

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE COMPLAINT)
BY OAK TREE ENERGY LLC AGAINST) AMENDED FINAL DECISION AND
NORTHWESTERN ENERGY FOR) ORDER; NOTICE OF ENTRY
REFUSING TO ENTER INTO A)
PURCHASE POWER AGREEMENT) EL11-006**

On April 28, 2011, Oak Tree Energy, LLC (Oak Tree) filed a Complaint (Complaint) with the South Dakota Public Utilities Commission (Commission) against NorthWestern Corporation d/b/a NorthWestern Energy (NWE).¹ The dispute involves a proposed wind generation project located in Clark County, South Dakota (Project). Oak Tree alleged that the Project is a Qualifying Facility (QF) under the Public Utility Regulatory Policies Act of 1978 (PURPA) and that NWE refuses to enter into a power purchase agreement. On May 5, 2011, the Commission electronically transmitted notice of the filing and the intervention deadline of May 20, 2011, to interested persons on the Commission's PUC Weekly Filings electronic listserv. No petitions for intervention were filed.

On May 24, 2011, NWE filed its Answer to the Complaint. On June 17, 2011, the Commission issued a Scheduling Order setting forth a schedule for discovery by the parties, including the Commission's staff (Staff), and deadlines for filing pre-filed testimony. On September 7, 2011, Oak Tree filed a Motion to Compel. On October 20, 2011, the Commission issued an Amended Scheduling Order. On November 8, 2011, the Commission heard Oak Tree's Motion to Compel, and on November 14, 2011, issued an Order Granting in Part Motion to Compel. On December 13, 2011, Oak Tree filed its written direct testimony. On January 13, 2012, NWE filed its written direct testimony. On January 27, 2012, Staff filed its written testimony. On February 7, 2012, the parties stipulated to an amended filing schedule.

On February 8, 2012, Oak Tree filed its Second Motion to Compel and on February 9, 2012, Oak Tree filed a Motion to Expedite Hearing. At its ad hoc meeting on February 13, 2012, the Commission granted Oak Tree's Motion to Expedite, setting the Motion for consideration at its regular meeting on February 14, 2012. On February 14, 2012, NWE filed NorthWestern Energy's Resistance to Oak Tree Energy, LLC's Second Motion to Compel. On February 16, 2012, the Commission issued an Order Granting Motion to Expedite, an Order Granting in Part Second Motion to Compel and Protective Order, and a Second Amended Scheduling Order. On February 24, 2012, Oak Tree filed its rebuttal testimony, and NWE filed its responsive testimony.

On February 28, 2012, the Commission issued an Order for and Notice of Hearing setting the matter for hearing on March 21-22, 2012, and Oak Tree filed a Motion to Allow Electronic Testimony. On March 2, NWE filed NorthWestern Energy's Pre-Hearing Motions and Brief in Support of NorthWestern Energy's Pre-Hearing Motions. On March 5, 2012, Oak Tree filed Oak Tree Energy, LLC's Prehearing Motions Regarding Right to Full Avoided Cost and Creation of Legally Enforceable Obligation and Oak Tree Energy, LLC's Motion to Exclude

¹ The Commission's Orders in the case and all other filings and documents in the record are available on the Commission's web page for Docket EL11-006 at:
<http://puc.sd.gov/Dockets/Electric/2011/el11-006.aspx>

Testimony of Steven E. Lewis in Full and Bleau Lafave in Part and Brief in Support. On March 7, 2012, NWE filed NorthWestern Energy's Brief in Opposition to Oak Tree Energy, LLC's Motion to Allow Electronic Testimony, NorthWestern Energy's Response to Oak Tree Energy, LLC's Pre-Hearing Motions Regarding Right to Full Avoided Cost and Creation of Legally Enforceable Obligation, and NorthWestern Energy's Brief in Opposition to Oak Tree Energy, LLC's Motion to Exclude Testimony. On March 8, 2012, Oak Tree filed Oak Tree Energy, LLC's Response to Northwestern Energy's Prehearing Motions.

At an ad hoc meeting on March 9, 2012, the Commission heard Oak Tree's Motion to Allow Electronic Testimony and on March 14, 2012, issued its Order Denying Motion to Allow Electronic Testimony. On March 13, 2012, the Commission heard the parties pre-hearing motions and on March 15, 2012, issued its Order Denying Oak Tree's Omnibus Prehearing Motions and Granting in Part and Denying In Part Parties' Motions to Strike and Exclude.

The hearing was held as scheduled on March 21-22, 2012, at which Oak Tree, NWE, and Staff appeared and participated. At hearing, in response to a request by Chairman Nelson, NWE agreed to produce for the hearing record its agreement with Titan Wind I, and on March 21, 2012, NWE filed the Titan Wind I Project Power Purchase Agreement, which was received into evidence as Exhibit NW 9. TR1 262, 299.² At the conclusion of the hearing, a discussion took place regarding post-hearing schedule, and agreement was reached between the Commission and the parties on the schedule for briefing and oral argument, with the oral argument procedures and time limits to be established following discussion between Commission Counsel and the parties. On April 10, 2012, the Commission accordingly issued a Post-Hearing Procedural Order.

On April 18, 2012, NWE filed NorthWestern Energy's Post-Hearing Brief. On April 19, 2012, Oak Tree filed Oak Tree Energy, LLC's Opening Post-Hearing Brief, and Staff filed Commission Staff's Post-Hearing Brief. On April 24, 2012, NWE filed NorthWestern Energy's Post-Hearing Response Brief, and Oak Tree filed Oak Tree Energy, LLC's Reply to Northwestern Energy's Post-Hearing Brief and Oak Tree Energy, LLC's Reply to Commission Staff's Post-Hearing Brief.

