

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

IN RE:

**INTERSTATE POWER & LIGHT
COMPANY**

DOCKET NO. EEP-2022-0150

**REBUTTAL TESTIMONY
OF
JAMES B. MARTIN-SCHRAMM**

1

2 **Q. Please state your name and business address.**

3 A. My name is James B. Martin-Schramm and my business address is 104 Spring Street,
4 Decorah, Iowa.

5 **Q. Are you the same James B. Martin-Schramm that filed Direct Testimony in this**
6 **proceeding?**

7 A. Yes.

8 **Q. What is the purpose of your rebuttal testimony?**

9 A. I will respond to the direct testimony of several intervenor witnesses as their remarks
10 pertain to the following topics in IPL's proposed Plan.

11 I. The Inflation Reduction Act

12 II. Beneficial Electrification and Decarbonization

13 III. Efficient Services / Technical Assistance

14 IV. Comprehensive Income Qualified Program

15 V. Energy Awareness and Education Program

VI. Demand Response Program

Q. Have you filed any exhibits with your Rebuttal Testimony?

A. Yes, the following exhibits have been filed in support of my Rebuttal Testimony:

Exhibit Number	Exhibit Title
CEDI Martin-Schramm Rebuttal Exhibit 1	IPL Response to CEDI Data Request No. 19
CEDI Martin-Schramm Rebuttal Exhibit 2	DOE LEAD, 0-200 FPL Households IA + USA
CEDI Martin-Schramm Rebuttal Exhibit 3	IPL Response to CEDI Data Request No. 20
CEDI Martin-Schramm Rebuttal Exhibit 4	IPL Response to CEDI Data Request No. 11
CEDI Martin-Schramm Rebuttal Exhibit 5	IPL Response to IBEC Data Request No. 7
CEDI Martin-Schramm Rebuttal Exhibit 6	IPL AMI Uses Matrix (03-15-23)

Q. To the extent you do not address a specific item in your testimony, should it be construed to mean you agree with IPL's proposal or the position of another witness?

A: No. The fact that I may not discuss a particular topic in my rebuttal testimony does not indicate my agreement with those topics, issues, or items as discussed by IPL or witnesses representing the other intervenors. Rather, the scope of my testimony is limited to the specific items addressed herein.

I. Inflation Reduction Act

Q. Are there recommendations made by OCA witnesses regarding the impact of the Inflation Reduction Act (IRA) that you want to affirm?

A. Yes, I want to affirm the following recommendations.

1 First, I support the recommendations by OCA witnesses Tim Tessier and Blake
2 Kruger that IPL educate its customers about the additional incentives available through
3 the programs funded by the IRA¹ and the potential savings they can realize.² Mr. Kruger
4 suggests that the educational outreach to low-income customers be supported by funds
5 IPL has proposed to use for its new limited-income program. I support the use of these
6 funds, in part, for this purpose. I also agree with Mr. Kruger that emphasis should be
7 placed on the value of the High-Efficiency Electric Home Rebate Act (HEEHRA) for
8 low-income households.³

9 Second, I agree with Mr. Tessier that IPL needs to revise its Plan “to adjust to the
10 IRA provisions.”⁴ As I note in my Direct Testimony: “*It is up to the utilities to figure out*
11 *how best to maximize the co-benefits of the federal programs funded by the IRA in*
12 *relation to the energy efficiency programs they offer their customers.*”⁵ I reiterate here
13 the recommendation I made in my Direct Testimony that the Board require IPL file a
14 report in this docket no later than the second quarter of 2024 regarding its consultation
15 with the Iowa Energy Office, the Office of Consumer Advocate, and other stakeholders
16 and explain whether and how it proposes to revise its Plan “to the greatest benefit for
17 customers, stakeholders, ratepayers, IPL, and the state of Iowa.”⁶ If necessary, I
18 recommend the Board open this docket or create a new docket to invite all intervenors to
19 comment on IPL’s report and proposed revised Plan.

¹ OCA Tessier Direct, pg. 22.

² OCA Kruger Direct, pg. 19.

³ Ibid., pg. 14.

⁴ OCA Tessier Direct, pg. 17.

⁵ CEDI Martin-Schramm Direct, pg. 10.

⁶ IPL Application, Exhibit 1, pg. 18.

