

**STATE OF IOWA**  
**BEFORE THE IOWA UTILITIES BOARD**

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<b>IN RE:</b>	)	
	)	<b>DOCKET NO. TF-2016-0321</b>
<b>DISTRIBUTED GENERATION</b>	)	<b>DOCKET NO. TF-2016-0322</b>
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	)	<b>RESPONSE COMMENTS</b>
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The Environmental Law & Policy Center (ELPC), Iowa Environmental Council (IEC), Sierra Club, Iowa Solar Energy Trade Association (ISETA), Solar Energy Industries Association (SEIA), Vote Solar, and Winneshiek Energy District (WED), collectively the “Joint Commenters,” file these comments in response to Interstate Power and Light Company’s (IPL) tariff filings on March 31, 2017.

**Background**

On March 31, 2017, IPL filed revised tariffs in TF-2016-0321 and TF-2016-0322. These revised tariffs responded to the Iowa Utilities Board’s Order issued on March 17, 2017 granting in part, and denying in part, applications for rehearing and requiring a revised tariff filing by IPL and represented the latest step in developing net metering pilot tariffs first ordered by the Board on July 19, 2016 as a culmination of the Distribution Generation Notice of Inquiry docket, NOI-2014-0001.

In the July 19, 2016 Order, the Board refocused utility efforts away from sweeping policy changes and on limited changes to net metering designed to expand distributed renewable generation. The Board explained, “To address these concerns and to obtain data ... the Board

finds that the impact of raising the net metering cap and the treatment of excess net metering credits should be studied before the Board decides whether to make permanent changes to its net metering rules.” The Board’s July 19, 2016 Order made clear that it intended to expand renewable energy and distributed generation with specific and limited changes, and that it was not looking to make sweeping or fundamental changes to net metering. The July 19, 2016 Order called for the utilities to submit revised pilot programs consistent with the Board’s overarching policy objectives.

In response to the July 19, 2016 Order, IPL filed a pilot program that raised significant stakeholder concerns about the breadth, complexity, and adverse impact of its pilot changes. Joint Commenters filed comments outlining significant concerns to IPL’s pilot program proposal on September 20, 2016. We expressed concerns that IPL’s approach could substantially reduce the size of solar installations for residential customers and business customers in the general service and large general service rate classes.

IPL has gone significantly farther than the July 19, 2016 Order to propose a dramatically altered limit to net metering that makes it less transparent, more complicated, and much less likely to encourage renewable generation. IPL’s approach goes well beyond the specific changes to raise the net metering cap and address treatment of excess net metering credits called for in the Board’s Order and imposes a new limit on net metering based on customer demand. The customer demand limit in IPL’s approach is inconsistent with the Board’s intent and with the Board’s specific direction. However, the Board provided additional guidance in the February 3, 2017 Order and accompanying Gold memo approving of IPL’s approach, and then in its March 17, 2017 Order, the Board reaffirmed its commitment to let IPL move forward with its approach

to limit net metering based on demand. The Board also required IPL to provide additional information and clarification on its approach in a revised tariff filing.

While we continue to have serious concerns about IPL's approach to limit net metering based on customer demand, these comments will focus on the implementation of that approach in IPL's revised tariffs in order to create a pilot framework that works as well as possible. These comments do not imply approval of IPL's approach, and we stand by and incorporate our previous arguments against IPL's proposed net metering pilot tariff. We reserve the right to challenge IPL's approach to limit net metering in appropriate forums in the future.

IPL's revised net metering pilot tariff and interpretation letter still has significant ambiguity and needs additional clarification. Many of these issues are due to the complicated nature of IPL's new approach to limiting net metering. These issues did not need to be considered under a framework that simply used annual energy usage to limit system size. Given the new approach that IPL is proposing and the gaps and ambiguity in the proposed tariff and interpretation letter, we have identified the following questions. This list of questions is not exhaustive and we anticipate that additional questions will arise as stakeholders attempt to implement the pilot tariff. We recommend that identified issues be addressed before final approval of the pilot tariff.

