

**BEFORE THE PUBLIC UTILITY COMMISSION**

**OF OREGON**

**UM 1208**

In the Matter of )  
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 )  
PACIFICORP, )  
 )  
Draft 2009 Request for Proposals pursuant )  
to Order No. 91-1383. )  
\_\_\_\_\_ )

REPLY COMMENTS OF THE  
CITIZENS' UTILITY BOARD OF OREGON  
ECUMENICAL MINISTRIES OF OREGON  
NW ENERGY COALITION  
OREGON STATE PUBLIC INTEREST RESEARCH GROUP  
&  
RENEWABLE NORTHWEST PROJECT

October 13, 2006

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PACIFICORP,	)	REPLY COMMENTS OF
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to Order No. 91-1383.	)	
_____	)	

**I. Introduction**

The Citizens’ Utility Board, the Ecumenical Ministries of Oregon, the Oregon State Public Interest Research Group, the NW Energy Coalition, and the Renewable Northwest Project, hereinafter the Joint Parties, submit these comments.

It seems clear to us that PacifiCorp is determined to build a fleet of new conventional pulverized coal plants. The signatories to these comments, considering economic risk, environmental science, and public opinion in Oregon, are equally as adamant that PacifiCorp not build these coal plants for us or in our name. PacifiCorp is not taking the science and threat of climate change seriously enough. The Joint Parties take global warming very seriously, and we question whether, given PacifiCorp’s denial of the science, the Company should be given any voice in determining what kind of carbon risk will be attributed to PacifiCorp customers. If the customers in Oregon are to bear the carbon risk, then we say there will be no new conventional pulverized coal plants

in our name. We wonder how enthusiastic PacifiCorp shareholders would be toward a new pulverized coal plant if it were made clear that shareholders would take the risk of carbon regulation cost for all new pulverized coal plants added to the system beginning today.

Based on the Company's comments, it would appear we have reached an impasse with PacifiCorp. If the Commission acknowledges the coal plants inherent in the 2012 RFP, it would do so despite the scientific consensus on global warming and the direct risk to PacifiCorp's ratepayers. It would also do so without the support and against the desire of the signatories to these comments, as well as the members and customers we represent.

## **II. This Is Not Monte Carlo, It Is Roulette**

While we do not waive our right to make specific technical arguments here, indeed, we do so in this document, we take a moment to assert that the technical minutiae that are being used to justify or attack the addition of three pulverized coal plants now borders on the absurd. On the issue of global warming and the future cost of regulating carbon, the specific economic quantifications that we have seen to date approach nonsense. The risks of what is still largely unknown are too great in our view to proceed with any new conventional coal resource. We acknowledge we have supported PacifiCorp's inclusion of a carbon cost in its resource planning process, but it is becoming increasingly clear that we cannot model the future cost or timing of CO<sub>2</sub> regulation. In addition, any global warming policy, state or federal, that grandfathers either the existing fleet of pulverized coal plants or pulverized coal plants yet to be built would be of dubiously efficacy.

The casino game most like the economic analysis of future regulatory cost of carbon is not the Monte Carlo runs used in IRP modeling, it is roulette: the choice is black or red. Either governments will not significantly regulate CO<sub>2</sub> emissions in the future or they will, and if they do, to be effective those regulations will have to be extreme. The Joint Parties believe that future carbon regulation will, by necessity, be quite aggressive. Ultimately, the choice comes down to a gamble that everything will be economically hunky dory or the costs of the regulation will cause economic dislocation to those customers who let their utility build too many coal plants. Based on this pure gamble, we think Oregon should join California regulators and find that the economic risk of a new pulverized coal plant is too great; therefore, such plants should no longer be added to a utility's existing resource base.

We challenge the Commission to explain to customers exactly how we can effectively economically model the real world effects of unknown consequences with an unknown probability of occurrence. One cannot simply average the hunky dory world with the economic dislocation world, even through a hundred runs of potential scenarios. It seems to us that only desperate people are willing to take such an all-or-nothing bet.