Third, while I argue in my Direct Testimony that the Board should “require IPL to adjust its Plan once the details of the state grant programs included in the IRA are finalized,”⁷ I agree with Mr. Tessier that the opportunities to increase energy efficiency for IPL customers “through the historic IRA incentives” should not be discussed only once over the life of IPL’s five-year Plan.⁸ Mr. Tessier suggests that such opportunities be explored through regular stakeholder collaboration. I support his recommendation that “the Board, in its order, provide direction for the continued use of the Stakeholder Collaboration process” and that the Board “establish specific goals for each collaboration year and compile collaboration results annually.”⁹

II. Beneficial Electrification and Decarbonization

Q. Are there recommendations made by OCA witnesses regarding beneficial electrification and decarbonization that you want to affirm?

A. Yes, I want to affirm the following recommendations.

First, I agree with Mr. Kruger’s comments about IPL’s nascent workforce training program. IPL says it will develop such a plan during the second quarter of 2023 but I agree with Mr. Kruger that a detailed workforce training plan should already be developed and in the Plan so that it can benefit from the scrutiny afforded by the review conducted in this docket.¹⁰ Given the rising costs of weatherization (discussed later) and the need to recruit and train more contractors to do this work, IPL’s workforce training program will be key—especially around the technologies that will hasten beneficial electrification and decarbonization.

⁷ CEDI Martin-Schramm Direct, pg. 9.

⁸ OCA Tessier Direct, pg. 28.

⁹ Ibid., pg. 29; 30.

¹⁰ OCA Kruger Direct, pg. 18.

1 On a related point, I also agree with Mr. Bent that “IPL should also develop an
2 education plan that allows the HVAC wholesale distributors to inform customers of the
3 enhanced incentives for heat pumps and other electrification strategies.”¹¹

4 As IPL develops its workforce training plan, IPL should collaborate with the Iowa
5 Energy Office because Section 50123 of the IRA appropriates \$200 million for State
6 Energy Offices to provide training and education to contractors and organizations
7 involved in the Home Energy Performance-Based, Whole-House Rebates (HOMES) and
8 the High-Efficiency Electric Home Rebate (HEEHR) programs.¹²

9 Second, I support Mr. Tessier’s view that “IPL needs to develop an electric
10 vehicle managed charging option now to help manage and stay ahead of the expected
11 impacts of electric load growth associated with not only the increased adoption of electric
12 vehicles, but also electrification” made possible, in part, by the IRA.¹³

13 Third, Mr. Tessier notes that “Water Heating, Electric Vehicle Smart Chargers,
14 and Battery Storage did not clear the pre-achievable Societal Cost Test” [in the ICF study
15 of potential], but he rightly points out that this assessment was conducted before the IRA
16 was signed into law. Given that provisions in the IRA can significantly reduce the cost of
17 these measures, I agree with Mr. Tessier that “IPL should conduct an updated analysis to
18 assess how the new incentives will impact the overall economics and demand response
19 potential of all programs identified in the Assessment as well as time-of-use rate
20 options.”¹⁴

¹¹ OCA Bent Direct, pg. 7.

¹² Congressional Research Service, “[The Inflation Reduction Act: Financial Incentives for Residential Energy Efficiency and Electrification Projects](#),” November 28, 2022, pg. 2.

¹³ OCA Tessier Direct, pg. 13.

¹⁴ Ibid, pg. 15.

Q. Do you think this updated analysis should include revised incentive amounts for heat pump systems?

A. Yes, I do.

In my view, and as I discuss in my Direct Testimony, this updated analysis needs to include revised and more generous rebates for heat pump systems. I reiterate here my recommendation that Alliant’s heat pump rebates, whether they be for ducted or ductless equipment, should conform to Northeast Energy Efficiency Partnerships’ Cold Climate Air Source Heat Pump Specification (CCASHP) Version 4.0.¹⁵ As they currently exist, IPL’s heat pump rebates are tied only to rated BTU capacity, SEER, and HSPF ratings,¹⁶ and do not take into consideration cold weather performance as specified under NEEP’s CCASHP Version 4.0 specification. As a result, units not suited for cold weather operation, like those without variable speed compressors, poor coefficient of performance (COP) ratings at cold temperatures, and units without base pan heaters, are currently rebated between \$500-\$800 for existing homes and \$300-\$480 for new homes. The total installed cost difference between a standard central air conditioner versus a non-cold climate single stage compressor heat pump is relatively little, and perhaps less than the value of the rebate, likely explaining the higher uptake of Alliant’s Air Source Heat Pump rebate.¹⁷

Similarly, rebates for ductless “Mini Split” style heat pumps should be tied to NEEP’s Cold Climate Air Source Heat Pump Specification Version 4.0 and should be

¹⁵ Northeast Energy Efficiency Partnership, [CCASHP Specification and Product List](#).

¹⁶ Alliant Energy, [Rebates: Air-Source Heat Pumps](#).

