

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE PETITION OF)
ROCKY MOUNTAIN POWER FOR AN) CASE NO. PAC-E-07-07
ORDER REVISING CERTAIN)
OBLIGATIONS TO ENTER INTO)
CONTRACTS TO PURCHASE ENERGY) ORDER NO. 30497
GENERATED BY WIND-POWERED SMALL)
POWER GENERATION QUALIFYING)
FACILITIES)

The Idaho Public Utilities Commission (Commission) has authority under Sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA) and the implementing regulations of the Federal Energy Regulatory Commission (FERC) to set avoided costs, to order electric utilities to enter into fixed-term obligations for the purchase of energy from qualifying facilities (QFs) and to implement FERC rules.

In early 2007 PacifiCorp dba Rocky Mountain Power (PacifiCorp; Company), Idaho Power Company (Idaho Power), and Avista Corporation dba Avista Utilities (Avista) filed petitions and wind integration studies recommending utility-specific wind integration adjustments to the published avoided-cost rates. Case Nos. PAC-E-07-07 (4-23-07); IPC-E-07-03 (2-6-07); and AVU-E-07-02 (4-2-07). The Commission in this Order addresses PacifiCorp's Petition and approves a comprehensive Settlement Stipulation of the issues presented. We increase the published rate eligibility cap for intermittent QF wind projects from 100 kW to 10 aMW/month, establish a wind integration adjustment to published avoided-cost rates, and eliminate the 90%/110% performance band for wind QFs that agree to provide a Mechanical Availability Guarantee and share in the cost of wind forecasting services.

Background

On June 17, 2005, in Case No. IPC-E-05-22, Idaho Power requested a temporary suspension of its purchase obligations for wind generation. PacifiCorp intervened and requested similar treatment. On August 4, 2005, the Commission issued Order No. 29839 finding good cause to conduct further proceedings to determine the appropriate amount of adjustment, if any, to integrate wind generation resources. The Commission declined to suspend the Company's purchase obligation. The Commission instead reduced the published rate eligibility cap for

intermittent QF wind projects from 10 aMW/month to 100 kW and required individual contract negotiations for wind QFs larger than 100 kW. This action was taken to investigate system reliability and avoided-cost issues regarding intermittent resources. In reducing the cap for published rates for wind projects offering power on a non-firmed basis, the Commission found that it had continuing authority to review PURPA rates in order to protect the public interest. 18 C.F.R. §§ 292.304(a)(1)(i), (c)(1), (c)(3)(ii); Order No. 29839 p. 9. It was further established that no utility is required to pay more than its avoided cost for QF purchases. PURPA § 210(b).

In the IPC-E-05-22 case, Idaho Power advised the Commission that it intended to perform a study to quantify the additional costs it would incur directly related to purchasing a significant amount of wind generation (the Wind Integration Study; the Study). Idaho Power further advised the Commission that upon completion of the Study, Idaho Power would provide it to the Commission for its consideration. Pursuant to Commission direction, Idaho Power in conjunction with PacifiCorp and Avista and in consultation with the other parties, scheduled and held four workshops (August 29, September 20, October 10, and November 18, 2005) and a settlement meeting (January 12, 2006). The parties were unsuccessful in reaching mutual agreement on interim settlement issues. No additional meetings were scheduled until completion of Idaho Power's wind integration study. See Phase II Workshop Final Report, January 31, 2006. See also September 6, 2005 and November 7, 2005 Status Reports.

On April 23, 2007, PacifiCorp in Case No. PAC-E-07-07 filed a Petition with the Commission proposing a wind integration adjustment of \$5.04/MWh to be applied as a decrement to the published avoided-cost rates payable to non-firm wind QFs to compensate for the increase in system costs due to wind variability.¹ The \$5.04 per MWh represents the wind integration cost included in the Company's 2004 Integrated Resource Plan (the 2004 IRP) adjusted for inflation.² The Company's proposal included the following additional elements and conditions: elimination of 90%/110% performance band; sharing of costs for wind forecasting

¹ On February 6, 2007, Idaho Power filed a Petition in Case No. IPC-E-07-03 proposing a wind integration adjustment of \$10.72 per MWh. In a Report Addendum filed with the Commission on October 31, 2007, Idaho Power presented an updated wind integration cost of \$7.92/MWh. On April 2, 2007, Avista Corporation (Avista) filed a similar Petition in Case No. AVU-E-07-02 proposing a wind integration adjustment to published avoided-cost rates of 12%; and for QFs agreeing to deliver output on a firm hourly schedule, a percentage reduction of 6%.

² PacifiCorp's 2004 IRP has now been superseded by its Commission-acknowledged 2007 IRP and a \$5.10/MWh estimated wind integration cost. Case No. PAC-E-07-11, Acceptance of Filing (October 15, 2007).

services; establishment of a “Mechanical Availability Guarantee” demonstrating physical capability and availability of wind QFs to generate at full output during 85% of the hours in a month, except for scheduled maintenance and events of force majeure; and contingent on acceptance of the foregoing, an increase in the published rate eligibility cap for intermittent QF wind projects from 100 kW to 10 aMW/month.

On October 4, 2007, PacifiCorp and Renewable Northwest Project and NW Energy Coalition (Renewable Coalition) filed a Joint Motion to Approve Settlement Stipulation. IDAPA 31.01.01.271-276. The Settlement (as amended) is a proposed resolution of the issues presented in this case and is now signed and/or is supported by all parties except Exergy Development Group of Idaho LLC (Exergy). The Settlement Stipulation provides for a wind integration adjustment equivalent to the calculated cost of wind integration on a per MWh basis provided in the Company’s most recent Commission-acknowledged 2007 Integrated Resource Plan (IRP) – i.e., \$5.10/MWh (Case No. PAC-E-07-11).

Parties of Record

The following parties requested and were granted intervenor status: Intermountain Wind LLC; Exergy Development Group of Idaho LLC; Renewable NW Project and NW Energy Coalition; Idaho Windfarms LLC; Avista Corporation; and INL Biofuels and Renewable Energy Technologies.

Wind Integration Adjustment – Initial Filing and Petition

PacifiCorp’s initial filing recommendation was that published avoided cost-rates for purchases of wind generation by the Company be reduced by \$5.04 per MWh, which amount is derived from its 2004 IRP and represents the integration costs of that wind power. PacifiCorp concludes that avoided-cost rates paid to wind-powered QF resources do not reflect the actual costs the Company could avoid by the purchases and must be reduced to be in compliance with PURPA. 18 C.F.R. § 292.304(a)(2). Excluded from the Company’s proposal are QF wind developers who agree to deliver QF output to PacifiCorp on a firm hourly schedule. Attached as Exhibit A to the Company’s Petition is an excerpt from the “PacifiCorp – 2004 IRP Appendix J – Renewable Generation Assumptions” in which PacifiCorp provides a description of the methodology used and the results derived from PacifiCorp’s analysis of the wind integration cost issue as part of the 2004 IRP process.

