

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

---

|  |  |
|--|--|
| <p>IN RE:</p> <p>MIDWEST RENEWABLE ENERGY<br/>PROJECTS LLC,</p> <p style="padding-left: 100px;">Petitioner,</p> <p style="text-align:center">v.</p> <p>INTERSTATE POWER AND LIGHT<br/>COMPANY,</p> <p style="padding-left: 100px;">Respondent.</p> | <p style="text-align:center">DOCKET NO. AEP-05-1</p> |
|--|--|

---

**ORDER ON REHEARING**

(Issued May 31, 2007)

**PROCEDURAL HISTORY**

On January 12, 2005, Midwest Renewable Energy Projects LLC (Midwest Renewable) filed with the Utilities Board (Board), pursuant to 199 IAC 15.4 and 15.5, a petition to determine specific rates to be paid by Interstate Power and Light Company (IPL) for purchases of qualifying energy and/or capacity from a specific qualifying small power production facility. The petition also asked that the Board order IPL to purchase such energy and/or capacity from the facility pursuant to a long-term agreement that may, but need not, convey to IPL any environmental attributes, such as emission credits, alternate energy credits, or similar tradable rights.

A hearing was held beginning April 5, 2005. On May 20, 2005, prior to the deadline for post-hearing reply briefs, IPL filed a motion to reopen the record to file additional testimony and evidence regarding an anticipated wind generation power purchase agreement (PPA) with Endeavor Power Partners, LLC (Endeavor) resulting from a request for proposals (RFP) that IPL had issued. On June 3, 2005, Midwest Renewable filed its own motion to present additional evidence. The Consumer Advocate Division of the Department of Justice (Consumer Advocate) did not object to either motion and the Board issued an order on June 13, 2005, reopening the record.

IPL was unable to file its Endeavor PPA by the deadline established by the Board, but Midwest Renewable filed additional prefiled testimony and exhibits. IPL and Consumer Advocate filed responsive testimony and a second hearing was held on July 20, 2005. At the second hearing, IPL presented the Endeavor PPA resulting from its RFP process. All parties filed briefs subsequent to the second hearing.

On August 12, 2005, IPL filed a motion to hold the docket in abeyance pending a ruling by the Federal Energy Regulatory Commission (FERC) on a petition for declaratory order filed by IPL asking FERC to determine that IPL is no longer required to enter into a new contract or obligation to purchase electricity under the Public Utility Regulatory Policies Act of 1978 (PURPA), or to enter into a PPA with any unbuilt Qualifying Facilities (QF) project, such as the Midwest Renewable project. On September 21, 2005, the Board denied IPL's motion to hold the docket in abeyance.

The Board issued its "Final Decision and Order" (Final Decision) in this docket on December 28, 2005. In that order the Board, among other things, set the avoided cost rate for IPL's purchases of energy or capacity from Midwest Renewable's proposed QF in Worth County that are made pursuant to PURPA and 199 IAC 15 at \$29 per MWh. The Board said if the parties are unable to agree on terms for the sale of environmental attributes, IPL would be required to make the energy or capacity purchases regardless of whether the agreement conveys to IPL any associated environmental attributes.

In setting IPL's avoided cost in the Final Decision, the Board relied on the results of analysis performed on IPL's Electric Generation Expansion Analysis System (EGEAS) and the results of IPL's competitive bidding process. The Board also noted that while Consumer Advocate did not endorse IPL's avoided cost analysis, Consumer Advocate's preferred method produced results relatively close to IPL's EGEAS analysis and the best bids received in IPL's RFP. (Final Decision, p. 10).

Midwest Renewable filed an application for rehearing and reconsideration on January 17, 2006. Included with the application was a conditional motion for procedural consolidation with three other dockets in which Midwest Renewable had requested that the Board determine IPL's avoided costs for other projects, Docket Nos. AEP-05-2, AEP-05-3, and AEP-05-4. Midwest Renewable filed a supplement to its application for reconsideration and rehearing on January 25, 2006. IPL and Consumer Advocate each filed responses to the application for rehearing on

January 31, 2006. Midwest Renewable filed a reply to IPL's response on February 2, 2006.

On February 14, 2006, IPL filed a pleading entitled "Disclosure of Change in Evidentiary Facts." The pleading indicated that there had been "subsequent developments that change facts in the evidentiary record in this docket." The change in evidentiary facts disclosed by IPL included an acknowledgement of the supporting role the Endeavor PPA and the RFP process played in the Board's adoption of IPL's EGEAS avoided cost analysis and a disclosure that the Endeavor PPA contractor "is not likely to perform under the contract terms, including price."

