BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

)

)

)

)

IN THE MATTER OF THE FILING BY PACIFICORP DBA ROCKY MOUNTAIN POWER OF ITS 2011 INTEGRATED RESOURCE PLAN

CASE NO. PAC-E-11-10 ACCEPTANCE OF FILING ORDER NO. 32351

On April 1, 2011, PacifiCorp dba Rocky Mountain Power ("Rocky Mountain" or "Company") filed its 2011 Integrated Resource Plan (IRP) with the Commission pursuant to the Commission's rules and in compliance with the biennial IRP filing requirements mandated in Order No. 22299.

On May 13, 2011, the Commission issued a Notice of Filing and Modified Procedure with a comment deadline of July 11, 2011. The Commission received written comments from Commission Staff ("Staff"), Monsanto Company ("Monsanto"), Renewable Northwest Project ("RNP"), and Idaho Conservation League ("ICL").

ROCKY MOUNTAIN'S INTEGRATED RESOURCE PLAN

Rocky Mountain serves approximately 70,000 customers in southeastern Idaho. The Company provides electric service to more than 1,000,000 customers in Utah, Wyoming and Idaho. Rocky Mountain's 2011 IRP is its "11th plan submitted to state regulatory commissions. . . ." Rocky Mountain 2011 IRP at 1. The Company states that it was developed with participation from numerous public stakeholders, including regulatory staff, advocacy groups, and other interested parties. *Id.* The 2011 IRP focuses on a 10-year period, 2011-2020. *Id.*

The Company states that the preferred portfolio in the new IRP contains a large relative increase in energy efficiency measures, new gas-fired combined-cycle combustion turbines (CCCTs), firm market purchases, and renewable resource additions beginning in 2018, presumably new wind resources. *Id.*

The following is a summary of the Company's 2011 IRP Action Plan:

1. Renewables/Distributed Generation:

- a. Acquire 800 MW of wind resources by 2020;
- b. Identify and obtain up to 100 MW of geothermal resources;

- c. Acquire additional solar resources, including 30 MW of solar hot water heating resources by 2020, and strive to meet the Company's 8.7 MW compliance obligation in Oregon;
- d. Identify and obtain up to 52 MW of combined heat and power (CHP) resources, through the PURPA qualifying facility contracting process, for the 2011-2020 period;
- e. Develop studies regarding the incremental capacity value and ancillary service benefits of energy storage; and
- f. Continue to work toward Renewable Portfolio Standard (RPS) compliance in Washington and California.

2. Intermediate/Base-load Thermal Supply-side Resources:

- a. Acquire a CCCT resource (Lake Side) in Utah in 2014; and
- b. Issue an RFP for a peaking/intermediate/baseload resource in late 2011 or early 2012 for acquisition no later than the summer of 2016.

3. Firm Market Purchases:

a. Acquire up to 1,400 MW via front office transactions or power purchase agreements (PPAs) through 2014, unless more economical long-term resources become available for acquisition.

4. Plant Efficiency Improvements:

- a. Coal plant turbine upgrade projects for 2011 and 2012, totaling 31 MW; and
- b. Complete remaining upgrade projects by 2021, totaling 34.2 MW and subject to economic review.

5. Class 1 DSM:

a. Acquire up to 250 MW, including 80 MW of commercial curtailment products for 2012-2013 (remaining 170 MW to be obtained through additional curtailment and irrigation/residential load control in the 2012-2020 time period and subject to economic review).

6. Class 2 DSM:

a. Acquire up to 1,200 MW by 2020, including programs acquired through the Energy Trust of Oregon, through active and subsequent RFPs.

7. Class 3 DSM:

a. Continue to monitor and evaluate program opportunities based on cost-effectiveness.

8. Planning and Modeling Process Improvements:

- a. Continue to refine its system optimizer modeling approach;
- b. Continue to work with the Company's transmission planning department using the IRP modeling process;
- c. Incorporate plug-in vehicles and Smart Grid technologies for discussion and consideration during the development of the Company's next IRP; and
- d. Continue to refine its wind integration modeling approach, including the establishment of a technical review committee and plan for the Company's next wind integration study.

