Exhibit 1

SIERRA CLUB
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To: PacifiCorp 2011 Integrated Resource Plan Team
From: Sierra Club
Date: March 8, 2011
Re: **Comments on Public Input Meetings 6 & 7, Jan 31 and Feb 23, 2011**

The Sierra Club respectfully submits comments, questions and data requests based on the presentations at the 6th and 7th Public Input Meetings (PIM) of PacifiCorp's 2011 Integrated Resource Plan (IRP), taking place on January 31st, 2011 and February 23rd, 2011, respectively.

The most significant comments fall under three umbrella categories, namely that

1. the public process, through which PacifiCorp is intended to share assumptions and respond substantively to public concerns, failed to provide transparency, presenting already enacted Company positions rather than seeking real input;

2. the IRP process, and IRP materials to date, fails to consider current and impending EPA regulations designed to improve public health and environmental impacts from the existing coal fleet;

3. in failing to analyze or examine a diversity of portfolios, the IRP created artificial barriers for finding a least cost portfolio, exposing PacifiCorp's ratepayers to unnecessary regulatory and financial risk;

4. the Company undermines any productive forward-planning by relying extensively on either ambiguous market capacity ("front office transactions") or undefined "growth resources", minimizing the value of the IRP.

While there are specific technical comments and recommendations based on materials presented in the two meetings, these questions are largely overshadowed by the concerns posed above. The following sections provide more detail and specific comments.

Public Process

The public input meeting process has consistently

(a) failed to deliver key materials to stakeholders until after substantive, and ostensibly irreversible, decisions have been made by the company (including resource cost assumptions, demand-side management (DSM) assumptions, portfolio definitions, model run outputs for most sensitivities, and preferred scenario choices, amongst others); and

(b) dismissed legitimate public concerns regarding Company assumptions on demand-side and supply-side options.

In the months preceding the choice of the "Preferred Portfolio Selection" (February 14 2011), requests from multiple parties were made to evaluate renewable energy assumptions, such as wind and solar PV costs, as well as DSM availability and cost assumptions, and mechanisms which would be used to determine "optimized" coal plant retirements in several run definitions.

As of the 7th and final PIM on February 23rd, 2011, the Company had not made available DSM cost or availability assumptions, or the assumptions which would be used to determine the "optimized" coal plant retirement schedule. Repeated requests by multiple PIM participants to evaluate wind costs, capacity factors, and availability assumptions garnered responses indicating that the Company was not open to altering these assumptions. Requested information was not made available during the input process.

Critical components of portfolio evaluation include changes in capacity (for reliability purposes), energy (for meeting demand from owned resources versus market purchases), bulk power and capital costs (to evaluate ratepayer impacts), as well as water use and emissions (to evaluate external environmental and economic impacts).

Despite repeated requests for all of these essential components, all of which are fundamental model outputs used by the Company for portfolio evaluation, public participants were only granted access to incremental capacity additions and 20-year net present value costs, largely meaningless without additional information (i.e. cost streams, near-term and long-term risk, or cost components such as fuel, emissions, and capital expenditures).

On January 28th, 2011, the Company presented results from only 19 "core" cases, of 51 potential resource portfolio runs, and asked public participants to evaluate these results in absence of the remaining 32 cases. After promising during the PIM meeting that results from these additional runs would be made available prior to the next meeting, on February 23rd, 2011, the Company selected a modified version of a core case as its preferred scenario. As discussed in the next section below, the core cases are essentially a cohort of equivalent runs for all practical purposes; therefore, there is little value in commenting on either the outcomes of the core cases or the preferred scenario in particular. With a notable, and potentially deliberate, lack of information, the PIM process disenfranchises public participants and erodes goodwill.

Specific Comments:

1. PacifiCorp should make DSM assumptions available for public inquiry, including costs and availability;

2. PacifiCorp should show and evaluate capacity, energy, emissions, and cost streams for all resources in all scenarios, not just incremental capacity and net present value for a pre-selected subset of scenarios;

3. PacifiCorp should construct an effective mechanism to allow substantive public input and transparency to "public input meetings" and "stakeholder process", rather than disregarding public input and concerns.[1]

Evaluate Existing Resources and Impending Regulatory Requirements

The existing coal fleet throughout the US faces a series of regulatory challenges over the next few years. EPA regulations designed to protect public health and environmental resources will tighten toxic gas, particulate, and mercury emissions standards, require cooling towers on power plants with excessive water use and thermal effluent, regulate the disposal and use of coal ash, and require greenhouse gas emissions reductions at either the state or national level. To comply with these rulings and reduce the external costs of combusting coal, many generating units in the US fleet will either have to retrofit with environmental controls, or choose to retire if it the economically expedient choice. These questions are faced by utilities and merchant operators around the US, and are not unique to the Intermountain West. However, PacifiCorp is unique amongst large coal-fired utilities in delaying serious evaluation of the merit of its existing coal fleet.