Because the disclosure of change in evidentiary facts was filed two days before the statutory deadline for a rehearing order, the Board on February 16, 2006, issued an order granting rehearing for the purposes of reconsidering its Final Decision. The order also set a March 10, 2006, deadline for responding to IPL's disclosure; Midwest Renewable and Consumer Advocate each filed responses on that date.

In reviewing the filings, the Board determined that the other parties had not been able to review IPL's EGEAS analysis in depth and that while IPL had provided the parties an update (Ex. 14) of its avoided cost report showing significantly higher costs associated with 1 MW of load pursuant to its 2006 PURPA avoided cost report (2006 PURPA Report), the parties did not ask for a similar update of IPL's 80 MW EGEAS analysis. Therefore, in its June 12, 2006, order the Board granted rehearing "for the limited purpose of updating IPL's 80 MW EGEAS avoided cost analysis and

allowing the parties additional time to review the data inputs and assumptions of IPL's updated analysis." The Board directed IPL to update its EGEAS analysis based on the same data inputs and assumptions used to generate its 2006 PURPA Report. A procedural schedule was issued as part of the order.

IPL filed its updated EGEAS analysis on July 11, 2006. (Ex. 105). Midwest Renewable filed a motion to require IPL to file a revised version of its updated EGEAS analysis based on additional changes requested by Midwest Renewable. The Board on August 25, 2006, issued an order requiring IPL to perform an EGEAS run using the inputs and assumptions provided by Midwest Renewable. The parties subsequently requested additional time to complete Midwest Renewable's requested analysis and the Board issued a revised procedural schedule on October 2, 2006.

On October 10, 2006, Midwest Renewable filed an amendment to its original petition, reducing the capacity of the wind facility for which avoided costs would be determined from 80 MW to 30 MW. Midwest Renewable and Consumer Advocate each filed testimony on October 18, 2006. IPL filed rebuttal testimony on November 6, 2006, and Consumer Advocate and Midwest Renewable each filed surrebuttal testimony on November 16, 2007. A hearing was held on December 18, 2006, and all parties filed post-hearing briefs on January 22, 2007.

#### **MIDWEST RENEWABLE NOTICE**

Subsequent to the filing of final briefs on rehearing, Midwest Renewable filed a notice with the Board on February 23, 2007, indicating that it had signed a term sheet with a public utility interested in purchasing the output from the remaining 30 MW of

Midwest Renewable's wind generation QF. Midwest Renewable said it would provide further notice if and when a PPA was executed. Midwest Renewable provided further notice on April 26, 2007, that a PPA with an unnamed utility had been executed. Midwest Renewable said that with the PPA's execution, the avoided cost issue in Docket No. AEP-05-1 was now moot because the remaining 30 MW was no longer for sale to IPL.

IPL responded to Midwest Renewable's initial notice. IPL asked the Board to issue a final decision in Docket No. AEP-05-1 regardless of whether a PPA was executed for the remaining 30 MW of Midwest Renewable's project. IPL argued the outcome of this docket would be applicable to the next avoided cost proceedings involving Midwest Renewable (Docket Nos. AEP-05-2, 3, and 4) because IPL's avoided cost determination is based on IPL-specific information used as inputs in the EGEAS model. IPL said the size of the QF in question is irrelevant to the EGEAS model except for the total MW capacity and that the same issues litigated extensively in Docket No. AEP-05-1 should not be relitigated.<sup>1</sup>

Midwest Renewable filed a response on March 14, 2007, stating that Docket No. AEP-05-1 would be moot if a PPA was executed. If the PPA was not executed by April 30, 2007, Midwest Renewable agreed a rehearing decision should be issued.<sup>2</sup>

---

<sup>1</sup> If the Board terminates the rehearing docket without final decision, IPL asked in the alternative that the Board take official notice of this docket in the pending AEP dockets, which are being held in abeyance until the rehearing decision in Docket No. AEP-05-1 is issued.

<sup>2</sup> Midwest Renewable said any motion to take official notice of the record in Docket No. AEP-05-1 in the other pending AEP dockets (AEP-05-2, 3, and 4) should be made in those dockets, not here.

Experience with the Endeavor PPA in this docket has shown that an executed PPA does not necessarily mean that a facility will be built and the power sold. (Tr. 722-73). The Board and the parties have expended considerable time and resources in this docket. In addition to litigation costs, IPL has been billed directly for all of the Board's and Consumer Advocate's administrative costs in this proceeding. The Board believes that a final order on rehearing will be useful to all the parties and that the executed PPA between Midwest Renewable and another utility does not render this proceeding moot.

