

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 67

In the Matter of

PACIFICORP, dba PACIFIC POWER,

2017 Integrated Resource Plan.

OREGON CITIZENS' UTILITY
BOARD'S COMMENTS ON
STAFF'S RECOMMENDATIONS

I. INTRODUCTION

The Oregon Citizens' Utility Board ("CUB") hereby submits its comments on the Public Utility Commission of Oregon Staff's ("Staff's") recommendations in LC 67 – PacifiCorp's 2017 Integrated Resource Plan ("IRP"). This has been a challenging IRP. Rather than identifying resource needs through pre-filing technical workshops and modeling various options to meet those needs, the technical workshops did not identify a need. Instead, at the end of the technical workshops, the Company proposed spending more than \$3 billion on resource actions. Staff is correct in identifying this as an economic opportunity, rather than an action based on meeting a resource need. Staff also accurately identifies the customer benefits of this investment as small and the risks as significant.

In these comments, CUB discusses Staff's review of PacifiCorp's coal resource actions and the Energy Vision 2020. CUB believes the Energy Vision 2020 project should not be acknowledged. Finally, CUB discusses how an unacknowledged economic opportunity could be treated under an Alternative Form of Remaking ("AFOR").

II. COAL RESOURCES

Staff's recommends PacifiCorp conduct analysis evaluating the economics of coal plant retirements, and CUB supports this proposal.

Currently, PacifiCorp's analysis of coal plants within the IRP is primarily limited to evaluating the cost effectiveness of new capital investments required under EPA Regional Haze Rules. CUB believes the Company's evaluation of those capital investments is reasonable and supports the Company's conclusion that retiring coal units is cost effective, when compared to adding new SCRs. CUB is concerned, however, the coal retirements the Company forecasts in its IRP will not happen. This, in turns, means the load/resource balance that is forecast will have significantly more resources, due to the continued operation of the coal plants.

A number of PacifiCorp coal units potentially face Regional Haze requirements to install SCRs. These can be grouped into four categories¹:

1. Units that are under a Federal Implementation Plan ("FIP"), which is being litigated by opponents (including PacifiCorp) of installing an SCR (Hunter Units 1 and 2, Huntington Units 1 and 2, and Wyodak);
2. Units that are under a FIP, which is not currently being litigated (Dave Johnston Unit 3);
3. Units that are under a State Implementation Plan ("SIP"), which has been approved by the EPA (Bridger Units 1 and 2, and Cholla Unit 4); and

¹ LC 67, PacifiCorp IRP, page 20-21.

4. Units that are under a SIP, which has not been approved by EPA (Craig Unit 1).

The Trump Administration (including the EPA and DOE) has been clear that protecting coal jobs is a priority. Five of the Company's coal units face FIP SCR requirements that are currently under appeal, allowing the EPA to reopen the FIP requirements to settle the litigation. The SIP not yet approved by the EPA could be rejected. Other units may also find relief from pollution control requirements. The EPA recently concluded a review of regulations and decided to narrow its focus on four key initiatives, including the effect of the agency's regulation on jobs.² PAC's IRP Figure 1.7 shows the coal retirements contained within the preferred portfolio. It showed 500 MW by 2021, 1500 MW by 2028, and more than 2000 by 2030.³ If the SCR requirements change, then the Company will have significantly more resources than is currently forecast.

The IRP focuses on capital investments for pollution control at coal plants. However, if the EPA changes pollution control requirements, this IRP coal analysis becomes largely irrelevant. This does not mean the entire coal fleet is economic, because PacifiCorp has not provided sufficient analysis on the underlying economics of each coal unit. Because coal plants inherently expose customers to the economic risk of future carbon regulations, CUB supports the proposals by Staff and Sierra Club to require PacifiCorp to conduct an analysis of the economics of coal unit retirements.

III. ENERGY VISION 2020

Staff recommends the Commission not acknowledge the Company's proposal to invest \$3.2 billion in wind repowering, new transmission and new Wyoming wind. CUB generally shares Staff's concerns and agrees the new transmission and new Wyoming wind should not be

² <https://www.sn1.com/web/client?auth=inherit#news/article?id=42380240&cdid=A-42380240-13364c>

³ PacifiCorp 2017 IRP, page 6.

acknowledged. However, the wind repowering can be separated and considered through the lens of asset management.

A. *Resource Need Is Essential to Least Cost/Least Risk Planning*

The basic structure of an IRP assumes the utility is addressing needs. The goal is to look at needs over the next five years and evaluate the alternative resources (supply and demand) to meet those needs. While the focus is on actions that will be taken over the next five years, those actions are comparatively evaluated over a twenty year period. The goal is to identify the solution to the need that is the least cost/least risk option.