In recognition that PacifiCorp's ratepayers may be negatively impacted by a lack of forward planning at the utility, PacifiCorp agreed to run a series of buildout scenarios recognizing "optimized" coal plant retirements in the face of impending regulations. However, even as the Company settled on a "preferred" plan, these critical decisions were never made public.

Indeed, out of 51 resource plans, 32 cases are not available for either public scrutiny or selection as part of the preferred resource selection criteria.[2] Failing to account for impending regulations in consideration of future build out options places PacifiCorp ratepayers at unnecessary risk.

Specific Comments

1. PacifiCorp should include, as part of the IRP and build-out plan, a specific strategy to meet current and impending EPA regulations governing the existing coal fleet;

2. PacifiCorp should make criteria for selecting "optimized" coal plant retirements available for public scrutiny;

3. PacifiCorp should evaluate all (51) runs, including sensitivities, in net present value calculations and evaluation criteria for preferred resource plan;

Portfolio Diversity

The 19 core cases which were presented and from which a preferred scenario was selected offer a marked lack of diversity from which to make informed decisions; indeed, the analytical process

[1] There are numerous valid mechanisms for achieving a valid, inclusive, and transparent stakeholder process, many components of which have been violated in this process. However, because there multiple options, we withhold specific recommendations.

[2] The 32 cases are excluded with the explanation that "sensitivity cases serve to evaluate the impact of alternate planning assumptions on resource selection, fulfill resource study requirements mandated by the company's state utility commissions, and support development of the Company's IRP action plan."

chosen by PacifiCorp virtually guaranteed a specific outcome, undermining the purpose of an IRP process and exposing ratepayers to unnecessary risk.

The 19 core cases examine only new incremental additions to the PacifiCorp fleet, and are excluded, *a priori*, from replacing or retiring any elements of the existing fleet. Having locked in the existing fleet, the new capacity additions available for selection are multiple types of gas-fired turbines, DSM, wind, geothermal, storage, solar, and nuclear power. Within this selection grid, the range of potential answers is highly constrained:

- the levelized cost of energy from solar, storage, and nuclear, as assumed by the Company, are all restrictively high (between $130 and $250/MWh);

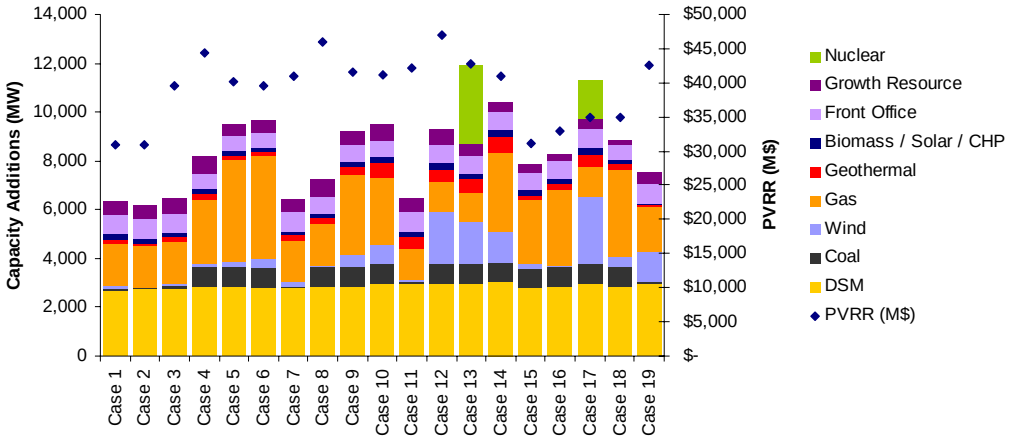
- the costs for DSM were never made public, but are assumed to almost always be cost-competitive;

- geothermal availability is restricted by company assumptions;

- the costs for wind and natural gas are nearly equivalent, depending on case-specific forecasts for natural gas and CO_2 prices, but wind is assumed to have a far lower capacity value.

Therefore, we would expect that, given no change in the existing resource profile, that the future load gaps for PacifiCorp will be primarily filled with DSM (when assumed available), and a combination of wind and gas-fired resources, with an emphasis on gas due to the low capacity factors for wind.