On April 26, 2012, the Commission heard oral argument from the parties. Following oral argument and Commissioner questions and discussion, Chairman Nelson described for the parties and Commissioners a proposal for possible resolution of the matter at an avoided cost value of \$46.47, if acceptable to the parties. Oak Tree v. NorthWestern – Nelson Proposal. The Commission instructed the parties to submit their responses on the Nelson Proposal by close of business on April 30, 2012, and scheduled a continuation of the proceeding on May 2, 2012. On April 30, 2012, Oak Tree filed Oak Tree Energy, LLC's Response to Chairman Nelson's Question, and NWE filed NorthWestern Energy's Response to Chairman Nelson's Proposal Presented at Oral Argument on April 26, 2012.

On May 2, 2012, after consideration of the parties' post-hearing briefs, oral argument, and responses to a proposal for agreed resolution of the matter by Chairman Nelson, the

² References to the March 21-22, 2012, and December 5-6, 2012, Hearing Transcripts are in the format "TR1" and "TR2," respectively, followed by the Hearing Transcript page number(s) referenced and references to Hearing Exhibits are in the format Ex followed by the exhibit number and, where applicable, the page number(s) referenced and, where applicable, the attachment or sub-exhibit identifier and page number(s) referenced (the exhibit number party abbreviations employed by the parties are: Oak Tree – "OT"; NorthWestern – "NW" or "NWE"; Staff – "Staff").

Commission voted unanimously to make certain intermediate rulings in the case, and on May 15, 2012, issued an Interim Order on such rulings directing the parties to file additional pre-filed testimony and rebuttal testimony in conformity with the Interim Order on or before June 6 and June 13, 2012, respectively, and setting the matter for additional hearing on June, 19, 2012. The interim rulings made by the Commission in the Interim Order were:

1. That, given NWE's status as a vertically integrated utility with predominant reliance on its own internal generation at this time, the hybrid method is the proper method to calculate avoided costs for NWE's South Dakota system.
2. That NWE did not, however, incorporate projected carbon cost inputs into its use of this method and also may have utilized unjustifiably low natural gas inputs and electric market inputs, and as a result, the Commission cannot reliably determine the proper avoided cost with the data and analyses currently in the record.
3. That the carbon emission cost values of \$5/ton starting in 2015 and shifting to \$10/ton starting in 2020 and rising to \$15/ton in 2025 as estimated by Lands Energy are reasonable carbon emissions cost estimates in the present environment and are the appropriate carbon emissions cost values to be included in the parties' respective hybrid method analyses of avoided cost.
4. That NWE is obligated to purchase Oak Tree's output because a legally enforceable obligation was created by Oak Tree on February 25, 2011.
5. That Oak Tree is entitled to capacity credit for the facility's output commencing in 2012 with the capacity contribution to be determined and adjusted in accordance with the method NWE is using for the Titan I project, and such capacity credit shall be incorporated into the hybrid method beginning in 2012.
6. That the proper avoided cost contract term is 20 years.

In the Interim Order, the Commission then directed the parties to submit additional testimony and scheduled a second hearing to consider the following:

1. The proper application of the hybrid method.
2. The proper natural gas input(s) to use in the hybrid method based on current market conditions and projections.
3. The proper electric market rates that the parties may deem warranted to reflect current market conditions and projections, taking into consideration the carbon emission costs previously approved and any adjustments to gas prices.
4. The proper capacity contribution and resulting capacity credits to be included in the avoided cost and added into the hybrid method under the Titan I method.
5. NorthWestern's avoided cost levelized over a 20 year period.

On May 29, 2012, Oak Tree filed Oak Tree Energy, LLC's Motion for Partial Reconsideration of Interim Order. On May 31, 2012, the Commission issued an Order Cancelling Procedural Schedule and Hearing. On June 14, 2012, NWE filed NorthWestern

Energy's Application for Reconsideration of Findings and Conclusions in Interim Order Issued on May 15, 2012. On June 18, 2012, NWE filed NorthWestern Energy's Answer in Opposition to Oak Tree Energy, LLC's Motion for Partial Reconsideration of Interim Order, and Staff filed Commission Staff's Answer to Oak Tree's Motion for Partial Reconsideration of Interim Order. On July 5, 2012, Oak Tree filed Oak Tree Energy, LLC's Answer to Northwestern Energy's Application for Reconsideration of Findings and Conclusions in Interim Order Issued on May 15, 2012. On July 10, 2012, Oak Tree filed Oak Tree Energy, LLC's Combined Reply in Support of Its Motion for Partial Reconsideration of Interim Order.