**1. How is customer load calculated for customers that have demand data/historic kW usage?**

IPL's tariff and interpretation letters still do not provide any detail on the load cap calculation for customers with actual demand data and historic usage. The August 31, 2016 tariff interpretation letter states: "IPL will derive customer load on a customer-specific basis by either reviewing actual historic demand billing of the customer or by applying an annual load factor to a customer's annual usage." There is no additional explanation on that calculation for a customer

with demand data. This methodology should be clarified in the tariff to avoid ambiguity and to provide customers with certainty. We recommend that the highest kW demand in the previous three year period be the load cap for the customer. This is straight forward, easy to apply, and easy for the customer to understand.

We also think that customers should have the option of establishing their customer-specific peak load data rather than use the estimates derived from class-based calculations, when such data is available. The utility traditionally would be one source for such data as referenced in the paragraph above, but the customer can be another source. We think that customers should have the option – at their choosing – of demonstrating their load prior to the interconnection. We recommend that the Board order IPL to work collaboratively with stakeholders to develop methodologies that would establish customer-specific data where none previously existed, thus allowing for a more fair and accurate determination of a maximum PV system size eligible for the tariff. We recommend that these methodologies be added to the pilot tariff within the next six months.

**2. How will IPL calculate net metering credits for customers that install systems that are larger than the net metering cap?**

The interpretation letter includes an example of a residential customer with no historic kW data and provides the calculation for determining the customer's estimated load and the installation size that is eligible for net metering. The interpretation letter includes information that a customer can install a larger solar installation of 10 kW instead of the load cap of 7.2 kW in the example. The interpretation letter describes but does not provide example calculations of the treatment for a larger installation. IPL should be required to provide detailed calculations and examples of a full year of monthly bills for customers that install a solar installation larger than the applicable load cap. Without such an example, customers will not be certain about how a

decision to install a larger system will affect them. This is not something that should be worked out after a customer installs a system.

For example, IPL could provide 12 months of bills showing typical levels of solar production and residential consumption over the course of a typical year for: customers that are at the load cap of 7.2 kW load and 7.2 kW-AC solar project; customers that have a load cap of 7.2 kW and a 8 kW-AC solar project (example in the tariff); customers that have a load cap of 7.2 kW and a 10 kW-AC solar project (matching the example in the interpretation letter).

Furthermore, the application of self-consumption is unclear based on the tariff and interpretation letter. IPL says that “there is no limit to the amount of energy that can be consumed by the customer directly from the generation facility behind the meter.” How this is calculated – e.g., is it monthly? IPL is netting on a monthly basis for the purposes of carry forward and cash out. It is unclear how IPL would allow 72% of the 10 kW system to net meter and 28% to not net meter in the example of a 7.2 kW system cap.

**3. How will the load cap be calculated for a customer looking to expand their system or with changes in load?**

There are several issues that could come up for customers who have installed systems. There are customers that install solar PV systems incrementally. The tariff does not specifically address these systems other than to say that “[a] customer may not modify facilities previously approved by IPL without IPL approval of such proposed modifications.”

A customer that has already installed distributed generation on site likely would have diminished load based on the self-generation from a system that has already been installed. The customer’s load cap would already be depressed by the customer’s use of solar. This could prevent the customer from effectively adding on to an existing system and being able to net

meter. In this case, we recommend that IPL use the customer's energy usage that existed prior to the installation of the solar system to calculate load cap.

This issue also impacts customers whose load changes over time. For example, this could include a residential customer who adds an electric car, hot tub, etc. or a commercial customer whose business expands – a restaurant that stays open longer, a small manufacturer that adds production, etc. Under IPL's proposed tariff, if these customers already have a net metered system, their ability to expand would be limited since their new load would already be reduced by an operating distributed generation system.

**4. How does IPL define customers with no historic kWh usage and calculate load limits for these customers?**

IPL's tariff states that “[c]ustomer class non-coincident kW demand shall be used in lieu of customer class average annual load factors in the event a customer has not historic kWh usage in the determination of a customer's load in the calculation of the load limitations for private generation credits.” This language is unclear, and IPL has not provided any example of how it will use the non-coincident kW in the calculation of load.