First, in the event the PPA is later terminated or one party fails to perform, the rehearing order will have established the avoided cost for IPL's required purchase of the remaining 30 MW of Midwest Renewable's QF. It would be a waste of resources to relitigate these issues in the event of this contingency, particularly when the rehearing order is the only remaining task to be completed by the Board. Second, a ruling in this proceeding is likely to provide guidance in the remaining AEP dockets, Docket Nos. AEP-05-2, 3, and 4. Third, the Board's rehearing decision on avoided cost could lead to a revision of IPL's 2006 PURPA Report filed pursuant to 199 IAC 15.3. IPL's 2006 PURPA Report is the subject of a complaint filed by Midwest Renewable, which is being held in abeyance pending completion of Docket No. AEP-05-1. For all these reasons, the Board will proceed to issue a decision on rehearing.

### **OVERVIEW OF AVOIDED COST POSITIONS**

IPL recommended the avoided cost be set at \$34.72 per MWh based on IPL's updated EGEAS analysis for Midwest Renewable's 30 MW wind generation QF.

Consumer Advocate recommended a range with a minimum of \$35.05 per MWh and a maximum of \$37.05 per MWh. Midwest Renewable recommended that there be another EGEAS run incorporating Midwest Renewable's prior adjustments (which produced an avoided cost of \$41.58 per MWh) and additional EGEAS adjustments to remove from the analysis all projected generation expansion. Midwest Renewable noted that the \$43.70 per MWh avoided cost produced by its alternative market price analysis shows that the EGEAS avoided cost estimates provided in this docket are too low. Before discussing the individual subissues (which will be identified later in this order), the Board believes it would be useful to present an overview of the parties' avoided cost positions that resulted in their final avoided cost recommendations.

### **Midwest Renewable's position**

Midwest Renewable continued to criticize IPL's updated EGEAS analysis for using outdated data. Midwest Renewable said IPL should be directed to apply the same fuel costs and other adjustments used in Midwest Renewable's version of the EGEAS analysis, which produced a 20-year levelized avoided cost of \$41.58 per MWh. (Exs. 44, 45). Midwest Renewable also produced an alternative, non-EGEAS analysis based on market forecast projections that IPL provided to Consumer Advocate, resulting in a levelized avoided cost of \$43.70 per MWh.

Midwest Renewable in particular focused on IPL's inclusion in its assumptions of projected facilities, such as a 150 MW wind placeholder (the amount of the failed Endeavor PPA) and proposed coal generation. Midwest Renewable said all

projected plant additions should be removed from assumptions used in the EGEAS analysis; only plant that is up and running should be included because projected plant is speculative and inappropriately reduces IPL's EGEAS avoided cost estimate. (Tr. 658-60, 663-64, 684, 686, 689-90, 693-94, 702-03).

**IPL's position**

IPL noted there were two EGEAS analysis methods for estimating avoided costs. The first estimates the cost of serving 1 MW of incremental load. The second compares the estimated cost of serving fixed levels of load with alternative combinations of generation resources. For example, one alternative would include Midwest Renewable's 30 MW wind facility and the other alternative would exclude it. IPL argued the second method should be used in this docket because it is based on the alternative costs of serving fixed levels of load, rather than the cost of serving additional load. (Tr. 776-77). IPL said the second method is consistent with Midwest Renewable's petition, which asked that avoided costs be calculated at the time the obligation is incurred rather than at the time of delivery. 199 IAC 15.5(5)"b." Changing the calculation to the time of delivery would, according to IPL, require a different method, which is outside the scope of the rehearing issues identified by the Board.

IPL disagreed with Midwest Renewable's assertions that IPL's EGEAS fuel and market price data are outdated. IPL said that it based its EGEAS analysis on the same inputs and assumptions used in its 2006 PURPA Report, as required by the Board, and its 2005-2020 electric resource plan, producing a levelized avoided cost

of \$34.72 per MWh. (Ex. 107, Sch. C). IPL argued that it is inappropriate to selectively update this analysis with IPL's actual 2005 fuel costs (as proposed by Midwest Renewable) without making other corresponding adjustments, which would include adjustments to fuel costs to account for inflated purchase power costs due to Hurricane Katrina and the Ottumwa Generating Station outage. (Tr. 687, 697). In other words, IPL maintained that selective adjustments to some inputs cannot be made without a comprehensive review of other practices and assumptions.

