

**CEDI Martin-Schramm
Direct Testimony
Exhibits**

Exhibit Number	Exhibit Title
CEDI Martin-Schramm Direct Exhibit 1:	IPL Responses to Data Requests <ul style="list-style-type: none">• OCA DR 16• CEDI DR 05• CEDI DR 07• CEDI DR 10• CEDI DR 14• CEDI DR 15
CEDI Martin-Schramm Direct Exhibit 2	CEDI High-Level Suggestions for Energy Efficiency Programs

**Response of
Interstate Power and Light Company
to
OFFICE OF CONSUMER ADVOCATE
Data Request No. 16**

Docket Number:	EEP-2022-0150
Date of Request:	January 10, 2023
Response Due:	January 18, 2023
Information Requested By:	Jennifer Easler
Date Responded:	January 18, 2023
Author:	Kari Gehrke / Kurt Sempf
Author's Title:	Mgr. Demand Side Mgmt. / Sr. Portfolio Mgr.
Author's Telephone No.:	319.786.4326 / 319.786.4118
Subject:	Demand Response - IRA
Reference:	Application Exhibit 1 Energy Efficiency Plan

Data Request No. 16

Please explain fully how IPL will support its customers' understanding of and ability to access Inflation Reduction Act incentives to support demand response enabled by expanded deployment of energy storage (batteries), smart thermostats, and pricing strategies to encourage efficient charging of electric vehicles during off-peak periods.

Response:

IPL continues to evaluate the components of the Inflation Reduction Act, implementation at the state level and the interplay with its Energy Efficiency Plan. IPL has requested the Iowa Utility Association to coordinate collaboration efforts among its Iowa electric and natural gas member utilities as well as the Office of Consumer Advocate staff and the State of Iowa Energy Office. Collaboration activities are expected to begin in Q1 2023.

☐ Confidential/Trade Secret

**Response of
Interstate Power and Light Company
to
CLEAN ENERGY DISTRICTS OF IOWA
Data Request No. 5**

Docket Number:	EEP-2022-0150
Date of Request:	March 17, 2023
Response Due:	March 24, 2023
Information Requested By:	Andrew Johnson
Date Responded:	March 24, 2023
Author:	Aquila Velonis
Author's Title:	Senior Associate
Author's Telephone No.:	503.467.7156
Subject:	Table 1-2 in the IPL Application (Energy Saving Potential Comparisons)

Data Request No. 5

Electric:

Table 1-2 in the IPL Application projects 506 GWh of electric savings, whereas Figure 7 in the ICF Study projects cumulative GWh savings for Alliant Energy [IPL] that range from 464 GWh in the Reference - Existing Scenario to 669 GWh in the High scenario.

- A. Why is IPL not pursuing greater electricity savings as reflected by the 669 GWh High potential in the ICF study?

Natural Gas:

Table 1-2 in the IPL Application projects 3,724,653 therms (372,465 DTh) of natural gas savings, whereas Figure 9 in the ICF Study projects cumulative DTh savings for Alliant Energy [IPL] that range from 332,234 DTh in the Reference - Existing Scenario to 670,785 DTh in the High scenario.

- B. Why is IPL not pursuing greater natural gas savings as reflected by the 670,785 DTh High Scenario in the ICF Study?

Response:

- A. The High potential scenario in the ICF study assumes the addition of new and expansions of existing programs. The IPL Plan does include new programs (e.g., midstream and demand response program components) as well as expanding existing programs (e.g., online marketplace and income-qualified program components). Details of IPL's redesigned programs are described in IPL Application Exhibit 1 section 2.2 Plan Schedule and Changes. While the IPL Plan may not reach the ICF high scenario, it does exceed the existing reference case.

Docket No. EEP-2022-0150

Data Request No. 5

Page 2 of 2

- B. The ICF study did not account for the spending cap in the natural gas efficiency High scenario as required by 199 IAC Chapter 35. The IPL Plan does not exceed the spending cap and is limited in in the design of the Plan to pursue greater savings as identified in ICF's High scenario.

**Response of
Interstate Power and Light Company
to
CLEAN ENERGY DISTRICTS OF IOWA
Data Request No. 7**

Docket Number:	EEP-2022-0150
Date of Request:	March 17, 2023
Response Due:	March 24, 2023
Information Requested By:	Andrew Johnson
Date Responded:	March 24, 2023
Author:	Kari Gehrke
Author's Title:	Manager Demand Side Management
Author's Telephone No.:	319.786.4326
Subject:	Online Home Energy Assessments, IPL Application, pg. 68

Data Request No. 7

CEDI believes homes and businesses that use propane and electric resistance heating may be ideal candidates for heat pump technology.