¹⁷ See Martin-Schramm Rebuttal Exhibit 1: IPL Response to CEDI Data Request No. 19, Table 1, pg. 2. To date, in its current Plan, IPL has rebated 473 residential and non-residential mini air-source heat pumps from 2019 through 2022 amongst its 495,923 electric customers in Iowa

1 made more generous to match those provided by IPL's Air Source Heat Pump Rebate.
2 Alliant has rebated only 340 residential and non-residential mini split heat pumps from
3 2019 through 2022 amongst its 495,923 electric customers in Iowa.¹⁸ The value of IPL's
4 Mini Split Rebate of \$50 for supplemental, and \$200 for whole-home applications, is
5 simply too low and likely dissuades many customers from submitting rebate paperwork.

6 I realize that Iowa's Technical Resource Manual (TRM) does not currently utilize
7 NEEP's Cold Climate Air Source Heat Pump Specification Version 4.0, but CEDI is
8 currently encouraging the Technical Assistance Committee to revise the TRM to NEEP
9 or other cold-climate standards such as those developed by the EPA's ENERGY STAR
10 Program (which the TRM does reference). The ENERGY STAR Program recently
11 revised its specifications, including those for cold climate models.¹⁹ I believe it is
12 important that IPL only incentivize the purchase and installation of cold climate heat
13 pumps, which are most appropriate to Iowa's climate.

14 **Q. Do you have any other concerns you wish to express about beneficial electrification**
15 **and decarbonization?**

16 A. Yes, in my Direct Testimony I recommended IPL provide supplemental funding to
17 increase ten-fold the number of heat pump hot water heaters for low-income families.
18 In this rebuttal testimony, I want to point out what appears to be an egregious error in
19 IPL's estimate of the average energy savings associated with replacing an electric
20 resistance water heater with a heat pump water heater in low- and limited-income
21 households. I discovered this error after submitting my Direct Testimony.

¹⁸ Ibid. For IPL's customer count, see IPL, [Response to Staff Correspondence Requesting Additional Information Dated November 14, 2022](#), (EEP-2022-0150), December 2, 2022, Table 1, pg. 1.

¹⁹ EPA Energy Star, [Central Air Conditioner and Heat Pump Version 6.1 Final Specification](#), January 27, 2022, Table 3: Energy-Efficiency Criteria for Certified Residential Cold Climate Heat Pumps, pg. 4.

1 IPL Application, Exhibit 7, is an Excel file that provides “Measure Level Detail”
2 of various efficiency measures proposed in IPL’s Plan. Details regarding the installation
3 of a heat pump water heater in a low-income, single-family home are found on row 60.
4 Details regarding the installation of a heat pump water heater in a limited-income, single-
5 family home are found on row 61. Column H makes it clear that the energy savings are
6 associated with electricity consumption rather than natural gas. Columns Q-U report the
7 annual electric energy per unit savings in terms of kilowatt hours (kWh). IPL estimates
8 each one of the 239 hot water heat pumps it plans to install in low-income households
9 each year during its five-year Plan will only save 20 kWh per unit. The same is true for
10 the 24 units it plans to install each year in households with limited-incomes. These
11 energy savings estimates can’t be correct. There must be approximately two zeros
12 missing.

13 I say this because row 20 and row 146 in Exhibit 7 provide measure details
14 related to the purchase of heat pump water heaters via IPL’s Residential and Non-
15 Residential Prescriptive Incentives program. Here the annual energy savings per unit
16 range from 1,904 – 2,010 kWh, which is roughly 100 times more than the 20 kWh energy
17 savings projected for the heat pump water heaters installed in low- and limited-income
18 households. These energy savings estimates are consistent with, though a little below, the
19 estimated annual kWh savings for heat pump water heaters provided by the EPA’s
20 ENERGY STAR website, which range from 2,257 kWh for a small household to 3,427
21 kWh for a large household.²⁰

²⁰ EPA, ENERGY STAR, [Ask the Experts, “Is a Heat Pump Water Heater Right for Your Home?”](#) (April 5, 2022).

1 If IPL intends to install heat pump water heaters in low- and limited-income
2 homes that are as efficient as those IPL intends to incentivize for residential and non-
3 residential customers, then the total energy (kWh) savings from these households over
4 the life of the Plan will be over 50% higher than the savings achieved through the
5 residential and non-residential prescriptive incentive program due to the number of
6 systems IPL intends to install.²¹ The associated energy cost savings will be invaluable to
7 these low- and limited-income households. I urge IPL to correct this error in Exhibit 7
8 and to adjust related cost-effectiveness calculations accordingly.