IPL took issue with Midwest Renewable's separate market forecast, noting that it includes an avoided capacity payment of \$3.40 per MW. IPL said it is unreasonable to include a capacity payment for a wind facility and noted that in earlier testimony Midwest Renewable acknowledged that its wind capacity was not dispatchable or reliable and, therefore, Midwest Renewable was not seeking a capacity payment.

IPL argued that it was appropriate to continue to include a 150 MW wind generation placeholder (representing the failed Endeavor PPA) in its EGEAS analysis. IPL noted that since the failure of the Endeavor PPA, it has negotiated PPAs for 17 MW of wind generation and is currently negotiating for another 160 MW. IPL said these megawatts of wind generation are intended to replace (and expand) the Endeavor PPA. (Tr. 723). If this placeholder is eliminated, IPL estimated that its avoided costs would be inflated by about \$2.00 per MWh. (Tr. 648, 688; Ex. 106, Sch. B; Ex. 107, Sch. C). IPL also used a 100 MW placeholder for a future wind project with a projected in-service date of 2009 or soon thereafter. IPL calculated

that eliminating this placeholder would increase its EGEAS avoided cost by about \$1.20 per MWh. IPL said that both the 150 MW and 100 MW placeholders are consistent with its 2005-2020 electric resource plan. (Ex. 105).

### **Consumer Advocate's position**

Consumer Advocate noted that this docket has focused primarily on avoided costs, and not other contract terms, because Midwest Renewable's petition described prior contract negotiations between Midwest Renewable and IPL as having resolved many contract terms and conditions. However, Consumer Advocate pointed out that Exhibit 205, which provides Midwest Renewable's details about contract terms, suggests that the Board should condition its avoided cost ruling according to the specific final contract between Midwest Renewable and IPL. Consumer Advocate said that while the EGEAS levelized cost analyses under review are all based on the assumption that Midwest Renewable will deliver the full energy output associated with the 30 MW of wind capacity to IPL, Midwest Renewable in fact is reserving the right to sell energy to buyers other than IPL. (Ex. 205; Tr. 603, 613, 615, 622-23).

Consumer Advocate provided further explanation of this point. Under the contract terms contained in Exhibit 205, Consumer Advocate contended, Midwest Renewable could use the levelized avoided cost as a guaranteed minimum price. Consumer Advocate said that if the wholesale market commanded a higher price, Exhibit 205 provides that Midwest Renewable could sell to that market; Midwest Renewable would only sell to IPL when the wholesale price was less than the guaranteed minimum (represented by the levelized avoided cost). Under such an

arrangement, Consumer Advocate argued that IPL (and its ratepayers) would consistently pay more than avoided cost, because the EGEAS levelized avoided cost analysis includes both high and low cost periods. (Tr. 613, 679-80, 752-53).

Consumer Advocate maintained that IPL should have rights to Midwest Renewable's energy during both high and low cost periods and that any determination of long-term levelized avoided costs for Midwest Renewable's QF should be conditioned on the Board's final approval of the contract so that the contract rates do not in fact exceed IPL's avoided costs.

Consumer Advocate supported IPL's EGEAS analysis method, which compares two generation expansion scenarios (one with and one without Midwest Renewable's 30 MW QF facility). Consumer Advocate also recognized that IPL used the same updated data inputs and assumptions that it used to generate its 2006 PURPA Report and 2005-2020 electric resources plan. Consumer Advocate urged that the avoided cost data be levelized to 20 years (rather than IPL's 13 years) to reflect Midwest Renewable's proposed 20-year contract period. Consumer Advocate also proposed adjustments to reflect IPL's sale of the Duane Arnold Energy Center (DAEC) and replacing it with a DAEC PPA and IPL's market price forecast in Docket No. SPU-05-15. These proposed changes resulted in a levelized avoided cost estimate of \$35.05 per MWh.

Consumer Advocate argued that it is inappropriate to use the actual 2005 fuel cost, market price, and heat rate data adjustments in the EGEAS analysis, as proposed by Midwest Renewable. Consumer Advocate noted that actual 2005 data

was not available when IPL prepared the EGEAS update for its 2005-2020 electric resource plan (Tr. 718) or during the March and July 2005 hearings in this docket. Consumer Advocate performed a hypothetical update of IPL's EGEAS fuel costs using a 2006 Department of Energy forecast, producing a levelized avoided cost of \$39.03 per MWh, to provide some perspective on the validity of Midwest Renewable's adjustments (which resulted in a levelized avoided cost of \$41.48 per MWh).