- A. What percentage of IPL's residential customers have completed the online home energy assessment?
- B. Is there anything unique about the residential customers that have completed the online home energy assessment?
- C. The online home energy assessment enables homeowners to select the type of heating system they have in their home. For example: Furnace-Gas, Boiler-Propane, Baseboard-Electric with no boiler, etc.
 - a. Please provide the total number of residential customers for each heating option.
- D. The online home energy assessment enables homeowners to select the type of hot water heating system they have in their home. For example: Tank-Gas Water Heater, Tank-Boiler-Fed, and Tankless-Electric, etc.
 - a. Please provide the total number of residential customers for each hot water heating system option.
- E. The online home energy assessment enables homeowners to select the type of fuel their clothes dryer uses.
 - a. Please provide the total number of residential customers for each fuel option.
- F. Apart from information derived from the online home energy assessment, does IPL have other information about the various technologies and fuel types their residential customers use to heat their homes? If so, please provide it in your response.

Docket No. EEP-2022-0150

Data Request No. 7

Page 2 of 4

Response:

- A: 1 percent of IPL's residential customers have completed the online home energy assessment.
- B: No, there is nothing unique that IPL is aware of concerning the residential customers who have completed the online home energy assessment
- C: See Table 1 below for each space heating option residential customers have selected who have completed IPL's online home energy assessment.
- D: See Table 1 below for each hot water heating system option residential customers have selected who have completed IPL's online home energy assessment.
- E: See Table 1 below for each clothes dryer fuel type option residential customers have selected who have completed IPL's online home energy assessment.
- F: No, IPL does not have other information about the various technologies and fuel types residential customers use to heat their homes.

Table 1

Online Home Energy Assessments 2/8/2022 through 12/31/2022

Total number of assessments completed	4,271
Percent of customer base	1%
Primary heating fuel	Total
Natural Gas	3,186
Electric	706
Propane	263
Dual -fuel	76
Wood	20
Oil	11
Shared	9

Type of heating

Electric	Count
Furnace	416
Baseboard heater	98
5 -year old or older heater pump	86
Not Sure	55
Less than 5-year-old heat pump	50
Gas	
High efficiency furnace 92% or better	1,165
15 years or older furnace	925
less than 15 year old furnace	811
less than 30-year-old boiler	154
Propane	
High efficiency furnace 92% or better	120

Docket No. EEP-2022-0150

Data Request No. 7

Page 3 of 4

15-year old or older furnace	76
less than 15-year old furnace	67
Oil	
15-year old or older furnace	9
Less than 15-year old or older furnace	76
Wood	
5-year-old or older outdoor boiler	7
Modern stove or indoor boiler	7
Stove	6
Has Secondary heating	
No	2,939
Yes	1,332
Secondary heater type	
Electric space heater	968
Gas Fireplace	232
Wood fireplace	58
Wood Stove	57
Propane space heater	17

Dual - fuel heater type	
5 year-old or older heat pump with gas backup	58
Less than 5-year old heat pump with gas backup	18
Shared Heater type	
Forced air	7
Baseboard radiator	1
Radiator	1
Water Heater fuel type	
Natural Gas	2,760
Electric	1,321
Propane	148
Gas Water Heater type	
Standard	2,543
Tankless	140
Indirect	77
Electric water heater type	
Standard	1,201
Tankless	47
Heat Pump	73

Docket No. EEP-2022-0150

Data Request No. 7

Page 4 of 4

Clothes Dryer Type	
Electric	3,424
Natural Gas	657
No dryer	140

**Response of
Interstate Power and Light Company
to
CLEAN ENERGY DISTRICTS OF IOWA
Data Request No. 10**

Docket Number:	EEP-2022-0150
Date of Request:	March 17, 2023
Response Due:	March 24, 2023
Information Requested By:	Andrew Johnson
Date Responded:	March 24, 2023
Author:	Kari Gehrke
Author's Title:	Manager Demand Side Management
Author's Telephone No.:	319.786.4326
Subject:	Comprehensive Income – Qualified Program

Data Request No. 10

“The Comprehensive Income Qualified program will be comprised of three major components—Single Family Low-Income, Multifamily and Institutional Low-Income, and Single-Family Limited-Income.” (IPL Application, Exhibit 1, pg. 59)

- A. How many households per year and in total does IPL intend to serve through each of these three components over the course of this EEP? (Application Exhibit 7 only provides numbers *per measure*.)