MONSANTO COMMENTS

Monsanto objected to various conclusions pertaining to the preferred resource portfolio identified in Rocky Mountain's IRP filing. Monsanto Comments at 1. Monsanto criticized Rocky Mountain for failing to "address the critical question of whether the selected resource path is affordable for ratepayers and for the states in which the economic burden will be placed." *Id.* According to Monsanto, the Company's present value revenue requirement (PVRR) analysis is flawed because "future and highly uncertain benefits are used to justify the very real and immediate rate impacts to customers today." *Id.* at 2.

Monsanto pointed out "the Company's assumptions regarding continuation of the Production Tax Credits for renewables clearly increase the perceived economic investment of that class of resources." *Id.* Rocky Mountain's assumption "provides an advantage to developing more renewables compared to the case where these credits are either eliminated or phased out in the emerging fiscal debate in Congress. . . ." *Id.*

Rocky Mountain's "implied assumptions" regarding a nationwide RPS led the Company to include the entirety of the Gateway Transmission Project in its IRP. *Id.* at 3. "[T]he emergence of a more conducive government policy toward renewable development . . . is, however, little justification for a massive transmission build-out that is, first and foremost, aimed at the delivery of Wyoming wind to markets scattered throughout various western states." *Id.*

Monsanto does not believe that a "green resource future," see IRP at 82, "is affordable to the ratepayer today." *Id.* Monsanto cites to an alleged controversy and difficulties experienced by Los Angeles Department of Water and Power during the current incorporation of its "aggressive integration of renewable acquisition program." *Id.*

Monsanto opines that the Company has adjusted the configuration of its Gateway South segment because the market for renewables, as originally conceived by the Company, has not materialized. *Id.* Monsanto criticizes Rocky Mountain for utilizing the "most aggressive set of assumptions" to develop its infrastructure and resource acquisition plans. *Id.* "Monsanto believes it is critically important that resource acquisitions not simply pass a least-cost PVRR test, but pass a more critical test of the affordability." *Id.* at 4.

"Monsanto also draws the Commission's attention to a reduction of 46 MW [327 MW in 2008 IRP Update and 281 MW in the current IRP] in the Company's assumption of Monsanto's existing interruptible resource." *Id.* "Monsanto recommends that the Commission reject the Company's faulty assumption of a decline in existing interruptible resources in any ruling on this IRP." *Id.* Monsanto protests Rocky Mountain's use of specific language in the parties' 2007 Electric Service Agreement, per the Company's request, to "reduce [, by 46 MW,] existing resources in order to unnecessarily boost future resource needs." *Id.* In Monsanto's opinion, if Rocky Mountain wants to use "the contractual language . . . as the basis for their reduction, then the prudent and least-cost course of action would be to advise Monsanto of its desire to revert to pre-2007 language in order to preserve the existing resource." *Id.* at 5.

RNP COMMENTS

RNP began its comments by expressing approval of "the Company's use of sophisticated transmission investment analysis in Chapter 4 of its IRP and its recognition of the diverse benefits of transmission investments. . . ." *Id.* at 1. "[C]areful planning for a robust, efficient transmission system will be a good bet for customers in any future—and especially in a future that prefers clean, renewable energy sources." *Id.*

RNP asserts that "the Company's [IRP] path is inconsistent with the very regulatory vision that it postulates." *Id.* at 2. "[T]he Company fails to provide any comprehensive, forward-looking economic analysis of continuing to upgrade aging, inefficient coal plants." *Id.* RNP believes that the Company's investment in pollution control upgrades "to prop up aging coal plants" are not a good investment "when viewed along with a reasonable forecast of the

compliance costs associated with likely future regulation." *Id.* RNP argues that Rocky Mountain's analysis "does not evaluate the full picture of the ratepayer investment required to keep individual coal plants on line." *Id.*

RNP challenges Rocky Mountain's modeling assumptions which may have influenced the Company's decision to include a "paucity of renewable resources" in its preferred portfolio. *Id.* RNP noted Rocky Mountain's adjustment in its preferred portfolio to include more renewables but challenges what it referred to as "skewed assumptions about renewable resources [which may have] prevented the Company's model itself from reaching appropriate outcomes for renewable energy." *Id.*