Based on its wind integration analysis, PacifiCorp requests a change in the Company's PURPA obligations for wind QFs. PacifiCorp proposes increasing the cap on entitlement to published avoided-cost rates for wind QFs from the current level of 100 kW to 10 aMW/month, subject to the following provisions.

Elimination of the 90%/110% Performance Band Requirement

PacifiCorp believes there is benefit to a level of consistency in the structure of PURPA QF tariffs among Idaho's electric utilities. Consistent with the proposals of Idaho Power in Case No. IPC-E-07-03 and Avista in Case No. AVU-E-07-02, PacifiCorp recommends that the 90%/110% performance band be eliminated in energy purchase contracts involving intermittent wind QFs, provided QFs agree to the following three conditions.

1. Wind QFs Agree to Fund Their Share of Wind Forecasting Services

PacifiCorp supports the concept that wind QFs should participate in funding wind forecasting services, as a condition of not being bound by the 90%/110% performance band requirement. Wind forecasting services, the Company notes, are specific to any given wind farm and therefore may not be able to be shared with other wind farms within the same geographic area. To the extent that PacifiCorp is able to use the same wind data, the Company would propose to share such expense on a pro rata basis with QFs that are selling their power to PacifiCorp under long-term contracts. QFs would pay a portion of the wind forecasting expenses proportional to their percentage share of the wind-generator capability being supplied to PacifiCorp from that geographic region.

2. Wind QFs Agree to Provide a Mechanical Availability Guarantee

In lieu of a performance band requirement, PacifiCorp supports the concept of establishing a Mechanical Availability Guarantee by the QF. Wind QFs would be required to demonstrate each month that except for scheduled maintenance and events of force majeure or uncontrollable force, the wind project is physically capable of generating at full output during 85% of the hours in the month. This guarantee would encourage wind developers to ensure that the maintenance is performed on the wind turbines and that they maintain the readiness of their equipment throughout the full duration of the long-term contract. PacifiCorp has successfully implemented a Mechanical Availability Guarantee in power purchase agreements with other wind-powered QFs and continues to support this method.

3. Intermittent Wind QFs Agree to a Wind Integration Adjustment to Published Avoided-Cost Rates

PacifiCorp believes that its proposed discount captures, as best as can be determined presently, the cost of integrating wind generation into the Company's system and, therefore to some degree, takes into account the inherent difficulty of accurately forecasting the availability of wind. The establishment of the discount, it contends, will in large measure account for the variability of wind, and thereby diminish the need for a performance band for wind.

Settlement Stipulation (October 4, 2007, as amended)

Following the filing of the Company's Petition, a series of public and settlement workshops were held. Efforts to obtain a common generic wind integration adjustment and comprehensive settlement in Case Nos. PAC-E-07-07, IPC-E-07-03, and AVU-E-07-02 were unsuccessful. Apprised of the impasse, the Commission on August 22, 2007 issued a Notice of Modified Procedure and established September 21 and October 5, 2007 comment and reply deadlines to bring the matter to closure. In a Motion to Vacate Comment Deadlines filed on September 14, 2007, the Commission was notified that Renewable Northwest Project/NW Energy Coalition had reached a settlement agreement in principle with two of the three utilities and believed that an agreement in principle could be achieved with the third utility. Additional time was requested to complete settlement discussions, to solicit support from other parties and to prepare settlement documents. On September 19, 2007, the Commission issued a further scheduling Order establishing deadlines for presentation of settlement documents and the filing of comments. Settlement Stipulations were filed in the three wind integration dockets.

The Commission then scheduled a consolidated prehearing conference of the parties in PacifiCorp Case No. PAC-E-07-07, Idaho Power Case No. IPC-E-07-03, and Avista Case No. AVU-E-07-02 for December 11, 2007. The purpose of the prehearing conference was to identify what issues remained, to determine at what point (if any) consensus existed, and to determine the scope and timeline of further proceedings. The following parties appeared by and through their respective representatives and counsel: PacifiCorp – Jordan White, Esq.; Idaho Power – Barton L. Kline, Esq.; Avista Corporation – Michael G. Andrea, Esq.; Commission Staff – Scott D. Woodbury, Esq.; Exergy – Peter J. Richardson, Esq.; Renewable Northwest Project & NW Energy Coalition – William M. Eddie, Esq.; Ridgeline Energy – Rich Rayhill; Idaho Windfarms

– Glenn Ikemoto; Cassia Gulch Wind Park & Cassia Wind Farms & Intermountain Wind – Dean J. Miller, Esq.; Gerald Fleischman; Renaissance Engineering & Design – Brian D. Jackson; and Blue Ribbon Energy – M. J. Humphries.

At the commencement of proceedings on December 11, 2007, clarification was sought from the Commission that the Settlement Stipulation was still being considered. The Commission was informed that, with the exception of Exergy, all parties of record in the multiple dockets recommended that the Commission approve the Settlement Stipulations. The following terms of Stipulation in Case No. PAC-E-07-07 were proposed as a fair, just and reasonable compromise of the issues raised:

Settlement Stipulation ¶ 3

- (a) [PacifiCorp's] published avoided-cost rates for Wind QFs will be adjusted to recognize an assumed cost of integrating the energy generated by Wind QFs as a part of the Company's generating resource portfolio. The integration charge will be equivalent to the calculated cost of wind integration on a per MWh provided in the Company's most recent Commission-acknowledged Integrated Resource Plan (IRP) . . . the estimated cost of wind integration in the 2007 IRP . . . is \$5.10/MWh. [PacifiCorp] shall hereafter file notice with the Commission of any changes to its wind integration charge as reflected in subsequent changes to its IRP. The integration charge will remain fixed throughout the term of the contract and will be applied as a decrement to the applicable published rate.

The term "applicable published rate" means the applicable avoided-cost rate approved by the IPUC and updated periodically for purchases of power from QFs producing less than 10 aMW, for the relevant contract year and time period of energy generation.

- (b) The 90%/110% performance band approved by the Commission in Order No. 29632 will be eliminated from the template Firm Energy Sales Agreement for future Wind QFs. The 90%/110% performance band will be replaced in future FESAs by the integration charge described in paragraph 3(a) above, a mechanical availability guarantee (MAG) as described in [PacifiCorp's] Petition in this case and a wind forecasting charge as described in paragraph 3(e) below.
- (c) [PacifiCorp] will review its expected cost of wind integration in light of the best available scientific data and actual operating experience. Expected wind integration cost information will be included in the Company's integrated resource planning (IRP) process in the same way that costs for other generating resources are included in the IRP.