Consumer Advocate said that in the original petition, Midwest Renewable elected an upfront determination of levelized avoided cost based on long-term forecasting methods (rather than avoided cost at time of delivery), which is inconsistent with Midwest Renewable's request for selective updates of various EGEAS inputs. Consumer Advocate argued periodic updates would have been more appropriate if Midwest Renewable had selected avoided cost at time of delivery; Midwest Renewable cannot have it both ways. Because IPL uses its EGEAS model for multiple related purposes, such as integrated resource expansion planning and avoided costs for energy efficiency programs and PURPA QFs, Consumer Advocate maintained that consistent data should be used and the Board should discourage selective modifications that are not part of IPL's current long-term resource plan. (Tr. 788-89).

Consumer Advocate opposed Midwest Renewable's alternative, non-EGEAS market forecast analysis as a way to determine avoided costs. Consumer Advocate argued that IPL's market energy prices do not reflect avoided costs associated with

Midwest Renewable's facility because the market provides dispatchable energy, whereas Midwest Renewable's facility does not. (Tr. 662-63, 809). Consumer Advocate suggested that if the market provides a better price, Midwest Renewable should sell into the market.

If Midwest Renewable proceeds with its wind project before IPL acquires its 150 MW of wind capacity, Consumer Advocate would not object to removing the 150 MW wind placeholder from IPL's EGEAS analysis. This would increase Consumer Advocate's recommended avoided cost by \$2.00 per MWh to \$37.05 per MWh. (Tr. 688, 703).

### **ISSUES ON REHEARING**

In the joint statement of issues filed by the parties, the issue on rehearing was framed as follows:

In light of the updated EGEAS studies and additional evidence submitted by the parties in the rehearing phase of this docket, what avoided cost is IPL required to pay [Midwest Renewable] for purchases of energy and/or capacity from [Midwest Renewable's] proposed qualifying small power production facility known as the Top of Iowa Wind Farm Phase II?

Because the rehearing briefs were filed simultaneously, the parties, at least to some extent, had to anticipate each other's final positions. While Consumer Advocate and IPL devote substantial discussion to the appropriate overall EGEAS method (comparison of alternative generation expansion plans versus incremental load analysis), Midwest Renewable did not brief this issue but instead focused on specific adjustments to the data inputs and assumptions used in the EGEAS analysis.

The parties are in apparent agreement on two subissues. First, no one objected to Midwest Renewable's amendment to its petition reducing the capacity size for the proposed facility from 80 MW to 30 MW. Second, no one opposed using a 20-year levelization period based on Midwest Renewable's proposed contract period. IPL supported a 13-year levelization, but did not oppose 20 years. The Board will accept the parties' agreement on these subissues.

There are three contested subissues related to the overall issue framed by the parties. The first is whether the EGEAS run should be updated with IPL's actual 2005 fuel costs and plant heat rates and Midwest Renewable's revised fuel cost escalation factor for 2006. The second is whether the EGEAS run should be updated with Midwest Renewable's revised peak/off-peak market energy price inputs for 2005, based on the Midwest Independent Transmission System Operator, Inc.'s (MISO), market energy prices between April 1, 2005, and March 31, 2006, and Midwest Renewable's revised market price escalation factors for 2006. The third is whether adjustments should be made to the EGEAS analysis to remove some or all of the projected plant additions.

There is one other subissue that related to the overall issue submitted by the parties. Consumer Advocate raised a question about the applicability of long-term levelized avoided cost rates to sales from Midwest Renewable's facility.

The Board will discuss each of the subissues separately.

## **DISCUSSION AND ANALYSIS**

### **1. Use of actual 2005 costs and 2006 escalation**

Midwest Renewable advocated updating IPL's EGEAS analysis with IPL's actual 2005 fuel costs and plant heat rates, as well as Midwest Renewable's revised fuel cost escalation factor for 2006. There are two parts to this issue. First, whether and to what extent IPL's current EGEAS analysis should be updated with more recent information. Second, whether the updated information is valid.

Both IPL and Consumer Advocate opposed selective updates of IPL's EGEAS analysis with information that was not available at the time the analysis was conducted in late 2005. Without a comprehensive review and updating of all data inputs and assumptions, IPL and Consumer Advocate said that selective updates can undermine the objectivity and integrity of the EGEAS analysis and produce erroneous results. (Tr. 686-88, 789). As noted by Consumer Advocate, IPL's EGEAS avoided cost serves more than one purpose and, from a broader integrated resource planning perspective, that avoided cost should provide consistent price signals for all its purposes. (Tr. 788-89). Consumer Advocate cautioned that selective adjustments to IPL's EGEAS analysis for Iowa QF purposes could have unintended impacts in terms of IPL's future resource selections. (Tr. 790).