RNP specifically objects to the Company's removal of geothermal resources. *Id.* at 3. RNP claims that Rocky Mountain abandoned inclusion of geothermal in its portfolio "because of a desire to obtain legislative cost-recovery guarantees. . . ." *Id.* RNP assumes that "the utility is only considering a self-build resource, and not PPAs [power purchase agreements] from geothermal developers." *Id.* RNP does not believe that "self-build" should be the only option and that the Company should follow the example of Idaho Power and negotiate PPAs with geothermal developers. *Id.* RNP believes that before Rocky Mountain is permitted to exclude an entire resource, one favored by the model, from consideration "the Company should at least be required to demonstrate that it has made a strong effort to find least cost, least risk geothermal resources through contracts and self-build opportunities." *Id.*

RNP stated that it was "pleased that the Company evaluated distributed generation resources, including solar PV and solar hot water." *Id.* RNP looks forward to the inclusion of "30 MW of solar hot water heating resources by 2020. . . ." *Id.* RNP encourages the Commission to order the Company to expand its Utah solar PV incentive program into Idaho. *Id.* at 4.

Finally, RNP urges the Commission to immediately, in this docket, "require the Company to provide, as a supplement to its IRP, a comprehensive regulatory analysis of past, present, and future investments in coal plants on a plant-by-plant basis." *Id.* The Company should "include a risk analysis that comprehensively compares the regulatory compliance costs . . . with alternative power supply options . . . examin[ing] the possibility that regulatory compliance costs will be greater than those forecasted." *Id.*

ICL COMMENTS

ICL has serious questions with both the substance and process of the IRP and advocates that the Commission "defer accepting this IRP until further details are available." ICL Comments at 1. "Despite RMP's laudable treatment of DSM, the 2011 IRP fails to adequately analyze several other resource types." *Id.* at 2. "RMP assumes unabated coal plant use despite requiring billions of dollars in pollution control upgrades." *Id.* True integrated resource planning should "consider all options to meeting RMP's resource needs, including changes to existing resources." *Id.*

ICL also lamented that "the public did not have a meaningful chance to participate in developing this IRP." *Id.* RMP conducted public meetings but failed "to incorporate public comments and factual information." *Id.* ICL believes that the Commission should wait until after the Utah and Oregon Commissions finish their "review proceedings before issuing any final order on this IRP." *Id.* at 3.¹

"Deferring any final order on this IRP will not negatively affect RMP because the Idaho review process does not result in any specific endorsement or approval of any of the action items." *Id.* Based on the foregoing, ICL recommends that the Commission not accept the Company's 2011 IRP filing. *Id.*

STAFF COMMENTS

In its comments, Staff acknowledged "the Company's sustained efforts in developing a sophisticated, thorough planning document amid an uncertain economic backdrop." Staff Comments at 3. The document "provides stakeholders with a more transparent view of the planning process." *Id.* Staff prefaced its comments by mentioning that it "does not intend for its comments to be all-inclusive of the document, but rather will focus on a number of issues it deems important to the Company's ten-year action plan." *Id.*

Rocky Mountain's "system peak and system load are projected to grow at an annual rate of 2.1 % over the ten-year planning horizon." *Id.* at 4. This rate of growth is "high when compared to other utilities within the state and around the nation." *Id.* However, there are signs that Rocky Mountain's forecasted load and peak is "softening" throughout its service territory, "relative to the previous IRP filing." *Id.* Growth in the residential and commercial classes,

¹ Rocky Mountain's IRP filing is currently pending before the Utah Public Service Commission, with reply comments due on October 5, 2011. The Company's IRP filing is also pending before the Oregon PUC, with final comments due October 13, 2011.

particularly on the east-side of the Company's service territory, is cited as the main culprit for continued moderate system growth. *Id.*