- (d) [PacifiCorp] currently provides public input meetings for its IRP assumptions. Idaho wind developers will be notified as part of the public meeting process and can contribute their input at those meetings to discuss PacifiCorp's wind integration study and new data related to wind integration costs prior to the publishing of the Company's next (2009) IRP.
- (e) [PacifiCorp] will have the option to include the specific wind QF in its existing contract with a qualified wind energy production forecasting vendor. The cost of adding the QF project to this forecasting service will be attributed to the individual Wind QF and will be shared equally between [PacifiCorp] and the Wind QF, with an annual cap on the Wind QFs maximum liability for such costs set at 0.1% of the total energy payments [PacifiCorp] made to the Wind QF under the applicable FESA during the previous Contract Year. During the first Contract Year, the cap will be set at 0.1% of the Wind QFs estimated total energy payments based on the Wind QFs original estimate of energy production in their FESA. [PacifiCorp] will deduct the Wind QFs calculated share during the first eleven months of each year and subsequently refund any overpayment (payments that exceed the cap) in the December invoice. It is [PacifiCorp's] intent that the wind energy-forecasting program be practical and cost effective.

As reflected in the Joint Motion, QFs with existing Firm Energy Sales Agreements with PacifiCorp that include the 90/110 performance band can elect to amend their contracts to conform with Settlement terms.

Exergy

In an October 19, 2007, filing with the Commission, Exergy recommended that the Joint Motion to Approve Settlement Stipulation be denied. Exergy contends that the proposed settlement is not supported by an adequate record and is contrary to the public interest. Exergy contends that the Commission is being asked to proceed in the face of "widely" varying integration costs that are based on a study with "minimal documentation" and using "assumptions for numerous variables" with "imprecision and uncertainty." To do so, Exergy states, would result in a wind integration adjustment that is, by definition, arbitrary.

Joint Reply

The Renewable Coalition and PacifiCorp dispute Exergy's contention that a wind integration adjustment must be set at zero until the utility can demonstrate actual integration costs based on actual wind generation on the Company's system. The parties to the Settlement submit that the wind integration costs reflected in the Stipulation are within the range of

reasonable estimated wind integration costs based on current conditions and information. Joint Reply p. 3.

Commission Staff

On October 5, 2007, in comments filed in support of the Settlement Stipulation, Staff recommends that the wind integration adjustment and other Settlement terms be approved. Staff contends the proposed adjustment represents a reasonable approximation of the wind integration costs over the 20-year term of new PURPA contracts. Under the terms of the PacifiCorp Stipulation the amount of the integration charge is fixed and will not increase with increases in avoided-cost rates nor will it change with the amount of wind online. Staff expects that over time integration costs should decrease as markets mature, geographic diversity improves, technology advances, and experience is gained in operation and forecasting. Yet it is also generally believed that as penetration levels increase, integration costs will increase. Whether the factors causing integration costs to increase completely offset the factors causing integration costs to decrease remains to be seen. Periodic reviews as provided for in the Stipulation, Staff contends, will provide opportunities to revise the wind integration adjustment if downward and upward pressures on wind integration costs get out of balance.

Staff notes that PacifiCorp performed its own wind integration study using its own staff as part of its Integrated Resource Plan (IRP) process. The Company has never prepared a report presenting the details and results of its study. Instead, a description of the study and results is attached as an appendix to its IRP. PacifiCorp's IRP study preceded Idaho Power's and Avista's, Staff states, and may lack some of the sophistication of the latest studies and may not fully account for all components of wind integration costs. With such minimal documentation, Staff believes it is difficult to judge its accuracy or to contrast its results with the studies of Idaho Power or Avista.

It is reasonable, Staff contends, to expect wind integration costs to differ from one electrical system to the next, just as electric rates differ between systems. Direct comparisons between integration costs for various utilities are often invalid, Staff contends, unless they recognize differences in generation fleets, resources available to integrate wind, the size and resources in the utility's control area, the structure of the real-time market, and most importantly, the difference in value of generation that is moved from on-peak to off-peak times, both on a daily and a seasonal basis to integrate wind. . . . The costs of wind integration, Staff states, are

driven by not so much the costs of the dispatchable resource used for integration, but are instead driven more by the difference in cost between the dispatchable resource and the market price at the time integration takes place. On a hydro-based system, wind integration, Staff contends, is primarily achieved by moving extremely low-cost hydro-generation from hours when it is most valuable to hours when it is least valuable. In a thermal-based system where gas is primarily used for integration, there is much less “opportunity cost” in shifting gas-fired generation from high value hours to low value hours.

The wind studies performed by PacifiCorp, Idaho Power and Avista, Staff contends, each relied on the best available analysis tools and expertise. While not directly comparable, other studies, Staff contends, do demonstrate that wind integration costs can be lower in systems where there is greater geographic diversity, larger control areas, greater amounts of dispatchable thermal generation, and shorter real-time markets. The other studies can also serve to provide indications that integration costs could become less in Idaho if conditions change in the future.

Staff believes that the larger service territory of PacifiCorp, which reduces the limitations on available resources, justifies a somewhat smaller integration cost adjustment than Idaho Power or Avista. Staff further believes it is reasonable to fix the wind integration adjustment as proposed by PacifiCorp rather than escalate the rate at increasing wind penetration levels, given that the proposed PacifiCorp rate adjustment already assumes a 20% wind penetration level. Staff supports the rationale that both parties benefit from forecasting and therefore should share the costs. Staff also supports the terms of the Settlement Stipulation that give PacifiCorp sole discretion for determining whether forecasting is necessary or desirable.

Commission Findings

The Commission has reviewed and considered the filings of record in Case No. PAC-E-07-07 including PacifiCorp’s initial filing in this docket, the Joint Motion for Approval of Settlement Stipulation (as amended), the supporting comments of Commission Staff, the opposition filing of Exergy, and the joint reply filing of PacifiCorp and the Renewable Coalition. We have reviewed public comments supportive of wind power and critical of utility and regulatory policies that the commenters contend have stymied the development of wind farms in Idaho. We have reviewed the transcript of the December 11, 2007, Joint Prehearing Conference in Case Nos. PAC-E-07-07, IPC-E-07-03, and AVU-E-07-02. We have also reviewed our Orders in Case No. IPC-E-05-22 and the workshop reports filed in that docket, our mechanical

availability guarantee Order in Case No. PAC-E-05-9 (Schwendiman), our 90%/110% performance band Orders in Case Nos. IPC-E-04-8/04-10, and the Company's 2007 Integrated Resource Plan (and included Appendix J, Wind Resource Methodology) in Case No. PAC-E-07-11.

