

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
BEFORE THE IOWA UTILITIES BOARD

IN RE:	
INTERSTATE POWER AND LIGHT COMPANY	DOCKET NO. TF-2016-0321

**RESPONSE AND OBJECTION**

The Iowa Office of Consumer Advocate, a division of the Iowa Department of Justice, objects as follows to the tariff filing made by Interstate Power and Light Company (IPL) in the above-captioned proceeding on August 31, 2016, and in support of this objection states as follows:

IPL's proposed tariff responds to the Order issued by the Iowa Utilities Board (Board) on July 19, 2016 in Docket No. NOI-2014-0001, directing IPL and MidAmerican Energy Company (MEC) to file new net metering tariffs implementing the following tariff changes that will be effective for a three-year study period:

- 1) Increase the net metering cap from 500kW to 1 MW (up to 100 percent of the customer's load;
- 2) Allow all customer classes to net meter but specify that each customer's generation will only offset the energy (kWh) charges and thus will not offset the customer charge or demand charge; and
- 3) Provide for an annual cash-out of excess credits at the utility's tariffed avoided cost rate. The data collected of the amount of excess credits generated by net-metered customers, those in excess of net-metering offset, should provide the Board information to address possible rule changes. (July Order at p. 5). The annual cash-out shall take place during the first billing cycle of the calendar year. The funds from the cash-out will be divided evenly between the customer and the utilities' funds to provide assistance to customers in need or the customer may choose to allow up to all of the excess credits to be distributed to provide assistance to customers in need.

These tariffs will be effective for all customers who file interconnection applications after the Board approves the tariffs. Customers on the current net metering tariff shall have the option to remain under the current tariff or take service under the new tariff and participate in the study. If an existing customer chooses to take service under the new net metering tariffs, the customer cannot return to the existing tariff. The new tariffs should include a sunset provision stating that the tariff will expire three years from the date of its approval. (July 19 Order, p. 4).

IPL's current and proposed net metering tariffs do not specifically address whether a customer and renewable energy facility owner must be the same or whether there would be any restrictions on net metering by a customer who finances or leases DG through a contract or purchase power agreement (PPA). In collaborative discussions leading up to the instant tariff filing, IPL confirmed that it interprets its net metering tariff as *not* restricting customer eligibility based on a customer's use of financing or PPA arrangements. MEC similarly proposes to modify its current net metering tariff to eliminate language requiring that a customer and facility owner be the same. OCA supports this approach because it is consistent with the Board's intent in the July 19 Order to abide by Iowa policy encouraging renewable energy development and the Supreme Court of Iowa's decision in *SZ Enterprises, LLC v. Iowa Utilities Board*, 850 N.W.2d 441 (2014).

IPL and MEC propose new terminology for renewable energy facilities. According to IPL's filing, this pilot program rate schedule is applicable to Residential, Non-Residential General Service, and Large General Service Customers that file complete interconnection applications with local generation facilities for metered energy only, "which are defined as Alternate Energy Production (AEP) Facilities or Small Hydro Facilities as such terms are defined by Section 476.42, Iowa Code." IPL's proposed net metering tariff then refers to AEPs as

“Private Generation Facilities” and the generation from such facilities as “Private Energy Credits.” The Iowa legislature adopted safety requirements for distributed electric generation facilities in H.F. 548 (Laws of the 86<sup>th</sup> G.A., 2015 Session). It defined distributed generation (DG) facility as an “Alternate Energy Production” or small hydro facility as defined in Iowa Code § 476.42 or a qualifying facility as defined in 18 C.F.R. pt. 292, subpart B, implementing the Public Utility Regulatory Policies Act (PURPA) of 1978. Iowa Code § 476.58. “Private Generation Facilities” and “Private Energy Credits” are not defined terms in Iowa law and could create confusion. Some net metering customers may be public entities and the use of “Private Generation” and “Private Energy Credits” for such entities could be confusing. The use of “Private Generation” and “Private Energy Credits” is potentially confusing and inaccurate. OCA recommends that IPL use terminology for renewable energy facilities that is defined in and consistent with Iowa Code §§ 476.42 and 476.58(1)(b), such as “distributed generation” or “alternate energy production” facilities.

The remainder of OCA’s response will focus on IPL’s proposed tariff terms for meeting the Board’s July 19 Order and whether these terms are consistent with the purpose for the changes directed by the Board.