At an ad hoc meeting on October 2, 2012, the Commission heard oral argument from all parties on Oak Tree's and NWE's respective requests for reconsideration of the Commission's Interim Order. The Commission deferred action until its regular meeting on October 9, 2012, at which the Commission again considered this matter. On October 11, 2012, the Commission issued an Order Granting in Part and Denying in Part Motion for Partial Reconsideration and Application for Reconsideration (Reconsideration Order) (i) denying Oak Tree's Motion for Partial Reconsideration with respect to the use of the hybrid method to determine avoided cost, (ii) granting Oak Tree's Motion for Partial Reconsideration with respect to the use of current market conditions and projections in determining proper natural gas inputs and proper electric market rates, (iii) denying NWE's Application for Reconsideration with respect to interim Finding and Conclusion 4 regarding Oak Tree's creation of a legally enforceable obligation (LEO) as of February 25, 2011, (iv) granting NWE's Application for Reconsideration with respect to interim Findings and Conclusions 2 and 3 on the grounds that carbon cost forecasts were too speculative as of the LEO date and remain so at this time to justify their inclusion as inputs into the avoided cost determination and that carbon costs should therefore have a value of zero, and (v) denying Oak Tree's Motion for Partial Reconsideration with respect to the use of the Land's Energy carbon emissions costs on the grounds that the issue had become moot as result of the granting of NWE's request to disallow the inclusion of carbon costs. Commissioner Fiegen dissented as to the issue of carbon cost inclusion.

On October 15, 2012, the Commission issued a Procedural Order; Order for and Notice of Hearing setting the matter for hearing on December 5-6, 2012, to address the issues as set forth in the Interim Order as modified by the Reconsideration Order:

1. The proper application of the hybrid method with no inclusion of carbon costs.
2. The proper natural gas input(s) to use in the hybrid method based on market conditions and projections as of February 25, 2011, the date on which a legally enforceable obligation was created.
3. The proper electric market rates that the parties may deem warranted reflecting market conditions and projections as of February 25, 2011.
4. The proper capacity contribution and resulting capacity credits to be included in the avoided cost and added into the hybrid method under the Titan I method.
5. NWE's avoided cost levelized over a 20 year period.

The hearing was held as scheduled. The Commission deferred taking action. The parties agreed to a procedural schedule for the filing of post-hearing briefs and consideration by the Commission, and on December 26, 2012, the Commission issued a Procedural Order setting forth the post-hearing briefing schedule and setting the matter for oral argument and decision on January 22, 2013.

On January 3, 2013, Oak Tree filed Oak Tree Energy LLC's Post Second Hearing Opening Brief. On January 16, 2013, NWE filed NorthWestern Energy's Post-Hearing Response

Brief for Supplemental Hearing. On January 18, 2013, Staff filed Staff's Post Second Hearing Brief. On January 22, 2013, Oak Tree filed Oak Tree Energy LLC's Post Second Hearing Reply Brief.

On January 22, 2013, the Commission heard brief oral arguments from the parties and then took the matter up for decision. Commissioner Nelson moved to adopt the avoided cost rates set forth in the columns entitled "Rounded Actual" for either "Beginning in 2013" or "Beginning in 2014" as the case may be contained in a spreadsheet handout entitled "Nelson Avoided Cost Summary Proposal January 22, 2013" (attached as Exhibit A hereto) that Commissioner Nelson provided to all persons present in person and via email attachment to those participating telephonically. The spreadsheet was based on the model developed by Staff witness Brian Rounds but with input values modified to reflect the input values that Commissioner Nelson believed were supported by the preponderance of the evidence and reflected a reasonable balance of the diversity of assumptions and inputs contained within the expert opinion evidence at hearing. After a detailed discussion among the Commissioners, primarily concerning the proper capacity cost value and energy load shape inputs and whether the avoided cost value should be the actual annual calculated value or the levelized value over the 20-year power purchase obligation contract term, Commissioner Nelson amended his motion to utilize the levelized avoided cost values as set forth on Exhibit A of \$53.31/MWh if operation begins in 2013 and \$55.34/MWh if operation begins in 2014. A majority of the Commission voted in favor of the motion, with Commissioner Fiegen dissenting.

On March 21, 2013, NWE filed NorthWestern Energy's Application for Reconsideration of Findings and Conclusions in Final Order Issued on February 21, 2013 (Application for Reconsideration). On April 15, 2013, Oak Tree filed Oak Tree Energy, LLC's Answer to NWE's Application for Reconsideration. The Application for Reconsideration requested reconsideration of the Decision's Findings of Fact 23, 30, and 31 and Conclusions of Law 7 and 8. On April 11, 2013, the Commission's Staff (Staff) filed Staff's Response to Northwestern Energy's Application for Reconsideration of Findings and Conclusions in Final Order issued on February 21, 2013.

At its regular meeting on April 23, 2013, the Commission considered the Application for Reconsideration. Commissioner Nelson submitted to the Commission, and provided to all persons present in person and via email attachment to those participating telephonically, an untitled spreadsheet handout depicting his load shape calculations. Following questions and discussion, the Commission voted unanimously to reconsider the Decision regarding use of levelized avoided cost without inclusion of a discount factor, but to defer final action on the appropriate resolution of the issue until the next meeting. The Commission voted unanimously to deny reconsideration of its Decision with respect to use of a 20% capacity factor in calculating avoided cost. A majority of the Commission, with Commissioner Hanson dissenting, voted to reconsider the Decision with respect to whether escalation of avoided capacity costs should commence prior to 2015, but took no substantive action on the proper capacity escalation commencement date. The Commission voted unanimously to reconsider the Decision's use of a 2.25% load growth factor in the avoided cost calculation model, but to defer decision on the issue until its next meeting. On April 29, 2013, Staff filed a letter and exhibits regarding model inputs and load shape adjustment (Staff Model). On May 6, 2013, Oak Tree filed Oak Tree Energy, LLC's Request for Levelized Rate Option.