Here's what we do know: there is an abundance of science which describes the problem of global warming and its probable consequences. With all due respect, utilities do not know how to analyze carbon any more than the rest of us. Utilities have not had to think about or plan around carbon until very recently. However, if the political position of the utility is to deny or delay action, then this will show up in the utility's model runs and its filings before this Commission.

Attachment A is slide 13 from PacifiCorp's presentation to its Global Climate Change Working Group on October 11, 2006. The working group was formed in compliance of transaction commitment 42b as part of the MidAmerican acquisition of PacifiCorp. UM 1209 OPUC Order No. 06-082. The slide juxtaposes a quote from the United Nation's Intergovernmental Panel on Climate Change Third Assessment Report with PacifiCorp's response to it. The IPCC quote reads, "Complex systems, such as the climate system, can respond in non-linear ways and produce surprises." While we were unable to find this exact quote from the Third Assessment, we believe that the thrust of this statement is that we should not expect steady progressive impacts on the climate from global warming, but because of uncertainties in the climate system, we might see sporadic, quick climate disruptions as certain system thresholds are met and exceeded. For example, in the document from Working Group II: Impacts, Adaptation and Vulnerability (Chapter 8), the IPCC says, "[w]hatever the cause, it is important to note that a relatively small change in the mean of a climate variable can lead to a large change in the occurrence of extremes. Meehl et al. (2000a) explore the implications for extremes of changes in the mean and/or variance; they show clearly that the relationship between a change in the mean and a change in the occurrence of extremes is nonlinear..."

However, PacifiCorp takes this uncertainty and applies it to the concept of global warming itself. On the same slide, PacifiCorp asks "Will it be warmer? Cooler? When will the global climate change? What are the potential adverse and beneficial effects?" The unmistakable scientific evidence points to higher concentrations of CO<sub>2</sub> in the atmosphere than we have likely seen in the past 20 million years, to an increase in average global daytime and nighttime temperatures every decade since the 1950s, to the

approximately 0.6° Celsius increase in global temperature during the 20<sup>th</sup> Century, and to the now nearly annual record breaking of the warmest year of the millennium (the last 1000 years).

The responsibility of this Commission in acknowledging an IRP is to identify the resource plan which, “for society over the long run,” represents the best combination of expected costs and variance costs. OPUC Order No. 89-507, p. 2. Many of the Joint Parties argued in LC 39, PacifiCorp’s last IRP, that new pulverized coal plants were inconsistent with this responsibility for a variety of reasons. The Commission explicitly did not acknowledge coal plants when it acknowledged the rest of PacifiCorp’s IRP. OPUC Order No. 06-029, January 23, 2006. Now comes the specter of the Commission acknowledging a coal plant through an RFP when we feel as if the issue of pulverized coal was not directly addressed by the Commission in LC 39.

The Joint Parties do not approve of wide-open, decades-long, unknown risks associated with carbon regulation of new coal plants. We believe that, under Oregon’s view of a least-risk portfolio, Oregon cannot approve these costs. PacifiCorp seems to suggest that “environmental objections” cannot be considered, and to do so would be a violation of precedent. PacifiCorp Reply Comments, p. 3. However, environmental costs are costs that, by precedent, must be considered in the resource planning process. Concerns with pulverized coal are real, and will lead to future costs to customers as the nation or individual states regulate the carbon emissions during the life of these plants. Considering this risk must be part of Oregon’s evaluation of a least-cost, least-risk portfolio.

In addition to what we think the Commission's responsibility is, we should note that our perspective is that electric utility customers do not want to be served by new coal resources. Attached is a slide from a presentation made on October 11<sup>th</sup> by Pamela Lesh of PGE. The slide indicates the results of a PGE customer survey which found that "conventional coal is the least favored resource of all." Attachment B.

