STATE OF IOWA

BEFORE THE IOWA UTILIITIES BOARD

IN RE: INTERSTATE POWER AND LIGHT)	DOCKET NO. EEP-2018-0003
COMPANY ENERGY EFFICIENCY FIVE-YEAR PLAN)	
TIVE-TEAKTEAN)	SURREBUTTAL TESTIMONY

SURREBUTTAL TESTIMONY OF KERRI JOHANNSEN

On Behalf of

Environmental Law & Policy Center Iowa Environmental Council

November 9, 2018

1	I.	INTRODUCTION
2	Q.	Please state your name, business name and address, and role in this proceeding.
3	A.	My name is Kerri R. Johannsen. I am the Energy Program Director with the Iowa
4		Environmental Council, located at 505 Fifth Ave, Suite 850, in Des Moines, Iowa. I
5		appear here in my capacity as a witness on behalf of the Environmental Law and Policy
6		Center and the Iowa Environmental Council (collectively "Environmental Intervenors").
7	Q.	Are you the same Kerri Johannsen who filed rebuttal testimony in this docket?
8	A.	I am.
9	Q.	What is the purpose of your testimony?
10	A.	The purpose of my testimony is to address the objections raised by the Iowa Business
11		Energy Coalition ("IBEC") and the Large Energy Group ("LEG") to my proposed solar
12		PV pilot.
13	Q:	Why does it make sense to consider the cost of MidAmerican's curtailment program
14		in terms of both energy and capacity?
15	A:	Witness Stephens states that my testimony:
16 17 18 19 20		Demonstrates a fundamental misunderstanding of the difference between capacity and energy. IPL's customers are provided credits under Rider INTSERV for the capacity that they provide to the system. It has nothing to do with avoided energy costs. (Stephens Reply at p. 16)
21		It is important for utilities to ensure they have adequate capacity and appropriate to assign
22		a value to capacity that is separate from energy. The MISO market has done so, as noted
23		above. However, it simply does not follow that capacity is unrelated to energy. Capacity
24		is not secured for capacity's sake alone, but to ensure reliability of the system at peak
25		times. This is critical. However, if a capacity resource has a high cost to maintain and is

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used very little, it is appropriate to examine whether there are other options available at a reasonable cost to balance the system and ensure reliability at peak times. Shaving peak with solar may be one option. OCA Witness Munoz in his Reply Testimony states, "...incentives, specifically demand response credits, are tied to some criteria or benchmark related to the value or opportunity cost of that resource." (Reply Testimony of OCA Witness Marcos Munoz at p. 5). I interpret this statement as consistent with my assertion in my Rebuttal Testimony that it is appropriate to compare the cost of demand response programs to the cost of alternative resource deployment. Witness Munoz goes on to state, "IPL's interruptible credit greatly exceeds relevant benchmarks of capacity cost for this resource. Demand response programs can be provided at a lower cost, and IPL should do so." OCA Witness Munoz's Testimony supports the assertion that IPL should be considering the cost of its curtailment program compared to other potential capacity and energy resources and that IPL is overpaying for it, even under the proposed reduced payments. This should drive the Board to ask IPL to explore alternatives. Witness Munoz concludes that: "utilities should not compensate emergency/peak load capacity at an unnecessarily high cost. This is not the goal of effective energy efficiency policy." (Munoz Reply Testimony at p. 12). I agree with this statement.

1 Q: IBEC Witness Stephens in his Reply Testimony states that your testimony is "the 2 equivalent of saying that IPL's production peaking capacity has no value unless it is 3 run often, even in times when not needed." (Stephens Reply at p. 16). Do you agree 4 with that characterization of your testimony? 5 No. OCA Witness Munoz points out that "DR resources are not analogous to long-term A: 6 capacity resources and are not dispatched as traditional generation resources." (Munoz 7 Reply at p. 10) Peaking capacity is, by definition, the last resource bid into the market 8 because it is the most expensive. If such resources could be deployed less expensively, 9 they would be deployed more often. 10 In contrast, MISO does not have a real market for demand response and so there is no 11 arbitration and no settling price to determine the real value of demand response and 12 related appropriate timing and frequency of deployment in the market. The current Rider-13 INTSERV is set up to deploy in a very narrow set of circumstances and, even then, a 14 participant can "buy through" an event and avoid interruption. This is out of step with 15 the way the rest of the MISO market works and leads to overspending on these programs. MISO can also call for deployment of a resource based on its location to address 16 17 reliability concerns, including having the ability to call up demand response in 18 emergency circumstances. MISO has done that only 8 times total since the market was created in 2005 and only one of these events (in 2006) impacted Iowa.² 19

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¹ MidAmerican Rider-CS – Curtailment Service Tariff, original sheet nos. 469 – 474.

² MISO, "Load Modifying Resources, Capacity Instruments Affecting Resource Availability and Need", May 25, 2018, pg. 4,

 $[\]frac{https://cdn.misoenergy.org/20180531\%20RSC\%20Item\%2009\%20LMR\%20Issues\%20Whitepaper206830.pdf.$

Absent reforms that result in the development of a market for demand response at MISO. it is critical that the Board considers the cost and value of these programs for Iowa customers compared to the alternatives. I present one possible alternative in my testimony – a partnership between industrial customers and the utility to deploy solar resources designed to reduce peak demand at a reasonable cost while providing multiple other benefits year-round.