On May 7, 2013, the Commission considered the issues remaining following the actions taken at its April 23, 2013, meeting. Commissioner Nelson submitted to the Commission, and provided copies to all persons present and via email attachment to those participating

telephonically, spreadsheet and graph handouts entitled "Nelson Avoided Cost Summary on Reconsideration May 7, 2013 - Peak and Load Growth" (Nelson Proposal). The first issue for decision was the appropriate date for commencement of escalation of avoided capacity cost. Commissioner Nelson moved that avoided capacity costs remain at \$36/kW-yr for 2013 and 2014 and then begin escalating at 5.84% per year. The Commission voted unanimously in favor of the motion.

The Commission then considered the issue of whether the 2.25% per annum load growth factor employed in the manner utilized to calculate the avoided energy costs over time approved in the Decision is the appropriate load growth factor and methodology for use in calculating avoided energy cost, and if not, what the appropriate load growth factor and calculation methodology should be. After an explanation of the model methodology he employed and the reasons underlying it, Commissioner Nelson moved that the methodology utilized to calculate load growth in the calculation of avoided energy costs approved by the Commission in the Decision be changed to the methodology for calculating energy and peak growth utilizing a load growth of 2.25%/yr and a peak growth of 1%/yr in the manner employed in the Nelson Proposal to calculate avoided energy costs over the 20-year contract period. After discussion, Commissioner Fiegen made a substitute motion to approve the Staff Model and its methodology for computing a 1% peak and 2.25% energy growth load shape as depicted on the lower spreadsheet on Exhibit A to the Staff Model. After discussion, a majority of the Commission voted in favor of the substitute motion, with Commissioner Nelson dissenting.

The Commission next considered the issue of whether the Commission should approve the use of non-levelized, annual avoided cost values instead of levelized avoided cost values, approve the inclusion of a discount factor in its levelized avoided cost calculation, or approve the non-discounted levelized approach as employed in the model used to calculate the levelized avoided costs approved in the Decision. Commissioner Fiegen moved to approve levelized avoided costs calculated as approved in the previous motion with the application of a 7.86% discount factor as set forth on the lower spreadsheet set forth on Exhibit B to the Staff Model. After discussion, a majority of the Commission voted in favor of the motion, with Commissioner Nelson dissenting.

In response to a question from Commission Counsel regarding a potential ambiguity with respect to the Commission's action on the appropriate date for commencement of escalation of avoided capacity costs as year 2015, Commissioner Fiegen moved to reconsider the action taken and further moved as a substitute motion that the \$36/kW-yr avoided capacity cost be maintained through the end of 2015, with the commencement of escalation for avoided capacity cost to begin after 2015 by applying the escalation factor of 5.84%/yr to the 2015 value, with the escalated avoided capacity cost to take effect on January 1, 2016, and with annual escalation to continue thereafter for the remainder of the 20-year contract term as set forth in the Staff Model. The Commission voted unanimously in favor of the motion.

On May 17, 2013, the Commission issued an Order Granting in Part and Denying in Part Application for Reconsideration reflecting the actions taken as described above, setting forth the amended findings of fact and conclusions of law to be incorporated in this Amended Final Decision and Order; Notice of Entry, and directing the issuance of this Amended Final Decision and Order; Notice of Entry.

Having considered the evidence of record, applicable law, and the briefs and arguments of the parties, the Commission makes the following amended Findings of Fact, Conclusions of Law, and Decision:

FINDINGS OF FACT

Parties

1. Complainant, Oak Tree Energy, LLC, is a limited liability company registered to do business in the state of South Dakota. TR1 144. Oak Tree is an independent wind power developer active in Clark County, South Dakota. Oak Tree's proposed project is located in Clark County, South Dakota. This project is known as the Oak Tree Project. The Project will have an initial installed nameplate capacity of 19.5 megawatts. TR1 137-139; Complaint p. 2; Ex OT 3, p1.

2. Respondent, NorthWestern Corporation d/b/a NorthWestern Energy, a Delaware corporation, is a public utility as defined in SDCL 49-34A-1(12) subject to regulation by the Commission.

3. Staff participated fully as a party in this matter.

Procedural Findings

4. The Procedural History set forth above is hereby incorporated by reference in its entirety in these Procedural Findings. The procedural findings set forth in the Procedural History are a substantially complete and accurate description of the material documents filed in this docket and the proceedings conducted and decisions rendered by the Commission in this matter.

Qualifying Facility

5. In its Complaint, Oak Tree alleged that it was a qualifying small power production facility (QF) under PURPA and attached its FERC Form 556 Certification in support. Complaint ¶ 7, p. 2 and Complaint Exhibit 1. In its Answer, NWE admitted that Oak Tree is a QF. Answer ¶ 7, p. 2. The Commission finds that Oak Tree is a QF.

Negotiations and Creation of a Legally Enforceable Obligation

6. PURPA rule 18 C.F.R. § 292.304(d)(2) provides:

Each qualifying facility shall have the option either:

(1) To provide energy as the qualifying facility determines such energy to be available for such purchases, in which case the rates for such purchases shall be based on the purchasing utility's avoided costs calculated at the time of delivery; or

(2) To provide energy or capacity pursuant to a legally enforceable obligation for the delivery of energy or capacity over a specified term, in which case the rates for such purchases shall, at the option of the qualifying facility exercised prior to the beginning of the specified term, be based on either:

- (i) The avoided costs calculated at the time of delivery; or
- (ii) The avoided costs calculated at the time the obligation is incurred.