### **Measuring a Net Metering Customer’s Load**

The Board requires that the net metering cap be increased from 500 kW to 1 MW, or up to 100 percent of a customer’s load.<sup>1</sup> The Order does not define how a customer’s load should be measured. IPL proposes to define customer load by using the customer’s actual historic demand billing or by applying an annual average load factor to the consumer’s annual usage. The average load factor is derived from the rate class to which the customer belongs. In

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<sup>1</sup> Iowa Utilities Board, “Order Directing Filing of Net Metering Tariffs,” issued July 19, 2016, Docket No. NOI-2014-0001, *Distributed Generation*, page 3.

addition, the non-coincident demand from annual class data will be used to determine the load of customers with no historic usage information. While the customer’s actual historic demand billing is a suitable method to determine customer load, most residential and small customers are not on demand meters. The determination of load using the average load factor of the customer class is problematic in this case because it creates a disadvantage for customers whose actual load factor is below the average. According to IPL’s tariff interpretation letter,<sup>2</sup> customer load is calculated as follows for a residential customer with annual usage of 12,000 kWh and a class average load factor of 25 percent:

$$\text{Load Cap} = \frac{\text{Annual usage}}{365 \text{ days} \times 24 \text{ hrs} \times 25\%} = \frac{12,000 \text{ kWh}}{8,760 \text{ hrs} \times 25\%} = 5.48 \text{ kW}.$$

However, if the customer’s actual load factor is less than 25%, for example, 19%,<sup>3</sup> then, all else being equal, a cap of 5.48kW will be less than 100 percent of that customer’s actual load. Under IPL’s proposed method for calculating load, the customer’s 100 percent load equivalent would be 5.48kW, which is less than the customer’s actual load:

$$\text{Load Cap} = \frac{\text{Annual usage}}{365 \text{ days} \times 24 \text{ hrs} \times 19\%} = \frac{12,000 \text{ kWh}}{8,760 \text{ hrs} \times 19\%} = 7.21 \text{ kW}.$$

Thus, the customer with an actual load factor of 19% will not qualify for net billing energy credits for 1.73kW, which represents nearly a quarter of its load. A customer in this situation will either have to size the DG facility to be smaller than needed for the customer’s load or enter into two separate arrangements with IPL: the first arrangement will be for net metering, while the second arrangement will be for a PPA for any generation in excess of the customer’s

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<sup>2</sup> *Interstate Power and Light Company*, Docket No. TF-2016-0321, “Interpretation No. IPL E2016-25,” p. 2 (Aug. 31, 2016).

<sup>3</sup> The choice of 19 percent is arbitrary and used solely for the purpose of illustration.

100 percent of load, as defined by IPL. This outcome is complex, unnecessary, and will disproportionately affect residential and small commercial customers because these customers can have significantly different load and most of these customers are not demand metered and would be subject to the average load calculation.<sup>4</sup> MidAmerican's new net metering tariff proposes a more straightforward approach for calculating customer load based on a customer's historical or anticipated annual energy usage. MidAmerican's approach is also preferable because it fairly calculates load for all customers and does not present the adverse and potentially discriminatory treatment that is inherent under IPL's approach. OCA opposes IPL's proposed use of the average class load factor to measure load because it is needlessly complex and places certain customers at a disadvantage. OCA recommends that IPL adopt a more straightforward and fair method of measuring customer load such as that proposed by MidAmerican.

#### **Cash-Out**

The Board also requires an annual cash-out of excess credits, if any, at the utility's tariffed avoided cost rate. This annual cash-out will take place during the first billing cycle of the calendar year. Based on collaborative discussions leading up to the instant tariff filing, OCA understands that the use of the first billing cycle for cash-out may present a disadvantage for DG customers. It is not evident from the underlying NOI proceeding or the Board's July 19 Order that the selection of the first billing period for cash-out was intended to reflect a policy decision. If responsive comments establish that the first billing period will introduce unintended burdens on DG customers, the OCA would urge the Board's consideration of a different billing period for the cash-out to occur. While the selection of a single billing period for all net-metered customers

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<sup>4</sup> It is not clear from IPL's proposed tariff whether IPL would utilize actual demand load from customers on demand meters, or if it would apply the average load calculation to all net metering customers.

is administratively efficient and should be utilized, it may be appropriate to allow some flexibility in the determination of a billing period for cash-out that would be just and reasonable.

The customer load size limit directed in the Board's July 19 Order serves to limit the size of net-metered DG facilities and will likely reduce the number of net metering customers who carry over excess generation.<sup>5</sup> The possibility of even lower avoided cost rates would tend to reinforce this. However, IPL's proposed method for measuring customer load will result in an average load calculation that in some instances will be well below a customer's actual load thus resulting in more carry-over generation that would be subject to avoided cost rate terms. If IPL retains this measurement approach, it will be even more important to ensure just and reasonable avoided cost terms are available. OCA has objected to IPL's proposed updated avoided cost terms in Docket No. TF-2016-0290, which is currently pending. If IPL were to measure customer load based actual or projected kWh, this would ameliorate the significance of pending avoided cost issues.

Rather than offer a distinct seasonal, time-differentiated avoided cost rate option as it does for other cogeneration and small power production facilities,<sup>6</sup> IPL proposes to an average avoided cost calculation to determine cash-out rates for net-metered customers. There is a high probability that the largest proportion of energy credits will be generated during the summer on-peak period for solar panel users,<sup>7</sup> so the use of an average rate could introduce bias against customers whose energy credits comprise mainly summer on-peak credits.<sup>8</sup> IPL requires the

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<sup>5</sup> OCA understands that the carry-over of excess generation is a relatively uncommon event under current net metering tariffs. In other words, most net metering customers do not have a significant net metering generation credit. OCA believes that few if any DG customers utilize IPL's tariff avoided cost rates.