9 The significant energy and energy cost savings discussed above help to justify my
10 recommendation that IPL increase its support for low-income households by providing
11 supplemental funding to facilitate a tenfold increase in the number heat pump water
12 heaters installed in low-income households. The Community Action Agencies that
13 implement Iowa's Weatherization Assistance Program have a long wait list of households
14 who need assistance. Provision of heat pump hot water systems would be a way to
15 provide substantial help to these households as they wait for whole-home weatherization
16 assistance.

17 **III. Efficient Services / Technical Assistance**

²¹ Based on data provided in IPL Application, Exhibit 7, Measure Level Detail, IPL intends to provide a total of 131 rebates for heat pump hot water systems to non-residential customers (Columns L-P) over the life of its Plan, which it projects will result in total energy savings of 261,264 kWh (Columns AV-AZ). On the residential side, IPL intends to provide a total of 605 rebates over the life of the Plan, which it projects will result in total energy savings of \$1,87,263 kWh. At an annual savings of 2,000 kWh, the 1,195 heat pump hot water systems IPL says it intends to install in low-income households will save 2,390,000 kWh over the life of the Plan; and similar annual savings from the 120 systems IPL intends to install in limited-income households will save 240,000 kWh over the life of the Plan. Together, the 1,315 heat pump hot water systems in low- and limited-income homes will save 2,630,000 kWh while the 736 residential and non-residential systems will save 1,548,527 kWh.

Q. Do you agree with concerns other witnesses have raised about IPL’s Home Energy Reports program?

A. Yes, I do.

I think OCA witness Munoz raises legitimate concerns about the extent to which the Home Energy Reports (HER) program produces actual, measurable energy savings. He points out that the 2021 EM&V report by Opinion Dynamics said “the program did not generate any statistically significant savings within the first year,”²² but the 2022 EM&V report by the same firm “reveals the HER program achieved statistically significant energy savings in the program evaluation period.”²³ Given that IPL “anticipates this program to account for 50 percent of the ‘Efficient Services’ Program and close to 18% of the overall electric savings in the Plan,”²⁴ I agree with Mr. Munoz that these “disparate findings” need to be explained by IPL and the energy savings need to be verified.²⁵

Furthermore, LEG Witness Vognsen points out that IPL intends to spend over \$5 million on the HER program over the five-year life of its proposed Plan.²⁶ If actual energy savings cannot be verified, then the Board should direct IPL to take the \$5.23 million it has budgeted for this program²⁷ and use it to provide greater measures of the high-quality, in-person technical assistance that I outline in my Direct Testimony. \$5 million could provide impactful energy planning services to many IPL households.

²² OCA Munoz Direct (Public), pg. 15.

²³ Id.

²⁴ Ibid., pg. 14.

²⁵ Ibid., pg. 16.

²⁶ LEG Vognsen Direct, pg. 29.

²⁷ IPL Application, Exhibit 4, Budget Account for Costs, Plan Budget Tables.

IV. Comprehensive Income Qualified Program

³⁰ OCA Kruger Direct, pg. 12.

1 200% FPL).³¹ Despite that fact, only 7% of IPL’s proposed Plan is dedicated to serving
2 these households.³²

3 Mr. Kruger also does well to point out that the costs to achieve energy savings
4 through IPL’s Single-Family Low-Income Program are very high because IPL’s funds
5 are spent primarily if not exclusively to support Iowa’s Weatherization Assistance Project
6 (WAP). According to Mr. Kruger, “IPL will need to spend approximately \$2.62 for
7 every kWh saved and \$24.53 for every therm saved.”³³ What makes matters worse is that
8 “the number of homes weatherized in Iowa has decreased over time while the average
9 cost to weatherize these homes (adjusted for inflation) has steadily increased. In 2021, the
10 average cost to weatherize a home was \$16,793 with \$4,828 of that amount coming from
11 utility ratepayer funds.”³⁴ Mr. Kruger points out that “IPL has more than 100,000
12 customers eligible for participation in the WAP, yet this program only reaches
13 approximately 1% of these customers each year.”³⁵

14 I agree with Mr. Kruger’s concerns and reiterate the recommendation I made in
15 my Direct Testimony that the Board should require all of Iowa’s rate-regulated utilities
16 and the Iowa Utility Association to collaborate more successfully with their state and
17 federal partners to achieve better results. This includes working with the regional
18 Community Action Agencies and developing a robust workforce training program that
19 will increase the pool and drive competition among the contractors who provide

³¹ CEDI Martin-Schramm Direct, pg. 43.

³² See IPL Application Exhibit 4, Cost Summary by Program and Component (2024-2028). The amount budgeted for the Single-Family Program is \$15.76 million whereas the total Plan budget is \$236.72 million

³³ OCA Kruger Direct, pg. 11.