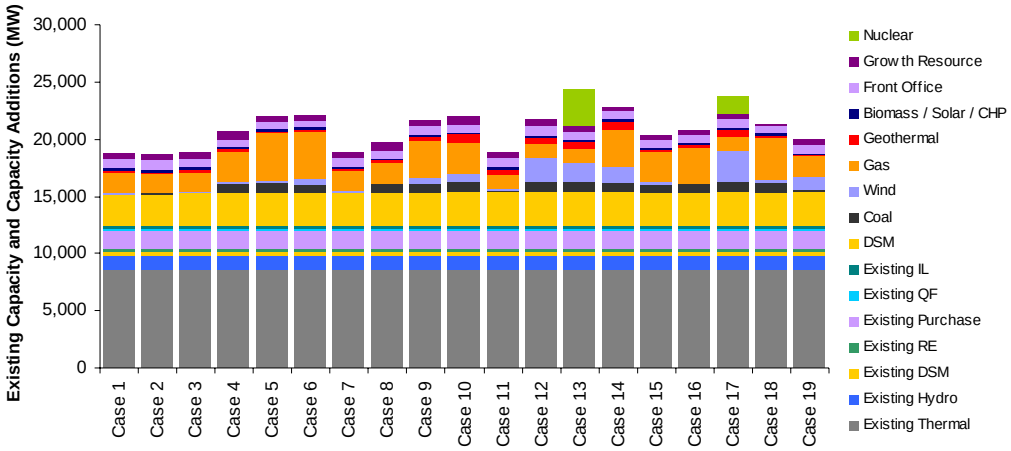
The 20-yr capacity additions, as shown in the "Portfolio Development Results" presentation from January 28, 2011, are shown in the figure below.



Indeed, the portfolios presented to stakeholders show extremely consistent results: a fixed amount of DSM made available in each core scenario (over 20 years, ~1,300 - ~1,500 MW in the

East and ~1,250 MW in the West),[3] little geothermal in near-term years, gas to meet capacity requirements in the near term, and variable amounts of wind in the longer-term. Most of the coal and nuclear additions only occur in the model in year 2030, neither substantively impacting model results nor the net present value.[4]The results are convoluted by the ambiguous "front office transactions" and "growth resources", which have undefined cost, energy implications, or emissions.

What these development scenarios do *not* show are the unchanging portfolios underlying the new capacity additions, now added into in the figure below.



By having left these resources intact in the only considered scenario runs, and not evaluating the forward-going costs of operating existing units on an economic basis, the Company needlessly exposes ratepayers to unnecessary financial and regulatory risk, such as required improved environmental controls on existing coal plants, a price on greenhouse gas emissions, and rising coal prices, all of which expose ratepayers in the existing fleet.

Finally, the Company has selected a preferred portfolio on the basis of a long-term net present value (PVRR) and a stochastic measure of the risk in PVRR. This PVRR is highly dependent on the timing of specific resources (such new gas combined cycle being built in 2015 or 2016), rather than the very real risks of high and low gas prices, or high or low CO_2 prices, or equally important, yet undervalued, external impacts of generation. It is critical that the company evaluate the risks present to the entire fleet (not just incremental capacity) by including a wider range of portfolios, and evaluating in the external environmental and economic costs of the scenarios.

<u>Specific Comments</u>

[3] A fixed amount of DSM in each case suggests that the cost of DSM is extremely competitive in this analysis, and is only restricted by availability.

[4] It can be argued, that from an analytical standpoint, if nuclear capacity is not selected until 2030, and CCS is restricted in the model until 2030, that these options should be significantly discounted as unlikely portfolio options; to the extent that these resources are important players in the IRP, they should be evaluated as serious options, but a presence only in the last year of analysis, 2030, is an unnecessary convulsion rather than illustrative.

4. PacifiCorp should include all (51) runs, including sensitivities, in net present value calculations and evaluation criteria for preferred resource plan;

5. PacifiCorp should test alternate DSM availability criteria, assuming economic potential (i.e. utility test cost-benefit) in full resource territory;

6. PacifiCorp should provide and evaluate information on the external environmental and economic consequences of given portfolios.

Front Office Transactions and Growth Resources

In 2013, some build-outs require over 1,400 MW of Front Office Transactions (FOT), maintaining similar levels through 2020. These transactions appear to account for over 10% of PacifiCorp's capacity requirements in near term years; however, the price, risk profile, and emissions of these transactions are not made clear for the purposes of building the Portfolio Development Cases.