In this case the Commission is presented with a comprehensive Settlement Stipulation and terms of agreement that include a wind integration adjustment to published avoided-cost rates. The parties to the Stipulation believe that the integration charge will provide long-term stability for QF development and will provide flexibility to protect customers from published rates that are too high. The Exergy Development Group is the only party to this case that opposes the Stipulation. At the consolidated prehearing conference in this matter the Commission inquired of Exergy as to the nature of the case it would intend to introduce if granted a hearing. Based on Exergy's representations, we are satisfied that the principal arguments that it would advance have already been addressed in its written filings of record. Tr. p. 22. We consider and find this case to be fully submitted and find it reasonable to process this matter without further hearing or notice. IDAPA 31.01.01.204.

Exergy contends that the Commission is legally prevented from determining a wind integration adjustment to published avoided-cost rates based on models, forecasts, projections and assumptions. Exergy contends that wind integration costs must be based on "actual" wind penetration on the Company's system. We find Exergy's argument to be unsound and evidence of a misunderstanding of both "avoided cost" as defined in 18 C.F.R. §§ 292.101(b)(6) and 292.304 and this Commission's authority and jurisdiction under PURPA and the implementing regulations of the Federal Energy Regulatory Commission. In establishing avoided-cost rates this Commission acts pursuant to federal, not state law. Avoided costs are the incremental costs to an electric utility of electric energy, capacity, or both, which absent purchase from a QF, the utility would generate itself or purchase. 18 C.F.R. § 292.101(b)(6). FERC does not prescribe a specific methodology for the calculation of avoided costs. The QF rates we establish for long-term firm contracts are forecast values and estimates and it has long been understood that the avoided-cost concept is not violated by use of such estimates. 18 C.F.R. § 292.304(b)(5).

The Commission also finds unreasonable Exergy's contention that utility contracts with wind generators cannot, in advance of the projects coming online, be factored into the Company's calculations of wind penetration on its system. To adopt such a position presupposes

that a contractual obligation of a wind developer to bring a project online by a certain date is without consequence and results in no reciprocal obligations on the part of the utility or duty to plan for the delivery of the power.

A review of the filings in IPC-E-05-22, IPC-E-07-03, and this docket reveals that the process of workshops and dialogue has resulted in constructive benefits to PacifiCorp and all parties. The Commission finds that the costs of wind integration are real, not illusory. A wind integration adjustment recognizes that variable wind generation presents operational integration costs to a utility that are different from other PURPA-qualified resources. PacifiCorp's study approach is different from that of Idaho Power and Avista. While PacifiCorp provides only a summary of its analyses, we consider the reasonableness of the Company's study and wind integration adjustment in the context of the wind studies presented in the Idaho Power and Avista dockets and the comments presented in this case. Additionally, we note that the wind integration studies of PacifiCorp, Idaho Power and Avista are not the only studies occurring in the Northwest. As reported in PacifiCorp's 2007 IRP, in March 2007, Northwest Power and Conservation Council released the Northwest Wind Integration Action Plan. . . . The report lists the key findings of studies of northwest utilities to quantify the full cost of integrating wind energy into existing systems. All of the studies (PacifiCorp, Avista, Idaho Power, Puget Sound Energy and Bonneville Power) find that the cost of integrating wind starts low as the variability of small quantities of wind generation is lost in the volatility of the system load and grows as the amount of wind resources increases. Collectively the studies list the size of the control area in relation to the amount of wind, the geographic diversity of the wind locations, the amount of flexibility of the receiving utility, and the access to robust markets as key factors affecting the cost of integrating wind energy.

We have reviewed the Company's 2007 IRP – Appendix J – Wind Resource Methodology and estimated \$5.10/MWh wind integration cost. PacifiCorp believes that the \$5.10/MWh integration charge is within a reasonable range of estimates of the Company's costs of integrating wind resources. The wind adjustment proposed in the Settlement is a result of compromise and negotiation. Settlement ¶ 3(a). As reflected in the Joint Motion to Approve the Settlement, the proposed wind integration cost represents the average cost of wind integration for the Company's full IRP portfolio of wind generation. PacifiCorp presently integrates 400 MW of installed wind capacity to its system, and has entered final agreements to integrate an

additional 530 MW. In addition, the Company anticipates acquiring another 400 MW of wind generation during calendar 2008-2009 through asset ownership or power purchase agreements. Joint Motion, p. 6. As reflected in the Company's 2007 IRP, Appendix J, PacifiCorp's estimated of wind integration costs are among the lowest of estimated costs in the region. Only Bonneville Power ranked lower. PacifiCorp attributes its low integration cost to be the likely result of the Company's opportunity to maximize the use of each of the key factors affecting the cost of integrating wind energy. We find the use of the adjustment as a decrement to the published avoided-cost rate for wind QFs results in net rates that represent the full avoided cost of wind generation; rates that are fair, just and reasonable. 18 C.F.R. §§ 292.101(b)(7); 292.304(a).

The Commission finds the Settlement Stipulation presented in this case and all of its components to be fair, just and reasonable and in the public interest. In our U.S. Geothermal/Lewandowski Orders in Case Nos. IPC-E-04-8/04-10, the Commission stated its belief that a legally enforceable obligation translates into reciprocal contractual obligations for both parties; a quid pro quo. It is not just a lock-in of avoided-cost rates, but is also an obligation to deliver. Asked to make a decision regarding eligibility between firm and non-firm resources, we defined firmness as "predictability on a monthly basis." In establishing a 90%/110% performance band requirement, a majority of the Commission defined the minimum degree of predictability required for published rate eligibility. The Commission found the performance requirement to be necessary to assure that the Company's customers received the generation product that they were paying for. In our later Schwendiman Order in Case No. PAC-E-05-9, we found that the mechanical availability guarantee did not alone provide a reasonable or equivalent substitute for the 90%/110% performance band, and was not in itself sufficient to protect ratepayers from overpaying. The wind forecasting and mechanical availability guarantee in conjunction with other provisions of the Settlement in this case, we find, make elimination of the 90%/110% performance band reasonable. We accept that the Stipulation is based on best available data and analysis and expect that as experience and data increases, the ability to calculate wind integration costs will improve. Our acceptance of the Stipulation is contingent on a continuing and close monitoring of integration costs by PacifiCorp.