<sup>6</sup> IPL Electric Tariff, Rate Code CSPP, Sheet Nos. 49-50.

<sup>7</sup> The summer on-peak period also coincides with the time of year that solar panels will have maximum exposure to sunlight. In addition, based on IPL's weighted average avoided cost calculations, 46 percent is placed on the winter off-peak rate, while 10 percent is placed on the summer on-peak rate.

<sup>8</sup> The average avoided cost proposed by IPL is lower than the summer on-peak avoided cost.

installation of metering equipment at the point of service to DG facilities capable of measuring power flows in each direction on an hourly or other real-time basis. Given these considerations and the meter capability requirements, IPL should also be required to offer a seasonal, time-differentiated rate option to determine cash-out rates for net-metered customers.

IPL proposes to make its avoided cost rates “subject to change based on IPL’s future avoided cost informational filing pursuant.” IPL’s current avoided cost tariff does not contain this language. Tariff rates are not changeable simply on the basis of an informational filing. Rather, they are subject to change based on Board review and determination.<sup>9</sup>

IPL abides by the Board’s directions regarding the allocation of excess generation credits. The Board allows customers to designate as much as 100 percent of its excess generation toward funds for customers in need. IPL requires customers to increase their allocation of the cash-out payment to the assistance fund by 25 percent increments. This decision appears to be arbitrary. OCA supports allowing customers to decide what percentage of excess generation beyond 50 percent they wish to contribute to customers in need. While the allocation of excess generation credits to customers in need is one means for helping lower-income customers realize the benefits of renewable energy generation, OCA hopes that other pilot efforts will provide lower-income customers greater opportunities to participate more directly in the benefits of renewable DG.

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<sup>9</sup> Iowa Code § 476.6(1) (2015); *See e.g., MidAmerican Energy Company*, Docket No. TF-2014-0338, “Order Approving Tariff, Requiring Rebilling, and Requiring Reports” (IUB, June 19, 2015) (Iowa law does not allow rate-regulated utilities to implement tariff changes or new rates without Board approval; rates implemented prior to Board approval are subject to recalculation and refund or revision in accordance with the approved rate.)

### **Sunset Provisions**

Although the new net metering tariff must sunset within three years of their effective date, the Board recognizes the importance of having tariff continuity for the life of the facility. IPL proposes that customers taking service under its tariff shall be allowed to remain on the tariff for the life of their interconnected equipment not to exceed 20 years. The 20-year term is consistent with IPL's current net metering tariff. OCA has no objection to continuing this limitation in the new tariff. However, OCA recommends that IPL incorporate language that specifically allows IPL and its customers to assign their rights and obligations under this net metering tariff to other entities. A three-year pilot coupled with the inability to assign the pilot tariff terms for the remainder of the 20-year term may discourage renewable energy investment. MidAmerican includes acceptable assignment provisions in its proposed net metering tariff.<sup>10</sup> With the transition to a three-year tariff and the uncertainty about what net metering terms will be available at the conclusion of this period, it is important to offer net metering customers who interconnect during the next three years the ability to transfer such facilities to new purchasers under the same tariff terms. This outcome appears to be consistent with the Board's desire to have the tariff rate available for the life of the facility.

### **Special Provisions**

IPL proposes to carry forward some provisions from its current net metering tariff in the "Special Provisions" section of its tariff. It also proposes new provisions in this section. IPL propose a new term which specifies that a net metering "Customer may be served from a distribution transformer which serves no other Customer." Interconnection terms are currently specified in 199 IAC chapter 45 and do not appear to impose the limitation that IPL proposes.

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<sup>10</sup> MidAmerican Energy Company, Docket No. TF-2016-0323, Sheet No. 365.

OCA recommends that this term be deleted and that interconnection matters be addressed through chapter 45. IPL also proposes the following new term: “All electricity delivered shall be for the exclusive use of the Customer and shall not be resold.” The meaning of this condition is unclear. Is this term intended to address electricity “delivered” by the DG or electricity “delivered” by IPL? If some DG generation is “delivered” by the DG to IPL, presumably IPL could resell it, but this sentence does not appear to allow this. Clarification is needed.

WHEREFORE, OCA objects to the proposed tariff and requests that the Board direct IPL to revise its net metering tariff in conformance with the foregoing recommendations; specifically, IPL shall incorporate terms that achieve the following:

1. Replace the use of “private energy generation” and “private energy credits.”
2. Measure customer load for purposes of determining net metering size eligibility according to a customer’s historical or projected kWh usage;
3. Abide by IPL’s Board-approved avoided cost rate provisions, including the ability to select an avoided cost rate that reflects seasonal and time-differentiated factors;
4. Allow customers flexibility in designating additional amounts of excess generation, beyond 50 percent, be credited to low-income funds;
5. Allow the Company and Customer to assign their respective rights and obligations under the net metering tariffs to other entities; and
6. Eliminate or clarify certain Special Provisions.

Respectfully submitted,

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