7 Q: Have any updates been filed regarding IPL's deployment of its demand response 8 program since you filed your Rebuttal Testimony?

Yes. IPL filed its report of interruption events for the 2018 summer season on October 22, 2018. IPL reported that it called 3 curtailments in 2018 for purpose 2 under its current tariff (Energy Efficiency-Reducing Peak Demand) and 2 under purpose 4 (Program Quality Control). The results are summarized in Table 1 below.

Table 1 – Results of IPL 2018 Calls for Non-Residential Curtailments³

	6/29/2018	8/27/2018	9/4/2018
Total Interruptible Load (MW)	238	238	238
Targeted Reduction (MW)	85	39	33
Curtailment Achieved (MW)	69	23	0
% Interruptible Load Called	35.7%	16.4%	13.9%
%Targeted Curtailment			
Achieved	81.2%	59.0%	0.0%

Customers participating in Rider INTSERV have the option to "buy through" an 15 16

interruption rather than interrupting load when requested by IPL. Rider INTSERV states:

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³ See IPL 2018 Annual Report of Interruptible and Cycling Program Summer Season Events filed in Docket No. EEP-2012-0001 at p. 4.

The buy-through cost will be computed as each hourly kW priced

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2 at the ALTW.ALTW node real-time LMP price plus a 12% adder 3 for any incremental administrative and MISO-related charges, less the energy adjustment clause factor for the month.⁴ 4 5 6 There are two issues here. The first is that IPL is rarely calling up its DR resource, as 7 covered extensively in my rebuttal testimony. The second is that, even when called, 8 customers are making an economic decision to buy through rather than interrupt. This is especially stark when considering the September 4th event when IPL called to interrupt 9 10 only 13.9% of its possible interruptible load and 100% of the customers called opted to 11 buy through. This is far from a ringing endorsement for the efficacy of this program in 12 actually reducing peak load. It is difficult to say what, exactly, customers are paying for 13 here. It is time to consider alternatives. 14 How do you respond to the criticism of Large Energy Group ("LEG") Witness O: 15 Latham that your analysis fails to account for the benefits of the non-residential 16 interruptible program? 17 A: I recognize that adequate capacity, including capacity available at peak, is critically

I recognize that adequate capacity, including capacity available at peak, is critically important. That is the reason my analysis and recommendations are focused on solar – a resource available during peak. With that said, it is important to consider the cost and efficacy of the resource you are purchasing. As discussed in my Rebuttal Testimony, solar is extremely cost-competitive with IPL's current DR program and generates at peak times. Deployment of a peak-shaving solar partnership with industrial users could reduce future energy costs for all customers and have a direct benefit for the industrial users

⁴ IPL Rider INTSERV at p. 3: https://www.alliantenergy.com/-
/media/Alliant/Documents/CustomerService/AlliantEnergyService/RatesandTariffs/IowaElectric
Rates/RiderINTSERVInterruptibleServiceOption.pdf?la=en.

1		themselves. The Board should direct the parties to begin development of such a mutually-
2		beneficial peak-shaving effort in this Plan.
3	Q.	Are there adequate resources for IPL to fund a solar partnership program for
4		industrial customers within its budget for demand response?
5	A:	Yes. Senate File 2311 set a cap of 2% of electric retail revenues for what the Board can
6		require IPL to spend on demand response programs. IPL's plan spends in 2019,
7		declining to in 2023. (See EI DR-15-Confidential, attached as Johannsen
8		Surrebuttal Exhibit 1). I am not advocating for a wholesale abandonment of IPL's current
9		demand response programs or even a reduction to spending on those programs at this
10		point in time. Instead, I am urging the Board to take this opportunity to require IPL to
11		work with stakeholders to undertake a pilot project that would utilize solar in peak
12		reduction and could fit easily under IPL's demand response budget and could be
13		incorporated in later years of the current plan cycle.
14	Q:	How does IPL address your recommendation that the company undertake a pilot
15		project to utilize solar in coordination with industrial customers to reduce peak
16		demand?
17	A:	IPL Witness Donnelly in her Reply Testimony addresses my solar partnership peak
18		demand reduction proposal by stating: "IPL is willing to continue to work with all
19		interested parties to collaborate on pilot ideas during Plan implementation or
20		modification, or through other dockets, as appropriate." (Reply Testimony of IPL
21		Witness Bonnie Donnelly at p. 20).

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IPL can and should make a stronger, specific commitment to exploring peak demand
reduction in partnership with stakeholders during the course of the current plan and, if
they do not, the Board should direct them to do so. As stated in my Rebuttal Testimony
and in this surrebuttal, without market signals to guide pricing and deployment of
demand response, the Board has a responsibility to consider alternatives.

- 6 **Q:** Does this conclude your testimony?
- 7 A: Yes.

AFFADAVIT OF KERRI R. JOHANNSEN

STATE OF IOWA COUNTY OF POLK)	SS.	
I, Kerri R. Johannse	n, being	first duly sworn on oath, state that I am the same Kerri R. Johannsen	
identified in the testi	mony b	eing filed with this affidavit, that I have caused the testimony to be	
prepared and am fan	niliar wi	th its contents, and that the testimony is true and correct to the best	
of my knowledge an	of my knowledge and belief as of the date of this affidavit.		
		_/s/ Kerri Johannsen Kerri Johannsen	
Subscribed and swor	n befor	e me the 6 th day of November, 2018.	
		/s/ Adam G. Lewis Notary Public in and for the State of Iowa	