7. Oak Tree engaged in discussions and correspondence over a considerable period of time in an attempt to negotiate a power purchase agreement with NWE on a voluntary basis. This process had begun no later than May 10, 2010, as evidenced by correspondence concerning the interconnection and avoided cost process and referencing inquiries that had predated such date. Ex OT 3, Exhibit 1. Prior to initiating its offer to NWE and attempting to engage NWE in negotiations, Oak Tree conducted an evaluation of numerous other potential power purchases and interconnection partners and concluded that NWE was the only viable interconnection partner and purchaser given the proximity of the Project to an interconnection point with NWE's facilities and other factors. TR1 151-152, 171-172; Ex 3, p. 8. An exchange of correspondence concerning Oak Tree's offer to sell power to NWE and negotiate the terms of a power purchase agreement proceeded until at least late July, 2010, and then resumed with Oak Tree's letter to NWE sent on January 25, 2011 (incorrectly dated January 25, 2010, TR1 180). Ex OT 3, Exhibits 2-8. The hiatus in correspondence reflected in these exhibits occurred because Oak Tree felt that NWE was not willing to engage in meaningful negotiations toward a viable power purchase agreement, and Oak Tree accordingly both resumed its evaluation of and contacts with other potential purchasers and marketing arrangements and had its consultants begin the process of developing the foundation for Oak Tree to make an offer that would constitute a legally binding obligation. TR1 178-179.

8. After reinitiating its correspondence with NWE on January 25, 2011, on February 25, 2011, Oak Tree made what it termed a "notice to NWE of the establishment of a legally enforceable obligation (the "LEO") for the delivery of energy and capacity by Oak Tree to NWE." This offer committed to make delivery of energy and capacity to NWE and included an executed power purchase agreement with a price for energy, including the Project's capacity contribution, of \$54.40/MWh with an annual escalator of 2.5 percent, which is equivalent to a 20-year levelized cost of approximately \$65.12/MWh. TR1 3; Ex 3, Exhibit 10 (see also Exhibit 10 to the Complaint). The Commission finds that this action by Oak Tree, coupled with its unsuccessful efforts to engage NWE in meaningful negotiations, created a legally enforceable obligation under 18 C.F.R. §292.304(d).

Avoided Cost

9. Following its receipt of NWE's response to its offer of an LEO, Oak Tree concluded that negotiations that could result in a viable power purchase agreement with NWE were not going to occur and decided that bringing the matter before the Commission for determination of the avoided cost rate was the only course of action available to it. TR1 178-187; Ex 3, Exhibits 11-13.

10. One of the primary issues contested at the first hearing on avoided cost was the issue of the proper methodology to employ in analyzing and modeling avoided cost over a 20 year term, the term that Oak Tree stated in its LEO offer to NWE. 18 C.F.R. § 292.101(6) defines "avoided cost" as follows:

Avoided Costs means the incremental costs to an electric utility of electric energy, capacity, or both, which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source.

11. Oak Tree's witness Lauckhart employed what he characterized as a spot market based market approach to project NWE's avoided costs over a twenty year period with the value of avoided energy costs coming directly from the Black & Veatch Fall 2010 Energy Market Forecast for the Midwest United States and applied to each hour of the twenty year QF contract term and the value of capacity coming from the Black & Veatch forecast of the value of capacity in the South Dakota area and applied to the twenty percent of the 19.5 MW nameplate capacity of the Project that the Midwest Reliability Organization applies to wind energy facilities for capacity accreditation beginning in the year 2013 when NWE indicated it would become capacity deficient in its then current biennial 10-year plan on file with the Commission pursuant to SDCL 49-41B-3. Ex OT 1, pp. 4-7. Mr. Lauckhart calculated both a "brown value" avoided cost of \$78.92/MWh, which assumes the avoided costs are not from a renewable resource and a "green value" avoided cost of \$70.81, which assumes the source is a renewable source.

12. NWE's witnesses LaFave, Green, and Lewis employed a combination of incremental baseload avoidable costs and spot market prices in what Mr. LaFave characterized as a mixture of the Component/Peaker method and the Market Estimates method to reflect the actual costs that NWE could avoid by offsetting market purchases and backing down the most expensive baseload unit, depending on load. The general method employed by NWE has been referred to in this proceeding as the "hybrid method." Ex Staff 1, p. 9. NWE included a capacity contribution in its calculations of avoided cost for the first hearing with such contribution to begin in 2016. Ex NW 1, p. 10. NWE calculated its avoided cost at \$35.85 levelized over a 20-year term. Ex NW 1, p. 18.

13. Staff witness Rounds asserted that NWE's method seems to most accurately reflect NWE's actual avoided incremental costs. However, Mr. Rounds believed NWE's gas and electric price forecasts to be unreliable. Ex Staff 1, p. 10.

14. As the Commission ruled in its Interim Order and again in denying Oak Tree's motion for reconsideration in its Order Granting in Part and Denying in Part Motion for Partial Reconsideration and Application for Reconsideration, the Commission finds that the "hybrid method" or combination method employed by NWE of using forecasted avoided incremental baseload costs for energy supplied to NWE from such resources and projected market prices for energy supplied to NWE from such resources most closely matches NWE's actual avoided costs. NWE is a vertically integrated utility that generates most of its energy at this time from its own baseload generation resources. To the extent that NWE is supplying all energy in an hour from its own baseload generation, the only costs NWE can avoid in that hour are the variable baseload generating costs that will be avoided by backing down its costliest baseload generator.