With regards to new resources, Staff expressed some concern that "given long lead times on large generation facilities, such as the Lakeside 2 (CCCT) currently under construction, the Company may find itself long on capacity in the near-term" if the current economic climate continues. *Id.* Staff determined that "the 2011 forecast, developed in October 2010, nearly mimics that of the 2009 IRP update forecast, developed in November 2009." *Id.* "Both forecasts are lower than that used in the 2009 IRP throughout the timeframe." *Id.* Rocky Mountain predicts "system coincident peak to be roughly 2.6%, or 328 MW, below that projected in the 2009 IRP, and system load to be roughly 1.2% lower than the 2009 IRP forecast." *Id.* Staff believes the reductions "may affect the timing of resource additions." *Id.*

Staff concurred with the Company "that it is appropriate to consider the possibility of federal climate change legislation in its portfolio evaluation process, and is satisfied that the Company has adequately addressed the issue." *Id.* at 5. Other considerations, including EPA regulations on its coal-fired facilities, have "prompted expenditures in pollution control equipment." *Id.*

Price Forecasts

The planning process for the 2011 IRP differs significantly from the 2009 IRP due to the decrease in natural gas and wholesale electricity prices. *Id.* The strong correlation between market prices and natural gas prices is expected to continue into the foreseeable future. *Id.* Even though natural gas prices have experienced decline, "the fuel has shown significant volatility over the past ten years." *Id.* Day-ahead prices have fluctuated between a low of \$1.72 per MMBtu (November 16, 2001) to a high of \$18.41 per MMBtu (February 25, 2003) but have recently somewhat settled below \$5.00 per MMBtu. *Id.* This may be a result of lower demand and the increase in domestic supplies from shale. *Id.*

Staff expresses caution toward the sentiment "that expansion of unconventional domestic supplies will continue to put downward pressure on gas prices," noting the recent failure of liquefied natural gas to "fill the supply-demand gap." *Id.* The expansion of natural gas generation, predicted by the U.S. Energy Information Agency to account for 60% of electric generation by 2035, could expose customers to the price volatility tied to variable fuel costs. *Id.*

Resource Options

Staff believes that Rocky Mountain has done an "admirable job" of screening and selecting resource options. *Id.* at 6. Staff encouraged the Company to retrofit "its gas and coal facilities with a solar hybrid design in its future IRPs." *Id.* Staff endorsed certain wind model adjustments made by the Company which "provides greater flexibility . . . to select additional wind should it prove to be a preferred resource." *Id.* Staff believes that Rocky Mountain is "well-positioned to integrate wind given its resource diversity and geographic footprint." *Id.*

Staff supports the Company's overall description of "supply and demand-side resources, as well as transmission options and market transactions, which leads to equitable treatment in the resource selection process." *Id.* at 7.

Portfolio Modeling and Selection

Staff was somewhat critical of Rocky Mountain's portfolio modeling and selection process. *Id.* at 8. Staff stated that "the Company needs to do a better job explaining its portfolio decisions when there does not appear to be clear best options." *Id.* Staff cited the Company's removal and replacement of geothermal resources with wind resources due to what Rocky Mountain asserted was uncertainty of rate recovery. *Id.* at 9. In Staff's opinion, this decision did not accurately capture the relative dissimilarities between the two types of resources. *Id.* Nevertheless, while its decisions could have been more transparent, Staff agrees that the Company made appropriate decisions regarding its preferred portfolio. *Id.* at 10.

2011 Action Plan

Staff noted that Rocky Mountain's plans to issue Request for Proposals (RFP) for baseload facilities, Class 1 and Class 2 DSM, and renewable resources corresponds with the resources identified by the Company in its preferred portfolio. *Id.* Additionally, Rocky Mountain includes a transmission expansion action plan in its 2011 IRP, detailing "the continuing efforts toward completion of the Gateway Project." *Id.* at 10-11. The transmission project is broken down into eight (A-H) segments. *Id.* at 11. Rocky Mountain is currently partnering with Idaho Power on segments D and E of the project. *Id.* Staff states that it "will continue to monitor the Company's progress toward completion of the Gateway Project," *Id.*

Staff noted that a "prudency assessment or approval of specific resources cited in either action plan is beyond the scope of the IRP review" and will take place "in a more suitable

forum, such as a general rate case." *Id.* While declining to specifically endorse the Company's preferred resource options outlined in its IRP Action Plan, Staff "nonetheless believes the identified course of action seems reasonable given the assumptions, analysis and conclusions of the Company as presented in the IRP." *Id.* Staff recommended that the Commission acknowledge the Company's 2011 IRP filing. *Id.* at 13.