### **III. Please Ignore That Little State To The South**

PacifiCorp dismisses the relevance of new California emissions laws to this RFP, concluding that the "actual impact" of these laws is adequately covered by its IRP carbon adder. PacifiCorp Reply, p.5. As to SB 1368, the emissions performance standard for California utilities, PacifiCorp concludes that the Company will either be exempted or won't have a problem meeting it given their small service territory. And, second, since the law applies to long-term contracts, that the Company could still sell short-term coal purchases into the state. PacifiCorp Reply, p. 5. PacifiCorp also doesn't think the emissions cap created by AB 32 will affect it, because the Company's wind purchases will provide the needed offset to its conventional coal. PacifiCorp Reply, p. 5-6.

We disagree with the Company's interpretation of the impact of these laws. First, we think the Company missed the point about this significant development in California. We did not highlight these new laws just because PacifiCorp may have to comply with them as a utility with service territory in California. We point them out because they are a very significant policy shift that has not been adequately considered by the 2004 IRP. These new laws, combined with other developments since the 2004 IRP (the June 2005 Sense of the Senate calling on Congress to pass mandatory rules to slow, stop, and reverse green house gas emissions; 7 cap-and-trade proposals in Congress; 270 cities in

the U.S. are pledging to meet Kyoto targets; Oregon's governor is actively considering carbon regulation proposals) indicate that regulation of global warming emissions is inevitable. In the face of this policy shift, any new investment in conventional coal is an enormous financial risk.

In the event that the Commission continues to rely on economic placeholders in evaluating the risk of carbon regulation, we will continue to point out problems with PacifiCorp's modeling. We disagree with the Company that the new California regulations are adequately considered by PacifiCorp's existing carbon adder. We strongly suggest a need to reevaluate whether PacifiCorp's \$8/ton CO<sub>2</sub> adder is still reasonable. We believe it is on the very low end of reasonable, and that the cost impact of emissions regulation will very likely exceed \$8/ton over the lifetime of any new conventional coal plant. A recent study by Synapse Energy Economics supports this point.<sup>1</sup> At the very least, we think the \$8/ton should increase at something higher than inflation. These values should be reconsidered in the context of this base load RFP.

As to whether PacifiCorp will actually have to comply with the California laws, we think it's too early to know, but we question the Company's predictions. For the exception to SB 1368 to apply, the Company must be subject to "the regulation of other commissions on these issues," and the Company must file an alternative compliance plan. PacifiCorp Reply, p. 5, citing Division 4.1 of the Public Utilities Code, Chapter 3, Section 8341(D)9). As of yet, none of PacifiCorp's other states regulate procurement of

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<sup>1</sup> Lucy Johnston, Ezra Hausman, Anna Sommer, Bruce Biewald, Tim Woolf, David Schlissel, Amy Roschelle, and David White, "Climate Change and Power: Carbon Dioxide Emissions Costs and Electricity Resource Planning," Synapse Energy Economics, May 18, 2006. (review of analyses of cost projections for CO<sub>2</sub>, as well as the emerging policy response to climate change and recent scientific and political developments. Their analysis resulted in a high, medium, and low CO<sub>2</sub> cost projections. When Synapse's cost projections are levelized over 30 years to 2005 dollars, the low CO<sub>2</sub> cost projection is \$8.50/ton, the mid-range projection is \$19.60/ton, and the high projection is \$30.80/ton) See <http://www.synapse-energy.com>.



resources based on the emissions profile. If PacifiCorp must comply with the law, the Company will have to rely on its new and existing renewable resources to offset the emissions of its coal fleet, even for its very small service territory in California. The Company also states that the cap on emissions from AB 32 would not “necessarily preclude new pulverized coal plants as long as they are sufficiently offset by other resources in the portfolio.” PacifiCorp Reply, p. 5-6. In order to sell its new coal into the California market, it would also be relying on its existing renewable resources to offset those emissions. We question whether PacifiCorp will really have enough clean resources to (1) meet the procurement standard in SB 1368 if it doesn’t qualify for the exception, (2) offset any short-term coal sales to California, and (3) have renewables to meet new state renewable energy standards in the rest of its service territory. PacifiCorp is adding new wind and geothermal projects to its portfolio, but these new clean resources are still an extremely small part of the Company’s portfolio (particularly in comparison to the capacity in pulverized coal plants currently sought by the Company), and the “offsets” provided by renewables won’t be able to be double-counted. We think it is too early to know if these new laws will impact PacifiCorp’s ability to sell its coal into the California market, but we reiterate our concern from our opening comments that they are a significant change from the 2004 IRP that has not been adequately considered in this RFP.