In the October 5th (2010) Portfolio Development Case definitions, it is stated that "the coal plant CO_2 emissions rate of 205 lbs/MMBtu is applied to balancing spot market transactions and firm market purchases (front office transactions) at the start of CO2 regulations." However there is little indication that the amount of FOT chosen in the scenarios reflect this CO_2 burden. The amount of FOT chosen, for example, does not significantly differ between Development cases based on high or low CO_2 prices. Ultimately the question needs to be addressed as to what resources PacifiCorp believes are available for firm transaction purchases through 2020, and how short and long-term contract prices are reflected in the risks for each scenario.

In later years, the Development cases, and indeed, the Preferred Scenario, rely heavily on "growth resources", which, like FOT are undefined for the public in price, risk, or emissions. It was suggested in the 7th PIM meeting that PacifiCorp seeks public input on the nature of these resources as gas, wind, or other renewable or thermal resources. We strongly recommend that these resources, in both the near and long-term should be regarded as capacity from renewable energy, demand response programs, and, if required, additional gas capacity. Increasing the portfolio use of wind capacity will reduce long-term fuel price and emissions risks.

Specific Comments

1. PacifiCorp should define a source, likely cost, and emissions profile for front office transactions and growth resources

2. PacifiCorp should model an increasing fraction of FOT and growth resources as wind and demand-side management.

SIERRA CLUB
FOUNDED 1892

To: PacifiCorp 2011 Integrated Resource Plan Team
From: Sierra Club
Date: March 24, 2011
Re: **Comments on Draft 2011 Integrated Resource Plan**

The Sierra Club respectfully submits comments based on the Draft 2011 Integrated Resource Plan, released March 7, 2011. As with our previous letters, these comments were prepared with the expert assistance of Synapse Energy Economics. Due to a compressed comment period, the comments here focus on one key provision, the incorrectly modeled "coal utilization" sensitivities, and resulting ratepayer exposure to inappropriate costs.

The Company should completely model coal plant utilization options, including retirement, for the purposes of determining a least cost solution for ratepayers. The determination of the most economically efficient choice requires a comprehensive and detailed assessment of the costs associated with a variety of options; limiting the scope of these options imposes a bias on the results, and may result in an unfair burden on consumers.

In the IRP, PacifiCorp has chosen to model a limited number of "coal plant utilization" sensitivities, which "are not intended to draw conclusions on the disposition of individual generating units or desirability of specific strategies to respond to future regulatory developments." (p151). By restricting the analysis from looking at economically favorable results, the Company unfairly and inappropriately skews the results of this IRP.

Further, in the limited cases in which existing coal plant utilization is examined, the company severely biases results by (a) failing to allow *any* environmental upgrade costs to be avoidable through coal plant retirement and (b) failing to take into account all reasonably expected environmental control costs.

To capture the avoided costs associated with environmental compliance upgrades, the Company should, in a modeling framework which includes sensitivities on natural gas and greenhouse gas prices:

1. Show all expected environmental compliance costs over the course of a reasonable analysis period (2011 – 2030);

2. Allow units to be retired or replaced as an environmental compliance mechanism, and evaluate the relative costs of these plans;

3. Allow all cost-effective resources, including efficiency, renewable energy, and gas resources to be utilized as "replacement" technologies for retiring units;

4. Evaluate costs to ratepayers and the company with and without full cost recovery for remaining plant balances on retiring units;

5. Remove contrived penalties associated with "coal contract liquidated damages".

The following points illustrate the significant shortcomings of the modeling exercise.

a) The IRP omits relevant information regarding the "incremental" environmental control costs for existing coal units that are considered in the model. Information on the estimated required environmental controls and the costs of these controls are important assumptions and factors underlying the model. The Company has steadfastly refused to discuss the exact EPA, state, and regional rules which it believes will impact its existing fleet, noting only the regulations which could be applicable, but not which ones are assumed to apply. During a stakeholder conference (March 22, 2010), requests for this information were turned down on the basis of confidentiality; however, the Company confirmed that the assumptions in the model were consistent with a November 2010 document entitled "PacifiCorp Emissions Reductions Plan", filed as a Technical Support Document (TSD) for the Wyoming Regional Haze 309(g) State Implementation Plan (SIP, January 7, 2011). [1] The reduction plan **estimates $4.2 billion in capital and operational expenses required to comply *only* with BART rules.** The plan states:

> "It is anticipated that the total costs for all projects that have been committed to will exceed $2.7 billion by the end of 2022. The total costs (which include capital, O&M and other costs) that will have been incurred by customers to pay for these pollution control projects during the period 2005 through 2023, are expected to exceed $4.2 billion, and by 2023 the annual costs to customers for these projects will have reached $360 million per year." - Reduction Plan, p1.