Midwest Renewable's argument was simple: IPL's EGEAS analysis should be based on the most recent information. Midwest Renewable maintained that whether or not the information was available at the time of the initial analysis, if it is available now it should be used because it makes a significant difference in the avoided cost results for Midwest Renewable's wind facility.

With respect to validity of the data, no one contested the accuracy of IPL's actual 2005 fuel cost and plant heat rates, although IPL regards the data for that year as being skewed by unusual circumstances such as Hurricane Katrina and the outage of the Ottumwa generating plant. However, IPL did contest the validity of Midwest Renewable's 2006 fuel cost escalator and suggested it would be more appropriate to use an escalation factor based on the 2006 Energy Information Administration forecast, although IPL opposed any updating for the reasons previously discussed.

The Board granted rehearing "for the limited purpose of updating IPL's [EGEAS] avoided cost analysis and allowing the parties additional time to review the data inputs and assumptions in IPL's updated analysis." (Order Granting Rehearing, p. 16). The Board directed IPL to provide an updated analysis based on the same data inputs and assumptions used to generate IPL's 2006 PURPA Report. (Order on Rehearing, p. 17). In granting rehearing, the Board cited what Midwest Renewable said were the two most significant events since initial briefs in the docket were completed in August 2005: the sale of DAEC and the filing of a 2005-2020 electric resource plan with the Minnesota commission that used EGEAS for the bulk of IPL's analysis of its supply-side resource alternatives. (Order on Rehearing, p. 11).

The EGEAS analysis filed by IPL in response to the Board's order was based on the same EGEAS analysis used in IPL's electric resource plan filed in Minnesota. (Tr. 650). Consumer Advocate updated its analysis to reflect the DAEC sale and the purchase power contract that replaced it. (Tr. 780-81; Ex. 204, Sch. A). This

adjustment was based on information available during the EGEAS analysis period, unlike the adjustments proposed by Midwest Renewable. (Tr. 780, 784-85).

While the Board understands that Midwest Renewable wants to continually make adjustments to increase IPL's QF purchase rates, the Board does not believe that adjustments can be made selectively without compromising the overall analysis. The outcome of IPL's EGEAS analysis can be analogized to the Board's review of a utility's rates in a rate case. The final outcome of a rate case is based on a historical test year and comprehensive consideration of inputs and adjustments that recognize both increases and decreases in different utility costs. A utility's base rates are generally not adjusted according to isolated changes in selected utility costs, especially if those changes occur outside the rate case's test year, unless all offsetting and related adjustments can be made at the same time. Similarly, selective adjustments to EGEAS inputs with information not available during the analysis period should not be made in the absence of all offsetting adjustments because those selective adjustments could create an unbalanced impact on the EGEAS results. (Tr. 686-89, 789). In addition, selective adjustments for Iowa QF avoided cost purposes could have unintended impacts by sending the wrong price signal for purposes of QF development, energy efficiency, and future resource planning. (Tr. 788-90).

The Board will not make adjustments to the EGEAS analysis for IPL's actual 2005 fuel costs and plant heat rates or for the 2006 fuel cost escalator proposed by Midwest Renewable. Any EGEAS adjustments must be made on a comprehensive

basis and not based on selected costs. Otherwise, the EGEAS results could be unbalanced and unreliable because they would not be based on a comprehensive consideration of inputs and adjustments that were available for review during the analysis period. In addition to concern about such adjustments generally, the Board also has concern about the validity of Midwest Renewable's 2006 fuel cost escalation adjustment. (Tr. 634-36).

## **2. Market energy price inputs**

The second subissue concerns Midwest Renewable's proposal to update EGEAS with revised peak/off-peak market energy price inputs for 2005 (based on MISO market energy prices between April 1, 2005, and March 31, 2006) and with revised market energy price escalation factors for 2006. IPL and Consumer Advocate opposed the selective adjustments for the same reasons they opposed the fuel cost adjustments. IPL also questioned the validity of the adjustments, explaining that the MISO market price data used in Midwest Renewable's analysis does not reflect IPL's market energy costs from the forward bulk power market. IPL also had other concerns with the data. (Tr. 727-30, 736-42, Ex. 109).