“IPL will implement the [single family] low-income pathway jointly with other Iowa IOUs through the Iowa Utility Association. IPL will contribute program funding through the Iowa Department of Human Rights in conjunction with the federal Weatherization Assistance Program. The Iowa Department of Human Rights will direct Community Action Program agencies to perform energy assessments and install qualifying energy efficiency measures in residences occupied by low-income families, at no cost to the customer. Community Action Program agencies will screen potential program participants for income qualifications and perform all technical services. Qualifying low-income customers will receive all measures, education, and services at no cost.” (IPL Application, Exhibit 1, pg. 59)

- B. How will IPL's EEP program dollars supplement or replace federal funding for similar purposes provided by state programs funded by the Inflation Reduction Act?
- C. Can Community Action Program agencies hire qualified local energy planners to perform all technical services for Single-Family Low-Income households?

“The Limited-Income component will serve customers classified as Asset-Limited, Income-Constrained, and Employed (ALICE), or the working poor. This population is defined as those whose income represents the bare minimum necessary for the household's survival. For this component, IPL will define eligible customers as those with an income level between 200 percent and 300 percent of the FPL. IPL will launch this component as a pilot effort in a limited geographic area. IPL will offer the same comprehensive assessment and direct installation services as those provided through the Low-Income pathway and will cover 75 percent of the installed cost of energy efficiency measures recommended through

Docket No. EEP-2022-0150

Data Request No. 10

Page 2 of 3

the assessment. As this is a new program component, IPL will issue a request for proposals to select an implementation vendor with a local presence that can qualify participants, conduct assessments, and leverage relationships with local installers and community agencies to deliver the program.” (IPL Application, Exhibit 1, pg. 60)

D. When will the RFP for an implementation vendor be issued?

IPL Witness Gehrke states in his Direct Testimony that “IPL will extend its single-family income-qualified offering to customers at a higher-income threshold. IPL will test this program component in communities where it provides both natural gas and electric service.” (Gehrke Direct, p. 10)

E. Does this mean that the Limited-Income component will be offered to all of IPL’s 132,000 joint electric and gas customers? (ICF Study of Potential, pg. 13)

“Through the multifamily and institutional pathway, IPL will offer a comprehensive suite of energy efficiency services to address the unique needs of property owners, property managers, landlords, and low-income tenants of eligible multifamily residences, defined as existing multifamily buildings with four or more units where at least 40 percent of units are qualified as Section 8 housing. This program pathway will also serve institutional facilities such as shelters, correctional facilities, and nursing homes. IPL will contract with a third-party vendor that has experience in end-use technologies and energy-system interactions common in multifamily facilities to deliver the on-site energy assessments. While on the site, the energy assessor will install a range of free measures in common areas and tenant units and will provide energy education to the property owner or manager. The energy assessor will also provide a comprehensive energy assessment report that identifies recommended building efficiency upgrades, such as heating and cooling systems, lighting equipment, and building shell measures, and will assist customers with identifying qualified installation contractors and accessing applicable IPL rebates.” (IPL Application, Exhibit 1, pg. 60)

F. Will IPL issue an RFP for the third-party vendor?

G. If so, when will IPL issue the RFP for a third-party vendor?

“The measures and incentives offered through the Comprehensive Income Qualified program will largely be consistent regardless of the pathway or building type. Through the program, IPL will offer comprehensive assessments and direct install measures, at no cost for customers in all components and pathways. Comprehensive retrofits will be free for customers in the Single-Family Low-Income and pathway and provided at 75 percent of installed costs for customers in the Single-Family Limited-Income pathway.” (IPL Application, Exhibit 1, pg. 61)

H. Are there no program participation or cost limits?

Table 4-18. Regarding the Comprehensive Income Qualified Program, the total for overhead (\$1,119,744) on the electric side is about 36% of the amount IPL plans to spend on incentives (\$3,148,989), whereas the total for overhead on the natural gas side (\$1,550,723) is only about 14.5% of the amount IPL plans to spend on incentives (\$10,673,884).