In the technical conferences leading up to the filing of the IRP, PacifiCorp was clear there were no significant resource needs during the five year action plan. However, rather than propose no resource actions during this five-year action plan period, the Company is proposing \$3.2 billion in investment. This investment, as proposed, would bring a significant benefit to shareholders and only a small benefit to customers.

The argument for more investment in energy supply, in order to replace front office transactions, does not imply the investment is needed to serve load. The Company analysis has consistently shown there are enough front office transactions available to meet load – that is, the Company does not need to invest in new resources to meet its obligations to provide service to customers. In addition, the preferred portfolio contains significant Regional Haze coal retirements that may not be required, therefore overstating the need for resources.

CUB believes such economic opportunities should not be acknowledged as least cost/least risk. When working to meet an actual need, the need helps define the resource options. For example, if the Company needed a significant capacity resource, the options would be defined by when that was needed, where on the system it was needed, and the constraints

associated with getting capacity to that need. Ultimately, for a need on the system, there is generally a limited set of options. Because there is a need, the utility has a responsibility to take an action, and the IRP is designed to evaluate and compare the set of available options to meet that need.

However, when it comes to economic opportunities, there is no set of available options to evaluate. The Company could take resource actions anywhere on its system at any time. The Company could build assets that rarely serve load, but which are primarily designed to serve the market, as long as the IRP suggested the Company's cost would be less than the forward price curve. Once investment is separated from system needs, the universe of potential investments is nearly unlimited. These investments are not appropriately evaluated through least cost/least risk analysis, because to do so would require identifying the full set of economic opportunities to contrast against each other. In this particular case, PacifiCorp has identified a single economic opportunity, but there may be a better economic opportunities yet to be analyzed.

In addition, because this investment came at the end of the technical advisory process, parties were not able to identify other economic opportunities the Company should be required to review. Allowing stakeholders to suggest portfolios to analyze is a critical part of the IRP process. Because parties were told that there was no need for resource investments, parties did not propose investments to be analyzed. Without analyzing a wider universe of economic opportunities, there is no basis to identify a single one as least cost/least risk.

B. Resource Investments Carry Risk

Resources investments contain risks. Economic opportunities contain great risk, because the cost effectiveness is largely dependent on the forecast of market conditions. In the late 1990's, there were several examples of utilities deciding to pursue economic opportunities. In

that era, however, they preferred to do so in an unregulated manner, because they were looking for returns that were in excess of rate base. The results were Avista lost \$100 million,⁴ and Montana Power went bankrupt and no longer exists.⁵

The benefit to customers from the Energy Vision 2020 investments is small--\$124 million over 20 years.⁶ Staff looked at several sensitivities: capacity factor shortfall, PTC value decrease, delay in commercial operations, construction cost overrun, changes in market prices and demonstrated that *small* changes in these elements could eliminate most or all of the benefit to customers.⁷

Resource investments carry risks much greater than Staff's sensitivities. This is particularly true for transmission investments. Twenty-three of thirty (77%) transmission projects in the Southwest Power Pool had cost overruns of more than 30%.⁸ ISO-NE had an average 79% cost overrun on 11 transmission projects between 2004 and 2012.⁹ Not only are transmission project cost overruns prevalent, they are often extensive.

Capital investments carry significant risk for customers. Customers take on that risk, because the investment is needed to provide electric service. Utility shareholders are protected from a great deal of the economic risk associated with resource investments, in order to incentivize them to invest billions of dollars into plants and equipment required to serve customers. When the investment is no longer necessary, however, the justification for customers taking on the bulk of the investment risk disappears.

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⁴ www.naturalgasintel.com/articles/75161-avista-reaches-settlement-in-5-year-old-investor-fraud-case

⁵ https://en.wikipedia.org/wiki/Montana_Power_Company

⁶ LC 67, Staff Final Comments, page 14.

⁷ LC 67, Staff Final Comments, page 21-23.

⁸ <https://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/>

⁹ http://acadiacenter.org/wp-content/uploads/2016/06/AC_transmissionmemo_spreads_finalforweb.pdf

C. Shareholder Benefits Are Significant

While the benefits to customers are small (\$124 million over twenty years), the benefits to shareholders are large. Since transmission assets have long useful lives, let's assume the average life of the assets being purchased is 30 years and each year, 1/30th of the plant depreciates.¹⁰ If the Company has a 50/50 capital structure, and a 9.7% ROE, then the return on equity in the first year would be approximately \$150 million.

Initial investment:	\$3.2 billion
Less first year depreciation (0.106 billion)	\$ 3.1 billion
Times 50% equity	\$ 1.55 billion
Times 9.7% ROE	<i>\$150 million</i>

Shareholders receive more of a benefit from this investment in its first year than customers do over the next 20 years. Yet, customers take nearly all of the economic risk.