The Board will deny Midwest Renewable's adjustments for the same general reasons it denied the fuel costs adjustments and fuel cost escalator proposed by Midwest Renewable. Selective adjustments with information not available during the EGEAS analysis periods would call into question the entire EGEAS analysis because such adjustments create the potential for unbalanced and biased results. In addition, the validity of the adjustments using MISO market data has been effectively

challenged by IPL with no effective rebuttal from Midwest Renewable. Finally, Midwest Renewable's rationale for its revised 2006 market energy price escalation factors was not explained. (Tr. 561).

There were two adjustments made by Consumer Advocate that appear to have been accepted (or not opposed) by IPL and Midwest Renewable. The first adjustment is based on IPL's market price forecast in Docket No. SPU-05-15 (involving the sale of DAEC) and the second adjustment recognizes the sale of DAEC and replaces it with the PPA IPL executed with the new DAEC owners. Both adjustments are based on information available at the time of IPL's EGEAS analysis and the Board will adopt those adjustments here.

### **3. Projected plant additions**

Various proposals were made to make adjustments to the EGEAS analysis to remove some or all of IPL's projected plant additions. This subissue has evolved as the docket progressed. Initially, Midwest Renewable questioned the validity of IPL's continued inclusion of a 150 MW placeholder (representing the failed Endeavor PPA) in its EGEAS analysis. IPL explained that its continued inclusion was based on other wind contracts it was pursuing.

Because it was unclear what impact the 150 MW placeholder had, the Board directed IPL to determine the impact of its removal from the EGEAS analysis. IPL filed information on December 13, 2006, showing the removal of the 150 MW placeholder increases IPL's levelized avoided cost by \$2.00 per MWh (from \$34.72 to \$36.72 per MWh). (Tr. 648, 688; Ex. 106, Sch. B; Ex. 107, Sch. C).

At the hearing, Midwest Renewable proposed not only removing the 150 MW placeholder but also another 100 MW placeholder identified as "Wind 100." (Tr. 576-79). While the rationale for this adjustment was not entirely clear to the Board (Tr. 583-91; Ex. 54), there was some discussion by IPL's witnesses that the Wind 100 placeholder had zero cost because it was a must-run unit with operating costs so low that it would be operated at all times and, therefore, not avoidable in terms of changing IPL's plant dispatch order. (Tr. 658-59, 686, 701-06).

In its rehearing brief, Midwest Renewable again expanded its position and proposed that all projected plant additions be removed from the EGEAS analysis. Midwest Renewable argued that because IPL is not certain when any of these plants will go into service, the use of these projected plants for EGEAS modeling purposes is unreasonably speculative. Because this issue was not argued at hearing, IPL's and Consumer Advocate's briefs do not respond to Midwest Renewable's revised position.

In its original petition, Midwest Renewable asked for a determination of avoided cost pursuant to a legally enforceable obligation over a specified term and for the purchase rates to be based on IPL's avoided costs calculated at the time the obligation is incurred rather than at the time of delivery. (Midwest Renewable petition, pp. 3-4). This required a long-term forecast of IPL's levelized avoided cost over the proposed 20-year term of the contract obligation between IPL and Midwest Renewable. IPL's EGEAS analysis accomplishes this task and is the same forecasting methodology used by IPL for its long-term resource plans. EGEAS

forecasts an optimal long-term generation expansion plan, which includes projected plant additions that are referred to as placeholders. (Tr. 663-64). After IPL used EGEAS for the initial expansion plan, EGEAS was next used to forecast a second expansion plan assuming purchases by IPL from Midwest Renewable's 30 MW wind facility, with the present value of the cost differences between the two expansion plans representing the avoided cost associated with Midwest Renewable's facility. (Tr. 774-77). By its nature, a generation expansion plan involves forecasting projected plant additions.

Removing all projected plant additions as advocated by Midwest Renewable would fundamentally alter the nature of the analysis and, in effect, creates an assumption that IPL will not add plant or other resources to serve forecasted load growth. This assumption is counter-intuitive and not supported by the record. The Board will not remove all future plant additions, including the Wind 100 placeholder, from the analysis. It is unreasonable to conclude that IPL will not build additional future plant, particularly in view of their publicly-announced plans with regard to proposed coal and wind facilities and IPL's obligation to provide reasonably adequate service to its customers pursuant to Iowa Code § 476.3(1).

The question of the 150 MW placeholder for the failed Endeavor contract remains. Consumer Advocate in its brief had no objection to the removal of this placeholder. Since the failed Endeavor PPA, only a total of 17 MW of PPAs have been executed (and there is nothing in the record to indicate any of these are performing yet). At this point, the 150 MW placeholder appears speculative and will

be removed from the analysis. The Endeavor PPA failed early in 2006 and still has not been substantially replaced.