15. In its Interim Order, the Commission found, however, that NWE may have utilized unjustifiably low natural gas inputs and electric market inputs in calculating its avoided costs, and as a result, the Commission could not reliably determine the proper avoided cost with the data and analyses in the record from the first hearing. The Commission did not overturn this finding on reconsideration. In the second hearing, the parties presented additional and revised evidence in conformity with the Commission's Interim Order.

16. In the Interim Order, the Commission found that NWE's model inputs into the hybrid method were deficient in that they did not include projected carbon costs. The Commission also found that the carbon emission cost values of \$5/ton starting in 2015 and shifting to \$10/ton starting in 2020 and rising to \$15/ton in 2025 as estimated by Lands Energy were reasonable carbon emissions cost estimates in the present environment and were the appropriate carbon emissions cost values to be included in the parties' respective hybrid

method analyses of avoided cost. On reconsideration, the Commission reversed its findings regarding the propriety of including carbon costs in the avoided cost calculations as unjustifiably speculative at this time.

17. In the Interim Order, the Commission found that the appropriate contract term for the Project was 20 years to enable the Project to obtain financing in accordance with the objectives of PURPA. This finding was not challenged in the parties' motions to reconsider and the Commission so finds.

18. In the Interim Order, the Commission directed the parties to utilize current market conditions and projections in determining proper natural gas inputs and proper electric market rates. On reconsideration, the Commission determined that this use of current inputs violates the PURPA requirement that the avoided cost must be determined as of the LEO date of February 25, 2011, and the Commission accordingly found that cost inputs and projections should be as of such date.

19. In testimony filed for the second hearing following the Interim Order and Reconsideration Order, Oak Tree witness Lauckhart employed natural gas price forecast data from five of the forecast scenarios in the U.S. Energy Information Administration's Annual Energy Outlook, 2010, and other comparative scenarios to arrive at a range of projected avoided cost values. Mr. Lauckhart asserted that the appropriate resource upon which to base the avoided capacity component of avoided cost is NWE's Aberdeen peaking plant currently under construction and in NWE's ten year plan as of the LEO date of February 25, 2011. Mr. Lauckhart stated that the cost of the Aberdeen gas turbine is approximately \$141/kw-yr. and that this is an appropriate input value for NWE's avoided capacity cost. Ex OT 10, pp. 3-4. Mr. Lauckhart asserted that based on this range of forecasted natural gas prices and other inputs, including capacity, avoided costs lie in the range between \$56/MWh to \$89/MWh. Mr. Lauckhart recommended the use of the average of these scenarios to factor in all of the forecast probabilities. He stated that the average of these calculated avoided values is \$69.3/MWh. Ex OT 9, pp. 11-16. Mr. Lauckhart also stated that he preferred the model employed by Staff over the model employed by NWE. Ex OT 10, p. 7.

20. Using 2012 as year one of the power purchase contract, NWE's witness LaFave's analysis of avoided cost for energy resulted in a 20-year levelized avoided energy cost of \$37.99. Mr. LaFave's calculation of avoided capacity cost resulted in an avoided capacity cost of \$36 per kilowatt year, increasing at a rate of 5.84% for the remaining years. This results in a 20-year levelized avoided capacity cost of \$56.56 per kilowatt year. Ex NW 15, pp. 7-8.

21. Staff witness Rounds asserted that the proper application of the hybrid method would be to evaluate each hour of the year and compare NWE's load, NWE's base load generation, and the QF's output. Mr. Rounds proposed method sets the avoided cost: (i) for hours in which NWE's baseload generation exceeds its load, at the cost of NWE's most expensive baseload generator; (ii) for hours in which NWE's load exceeds its baseload generation by at least the QF's output, at the market price; and (iii) and for hours in which NWE's load exceeds its baseload, but not by as much as the QF's output level, at market price for the difference between NWE's load and its base load generation capacity and at the cost of its most expensive base load generator for the remaining QF output. Ex Staff 2, p. 1. Mr. Rounds also asserted that the best forecast available as of February 25, 2011 was the natural gas forecast from the EIA's Annual Energy Outlook (AEO) 2011 Early Release Reference Case, released on December 16, 2010, and utilized by the Eastern Interconnection Planning Collaborative (EIPC) for its analysis in the Eastern Interconnection Business As Usual future

analysis. Ex Staff 2, p. 2-5. Mr. Rounds utilized a "load block" analysis utilized by EIPC and the EIPC load growth projections, load shapes for this region, and a pricing method consisting of EIPC price projections adjusted by AEO data to scale the data to this region. Ex Staff 2, p. 5-7. Mr. Rounds computed NWE's levelized avoided cost over a 20 year period at \$54.32/MWh beginning in 2013 and \$55.78/MWh beginning in 2014. Ex Staff 2, p. 3. For the capacity component, Mr. Rounds used a rated capacity value of 19.5 MW, a capacity cost value of \$20 per kilowatt year, and a capacity credit of 12.9 percent across the entire 20 years which yielded an avoided capacity cost of \$0.66/kWh. TR2 250-251; Ex Staff 2, p. 6.

22. At hearing, Mr. Rounds testified that he felt adjustments needed to be made to certain inputs to his avoided cost calculations. This included adding an inflation adjustment to capacity cost of 2.5% per year and adjusting the capacity contribution value to 18.915 MW to reflect the net-of-losses value stated in Oak Tree's FERC Form 556 QF certification filed with the Complaint as Exhibit 1 thereto. TR2 253. Mr. Rounds also testified that the MAPP_US load shape that he had used in his modeling did not seem to accurately reflect NWE's load shape, and he therefore substituted the MISO West load shape which better matches NWE's actual energy demand. TR2 254-255; Ex Staff 5. Based on these changes, Mr. Round's revised calculations produced an avoided cost of \$46.23/MWh beginning in 2013 and \$47.55/MWh beginning in 2014. TR2 257; Ex Staff 6.