Another impact that is likely to follow the implementation of California’s (and subsequently other western states’) carbon-emission laws is that the market price of power will bifurcate. That is, there will be one price for non-coal power and a second, lower price for power generated with un-sequestered coal. This development will change

the value of any surplus power PacifiCorp will be attempting to sell, and this effect must be modeled in evaluating the cost of these plants.

#### **IV. Technical Observations**

We have the following technical observations regarding PacifiCorp's revised RFP: First, it is not obvious that PacifiCorp has adequately or realistically incorporated the environmental and regulatory approvals and permits related to new pulverized coal plants. As public concern about global warming grows, we believe that these approvals and permitting hurdles will become higher and more time-consuming to overcome, if they can be overcome at all.

Second, by making the IGCC plant the last of four coal plant acquisitions, PacifiCorp guarantees that IGCC will be the lowest priority resource. IGCC technology, rather than getting the scrutiny the Commission hoped for in Order No. 06-029, will be relegated to a fourth-tier analysis.

Third, given that a coal resource has an expected life of at least 40 years, we wonder if it is appropriate to cap the renewable generation included in the Company's analysis at 1400 MW. 1400 MW is the amount PacifiCorp committed to acquire in the past, but it is no longer an adequate amount. PacifiCorp's revision to the RFP to model the 1400 MW of renewable generation is inadequate. PacifiCorp Reply, p. 8. A more robust process would reevaluate the amount of renewables that is appropriate for PacifiCorp's system.

Fourth, PacifiCorp attempts to respond to the criticisms that its RFP ignores the Commission's desire to both delay acquisition of 40-year pulverized coal plants and to bridge the period until such time that IGCC may be commercially viable. PacifiCorp

misses the point, however, by saying that the Company responded to the Commission's desire by postponing a gas plant. Unfortunately, not only did PacifiCorp not delay or obviate the need for a new pulverized coal plant, it did not bring IGCC any further toward the front of the resource line. Specifically, PacifiCorp responds by lowering the minimum resource term to five years from ten. PacifiCorp Reply, p. 6-7. We do not think it is nitpicking, in fact we think it goes to the heart of the Action Plan, to point out that reducing the minimum resource term is a far cry from telling the market to specifically bring proposals for bridge resource alternatives. PacifiCorp is intent on building these coal units. That is what the market will understand. If PacifiCorp is serious about changing its Action Plan to emphasize a strategy to bridge the period until IGCC is commercially viable, then the RFP will specifically ask for bridge resources. We think PacifiCorp's revision to the RFP is an inadequate message to the market.

Finally, as we address earlier, we think the CO<sub>2</sub> adder PacifiCorp is using is inadequate.

## **V. The Revised Protocol & Risk Of Different Regulatory Treatment**

Not surprisingly, PacifiCorp revised its RFP only minimally from the previous version, and certainly not enough to win our support. More surprising, however, is PacifiCorp's reinvention of the terms of the Revised Protocol. The Company attempts to shift the risk that different state commissions will treat new resources differently from its shareholders to PacifiCorp's customers.

PacifiCorp claims that Oregon cannot disapprove of the costs associated with new coal plants without violating the terms of the Revised Protocol:

If the Commission deviates from the least cost, least risk standard in reviewing the 2012 RFP because of environmental objections to

conventional coal, this would mark a significant change in Commission precedent ... It would also be inconsistent with Section XII of the Revised Protocol approved by the Oregon Commission which provides that “PacifiCorp shall plan and acquire new resources on a system-wide least cost, least risk basis.” ...