³⁴ OCA Kruger Direct, pg. 13. See also OCA Kruger Direct, Exhibit 2.

³⁵ Ibid., pg. 14.

1 weatherization services. IPL also needs to implement the recommendations by Opinion
2 Dynamics in their recent assessment of IPL's Low-Income Weatherization Program.³⁶

3 That said, I disagree with Mr. Kruger's concern that "[d]ollars spent on these
4 [low-income] programs may come at the expense of other programs that can more
5 efficiently achieve savings."³⁷ I agree that funds budgeted to serve low-income
6 households should be spent as efficiently as possible, but I disagree that these funds
7 should be limited if they could be spent elsewhere to reduce energy consumption more
8 effectively. *Efficiency is a value but justice is a virtue.* Justice requires that similar cases
9 be treated similarly. Low-income households are dissimilar.

10 Most low-income households in Iowa have energy burdens that far exceed the
11 state average. According to the Department of Energy's Low-Income Energy
12 Affordability Data (LEAD) Tool, the average energy burden for Iowa households is 3%
13 but the percentage of household income spent on energy in Iowa's poorest households (0-
14 100 FPL) is 18% and ranges from 7-9% for other low-income households (100-200
15 FPL).³⁸

16 The energy burden for low-income households served by IPL is likely higher
17 because, as Mr. Kruger has pointed out via his testimony in another docket, IPL's costs
18 per kilowatt hour to serve residential households are almost the highest in the state.³⁹ In
19 2020, there were only four electric utilities that had higher "all-in" residential rates than
20 IPL. At 16.6 cents per kilowatt hour, IPL's rates in 2020 were 61% higher than

³⁶ CEDI Martin-Schramm Direct, pp. 45-46.

³⁷ OCA Kruger Direct, pg. 12.

³⁸ See Martin-Schramm Rebuttal Exhibit 2, DOE Low-Income Energy Affordability Data (LEAD), 0-200 FPL Households IA + USA. See also <https://lead.openei.org/?scenarioId=643431a2205b4>.

³⁹ OCA Kruger [Responsive Testimony](#) (RPU-2021-0003), pg. 10.

1 MidAmerican Energy Company's rates. Based on information compiled by the federal
2 Energy Information Administration, IPL's residential rates in 2020 ranked 55th out of 58
3 investor-owned utilities in the Midwest.⁴⁰

4 A good example of the higher energy burdens poor households face in IPL's
5 service territory can be found in Lansing, Iowa. Despite the fact that IPL operated coal-
6 fired generating stations near Lansing for approximately 75 years, low-income
7 households have certainly not benefitted. Whereas, on average, the poorest households in
8 Iowa (0-100 FPL) have an 18% energy burden, in Lansing these households have a 44%
9 energy burden:

0 -100 FPL	Iowa	Lansing
Electricity	\$1,239	\$2,140
Gas	\$591	\$1,088
Other	\$22	\$164
Total Energy Costs	\$1,852	\$3,392
Energy Burden	18%	44%

10
11 This is due, in largest measure, to the difference in electricity costs. The poorest
12 households in Lansing pay 42% more for their electricity compared to other similar
13 households in Iowa.⁴¹

14 Given these high rates, it is much harder to climb out of poverty if you are an IPL
15 customer. That is why the Board should require the company to allocate even more
16 money to serve the low-income households in their service territory and to develop new
17 channels or programs in addition to writing checks each year to the state's
18 Weatherization Assistance Program. I have made various recommendations for how the

⁴⁰ OCA Kruger [Responsive Exhibits](#) 1, 2 (RPU-2021-0003).

⁴¹ See DOE Low-Income Energy Affordability Data (LEAD) tool,
<https://lead.openei.org/?scenarioId=64344ce738920>.

company might increase its outreach and assistance to low-income households in my Direct Testimony. These include providing free, high quality, in-person technical energy planning services to all low-income households, increasing ten-fold the number of installed heat pump hot water heaters, providing supplemental funding to ensure heat pumps for heating and cooling are installed wherever they are recommended, and providing shares in community solar gardens sufficient to cover at least 50% of consumption for a significant number of low-income households.

Q. Do you agree with Mr. Kruger’s recommendations regarding IPL’s proposed new Limited-Income Program?

A. Yes, I do, almost entirely.

First, while I agree with Mr. Kruger that “it is laudable that IPL is considering offering programs to assist those with moderate incomes,” I share his concern that this program may be too generous since a family of four can make up to \$90,000 and still qualify.⁴² I agree with Mr. Kruger that the company should not undertake this new program “when IPL is unable to meet the needs of customers within the established 200% FPL standard with its existing whole home weatherization efforts.”⁴³

Second, I agree with Mr. Kruger that the \$1,799,928 IPL has budgeted for the Limited-Income program should instead be spent on low-income households.⁴⁴ He suggests offering to all low-income households the installation of a smart thermostat coupled with enrollment in IPL’s new Residential Behavior Response Program.⁴⁵ I think

⁴² OCA Kruger Direct, pg. 15.