PacifiCorp agrees to continue to review its wind integration study and update its study to include the results of available scientific data and actual operating experience. The Company is continuing to explore methodologies to confirm and quantify wind variability with

respect to the need for operating reserves. In particular, sub-hourly data is being captured to test the impact of deviations within the hour. The Company proposes including a wind integration review in the Company's biennial Integrated Resource Plan. This Commission has continuing oversight and we expect PacifiCorp to provide wind integration analysis and results to the Commission separate from its biennial IRP filing. We expect the Company in conjunction with its IRP planning process to address wind integration as a discrete part of its plan and to extend participation to Commission Staff and the parties of record in Case No. PAC-E-07-07. Regional wind integration efforts, improvements in wind forecasting, regulatory changes and actual "hands-on" experience will all have an impact on the cost of integrating wind energy. The Commission is interested in the day-to-day mechanics of how wind is integrated into the Company's system; the day-to-day impact on scheduling; and the ramifications of the Area Control Error (ACE) Diversity Interchange sharing on integration costs. We expect annual review by the Company and proposed adjustments (up or down) when warranted. We expect the additional data provided will be very important to our continued support of a wind integration adjustment. As with variables in the underlying avoided-cost methodology, parties can petition the Commission at any time to open a docket to review and update wind integration costs if those costs are believed to be outdated or inaccurate.

CONCLUSIONS OF LAW

The Idaho Public Utilities Commission has jurisdiction over PacifiCorp dba Rocky Mountain Power, Idaho Power Company, and Avista Corporation dba Avista Utilities, electric utilities, pursuant to the authority and power granted it under Title 61 of the Idaho Code and the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Commission has authority under PURPA and the implementing regulations of the Federal Energy Regulatory Commission (FERC) to set avoided costs, to order electric utilities to enter into fixed term obligations for the purchase of energy from qualified facilities (QFs) and to implement FERC rules.

ORDER

In consideration of the foregoing and as more particularly described and qualified above, IT IS HEREBY ORDERED and the Commission does hereby approve the Settlement Stipulation filed in Case No. PAC-E-07-07.

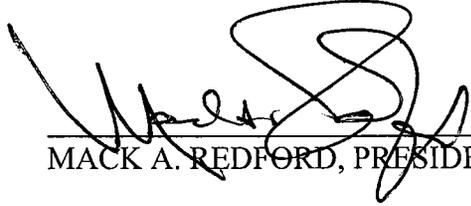
IT IS FURTHER ORDERED and the Commission hereby authorizes PacifiCorp to enter into new contracts with wind QFs utilizing the charges, terms and conditions contained in the Settlement Stipulation. The resultant adjusted rates for QF wind projects are attached to this Order. The rates are derived from the avoided-cost rates included in Order No. 30480. These rates include the application of heavy and light load hour differentials, seasonalization factors, and wind integration adjustments. Rates are shown for 2008 online dates only. For later online dates, contact the Commission Staff or the utility. The wind integration adjustments approved in this Order shall also be applied to future avoided-cost rates as they may be changed due to changes in gas prices or other input data variables.

We will also permit wind QFs with existing Firm Energy Sales Agreements with PacifiCorp to amend their contracts to replace the 90%/110% performance band with a Mechanical Availability Guarantee should they also agree to fund their share of wind forecasting services and accept a wind integration adjustment. Amendments must be signed by the QF and utility and submitted for Commission review and approval. No change to the underlying published rate in existing contracts will be authorized.

IT IS FURTHER ORDERED and the Commission hereby increases the published rate eligibility cap for intermittent QF wind projects from 100 kW to 10 aMW/month.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. See *Idaho Code* § 61-626.

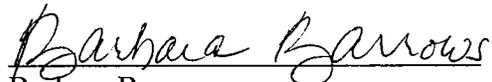
DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 20th
day of February 2008.


MACK A. REDFORD, PRESIDENT


MARSHA H. SMITH, COMMISSIONER


JIM KEMPTON, COMMISSIONER

ATTEST:


Barbara Barrows
Assistant Commission Secretary

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PACIFICORP
 LEVELIZED RATES
 PROJECT ON-LINE IN 2008
 Effective Date: Jan 01, 2008

Contract Length	January				February				March				April			
	Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour	
	Price	Less Wind Integration Adjustment														
1	69.30	64.20	63.24	58.14	70.64	65.54	65.26	60.16	63.92	58.82	53.82	48.72	63.92	58.82	51.13	46.03
2	68.24	63.14	62.28	57.18	69.57	64.47	64.27	59.17	62.94	57.84	53.00	47.90	62.94	57.84	50.35	45.25
3	67.14	62.04	61.27	56.17	68.44	63.34	63.23	58.13	61.92	56.82	52.15	47.05	61.92	56.82	49.54	44.44
4	66.03	60.93	60.26	55.16	67.31	62.21	62.18	57.08	60.90	55.80	51.28	46.18	60.90	55.80	48.72	43.62
5	65.25	60.15	59.55	54.45	66.52	61.42	61.45	56.35	60.18	55.08	50.68	45.58	60.18	55.08	48.15	43.05
6	64.87	59.77	59.21	54.11	66.13	61.03	61.10	56.00	59.84	54.74	50.39	45.29	59.84	54.74	47.87	42.77
7	64.66	59.56	59.01	53.91	65.91	60.81	60.89	55.79	59.64	54.54	50.22	45.12	59.64	54.54	47.71	42.61
8	64.70	59.60	59.05	53.95	65.96	60.86	60.93	55.83	59.68	54.58	50.25	45.15	59.68	54.58	47.74	42.64
9	64.94	59.84	59.27	54.17	66.20	61.10	61.16	56.06	59.90	54.80	50.44	45.34	59.90	54.80	47.92	42.82
10	65.30	60.20	59.60	54.50	66.57	61.47	61.50	56.40	60.23	55.13	50.72	45.62	60.23	55.13	48.18	43.08
11	65.77	60.67	60.03	54.93	67.05	61.95	61.94	56.84	60.66	55.56	51.09	45.99	60.66	55.56	48.53	43.43
12	66.29	61.19	60.50	55.40	67.58	62.48	62.43	57.33	61.14	56.04	51.49	46.39	61.14	56.04	48.91	43.81
13	66.85	61.75	61.01	55.91	68.14	63.04	62.95	57.85	61.65	56.55	51.92	46.82	61.65	56.55	49.32	44.22
14	67.43	62.33	61.53	56.43	68.73	63.63	63.50	58.40	62.19	57.09	52.37	47.27	62.19	57.09	49.75	44.65
15	68.02	62.92	62.08	56.98	69.34	64.24	64.06	58.96	62.74	57.64	52.83	47.73	62.74	57.64	50.19	45.09
16	68.62	63.52	62.63	57.53	69.96	64.86	64.63	59.53	63.29	58.19	53.30	48.20	63.29	58.19	50.64	45.54
17	69.24	64.14	63.19	58.09	70.58	65.48	65.20	60.10	63.86	58.76	53.78	48.68	63.86	58.76	51.09	45.99
18	69.85	64.75	63.75	58.65	71.21	66.11	65.78	60.68	64.43	59.33	54.25	49.15	64.43	59.33	51.54	46.44
19	70.47	65.37	64.31	59.21	71.84	66.74	66.37	61.27	65.00	59.90	54.74	49.64	65.00	59.90	52.00	46.90
20	71.10	66.00	64.88	59.78	72.48	67.38	66.95	61.85	65.57	60.47	55.22	50.12	65.57	60.47	52.46	47.36