23. The Commission finds that Oak Tree is entitled to capacity credit for the facility's output commencing with the Project's coming online with the capacity value equal to 20% of the Project's net-of-losses capacity of 18.915 MW. The 20% value is the appropriate percentage since NWE is a member of the Midwest Reliability Organization (MRO), and as of the LEO date of February 25, 2011, the MRO accredited wind energy facilities at 20% of their rated capacity.

24. The Commission finds that the appropriate model for determining avoided costs is the model developed by Staff witness Rounds. Ex Staff 2.

25. The Commission finds that the appropriate inputs into the model to fairly reflect NWE's avoided energy costs are to utilize NWE's actual hourly load shape and apply it to the hourly forecast blocks developed by the EIPC as used by Staff witness Rounds. The EIPC projections were developed by an industry wide collaborative of professionals in the field and represent a disinterested set of projections that is generally accepted by the industry.

26. The Commission finds that the appropriate peak growth rate and energy load growth rate forecasts for the next 20 years are the 1 percent per year peak and 2.25 percent per year energy growth rates offered by NWE. Ex NWE 10, p. 2. The Commission further finds that the appropriate method for distributing the annual energy growth across NWE's load shape as it changes in response to the greater growth rate in energy than peak is to spread the energy growth across the forecast blocks as a function of each block's growth room to the total growth room of all blocks.

27. The Commission finds that the proper avoided capacity costs are the \$36 per kilowatt year avoided capacity cost value presented by NWE through the end-of-year 2015 termination date of NWE's capacity contract upon which this capacity value is based, and then escalating by 5.84 percent on January 1, 2016, and at the beginning of each year thereafter for the remainder of the 20-year QF contract term. TR2 211; Ex NWE 14.

28. The Commission finds that renewable energy credits (REC) associated with the Project should remain with Oak Tree. Oak Tree will have access to the REC market, and Oak Tree can market its RECs as it deems in its best interest.

29. The Commission finds that the appropriate model input for NWE's base generation is 191 megawatts. TR2 272.

30. The Commission finds that the introduction of these inputs into the model developed by Mr. Rounds yields the resulting levelized and non-levelized avoided cost values set forth on the spreadsheet attached hereto as Exhibit A and incorporated herein by reference.

31. The Commission finds that levelized avoided cost values, discounted by a 7.86% present-value discount factor, are the appropriate values to use because they will produce a stable price that will better enable Oak Tree to finance the Project. The Commission accordingly finds that NWE's avoided cost for the Oak Tree Project is \$49.24/MWh if production begins in 2013 and \$51.23/MWh if production begins in 2014 as set forth on the "Levelized" columns of Amended Exhibit A.

General

32. To the extent that any Conclusion of Law set forth below is more appropriately a Finding of Fact, that Conclusion of Law is incorporated by reference as a Finding of Fact.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over this matter pursuant to 16 U.S.C. Chapter 12, § 824a-3, 18 C.F.R. Part 292, and SDCL Chapters 1-26 and 49-34A, including 49-34A-93.

2. 16 U.S.C. § 824a-3(a) required the Federal Energy Regulatory Commission to promulgate rules "to encourage cogeneration and small power production . . . , which rules require electric utilities to offer to. . . (2) purchase electric energy from such facilities." Under 16 U.S.C. § 824a-3(f), following FERC's promulgation of such rules, "each State regulatory authority shall, after notice and opportunity for public hearing, implement such rule (or revised rule) for each electric utility for which it has ratemaking authority." Pursuant to 16 U.S.C. § 824a-3(b), "rates for such purchase—

(1) shall be just and reasonable to the electric consumers of the electric utility and in the public interest, and

(2) shall not discriminate against qualifying cogenerators or qualifying small power producers.

No such rule prescribed under subsection (a) of this section shall provide for a rate which exceeds the incremental cost to the electric utility of alternative electric energy."

16 U.S.C § 824a-3 defines "incremental cost to the electric utility of alternative electric energy" as follows:

"incremental cost of alternative electric energy" means, with respect to electric energy purchased from a qualifying cogenerator or qualifying small power producer, the cost to the electric utility of the electric energy which, but for the purchase from such

cogenerator or small power producer, such utility would generate or purchase from another source.

The FERC rules set forth in 18 C.F.R. Part 292 set forth the standards for the Commission's determination of avoided cost.

3. A legally enforceable obligation need not have a contract executed by the utility to exist. If it did, utilities could negate the operation of PURPA by simply refusing to sign.

4. The Commission concludes that a legally enforceable obligation was created on February 25, 2011, under 18 C.F.R. § 292.304(d).

5. The appropriate contract term for the Project is 20 years to enable the Project to obtain financing in accordance with the objectives of PURPA.

6. The inclusion of carbon costs in the avoided cost calculations is not justified at this time due to the absence of any legislation that seems likely to pass that would establish such costs and is therefore too speculative to warrant inclusion in the avoided cost.

7. Oak Tree is entitled to capacity credit for the facility's output commencing with the Project's coming online with the capacity value equal to 20% of the Project's after-losses capacity of 18.915 MW. The 20% value is the appropriate percentage since NWE is a member of the Midwest Reliability Organization (MRO), and as of the LEO date of February 25, 2011, the MRO accredited wind energy facilities at 20% of their rated capacity.