Under Section XIII of the Revised Protocol, proposed changes or amendments to the Revised Protocol – such as a change or exception to the least cost, least risk standard, or the requirement PacifiCorp plan and acquire resources on a system basis – are handled through the MSP Standing Committee ... The Revised Protocol provides that: “Prior to departing from the terms of the Protocol, consistent with their legal obligations, Commissions and parties will endeavor to cause their concerns to be presented at meetings of the MSP Standing Committee and interested parties from all States in an attempt to achieve consensus on a proposed resolution of those concerns.” ...

Deference to the concerns of other states is especially appropriate with the 2012 RFP because it addresses a resource need for PacifiCorp’s east-side states, with those states bearing the primary share of the associated reliability risks and cost responsibility and all of the plant siting issues. At a minimum, such deference requires the Commission to issue approval to permit the 2012 RFP to move forward while the Commission initiates a concurrent process with the MSP Standing Committee to permit Oregon to pursue an energy policy that excludes new pulverized coal plants, even if they are the least cost option on a risk adjusted basis.

UM 1208 PacifiCorp Reply Comments, p. 3-4.

PacifiCorp seems to believe that, under the Revised Protocol, Oregon must allow the Company to build new coal plants, unless Oregon proposes an amendment to the Standing Committee. Of course, such an amendment would require approval from “each of the Commissions who have previously ratified the Protocol.”<sup>2</sup> PacifiCorp’s suggestion is that we approve the costs and long-term risks associated with these coal plants, while initiating a “concurrent” process to negotiate with other states to get out of these costs and risks. PacifiCorp appears to believe that Oregon cannot say “no” to the proposed

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<sup>2</sup> UM 1050 Revised Protocol, p. 13-14.

coal plants, unless all the other states let us, and the risk of not reaching unanimity falls on the Oregon ratepayer.

CUB actively participated throughout the Multi-State Process, and PacifiCorp appears to be conveniently misinterpreting the Revised Protocol and the Multi-State Process. The issue of a new coal facility is not new, and was the subject of discussions at MSP meetings in Las Vegas and Boise. PacifiCorp's original proposal in the Multi-State Process allowed Oregon to opt-out of a new coal plant, but: "No party appeared supportive of the 'coal opt-out' provision that was proposed for Oregon."<sup>3</sup> Instead of accepting this proposal, the participants in the Multi-State Process agreed that the utility would assume the risk that states might not agree on what resources should be built. Each state is allowed to independently evaluate the cost and risk (in whatever manner the State considers to be appropriate) of a resource, and decide whether the cost and risk associated with that plant is prudent to incur and place onto ratepayers for the next several decades. Each state gets to make its own evaluation, and the Company takes the risk of whether it can convince each state that its actions were prudent. According to Mr. Hellman's testimony in support of the Revised Protocol:

The PRP [Revised Protocol] allocates 100% of the costs but does not guarantee recovery. The PRP does not allow PacifiCorp to shed risk that it may incur costs a state commission will conclude are not prudent, such as, paying above market costs for services. In addition, PacifiCorp retains the risk of working with different commissions that will have differing opinions on issues. For example, with respect to least-cost planning, commissions reviewing the same PacifiCorp filing could reach different conclusions regarding the timing of resource additions or recommended resources. If this occurs, PacifiCorp faces the risk that a commission will disallow some costs.

UM 1050 Staff/100/Hellman/13.

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<sup>3</sup> UM 1050 PacifiCorp/202/Kelly/2.

Oregon does not need to “initiate” a proceeding with the Standing Committee asking that the risks associated with a series of new coal plants not be placed on Oregon. If Oregon believes that the unknown risks associated with carbon regulation during the life of a new 40-year coal plant is too great, Oregon can simply recognize that building such a plant is not a prudent exercise on behalf of Oregon customers. Such a prudence decision could lead to excluding the rate base associated with such a plant from Oregon customers or excluding the costs associated with future carbon regulation from Oregon customers. But there is no reason for the Commission to treat this any differently than it would for a company such as PGE that does not have a multi-state cost allocation agreement.