The proposed non-coincident demands listed in Special Provision 7 (Original Sheet 42.1) are 5.29 kW (residential), 12.75 kW (general service) and 527.43 kW (large general service). How does IPL plan to use these caps for customers with no historic kWh usage (as stated under “B. Load Limitations for Private Generation Credits” on Revised Sheet No. 42)? It is unclear how this will replace customer class average annual load factors and what the implications would be.

IPL does not define the situations where there is not historic kWh usage. If there are instances where IPL knows there will be no historic usage, those should be specified in the tariff. We know that there will not be historic kWh usage in cases of new construction. We think that

this is the only situation where this should apply. In cases of site transfer, for example from one residential customer to another or one commercial customer to another at an existing site, the previous owner's usage history should apply to that site.

In addition to the concerns related to the lack of definition of no historic usage, this methodology creates defaults that may arbitrarily limit system size and will significantly reduce the installation of solar at new construction sites. The customer class load factor calculation accounts for the unique customer information of annual kWh usage and allows for the load cap to vary by customer. Customers without historic kWh information will still have different kW loads. How does the proposed use of non-coincident demand allow for the load cap to change to reflect variations in customer kW loads? The tariff and interpretation letter make this seem like a one-size fits all approach for all customers without historic kWh usage.

If that is the case, many residential and general service customers would be able to install significantly larger systems by waiting for a year of kWh usage. This would force these customers to choose between smaller system sizes or risk missing out on existing state and federal tax credits that may have wait lists or that are scheduled to be phased out. However, for many of these customers, the anticipated kWh usage could be reasonably predicted in advance. Residences of a certain size could have a reasonable prediction of energy use. Similarly, commercial building by size and sector would have some predictability to energy usage. It would be better to allow for the flexibility for a customer to provide a reasonable comparison property and energy usage for new construction system size. We recommend that the Board order that IPL modify the tariff to allow customers to provide a reasonable comparison property. The alternative is to significantly reduce this market segment.

**5. Will IPL provide sufficient flexibility to increase the load cap given potential DG technology constraints?**

In some circumstances, it may not be possible to size a DG system to exactly match the applicable load cap. For example, a customer may have a load cap of 7.21 kW-AC (per the IPL interpretation letter example) while the available inverter sizing may be little larger, such as 7.6 kW-AC or 7.8 kW-AC, or smaller 6 kW-AC. Without flexibility, the customer would be forced to choose between two options that limit net metering – under-sizing the system and net metering less than the cap or slightly exceeding the cap and losing the ability to fully net meter the production from the system. We recommend that the Board order that IPL provide sufficient flexibility to allow customers to increase the applicable load cap in such circumstances, which are beyond customers' control. For the majority of customers, the load cap will be established using an estimate of customer demand (either the load factor or non-coincident demand methodologies), and it is not reasonable for IPL to strictly adhere to a load cap that was established with estimates.

**6. One of IPL's proposed data collection plans appears to move towards establishing a different net metering program.**

We have identified a concern with one of IPL's proposed data collection items and request that this item be removed from IPL's data collection plan. At the end of its proposed data collection plan, IPL stated "IPL will also explore the option of directly metering private generation by adding a request to do so at the time of interconnection." We believe this presents a much broader potential program change that goes well beyond data collection, is inappropriate to include in the interconnection process, and should be eliminated from the data collection list.

As we have previously noted, a major concern with the new demand-based cap on net metering is the difficulty in implementation that this approach presents to customers and DG or



solar installers. The use of an additional meter or separate meters, rather than a single bidirectional meter, presents additional steps in the interconnection process and conflicts with current rules. The Board's Chapter 15 rules require utilities to use a single meter that monitors only the net amount of electricity sold or purchased for net metering. See 199 IAC 15.11(5). While the rules allow for AEP facilities to choose, as an option, another type of transaction, the rules are silent on the use of additional metering. The IPL proposal to insert into the interconnection process a request for additional or separate metering, when combined with all of the other changes in the net metering pilot, further complicates an already complicated and confusing pilot program. In addition, during the interconnection process, customers may not perceive the option of a separate meter as a choice and may feel pressured to accept the IPL request to use separate metering. We ask that this item be removed from the IPL data collection plan and that IPL not inject this issue into the interconnection process.

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Respectfully submitted,

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