8. Levelized avoided cost values, discounted by a 7.86% present-value discount factor, are the appropriate values to use because they will produce a stable price that will better enable Oak Tree to finance the Project. NWE's avoided cost for the Oak Tree Project is \$49.24/MWh if production begins in 2013 and \$51.23/MWh if production begins in 2014 as set forth on the "Levelized" columns of Amended Exhibit A.

9. To the extent that any of the Findings of Fact in this decision are determined to be conclusions of law or mixed findings of fact and conclusions of law, the same are incorporated herein by this reference as a Conclusion of Law as if set forth in full herein.

It is therefore

ORDERED, that the avoided cost determinations of the Commission as set forth in the Findings of Fact and Conclusions of Law shall govern the pricing and payment for the delivery of energy and capacity by Oak Tree to NWE. It is further

ORDERED, that NWE and Oak Tree shall enter into negotiations in good faith to consummate a power purchase agreement consistent with the avoided cost determinations and other Findings of Fact and Conclusions of Law of this Order and with current normative terms of such contracts. The parties shall conclude such negotiations and reach an agreement on a power purchase agreement no later than thirty (30) days following the date of issuance of this Order and file such agreement with the Commission.

NOTICE OF ENTRY AND OF RIGHT TO APPEAL

PLEASE TAKE NOTICE that this Amended Final Decision and Order; Notice of Entry was duly issued and entered on the 17th day of May, 2013. Pursuant to SDCL 1-26-32, this Amended Final Decision and Order will take effect 10 days after the date of receipt or failure to accept delivery of the decision by the parties. Pursuant to SDCL 1-26-31, the parties have the right to appeal this Final Decision and Order to the appropriate Circuit Court by serving notice of appeal of this decision to the circuit court within thirty (30) days after the date of service of this Notice of Entry and Right to Appeal.

Dated at Pierre, South Dakota, this 17th day of May, 2013.

CERTIFICATE OF SERVICE
The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, by facsimile or by first class mail, in properly addressed envelopes, with charges prepaid thereon.
By: <u>[Signature]</u>
Date: <u>05.17.13</u>
(OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

[Signature]
GARY HANSON, Chairman, dissenting in part

[Signature]
CHRIS NELSON, Commissioner, dissenting in part

[Signature]
KRISTIE FIEGEN, Commissioner, dissenting

Amended Exhibit A

Staff's 1% Peak and 2.25% Energy Growth								
Year	Oak Tree Output (MWh)	Oak Tree Capacity Value (\$)	Oak Tree Energy Value (\$)	Avoided Cost (\$/MWh)	Beginning in 2013		Beginning in 2014	
					Rounded Actual (\$/MWh)	Levelized (\$/MWh)	Rounded Actual (\$/MWh)	Levelized (\$/MWh)
2013	76527.3688	\$136,188.00	\$2,556,867.56	35.19075074	35.19	49.24		
2014	76527.3688	\$136,188.00	\$2,688,995.60	36.91729692	36.92	49.24	36.92	51.23
2015	76527.3688	\$136,188.00	\$2,827,810.08	38.73121636	38.73	49.24	38.73	51.23
2016	76527.3688	\$144,141.38	\$3,030,092.44	41.47841316	41.48	49.24	41.48	51.23
2017	76527.3688	\$152,559.24	\$3,200,408.01	43.81396221	43.81	49.24	43.81	51.23
2018	76527.3688	\$161,468.70	\$3,293,155.71	45.14233870	45.14	49.24	45.14	51.23
2019	76527.3688	\$170,898.47	\$3,341,755.54	45.90062434	45.90	49.24	45.90	51.23
2020	76527.3688	\$180,878.94	\$3,430,472.43	47.19032454	47.19	49.24	47.19	51.23
2021	76527.3688	\$191,442.27	\$3,535,886.83	48.70583105	48.71	49.24	48.71	51.23
2022	76527.3688	\$202,622.50	\$3,820,812.31	52.57510971	52.58	49.24	52.58	51.23
2023	76527.3688	\$214,455.65	\$4,160,336.83	57.16637782	57.17	49.24	57.17	51.23
2024	76527.3688	\$226,979.86	\$4,271,017.20	58.77631921	58.78	49.24	58.78	51.23
2025	76527.3688	\$240,235.48	\$4,364,360.80	60.16927477	60.17	49.24	60.17	51.23
2026	76527.3688	\$254,265.24	\$4,488,800.38	61.97868404	61.98	49.24	61.98	51.23
2027	76527.3688	\$269,114.33	\$4,595,850.57	63.57156883	63.57	49.24	63.57	51.23
2028	76527.3688	\$284,830.60	\$4,720,069.44	65.40013221	65.40	49.24	65.40	51.23
2029	76527.3688	\$301,464.71	\$4,852,732.64	67.35103316	67.35	49.24	67.35	51.23
2030	76527.3688	\$319,070.25	\$4,978,792.42	69.22833956	69.23	49.24	69.23	51.23
2031	76527.3688	\$337,703.95	\$5,092,729.42	70.96067007	70.96	49.24	70.96	51.23
2032	76527.3688	\$357,425.86	\$5,257,895.22	73.37663863	73.38	49.24	73.38	51.23
2033	76527.3688	\$378,299.53	\$5,375,926.44	75.19173939			75.19	51.23

Discount Factor 7.86%