Alliant Energy Corporate Services
Legal Department
319-786-4505 – Phone
319-786-4533 – Fax

Paula N. Johnson
Senior Attorney - Regulatory

Interstate Power and Light Co.
An Alliant Energy Company

Alliant Tower
200 First Street SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

Office: 1.800.822.4348
www.alliantenergy.com

January 15, 2014

FILED WITH
Executive Secretary

January 15, 2014

IOWA UTILITIES BOARD

Ms. Joan Conrad, Executive Secretary
Iowa Utilities Board
1375 East Court Avenue, Room 69
Des Moines, IA 50319-0069

RE: Interstate Power and Light Company
Docket No. INU-2014-**0001**
Request for Investigation into Appropriate Avoided Cost Calculation and Application Pursuant to 199 IAC Chapters 15 and 35

Dear Secretary Conrad:

Enclosed please find Interstate Power and Light Company's Request for Investigation into Appropriate Avoided Cost Calculation and Application Pursuant to 199 IAC Chapters 15 and 35, as filed today on EFS.

Very truly yours,

/s/ Paula N. Johnson
Paula N. Johnson
Senior Attorney – Regulatory

PNJ/kjf
Enclosure

FILED WITH
Executive Secretary

January 15, 2014

IOWA UTILITIES BOARD

STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD

IN RE: **REQUEST FOR INVESTIGATION INTO AVOIDED COSTS DETERMINATIONS PER 199 IAC CHAPTERS 15 AND 35.**	**DOCKET NO. INU-2014-0001**

REQUEST FOR INVESTIGATION INTO APPROPRIATE AVOIDED COST CALCULATION AND APPLICATION PURSUANT TO 199 IAC CHAPTERS 15 AND 35

COMES NOW, the Interstate Power and Light Company (IPL) and submits this Request for Investigation into Appropriate Avoided Cost Calculation and Application Pursuant to 199 IAC Chapter 15 and 35 (Request), relevant specific to electric energy and capacity,[1] pursuant to Settlement Point No. 22 of its Joint Motion for Approval of Non-Unanimous Settlement Agreement (Joint Settlement) submitted on July 26, 2013, in Docket No. EEP-2012-0001, and pursuant to the Iowa Utilities Board (Board) Order issued on December 2, 2013, approving portions of the Joint Settlement (EEP Order). In support of its position, IPL states as follows:

BACKGROUND

1. The appropriate method for calculation and application of avoided cost determinations in the context of both the Public Utility Regulatory Policy Act (PURPA) (199 IAC Chapter 15) and energy efficiency program (EEP) proceedings (199 IAC Chapter 35) has generated an ongoing discussion. With specific regard to IPL, the Board has been asked by various parties to examine the appropriate

[1] No party to Docket No. EEP-2012-0001 raised any issues with the avoided cost calculation for natural gas (199 IAC Chapter 35), and natural gas avoided cost calculations are not contemplated for the purposes of PURPA (199 IAC Chapter 15).

calculation and application of avoided cost determinations, most recently, in in Docket No. EEP-2012-001 (IPL's recent EEP proceeding) and in the pending Docket No. TF-2012-0546 (IPL's Cogeneration and Small Power Production, or CSPP, tariff) filed on July 10, 2012, and revised on August 23, 2012.

2. While the CSPP tariff is pending a final order, the Board approved the following portion of the Joint Settlement regarding avoided costs:

> Issue No. 22 has been resolved between IPL, the OCA and the Environmental Intervenors. These three parties agree to request an investigative proceeding (INU) to address the issue of avoided cost in more detail. The three Parties shall submit a request, singularly or jointly, for an INU proceeding by January 15, 2014.

(Joint Settlement, p. 18.)

