2014.

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Summary Report

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