PACIFICORP
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Contract Length	Levelized Flat Price	September				October				November				December			
		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour	
		10%	Less Wind Integration Adjustment	99%	Less Wind Integration Adjustment	115%	Less Wind Integration Adjustment	105%	Less Wind Integration Adjustment	110%	Less Wind Integration Adjustment	123%	Less Wind Integration Adjustment	120%	Less Wind Integration Adjustment		
1	67.28	73.34	68.24	66.61	61.51	77.37	72.27	70.64	65.54	74.01	68.91	64.59	59.49	86.79	81.69	80.74	75.64
2	66.25	72.22	67.12	65.59	60.49	76.19	71.09	69.57	64.47	72.88	67.78	63.60	58.50	85.47	80.37	79.51	74.41
3	65.18	71.05	65.95	64.53	59.43	74.96	69.86	68.44	63.34	71.70	66.60	62.58	57.48	84.09	78.99	78.22	73.12
4	64.10	69.87	64.77	63.46	58.36	73.72	68.62	67.31	62.21	70.51	65.41	61.54	56.44	82.69	77.59	76.92	71.82
5	63.35	69.05	63.95	62.72	57.62	72.86	67.76	66.52	61.42	69.69	64.59	60.82	55.72	81.72	76.62	76.02	70.92
6	62.98	68.65	63.55	62.36	57.26	72.43	67.33	66.13	61.03	69.28	64.18	60.47	55.37	81.25	76.15	75.58	70.48
7	62.78	68.43	63.33	62.15	57.05	72.19	67.09	65.91	60.81	69.05	63.95	60.26	55.16	80.98	75.88	75.33	70.23
8	62.82	68.47	63.37	62.19	57.09	72.24	67.14	65.96	60.86	69.10	64.00	60.30	55.20	81.03	75.93	75.38	70.28
9	63.05	68.72	63.62	62.42	57.32	72.51	67.41	66.57	61.47	69.35	64.25	60.53	55.43	81.33	76.23	75.66	70.56
10	63.40	69.11	64.01	62.77	57.67	72.91	67.81	66.74	61.64	69.74	64.64	60.86	55.76	81.79	76.69	76.08	70.98
11	63.86	69.60	64.50	63.22	58.12	73.44	68.34	67.05	61.95	70.24	65.14	61.30	56.20	82.38	77.28	76.63	71.53
12	64.36	70.15	65.05	63.72	58.62	74.01	68.91	67.58	62.48	70.80	65.70	61.79	56.69	83.02	77.92	77.23	72.13
13	64.90	70.74	65.64	64.25	59.15	74.63	69.53	68.14	63.04	71.39	66.29	62.30	57.20	83.72	78.62	77.88	72.78
14	65.46	71.35	66.25	64.81	59.71	75.28	70.18	68.73	63.63	72.01	66.91	62.84	57.74	84.45	79.35	78.55	73.45
15	66.04	71.98	66.88	65.38	60.28	75.94	70.84	69.34	64.24	72.64	67.54	63.40	58.30	85.19	80.09	79.25	74.15
16	66.63	72.62	67.52	65.96	60.86	76.62	71.52	69.96	64.86	73.29	68.19	63.96	58.86	85.95	80.85	79.95	74.85
17	67.22	73.27	68.17	66.55	61.45	77.30	72.20	70.58	65.48	73.94	68.84	64.53	59.43	86.71	81.61	80.66	75.56
18	67.82	73.92	68.82	67.14	62.04	77.99	72.89	71.21	66.11	74.60	69.50	65.10	60.00	87.48	82.38	81.36	76.28
19	68.42	74.58	69.48	67.74	62.64	78.68	73.58	71.84	66.74	75.26	70.16	65.68	60.58	88.26	83.16	82.10	77.00
20	69.03	75.24	70.14	68.34	63.24	79.38	74.28	72.48	67.38	75.93	70.83	66.26	61.16	89.04	83.94	82.83	77.73

PACIFICORP
 LEVELIZED RATES
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 Effective Date: Jan 01, 2008

Contract Length	Levelized Flat Price	May				June				July				August			
		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour	
		Price	Less Wind Integration Adjustment														
1	67.28	61.90	56.80	42.39	37.29	63.24	58.14	43.73	38.63	81.41	76.31	61.90	56.80	81.41	76.31	61.90	56.80
2	68.25	60.95	55.85	41.74	36.64	62.28	57.18	43.07	37.97	80.17	75.07	60.95	55.85	80.17	75.07	60.95	55.85
3	65.18	59.97	54.87	41.07	35.97	61.27	56.17	42.37	37.27	78.87	73.77	59.97	54.87	78.87	73.77	59.97	54.87
4	64.10	58.98	53.88	40.39	35.29	60.26	55.16	41.67	36.57	77.57	72.47	58.98	53.88	77.57	72.47	58.98	53.88
5	63.35	58.28	53.18	39.91	34.81	59.55	54.45	41.18	36.08	76.66	71.56	58.28	53.18	76.66	71.56	58.28	53.18
6	62.98	57.95	52.85	39.68	34.58	59.21	54.11	40.94	35.84	76.21	71.11	57.95	52.85	76.21	71.11	57.95	52.85
7	62.78	57.75	52.65	39.55	34.45	59.01	53.91	40.80	35.70	76.01	70.91	57.75	52.65	76.01	70.91	57.75	52.65
8	62.82	57.79	52.69	39.57	34.47	59.05	53.95	40.83	35.73	76.29	71.19	58.00	52.90	76.29	71.19	58.00	52.90
9	63.05	58.00	52.90	39.72	34.62	59.27	54.17	40.98	35.88	76.71	71.61	58.00	52.90	76.71	71.61	58.00	52.90
10	63.40	58.33	53.23	39.94	34.84	59.60	54.50	41.21	36.11	77.27	72.17	58.33	53.23	77.27	72.17	58.33	53.23
11	63.86	58.75	53.65	40.23	35.13	60.03	54.93	41.51	36.41	77.88	72.78	58.75	53.65	77.88	72.78	58.75	53.65
12	64.36	59.21	54.11	40.55	35.45	60.50	55.40	41.83	36.73	78.53	73.43	59.21	54.11	78.53	73.43	59.21	54.11
13	64.90	59.71	54.61	40.89	35.79	61.01	55.91	42.18	37.08	79.21	74.11	59.71	54.61	79.21	74.11	59.71	54.61
14	65.46	60.22	55.12	41.24	36.14	61.53	56.43	42.55	37.45	79.91	74.81	60.22	55.12	79.91	74.81	60.22	55.12
15	66.04	60.76	55.66	41.60	36.50	62.08	56.98	42.93	37.83	80.62	75.52	60.76	55.66	80.62	75.52	60.76	55.66
16	66.63	61.30	56.20	41.97	36.87	62.63	57.53	43.31	38.21	81.34	76.24	61.30	56.20	81.34	76.24	61.30	56.20
17	67.22	61.84	56.74	42.35	37.25	63.19	58.09	43.69	38.59	82.06	76.96	61.84	56.74	82.06	76.96	61.84	56.74
18	67.82	62.39	57.29	42.73	37.63	63.75	58.65	44.08	38.98	82.79	77.69	62.39	57.29	82.79	77.69	62.39	57.29
19	68.42	62.95	57.85	43.10	38.00	64.31	59.21	44.47	39.37	83.52	78.42	62.95	57.85	83.52	78.42	62.95	57.85
20	69.03	63.50	58.40	43.49	38.39	64.88	59.78	44.87	39.77	84.29	79.19	63.50	58.40	84.29	79.19	63.50	58.40