3. In approving this portion of the Joint Settlement, the Board stated:

> The Board believes it is appropriate to continue the discussion and will approve the settlement of Issue 22. The signatories requesting the investigative proceeding are to specify the issues they intend to address that have not already been addressed in either the tariff proceeding or the IPL energy efficiency plan proceeding, specify their respective ongoing concerns, and propose solutions for discussion that would address their concerns….

(EEP Order, pp. 66-67.)

4. IPL's avoided energy costs for the purpose of the EEP is based on its biennial PURPA avoided cost reports submitted to the Board pursuant to 199 IAC Chapter 15.5(6), adjusted as required by 199 IAC 35.9(7)"b" for use in an EEP. IPL's avoided capacity costs in the EEP are based upon 199 IAC 35.9(6) and 35.9(7)"a." The Board directed that the avoided costs IPL proposed in the EEP proceeding were approved, and would remain in effect until IPL's next EEP, regardless of the outcome of any INU proceeding. Therefore, the only outstanding

issue with regard to the calculation and application of avoided cost determinations in the EEP proceeding are prospective.

5. There remains no Board decision, however, on IPL's CSPP tariff. The CSPP tariff rates, like the EEP avoided cost determinations, are based on IPL's biennial PURPA reports submitted to the Board pursuant to 199 IAC Chapter 15. However, unlike the EEP, Chapter 15 does not provide prescriptive adjustments to the avoided energy cost determination, such as externalities. In addition, 199 IAC Chapter 35.9(6)"c" requires the use of a combustion turbine as a proxy for the next capacity addition to satisfy future capacity shortfalls regardless of the actual capacity additions reflected in a utility's Integrated Resource Plan. Finally, neither 199 IAC Chapter 15 nor 199 IAC Chapter 35 requires the utilization of avoided transmission and distribution costs; however, utilities have historically applied avoided transmission and distribution costs in the cost effectiveness modeling for EEPs.

6. IPL believes it is important to set a context for the avoided cost discussion contained in its recommendations regarding this proceeding below. Specifically, as it did in its Additional Information provided in Docket No. TF-2012-0546 submitted to the Board on January 15, 2013, IPL wishes first to explain how it calculates avoided costs and applies those avoided costs to various scenarios. This discussion illustrates why certain factors relevant to the determination avoided costs may be appropriate in an EEP, but may not be helpful in establishing a purchase power rate.

7. IPL performs the initial avoided energy cost calculation in the same matter for all internal uses, through an econometric model called the Electric

Generation Expansion Analysis System (EGEAS). EGEAS is a software package designed to examine the least-cost resource plans, purchase power options and other alternatives utilized by a utility to meet its generation requirements. The model performs a "comparative cost" function that can be indicative of an avoided cost for the utility.[2] This avoided cost calculation assumes the utility's forecasted load levels remain unchanged but the resource mix is altered.[3]

8. For example, assume IPL's forecasted load for a particular hour is 2000 MW and IPL needs to determine the avoided cost of 30 MW of wind energy. The comparative calculation allows IPL to change the generation mix so that it can calculate the cost to serve the load from 1971 MW to 2000 MW. A potential wind generator would then be entitled to receive up to those incremental avoided costs for that hour, and customers would remain indifferent since the revenue requirements would be maintained. EGEAS performs this analysis over an annual basis for a 15 year horizon and provides a levelized incremental avoided energy cost. This comparative calculation is used as the starting point for both IPL's biennial avoided cost filing pursuant to 199 IAC 15.3 and its five-year energy efficiency plan filings.

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[2] Pursuant to 199 IAC 15.1, "*'Avoided costs'* means the incremental costs to an electric utility of electric energy or 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."

[3] IPL's avoided costs generally address both energy and capacity. However, small renewable resources with low capacity factors (i.e., small wind farms and solar panel installations) generally do not impact capacity planning. Capacity credits are generally considered separately during contract price negotiations for projects with higher capacity factors, such as biogas digesters. Capacity payments are based on the levelized cost of a next plant addition such as a CT similar to EEP filings, but converted to a $/MWH basis, if the QF is dispatchable resource that would qualify as an Asset Based Planning Reserve Credit (PRC) under MISO Module E.