COMMISSION DECISION

The Commission has reviewed the filings of record in Case No. PAC-E-11-10, including Rocky Mountain's 2011 Integrated Resource Plan, appendices and addendums, and related comments. We find that the Company's 2011 IRP is in the appropriate format and contains the necessary information outlined by the Commission in Order No. 22299. The Commission reiterates that a standard IRP is a utility planning document that incorporates many assumptions and projections at a specific point in time. It is the ongoing planning process that we acknowledge, not the conclusions or results.

The Commission accepts Rocky Mountain's IRP filing. However, the Commission cautions the Company to avoid becoming too reliant upon gas-fired supply resources. Historically, natural gas markets have been volatile. While it is true that new methods of extracting natural gas have resulted in lower prices, there is no guarantee that current market prices will persist into the future. These lower prices should be viewed as the result of increased supply and the potential for the production of an even greater supply through the utilization of controversial extractor techniques such as hydraulic fracturing or "fracking." The use of hydraulic fracturing has engendered environmental concerns regarding water quality. Not unlike the Company's evaluation regarding the effect that future climate change legislation may have upon available resources, Rocky Mountain should seriously consider the potential for the enactment of tighter rules and disclosure requirements for "fracking" from federal and state environmental agencies.

Additionally, it is not clear to the Commission that the Company has adequately examined the effect of the elasticity of demand upon gas prices. While the current economic climate remains depressed it will undoubtedly improve over time. Marginal economic growth will inevitably create additional demand and counteract the current downward pressure caused by increased supply. Thus, a prudent course of action for the Company moving forward would take these factors into account in the development of its preferred resource portfolio.

The Commission believes that RNP's comments regarding Rocky Mountain's investment in upgrades to its coal plants are well-placed. They are particularly relevant in a regulatory environment that includes federal legislation restricting carbon emissions. Nevertheless, that is not Rocky Mountain's current regulatory environment. The Commission finds that the Company's 2011 IRP filing represents an effort by the Company to continue to develop renewable resources and retro-fit its current generation resources so they are able to operate more efficiently and comply with existing air quality standards.

The Commission will continue to scrutinize Rocky Mountain's capital expenditures in the context of a general rate case. As noted by Monsanto in its comments, resource acquisitions should be scrutinized on a case-by-case basis to determine whether they merit recovery through rates. The Commission clearly demonstrated in the Company's last general rate case, PAC-E-10-07, our commitment to thoroughly review resources and infrastructure investments. *See* Order No. 32196 at 37-38.

Finally, the Commission acknowledges the concerns regarding PacifiCorp's contemporaneous IRP filings with the Utah and Oregon Commissions. Nevertheless, we do not believe that a ruling on the instant filing with this Commission should be delayed or deferred until Utah and Oregon Commissions have rendered their findings. However, the Commission orders the Company to advise the Commission of any changes made to its system-wide IRP methodology or IRP results emanating from the review conducted by another state utility Commission.

CONCLUSIONS OF LAW

The Idaho Public Utilities Commission has jurisdiction over PacifiCorp dba Rocky Mountain Power, an electric utility, pursuant to Title 61 of the Idaho Code and the Commission's Rules of Procedure, IDAPA 31.01.01.000 *et seq*.

ACCEPTANCE OF FILING

Based upon our review, we find it reasonable to accept for filing Rocky Mountain's 2011 Electric IRP. Our acceptance of Rocky Mountain's 2011 IRP should not be interpreted as an endorsement of any particular element of the plan, nor does it constitute approval of any resource acquisition contained in the plan.

ORDER

IT IS HEREBY ORDERED that PacifiCorp's 2011 Integrated Resource Plan is accepted for filing.

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this $/6^{+h}$ day of September 2011.

PAUL KJELLAND PRESIDENT

MACK A. REDFORD, COMMISSIONER

MARSHA H. SMITH, COMMISSIONER

ATTEST:

und l

Jean D. Jewell Commission Secretary

O:PAC-E-11-10_np2