PACIFICORP
NON LEVELIZED RATES
Effective Date: Jan 01, 2008

Year	January			February			March			April		
	Heavy Load Hour		Light Load Hour	Heavy Load Hour		Light Load Hour	Heavy Load Hour		Light Load Hour	Heavy Load Hour		Light Load Hour
	103%	Less Wind Integration Adjustment	Price	84%	Less Wind Integration Adjustment	Price	95%	Less Wind Integration Adjustment	Price	85%	Less Wind Integration Adjustment	Price
2008	69.30	64.20	63.24	70.64	65.54	65.26	63.92	58.82	53.82	63.92	58.82	51.13
2009	67.10	62.00	61.24	68.40	63.30	63.19	61.89	56.79	52.12	61.89	56.79	49.51
2010	64.85	59.55	59.00	65.91	60.81	60.89	59.63	54.53	50.22	59.63	54.53	47.70
2011	62.11	57.01	56.68	63.31	58.21	58.49	57.28	52.18	48.24	57.28	52.18	45.83
2012	59.87	56.36	56.09	61.46	57.56	57.88	56.69	51.59	47.74	56.69	51.59	45.35
2013	62.46	57.36	57.00	62.46	58.57	58.82	57.61	52.51	48.51	57.61	52.51	46.09
2014	61.10	57.83	57.43	64.15	59.05	59.27	58.04	52.94	48.88	58.04	52.94	46.44
2015	63.21	60.01	59.42	66.37	61.27	61.32	60.05	54.95	50.57	60.05	54.95	48.04
2016	65.75	62.63	61.81	69.04	63.94	63.78	62.47	57.37	52.60	62.47	57.37	49.97
2017	68.20	65.15	64.11	71.61	66.51	66.16	64.79	59.69	54.56	64.79	59.69	51.83
2018	71.12	68.15	66.85	74.67	69.57	69.98	67.56	62.46	56.89	67.56	62.46	54.05
2019	73.55	70.66	69.14	77.23	72.13	71.35	69.87	64.77	58.84	69.87	64.77	55.90
2020	76.17	73.35	71.60	79.98	74.88	73.88	72.36	67.26	60.93	72.36	67.26	57.89
2021	78.77	76.03	74.04	82.71	77.61	76.41	74.83	69.73	63.02	74.83	69.73	59.87
2022	81.46	78.80	76.57	85.53	80.43	79.01	77.38	72.28	65.17	77.38	72.28	61.91
2023	84.23	81.66	79.18	88.44	83.34	81.70	80.02	74.92	67.39	80.02	74.92	64.02
2024	87.21	84.72	81.98	91.57	86.47	84.59	82.85	77.75	69.77	82.85	77.75	66.28
2025	90.17	87.78	84.76	94.68	89.58	87.47	85.66	80.56	72.14	85.66	80.56	68.53
2026	93.47	91.17	87.86	98.14	93.04	90.66	88.79	83.69	74.77	88.79	83.69	71.03
2027	96.99	94.80	91.17	101.84	96.74	94.08	92.14	87.04	77.60	92.14	87.04	73.72
2028	100.52	98.44	94.49	105.55	100.45	97.51	95.50	90.40	80.42	95.50	90.40	76.40
2029	104.30	102.33	98.04	109.51	104.41	101.17	99.08	93.98	83.44	99.08	93.98	79.27
2030	108.07	106.21	101.59	113.48	108.38	104.83	102.67	97.57	86.46	102.67	97.57	82.13