9. For the biennial avoided cost calculation pursuant to 199 IAC 15.3, this avoided cost calculation, unadjusted except for Board formatting requirements,[4] serves as the basis for IPL's Public Utility Regulatory Policy Act (PURPA) avoided cost rate. In other words, this is the rate that serves as the starting point for negotiating power purchase agreements between IPL and qualifying facilities. This rate may be adjusted during the negotiation process for factors such as line losses, as appropriate, but it remains unadjusted in the biennial avoided cost filing.

10. This same comparative cost calculation is also utilized, as noted above, in determining the avoided cost rate to be used in IPL's five-year energy efficiency plans (EEP). In this case, however, the avoided energy cost rate is adjusted, in compliance with 199 IAC 35.9(7). For example, 199 IAC 35.9(7)"b" requires adjustments to the avoided energy costs for prescriptive factors such as variable operations and maintenance costs (marginal energy costs), system energy loss factors and societal costs (externalities). The avoided cost rate for IPL's EEP may, on its face, look like a different rate calculation than IPL's avoided cost rate for its PURPA filing. At the core, however, both are based on the initial comparative cost analysis through EGEAS. That same comparative cost calculation is also used in IPL's resource planning. IPL consistently uses the same base calculation as the starting point; it is only the adjustments for specific uses that produce an air of difference in the avoided cost rates.

11. As noted above, IPL believes its avoided energy cost methodology for PURPA QFs and EEPs already conform to the applicable criteria. IPL uses the

[4] Please see the Board's orders issued in Docket No. 199-IAC15.3 (PURPA Section 210) on December 21, 2007, and April 10, 2008.

same base calculation methodology as the starting point for each. The only difference occurs in applying certain adjustment factors to the avoided cost for the purpose of refining it for use in a specific energy-efficiency environment. However IPL does not believe application of these adjusting factors would necessarily be appropriate for the PURPA QF informational filings. For example, the externalities applied by 199 IAC 35.9(7)“b” to an EEP analysis may not be applicable to a PURPA QF price negotiation. The PURPA QF price points will inherently require a more case-by-case analysis to take into consideration factors such as the location (which may affect line losses), capacity factor of the generating unit, and fuel source of the QF.

12. Conversely, it is not necessarily appropriate to remove these factors from a specific EEP calculation. For example, the externality factors specifically account for EEP considerations that may not be addressed in a raw avoided cost determination. The externality factors specifically account for the societal costs of energy supply. This externality is unnecessary for the calculation of a QF avoided cost rate; that rate represents a pure pricing point for the purchase of energy. However, it is important to account for this externality when determining whether an EEP measure provides a societal benefit.

PROPOSED INVESTIGATION

13. While IPL and MidAmerican Energy Company (MEC) both use a base calculation as the starting point for both types of avoided cost determinations, IPL and MEC use different methodologies to perform their base calculations. IPL notes that there appears to be some desire by other parties for a uniform approach to

avoided costs. However, as MEC explained in Docket No. TF-2012-0574, which addressed its CSPP-comparable tariff, MEC has its own methodologies and rationale for its avoided cost computations unique the load characteristics of its customers, existing facilities, and generation portfolio.

14. IPL and MEC, as well as the Office of Consumer Advocate (OCA) and Environmental Law and Policy Center (ELPC), actively contributed to the respective utilities' tariff dockets. As a result, the Board identified the following general issues:

- Whether utilities should use the same uniform avoided cost methodology for purchasing energy and capacity from PURPA QFs and EEP proceedings; and
- Whether avoided cost methodologies should be made more transparent.

(Board Order in Docket Nos. TF-2012-0546, TF-2012-0574, pp. 1-2, issued December 3, 2012.)