⁴³ Ibid., pg. 18.

⁴⁴ See Martin-Schramm Rebuttal Exhibit 3, IPL Response to CEDI Data Request No. 20, Table 2, Single-Family Limited-Income.

⁴⁵ Ibid., pp. 19-20.

that would be beneficial but installing more heat pump water heaters in low-income households will produce about nine times more energy savings per unit if these units have an average efficiency similar to those the company is incentivizing through its Residential and Non-Residential Prescriptive Incentives.

Finally, Mr. Kruger suggests that IPL develop bill inserts targeted to low-income households that alert them to the potential savings they could achieve via the IRA as well as the cost-savings they could achieve by enrolling in IPL's time-of-use rates. In my view, both subjects should be the focus of bill inserts sent to *all IPL customers*. Beyond the funding provided for smart thermostats, I think the remainder of the budget for the Limited-Income component should be used to implement the measures for low-income households that I recommend above and in my Direct Testimony.

V. Energy Awareness and Education Program

Q. Do you concur with the recommendations of other witnesses regarding IPL's Energy Awareness and Education Program?

A. Yes, I agree entirely with the following recommendations offered by OCA Witness Tim Tessier:

- IPL needs to prioritize deployment of the rate calculator they have promised.
- IPL should cease all activities at and sponsorship of local events since the evaluation by Opinion Dynamics has found it to be the least effective means of promoting actual energy efficiency awareness.
- IPL should reduce, if not eliminate, the amount of Plan promotion it conducts through traditional media since the EM&V report found these are not effective channels for generating program awareness.

- 1 ● IPL needs to continue to develop and improve a company website at a reasonable
- 2 cost to raise customer awareness about IPL's energy efficiency programs and
- 3 incentives.⁴⁶
- 4 ● IPL needs to increase its use of social media and further develop its ability to
- 5 micro-target specific subsets of customers to promote the programs in its Plan.

6 **Q. Do you have concerns about IPL's PowerHouse TV program?**

7 A. Yes, I do.

8 Mr. Tessier recommends that IPL continue the use of television advertisements to

9 promote its PowerHouse TV program.⁴⁷ Mr. Tessier acknowledges, however, that IPL

10 does not measure savings from non-targeted initiatives like the PowerHouse TV program

11 and he stresses that "[i]t is important to ensure the expenditures are effective in educating

12 consumers about energy efficiency and actually motivating customer action."⁴⁸

13 Opinion Dynamics discusses the effectiveness of the PowerHouse TV program in

14 its 2019–2023 Report on IPL's Outreach Program.⁴⁹ Opinion Dynamics offers a mixed

15 assessment of the effectiveness of the PowerHouse TV program. On the one hand, it says

16 "IPL customers have high awareness of and engagement with the Outreach Program

17 through the PowerHouse TV brand . . . [since] 69% of respondents said they were aware

18 of PowerHouse TV and 41% had seen one or more episodes."⁵⁰ On the other hand, "[t]he

19 broad reach and influence of the Outreach Program, specifically the PowerHouse TV

⁴⁶ OCA Tessier Direct, pp. 26-27.

⁴⁷ Ibid., pg. 27.

⁴⁸ Ibid., pg. 25.

⁴⁹ Interstate Power & Light, Annual Report for 2021 Energy Efficiency Plan, (EEP-2018-0003), Appendix F, filed May 25, 2022, [Opinion Dynamics, IPL Outreach Program: 2019-2023 Evaluation Report Final](#), December 17, 2021 pp. i-41.

⁵⁰ Ibid., pg. 1.

1 brand and content, . . . suggests that the program *may produce quantifiable savings, but*
2 *this effect is likely indirect*” because “approximately 21% of IPL customers take action,
3 seek additional information, or share information with others based on what they learn
4 through the Outreach Program.”⁵¹ (Emphasis added)

5 IPL acknowledges that it does not attempt to calculate energy savings from its
6 Energy Awareness and Education Program, but it is fair to ask whether the money
7 invested in the PowerHouse TV program is actually driving participation in other
8 programs that do achieve energy savings.