If PacifiCorp wants to initiate a multi-state process to discuss this, the Joint Parties would likely participate and would encourage other Oregon parties to participate. However, a number of issues would have to be renegotiated out among the 6 states: How would a proposal allowing new coal plants to be assigned to some states interact with the embedded cost differential used to calculate the hydro endowment? How would it interact with the assignment of existing power plants? How would it interact with the allocation of power purchases and power sales? Would such an agreement require new rate caps in states that were being assigned additional costs? If carbon regulation is by company, rather than by individual plant output, how would the cost of carbon regulation be allocated? What concessions would other states require in order to reopen MSP?

Finally and most importantly, how would an agreement on allocating the risks for the next 50-years of carbon regulation of new coal plants be enforced? If other states were somehow willing to take on the carbon risk, what happens if the risk ends up being

greater than PacifiCorp modeled? Would states argue that this is a risk beyond what they agreed to and now argue that the risk has to be socialized across all states including Oregon? During the MSP, we found that due to the prohibition on binding future Commissions, there was not a willingness to try to define the agreement as a permanent one. Because Oregon had to “buy” its way into the Hydro Endowment by taking on the situs assignment of QF contracts, we argued and asked that parties leave a paper trail which suggested that the hydro endowment was intended to be permanent. But other states were unwilling to even agree that we thought were making a long-term permanent agreement.

## **VI. Conclusion**

Given our view that the cost of future carbon regulation may be substantial, that it is not clear PacifiCorp is taking global warming seriously, that we should not continue the fallacy that we can economically model this unknown, that Oregon ratepayers do not want to take the risk of an unreliable model, that the revisions to the RFP are inadequate, and that the RFP deviates from the Company’s acknowledged IRP, the Joint Parties urge the Commission to reject PacifiCorp’s Revised 2012 RFP

Respectfully Submitted,  
October 13, 2006

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Jim Edelson for the Ecumenical Ministries of Oregon  
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## Fundamental Uncertainties

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- Will it be warmer? Cooler?
- When will the global climate change?
- What are the potential adverse and beneficial effects?

“Complex systems, such as the climate system, can respond in non-linear ways and produce surprises.”

Intergovernmental Panel on Climate Change, Third Assessment Report (2001)



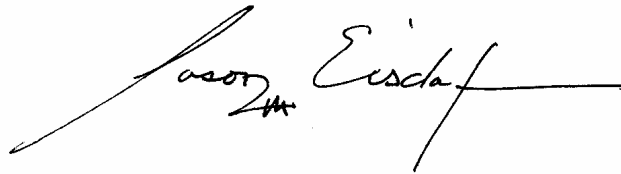
# PGE and global warming

- Are currently engaged in Integrated Resource Planning for resource actions we need to take by 2012
- Assuming \$7/metric ton in 2010 with 5% annual increase
- \$7 derives from studies by the National Commission on Energy Policy on the cost of climate change on the U.S. economy
- Surveyed a number of customers around resource preferences
  - All customers express strong preferences for the inclusion of renewables and conservation in future supply portfolios
  - Given cost information, the preferences only change slightly, although more for business customers than residential
  - Conventional coal is the least favored resource of all – significantly less even than new nuclear

**CERTIFICATE OF SERVICE**

I hereby certify that on this 13<sup>th</sup> day of October, 2006, I served the foregoing Reply Comments of the Citizens' Utility Board of Oregon, The Renewable Northwest Project, the Ecumenical Ministries of Oregon, the Oregon State Public Interest Research Group, and the Northwest Energy Coalition in docket UM 1208 upon each party listed below, by email and, where paper service is not waived, by U.S. mail, postage prepaid, and upon the Commission by email and by sending 6 copies by U.S. mail, postage prepaid, to the Commission's Salem offices.

Respectfully submitted,



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**W=Waive Paper service Q=Confidential**

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