PACIFICORP
 NON LEVELIZED RATES
 Effective Date: Jan 01, 2008

Year	Non-Levelized Price	May				June				July				August			
		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour	
		Price	Less Wind Integration Adjustment														
2008	67.28	61.90	56.80	42.39	37.29	63.24	58.14	43.73	38.63	81.41	76.31	61.90	56.80	81.41	76.31	61.90	56.80
2009	65.15	59.93	54.83	41.04	35.94	61.24	56.14	42.34	37.24	78.83	73.73	59.93	54.83	78.83	73.73	59.93	54.83
2010	62.77	57.75	52.65	39.54	34.44	59.00	53.90	40.80	35.70	75.95	70.85	57.75	52.65	75.95	70.85	57.75	52.65
2011	60.30	55.47	50.37	37.99	32.89	56.68	51.58	39.19	34.09	72.96	67.86	55.47	50.37	72.96	67.86	55.47	50.37
2012	59.67	54.90	49.80	37.59	32.49	56.09	50.99	38.79	33.69	72.20	67.10	54.90	49.80	72.20	67.10	54.90	49.80
2013	60.64	55.79	50.69	38.20	33.10	57.00	51.90	39.42	34.32	73.37	68.27	55.79	50.69	73.37	68.27	55.79	50.69
2014	61.10	56.21	51.11	38.49	33.39	57.43	52.33	39.71	34.61	73.93	68.83	56.21	51.11	73.93	68.83	56.21	51.11
2015	63.21	58.15	53.05	39.82	34.72	59.42	54.32	41.09	35.99	76.49	71.39	58.15	53.05	76.49	71.39	58.15	53.05
2016	65.75	60.49	55.39	41.42	36.32	61.81	56.71	42.74	37.64	79.56	74.46	60.49	55.39	79.56	74.46	60.49	55.39
2017	68.20	62.75	57.65	42.97	37.87	64.11	59.01	44.33	39.23	82.53	77.43	62.75	57.65	82.53	77.43	62.75	57.65
2018	71.12	65.43	60.33	44.80	39.70	66.85	61.75	46.23	41.13	86.05	80.95	65.43	60.33	86.05	80.95	65.43	60.33
2019	73.55	67.67	62.57	46.34	41.24	69.14	64.04	47.81	42.71	88.00	83.90	67.67	62.57	88.00	83.90	67.67	62.57
2020	76.17	70.08	64.98	47.99	42.89	71.60	66.50	49.51	44.41	92.16	87.06	70.08	64.98	92.16	87.06	70.08	64.98
2021	78.77	72.47	67.37	49.63	44.53	74.04	68.94	51.20	46.10	95.31	90.21	72.47	67.37	95.31	90.21	72.47	67.37
2022	81.46	74.94	69.84	51.32	46.22	76.57	71.47	52.95	47.85	98.56	93.46	74.94	69.84	98.56	93.46	74.94	69.84
2023	84.23	77.49	72.39	53.07	47.97	79.18	74.08	54.75	49.65	101.92	96.82	77.49	72.39	101.92	96.82	77.49	72.39
2024	87.21	80.23	75.13	54.94	49.84	81.98	76.88	56.69	51.59	105.52	100.42	80.23	75.13	105.52	100.42	80.23	75.13
2025	90.17	82.96	77.86	56.81	51.71	84.76	79.66	58.61	53.51	109.11	104.01	82.96	77.86	109.11	104.01	82.96	77.86
2026	93.47	85.99	80.89	58.88	53.78	87.86	82.76	60.75	55.65	113.09	107.99	85.99	80.89	113.09	107.99	85.99	80.89
2027	96.99	89.23	84.13	61.11	56.01	91.17	86.07	63.05	57.95	117.36	112.26	89.23	84.13	117.36	112.26	89.23	84.13
2028	100.52	92.48	87.38	63.33	58.23	94.49	89.39	65.34	60.24	121.63	116.53	92.48	87.38	121.63	116.53	92.48	87.38
2029	104.30	95.95	90.85	65.71	60.61	98.04	92.94	67.79	62.69	126.20	121.10	95.95	90.85	126.20	121.10	95.95	90.85
2030	108.07	99.43	94.33	68.09	62.99	101.59	96.49	70.25	65.15	130.77	125.67	99.43	94.33	130.77	125.67	99.43	94.33

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 NON LEVELIZED RATES
 Effective Date: Jan 01, 2008

Year	Non-Levelized Price	September				October				November				December			
		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour		Heavy Load Hour		Light Load Hour	
		Price	Less Wind Integration Adjustment														
2008	67.28	73.94	68.24	66.61	77.37	72.27	70.64	65.54	74.01	68.91	64.59	59.49	86.79	81.69	80.74	75.64	
2009	65.15	71.01	65.91	59.39	74.92	69.82	68.40	63.30	71.66	66.56	62.54	57.44	84.04	78.94	78.17	73.07	
2010	62.77	68.42	63.32	57.04	72.18	67.08	65.91	60.81	69.05	63.95	60.26	55.16	80.97	75.87	75.32	70.22	
2011	60.30	65.72	60.62	54.59	69.34	64.24	63.31	58.21	66.33	61.23	57.88	52.78	77.78	72.68	72.36	67.26	
2012	59.67	65.04	59.94	53.98	68.62	63.52	62.66	57.56	65.64	60.54	57.29	52.19	76.98	71.88	71.61	66.51	
2013	60.64	66.10	61.00	54.93	69.73	64.63	63.67	58.57	66.70	61.60	58.21	53.11	78.22	73.12	72.77	67.67	
2014	61.70	66.80	61.50	55.39	70.26	65.16	64.15	59.05	67.21	62.11	58.66	53.56	78.82	73.72	73.32	68.22	
2015	63.21	68.90	63.80	57.48	72.69	67.59	66.37	61.27	69.53	64.43	60.68	55.58	84.82	79.72	78.90	73.80	
2016	65.75	71.67	66.57	60.00	75.62	70.52	69.04	63.94	72.33	67.23	63.12	58.02	87.98	82.88	81.84	76.74	
2017	68.20	74.94	69.24	62.42	78.43	73.33	71.61	66.51	75.02	69.92	65.47	60.37	91.74	86.64	85.34	80.24	
2018	71.12	77.52	72.42	65.31	81.78	76.68	74.67	69.57	78.23	73.13	68.27	63.17	94.88	89.78	88.26	83.16	
2019	73.55	80.17	75.07	67.72	84.59	79.49	77.23	72.13	80.91	75.81	70.61	65.51	94.26	89.16	87.40	82.30	
2020	76.17	83.02	77.92	70.31	87.59	82.49	79.98	74.88	83.79	78.69	73.12	68.02	101.61	96.51	94.52	89.42	
2021	78.77	85.86	80.76	72.88	90.59	85.49	82.71	77.61	86.65	81.55	75.62	70.52	105.08	99.98	97.75	92.65	
2022	81.46	88.79	83.69	75.54	93.68	88.58	85.53	80.43	89.60	84.50	78.20	73.10	108.66	103.56	101.08	95.98	
2023	84.23	91.81	86.71	78.29	96.87	91.77	88.44	83.34	92.65	87.55	80.86	75.76	112.50	107.40	104.65	99.55	
2024	87.21	95.06	89.96	81.24	100.29	95.19	91.57	86.47	95.93	90.83	83.72	78.62	116.32	111.22	108.21	103.11	
2025	90.17	98.29	93.19	84.17	103.70	98.60	94.68	89.58	99.19	94.09	86.56	81.46	120.57	115.47	112.16	107.06	
2026	93.47	101.88	96.78	87.43	107.49	102.39	98.14	93.04	102.81	97.71	89.73	84.63	125.12	120.02	116.39	111.29	
2027	96.99	105.72	100.62	90.92	111.54	106.44	101.84	96.74	108.69	103.59	95.50	91.40	129.67	124.57	120.63	115.53	
2028	100.52	109.57	104.47	94.42	115.60	110.50	105.55	100.45	110.57	105.47	98.50	94.40	134.54	129.44	125.16	120.06	
2029	104.30	113.68	108.58	98.15	119.94	114.84	109.51	104.41	114.73	109.63	100.12	95.02	139.41	134.31	129.69	124.59	
2030	108.07	117.80	112.70	101.89	124.28	119.18	113.48	108.38	118.88	113.78	103.75	98.65					