9 IPL provided specific annual budget information for the program in response to
10 CEDI Data Request No. 11.⁵² IPL intends to spend, on average, \$468,058 per year on the
11 program and \$2,340,289 over the five years of the proposed Plan. The cost to produce
12 and air the PowerHouse TV program represents 88% of IPL’s budget for Non-Targeted
13 Awareness and 18% of the total budget for the Energy Awareness and Education
14 Program over the life of the Plan.

15 This is a lot of money to spend on an education and awareness strategy that “may
16 produce quantifiable savings, but this effect is likely indirect.”⁵³ I agree with LEG
17 witness David Vognsen who says “[t]here needs to be a quantifiable value for the
18 continuation of this program.”⁵⁴ I think the Board should require IPL to conduct further
19 analysis of the PowerHouse TV program to verify that it, in fact, is driving participation
20 in other programs and thus producing energy savings. If such verification is not

⁵¹ Ibid., pg. 2.

⁵² See CEDI Martin-Schramm Rebuttal Exhibit 4.

⁵³ Interstate Power & Light, Annual Report for 2021 Energy Efficiency Plan, (EEP-2018-0003), Appendix F, filed May 25, 2022, [Opinion Dynamics, IPL Outreach Program: 2019-2023 Evaluation Report Final](#), December 17, 2021 pg. 2.

⁵⁴ LEG Vognsen Direct, pg. 30.

provided, then I recommend the Board require IPL discontinue the program and redirect the remaining budget resources to measures that will help low-income customers like those I have recommended in my Direct Testimony and summarized above.

VI. Demand Response Program

Q. Do you share concerns raised by other witnesses regarding the \$1/kWh incentive in IPL's new Residential Behavior Response Program?

A. Yes, I do.

I agree with the three concerns raised by OCA Witness Tim Tessier:

First, while IPL asserts that the incentive was designed and structured to be consistent with best practices from other utilities, IPL was unable to explain why the \$1 incentive is considered a best practice or a good approach for its Iowa customers. Second, the rebate amount was not justified by comparing it to the actual cost of a kilowatt-hour of electricity that would be consumed during a peak event. Finally, IPL has not committed to any type of reconciliation to provide a basis to justify if the total rebates paid out were comparable to the actual cost savings the Company experienced. Advanced rate offerings need to be designed and structured appropriately for IPL's Iowa customers.⁵⁵

In addition, I find OCA witness Marcos Munoz's concerns similarly persuasive.

He claims the \$1/kWh incentive "translates into a \$20 per kW of demand, which is reasonably dissimilar to IPL's per unit incentive for Non-Res demand response [~\$75 per kW of demand]."⁵⁶ It is possible that such varying incentive levels are justifiable but IPL offers no rationale for the significant difference between the two incentives.

Mr. Munoz goes on to recommend a higher incentive level to encourage participation in the Residential Behavior Response program, which he argues will increase the amount of demand response. I think IPL should be required to address Mr.

⁵⁵ OCA Tessier Direct, pg. 12.

⁵⁶ OCA Munoz Direct (Public), pg. 27.

Munoz’s recommendation and explain why it thinks its proposed \$1/kWh incentive will produce a robust amount of demand response.

Finally, Mr. Munoz notes that “IPL’s budget for this program includes a meager 10% of the overall program budget, and .03% of the overall demand response budget. The majority of the program spending (close to 80%) is related to program administration.”⁵⁷ I agree with Mr. Munoz that the cost to administer the Residential Behavior Response Program is disproportionate to the incentives offered. There needs to be “more bang for the buck” to justify this new program.

Q. Do you also have concerns about the Nonresidential Interruptible component of IPL’s proposed Demand Response Program?

A. Yes, I do.

OCA Witness Marcos Munoz says “IPL appears to be underutilizing demand savings for its interruptible program relative to its interruptible capacity potential as identified by ICF’s assessment of potential for this program.”⁵⁸ Mr. Munoz offers additional evidence of higher amounts of interruptible capacity in his confidential testimony.⁵⁹

Achieving greater measures of participation in the Nonresidential Interruptible demand response program will likely revolve around the level of the incentive. IPL proposes no change to the current incentive amount, which is pegged to MISO’s Cost of New Entry (CONE) for the 2018–2019 Planning Year of \$88.87/kW-year Wood Mackenzie’s 2017 forecast of the MISO capacity auction price for 2019.⁶⁰ Given that it

⁵⁷ Ibid., pg. 28.

⁵⁸ Ibid., pg. 32.

⁵⁹ OCA Munoz Direct (Confidential), pp. 32-33.

⁶⁰ Ibid., Munoz Direct (Public), pg. 31.