15. IPL recommends that these two issues be the focus of the investigative proceeding. IPL also recommends that this proceeding be conducted in a manner that allows for both written comment and collaborative workshops. All parties would benefit not only from written statements of positions for consideration, but also from bringing various avoided costs experts together to actively discuss:

- The merits of the avoided cost calculation methodologies employed;
- The pros and cons of consistent application of a uniform avoided cost calculation methodology among different utilities;
- The pros and cons of consistent use of a methodology in the context of both PURPA QFs and EEPs, and whether Iowa Administrative Code revisions would be required to make them consistent;

- The level of transparency of the inputs into the avoided cost calculations that is warranted (e.g., would full transparency require the release of confidential and/or proprietary information and would full transparency result in "information overload," particularly for detail-intensive software modeling programs); and
- The sophistication, in operation and output, of the various avoided cost software programs available.

16. Currently, IPL takes the following general positions on the proposed topics, and would offer a more detail explanation of each position if the INU is initiated:

- IPL's EGEAS methodology most appropriate represents the costs and impacts for its own system;
- IPL and MEC have unique generation blends, overall system configurations, and internal policies that necessitate differing avoided cost calculation software and/or methodologies;
- The inherent differences in the uses of and time periods and/or horizons for calculation of the avoided costs necessitate different tempering of the EGEAS results for PURPA QFs and EEPs; and
- While IPL advocates for transparency of its energy cost calculations to the extent possible and practical, IPL has concerns regarding the potential "information overload" release of all data inputs and outputs could have (given its data-intensive EGEAS software), other parties' inability to replicate IPL's calculations because of the sensitivities inherently involved, the potential release of licensed information from its natural gas price

sources, and the release of confidential contractual information that could impair its negotiating position for power purchases.

- IPL is satisfied with the level of detail contained in both the inputs and outputs of its EGEAS modeling software, and would not be interested in this time in shifting to a different software or methodology. IPL recognizes, however, that its forecasting position its unique to its system; other utilities may not find the same value in this level of detail that IPL enjoys.

17. IPL suggests the following overall structure could be employed by the Board in a procedural schedule to address these issues:

- 45 days after Board order – Parties file comments providing information and data to address the four general issues discussed above;
- 30 days after initial comments – Reply comments due;
- 30 days after reply comments – First workshop to discuss considerations;
- 30 days after first workshop – Second workshop to discuss analysis since first workshop;
- 30 days after second workshop – Post-workshop comments, which should be filed jointly if a consensus can be reached;
- 20 days after post-workshop comments – Post-workshop rely comments;
- 30 days after Post-workshop reply comments – Board public hearing for oral comment (if necessary); and
- 15 days after Board public hearing – Final written comments.

18. This process should allow for full participation of all interested parties in a collaborative atmosphere. IPL suggests that through this collaborative effort, even if the parties cannot reach a consensus, all participants should have a greater understanding of the various considerations in avoided cost calculations and applications.

CONCLUSION

WHEREFORE, IPL respectfully requests that the Board, utilizing the suggested procedural format, open an investigative proceeding to fully vet the following five issues regarding avoided cost calculations and applications:

- The merits of the avoided cost calculation methodologies employed;
- The pros and cons of consistent application of a uniform avoided cost calculation methodology;
- The pros and cons of consistent use of a methodology in the context of both PURPA QFs and EEPs;
- The level of transparency of the inputs into the avoided cost calculations that is warranted (e.g., would full transparency require the release of confidential and/or proprietary information and would full transparency result in "information overload"); and
- The sophistication, in operation and output, of the various avoided cost software programs available.

Dated this 15th day of January, 2014.

Respectfully Submitted,
Interstate Power and Light Company

By: *_/s/ Paula N. Johnson_*

Paula N. Johnson
Senior Attorney – Regulatory
Alliant Energy Corporate Services, Inc.
200 First Street SE, P.O. Box 351
Cedar Rapids, IA 52406-0351
319.786.4742
paula Johnson@alliantenergy.com