**4. Applicability of long-term levelized avoided cost rates**

Consumer Advocate raised this issue at hearing because of the lack of a firm guarantee from Midwest Renewable that it would sell IPL the full energy output from its 30 MW wind facility. (Tr. 607-23; Ex. 205). Consumer Advocate asked that the Board condition its determination of long-term levelized avoided cost rates for Midwest Renewable's facility on Board review and approval of the final contract terms between Midwest Renewable and IPL.

As noted earlier, Midwest Renewable in its original petition chose to have the purchase rates based on IPL's avoided costs calculated at the time the obligation is incurred rather than at the time of delivery. (Midwest Renewable petition, pp. 3-4). Because of Midwest Renewable's choice, all the avoided cost rate proposals in this docket (including Midwest Renewable's) have been determined according to long-term levelized avoided cost based on the full energy output of Midwest Renewable's wind facility. (Tr. 21-22, Tr. 571-72; Ex. 3, Ex. 53).

Since the long-term levelized avoided cost rate requested by Midwest Renewable assumes the full energy output of the facility will be sold to IPL on an "as available" basis, this assumption must be tied to the applicability of the long-term levelized avoided cost rate in this docket. If it is not, Midwest Renewable could sell its energy output to the wholesale market when market prices are higher than IPL's levelized avoided cost rate and sell to IPL at levelized avoided cost when market

prices are lower. In this event, IPL would end up paying more than avoided cost for Midwest Renewable's selective "as-delivered" output. (Tr. 613, 679-80, 752-53).

The Board's rules (199 IAC 15) do not provide for Board approval of QF or alternate energy production contracts. The Board only determines select contract terms if the parties cannot agree and bring specific issues to the Board for resolution, such as the green credit issue decided in this docket (but not subject to the rehearing request). Therefore, the Board will not condition its avoided cost determination on final contract approval, but the Board will limit the applicability of the avoided cost rate that it determines. The rate will apply to purchases of the full MWh output available from the 30 MW wind generation QF identified by Midwest Renewable in this docket, over a 20-year contract term.

## **5. Summary**

The Board will accept adjustments consistent with Consumer Advocate's recommendations, which result in a levelized avoided cost of \$35.05. This includes adjustments that reduce the capacity size of Midwest Renewable's proposed facility from 80 MW to 30 MW, change the levelization period from 13 to 20 years, recognize the DAEC sale and replacement PPA, and incorporate IPL's market price forecast from Docket No. SPU-05-15. The Board will also accept an adjustment removing from the EGEAS inputs the 150 MW placeholder for the failed Endeavor PPA. All other adjustments will be denied. This results in a final levelized avoided cost rate of \$37.05 per MWh, limited to purchases by IPL of the full MWh output available from

the 30 MW QF identified by Midwest Renewable in this docket, over a 20-year contract term.

### **FINDINGS OF FACT**

Based on a review of the entire record in these proceedings, the Board makes the following findings of fact:

1. It is reasonable to require IPL to pay Midwest Renewable an avoided cost rate of \$37.05 per MWh for purchases of energy and/or capacity from Midwest Renewable's proposed 30 MW wind project.
2. It is reasonable to limit the applicability of the levelized \$37.05 per MWh rate to purchases of the full MWh output available from the 30 MW wind generation QF identified by Midwest Renewable in this docket over a 20-year contract term.

### **CONCLUSIONS OF LAW**

The Board has jurisdiction of the parties and the subject matter in this proceeding, pursuant to Iowa Code ch. 476 (2007), 199 IAC 15, and the Public Utility Regulatory Policies Act of 1978.

### **ORDERING CLAUSES**

#### **IT IS THEREFORE ORDERED:**

1. The application for rehearing filed by Midwest Renewable Energy Projects LLC on January 17, 2006, is granted to the extent discussed in this order, and denied in all other respects.

2. The "Final Decision and Order" of the Utilities Board issued December 28, 2005, is modified and clarified in accordance with the discussion in the body of this order.

3. Motions and objections not previously granted or sustained are denied or overruled. Any argument in the rehearing pleadings not specifically addressed in this order is rejected either as not supported by the evidence or as not being of sufficient persuasiveness to warrant comments.

**UTILITIES BOARD**

/s/ John R. Norris

/s/ Curtis W. Stamp

ATTEST:

/s/ Judi K. Cooper \_\_\_\_\_  
Executive Secretary

Dated at Des Moines, Iowa, this 31<sup>st</sup> day of May, 2007.