1 is 2023 and IPL's Plan was submitted on November 1, 2022, it is clear that these
2 assumptions are quite dated. IPL does not explain why they have not updated their
3 assumptions in their proposed five-year Plan. Based on IPL's response to IBEC Data
4 Request No. 7, it appears they intend to negotiate any increase via the presumed
5 settlement agreement in this docket.⁶¹

6 LEG Witness David Vognsen and IBEC Witness Robert Stephens argue
7 vociferously that the current level of incentive does not reflect the value interruptible
8 customers provide in demand response. They urge the Board to restore the incentive to
9 its pre-2019 levels and Mr. Stephens uses updated MISO capacity and CONE figures to
10 demonstrate that an incentive based on this updated information would, in fact, produce
11 an incentive very close to the pre-2019 levels.⁶²

12 As an ethicist, I am both sympathetic to and persuaded by the claim Mr. Vognsen
13 and Mr. Stephens make that the current level of incentive does not fairly or accurately
14 reflect the value interruptible customers provide in terms of demand response. That said,
15 I am as or more interested in whether the increased level of incentive they both
16 recommend will actually increase participation in the program and draw closer to the
17 higher potential for demand response ICF identified in their study. I urge IPL to respond
18 specifically to this matter in their Reply Testimony.

19 **Q. Do you have anything else to say about witness recommendations regarding IPL's**
20 **Demand Response Program?**

21 A. Yes, I do.

⁶¹ See Martin-Schramm Rebuttal Exhibit 5.

⁶² LEG Vognsen Direct, pg. 25; IBEC Stephens Direct, pg. 8.

1 I agree with Mr. Tessier that IPL should “evaluate, deploy and test various
2 advanced rate offerings to encourage energy efficiency and demand response through
3 pilot projects.”⁶³ Mr. Tessier identifies several technologies that are supported by the
4 Inflation Reduction Act that could be the focus of these innovative pilots: “Residential
5 solar, solar + battery storage, electric vehicle charging + solar, electric vehicle charging +
6 battery storage, and electric vehicle charging + solar + battery storage.”⁶⁴

7 By way of example, Mr. Tessier points out that Liberty Utilities in New
8 Hampshire is running a pilot program that enrolls participants in time of use (TOU)
9 pricing and provides them with batteries. The TOU rate encourages customers “to charge
10 their batteries at a lower cost during periods of lower demand, and then use the less
11 expensive stored power to offset use when prices are higher, resulting in net cost
12 savings.”⁶⁵ I agree with Mr. Tessier that this would be a worthy pilot program for IPL to
13 offer in this new Plan because the batteries could reduce capacity costs associated with
14 monthly and annual coincident peak demand while also helping customers reduce energy
15 costs and enjoying the benefits of backup power during system outages.

16 Key to the success of such a pilot, and other related pilots that encourage IPL
17 customers to adopt TOU rates, is the development of an accurate rate calculator that helps
18 customers compare the status quo with a TOU rate alternative. IPL has repeatedly
19 reported delays in the development of such a calculator even though it has been on the
20 AMI Uses Matrix for the better part of four years. At the most recent stakeholder
21 collaboration meeting on March 22, 2023, the company reported that “[t]he rate

⁶³ OCA Tessier Direct, pg. 17.

⁶⁴ Id.

⁶⁵ OCA Tessier Direct, pg. 14.

1 calculator project is still in development and testing. IPL expects to have the residential
2 time of use calculator available for customers in 2Q'23.”⁶⁶ If the company fails to meet
3 this deadline, I recommend the Board require IPL hire a competent third party to develop
4 such a calculator by the end of 2023.

5 **Q. Does this conclude your testimony?**

6 **A.** Yes, it does.

⁶⁶ See Martin-Schramm Rebuttal Exhibit 6, AMI Uses Matrix (03-15-23).

STATE OF IOWA)

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SS: AFFIDAVIT OF JAMES B. MARTIN-SCHRAMM

COUNTY OF WINNESHIEK)

I, James B. Martin-Schramm, being first duly sworn on oath, depose and state that I am the same James B. Martin-Schramm identified in the foregoing Rebuttal Testimony, that I have caused the Testimony to be prepared and am familiar with the contents thereof, and that the Rebuttal Testimony is true and correct to the best of my knowledge, information and belief as of the date of this Affidavit.

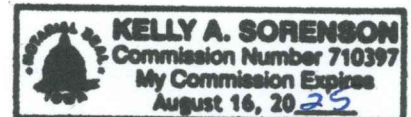
/s/ James B. Martin-Schramm

James B. Martin-Schramm

Subscribed and sworn to before me, a Notary Public in and for said County and State this 12th day of April, 2023.

Kelly A. Sorenson
Notary Public

[Seal]



My commission expires on 8/16/2025