D. Prudence is not an Adequate Customer Protection

Customers take most of the risk associated with this investment: capacity factor shortfall, PTC value decrease, and delay in commercial operation, construction cost overrun, and changes in market prices. The primary limit to customer risk is prudence. Prudency is evaluated based on what the company knew, or should have known, when it made its final investment decision. Most of the risks identified above are risks related to the period after a company makes a final investment decision. The result is a prudency determination offering customers little protection.

¹⁰ A longer useful life increases shareholder benefit.

While this basic allocation of risk between shareholders and customers seems unfair, it normally happens in the context of a utility making an investment required to serve customers. Customers have a reason to incentivize the investment – it is necessary. If too much risk is allocated to shareholders and they resist the investment, customer service could be impacted. In this case, however, the investment is not needed and, therefore, will not impact customer service.

IV. INTEGRATED RESOURCE PLANNING IN THE CONTEXT OF ECONOMIC OPPORTUNITIES

Since this investment is not needed, it is impossible to identify it as the least cost/least risk resource. It is an economic opportunity – particularly for shareholders. As an economic opportunity, the economic risk falls primarily on customers and the benefits flow primarily to shareholders. Because it cannot be identified as least cost/least risk—and because it places too much risk on customers—this investment should not be acknowledged. While acknowledgement is not pre-approval, it suggests the investment seems to be prudent. The prudence standard is not appropriate for the allocation of risk between shareholders and customers for unnecessary investments.

Instead of acknowledgement as a potential addition to ratebase, the Commission should condition this investment with the following conditions:

1. This is a discretionary investment. It is the Company's decision whether to make this or not make it.
2. To the degree that the company makes the investment, it is not eligible for the traditional cost of service recovery (guaranteed ratebase if prudent).

3. Instead, the Company can apply to have it put into rates using an alternative to cost of service regulation (“alternative form of regulation” or “AFOR”).¹¹
4. The AFOR treatment will require a showing of net benefits,¹² and may involve any and all of the conditions proposed by Staff.

Using an AFOR, rather than traditional cost of service rate treatment, would allow a reallocation of risk between customers and shareholders. Using a net benefits test would ensure the investment is only put into rate to the degree it creates a customer benefit.

Requiring a net benefits test is not new. When deciding the future of the Trojan nuclear power plant, PGE conducted an IRP which determined closing Trojan was the least cost option. After Trojan was closed and PGE brought the decision forward for ratemaking purposes, the Commission decided to impose a net benefits test to the decisions, stating that granting “full recovery in rates where there is not a net benefit to ratepayers would insulate the utility from risk... .¹³”

At this time, the Commission does not have to decide the ratemaking details under this approach. However, the Commission should be clear that without a need, this is an economic opportunity. Such a resource investment will not be acknowledged and will not come into rates as a cost-of-service resource. Instead, there will be a reallocation of risk.

V. ASSET MANAGEMENT

One piece of the Energy Vision 2020 can be looked at differently. CUB believes the repowering of existing wind facilities may be examined under the lens of utility asset management. Utilities are generally expected to manage their rated-based assets in the best interest of customers. This means utilities take opportunities for off-system sales when the

¹¹ ORS 757.210(2)(b).

¹² ORS 757.210(2)(b)(E).

¹³ OPUC Order No. 95-322.

revenue can be used to offset rates. The Energy Imbalance Market is a form of asset management, where the utility adds remote dispatch functionality to a plant. This added functionality allows the plant to participate in the EIM and therefore generate revenue to offset costs.

Repowering plants is not new. Utilities have repowered hydro plants to increase production. PGE upgraded two low pressure turbines at Boardman in 2000 by installing new rotors to increase efficiency.¹⁴ In such a case, the question of need rests with the original investment in the plant. Once that investment is made and is found to be prudent, repowering can be viewed through the lens of whether it is an economically beneficial use of the underlying plant.

VI. CONCLUSION

CUB generally agrees with Staff's analysis. PacifiCorp's proposal to invest in a new transmission line and new wind facilities in Wyoming are not needed and should not be acknowledged. In addition, CUB believes if the Company goes ahead with the investment without acknowledgement, rather than using cost of service ratemaking treatment, the Commission should require the Company to enter into rates under an alternative form of regulation, including a net benefits test to reallocate the risk associated with the investment.

CUB also agrees with Staff's highlighting of the need for an economic analysis of coal plant retirement. PacifiCorp has relied on the EPA's Regional Haze rules to identify coal plants that are no longer economic. With the current EPA administration, PacifiCorp needs to conduct analysis of all coal plants to determine whether coal plant retirement is in customers' best interest.

¹⁴ OPUC Order No. 10-051, page 1.

CUB diverges with the Staff in relationship to wind repowering. CUB believes utilities have an obligation to maximize the value of current assets for the benefits of customers. Rather than being viewed as a new resources, wind repower can be viewed as an investment to enhance the value of an existing asset – asset management.

Signed this 30th of October, 2017.

A handwritten signature in black ink, appearing to read "Bob Jenks".

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