The Reduction Plan further notes that "…the rate increases for PacifiCorp customers associated with PacifiCorp's emission reduction strategy alone will be significant."

b) PacifiCorp has not estimated the costs of compliance with mercury or HAP MACT provisions. The Draft IRP states that:

> "The Company does, however, anticipate that additional state and federal environmental laws and regulations will necessitate further investment in pollution control and environmental compliance projects, as well as further evaluation of unit specific operational/dispatch impacts, especially with respect to pending greenhouse gas regulations and hazardous air pollutants maximum achievable control technology (HAPs MACT) requirements."

However, assuming that the modeling assumptions are consistent with the Reduction Plan, we can surmise that the model does not include mercury emissions and hazardous air pollutants (HAP) provisions under EPA's 2011 proposed Maximum Achievable Control Technologies (MACT) ruling. In the Reduction Plan, the Company notes that

[1] Exhibit A – PacifiCorp's Emissions Reduction Plan. November, 2, 2010. Available online at http://deq.state.wy.us/aqd/308%20SIP/PacifiCorp%20Emissions%20Reductions%20Plan_11-2-10_Chap.%206.pdf

> "These cost increases do not include other costs expected to be incurred in the future to meet further emission reduction measures or address other environmental initiatives, including but not limited to: … 2. The addition of mercury control equipment under the requirements of the upcoming mercury MACT provisions." - Reduction Plan, p7.

Potential additional capital and operating expenditures to comply with these provisions could include new fabric filter baghouses, activated carbon injection (ACI), and selective catalytic reduction (SCR) for MACT compliance.

c) PacifiCorp has not estimated the costs of compliance with expected EPA rules on CCR. Both the Draft IRP and Reduction Plan do not estimate the anticipated costs of compliance with expected an EPA ruling on the proper disposal and management of coal combustion residuals (CCR) under the Resource Conservation and Recovery Act (RCRA). The Draft IRP states that:

> "Costs that have not been incorporated include potential plant regulatory compliance costs associated with the EPA's proposed rules for coal combustion residuals (CCR) and cooling water intake structures…"

The Reduction Plan notes that:

> "These cost increases do not include… 5. Regulations associated with coal combustion byproducts… It is anticipated that the requirements under the final rule will impose significant costs on PacifiCorp's coal-fueled facilities within the next eight to ten years." - Reduction Plan, p7.

d) PacifiCorp has not estimated the costs of compliance with expected EPA rules on cooling water intake structures. As stated above, the Draft IRP (and Reduction Plan) specifically excludes the anticipated costs of compliance with an expected EPA ruling on the use of cooling water intake structures (particularly once-through cooling) under the Clean Water Act (CWA) §316(b). The Company bears significant risk of compliance obligations at the once-through cooled Dave Johnson plant in Wyoming, as well as the open-water cooling pond structure at Cholla, in Arizona.

e) PacifiCorp has failed to appropriately estimate the costs and benefits of using coal plant retirement as an environmental compliance mechanism. A rational, forward-looking planning exercise, such as an IRP, should logically consider environmental compliance costs as part of the decision of if a plant should continue operations. The company, however, creates a model structure in which environmental compliance costs cannot be avoided through the retirement of coal units.

1. The Company has confirmed (in a March 22, 2011 stakeholder call) that the costs associated with these utilization runs are those set forth in the 2010 Reduction Plan. In keeping with EPA compliance deadlines, these costs are almost exclusively incurred prior to the year 2016 (see Reduction Plan, p5; Capital Expenditures graphic)

2. The model used by PacifiCorp specifically prohibits the retirement of any coal unit prior to the year 2016.[2]

3. The company has confirmed, in the same stakeholder call, that the environmental retrofit costs are unavoidable, i.e. that ratepayers will be compelled to pay for the retrofits regardless of if a lower cost plan would have retired the plant.

We conclude that PacifiCorp has excluded important potential least-cost plans, thereby dramatically increasing ratepayer exposure to regulatory risk, by failing to appropriately model both the existing fleet in addition to new fleet capacity additions.

[2] 2011 Draft IRP. p152. "System Optimizer is allowed to select the gas plant betterment option for any year after 2016."