I. Why is overhead so high on the electric side?

Docket No. EEP-2022-0150

Data Request No. 10

Page 3 of 3

Response:

- A:** IPL intends to serve the following projected number of households for each program during the Plan:
- Single Family Low-Income: 760
 - Single-Family Limited-Income: 76
 - Multifamily and Institutional Low-Income: The number of apartments units per building and the number measures installs vary per apartment unit. The approximate number of buildings in 2019 was 76 and the basis for the number of units installed.
- B:** IPL is working with the Iowa Utility Association to collaborate with the State Energy Office, Office of Consumer Advocate and other utilities in Iowa to identify where utilities may be able to supplement or support Inflation Reduction Act funding.
- C:** IPL does not restrict CAP agencies to how they perform their services.
- D:** A Request For Proposal for the ALICE program is planned for release in late Q2 of 2023.
- E:** IPL intends to initially select a single combination community to launch the program.
- F:** IPL does not anticipate issuing an RFP for the multi-family program.
- G:** N/A
- H:** There are no participation or cost limits for low-income customers (those with incomes up to 200 percent of Federal Poverty Level (FPL)). IPL's low-income customer participation and budget projections are based on historical participation. As noted in the Plan, IPL partners with state agencies for single-family homes and works with a third-party implementation contractor to deliver services to the multifamily and institutional sectors. While there are no participation limitations, there are state agency and contractor staffing constraints. As for those customers who are qualified for the limited income (those with incomes from 200 percent to 300 percent of FPL), IPL plans test this program component in one community where it provides both natural gas and electric service. The initial participation and budget are limited as this program component identifies communities to best serve before expanding participation and budget.
- I:** IPL has chosen to allocate administration expenses between electric and natural gas plans at a more even distribution than it is able to allocate incentives due to funding limitations as required by 199 IAC Chapter 35.

**Response of
Interstate Power and Light Company
to
CLEAN ENERGY DISTRICTS OF IOWA
Data Request No. 14**

Docket Number:	EEP-2022-0150
Date of Request:	March 17, 2023
Response Due:	March 24, 2023
Information Requested By:	Andrew Johnson
Date Responded:	March 24, 2023
Author:	Kari Gehrke
Author's Title:	Manager Demand Side Management
Author's Telephone No.:	319.786.4326
Subject:	Technical Assistance

Data Request No. 14

"IPL says it will continue to provide technical resources (such as assessments, audits, and feasibility studies) that help customers identify and prioritize energy-savings opportunities and encourage them to invest in deep building and home retrofits and comprehensive measure packages that increase savings per customer interaction."(IPL Application, Exhibit 1, pg. 17)

IPL currently only offers in-person energy audits for commercial and industrial customers. In the past, however, IPL offered in-person energy audits to all ratepayer classes.

- A. Does IPL have data on energy efficiency and/or demand response measures adopted by recipients of in-person home energy audits/assessments that were conducted during prior EEP cycles? If so, please provide this information in your response.
- B. IPL has studied incentive programs offered by utilities in other states. IPL states in its response to OCA DR 26 that "IPL's Behavioral Demand Response incentive of \$1.00 per kWh saved is consistent with other "Peak Time Rebate" utility programs ..."
 - a. Has IPL studied in-person technical assistance programs for residential customers offered by utilities in other states – including Home Performance with Energy Star – to determine which such programs have the greatest impact? If not, why not?

Response:

- A. No such data exists.
- B. No, IPL has not studied in-person technical assistance programs for residential customers offered by utilities in other states.

**Response of
Interstate Power and Light Company
to
CLEAN ENERGY DISTRICTS OF IOWA
Data Request No. 15**

Docket Number:	EEP-2022-0150
Date of Request:	March 17, 2023
Response Due:	March 24, 2023
Information Requested By:	Andrew Johnson
Date Responded:	March 24, 2023
Author:	Kari Gehrke
Author's Title:	Manager Demand Side Management
Author's Telephone No.:	319.786.4326
Subject:	Iowa Retail Rate Revenues

Data Request No. 15

CEDI has utilized IPL Application Exhibit 4 and IPL Application Exhibit 14 Retail Rate Revenue_CONF.pdf to calculate IPL's proposed EEP program costs as a percentage of annual retail rate revenue and in relation to the statutory caps.

Please review CEDI's summary findings below regarding the company's program costs as a percentage of annual retail rate revenues over the 2024-2028 plan period.

IPL's program costs as a percentage of annual retail rate revenues over the 2024-2028 plan period:

1. Range from 1.43% to 1.5% regarding the natural gas efficiency program, which is at or just below the 1.5% statutory cap
2. Range from 1.01 to 1.18% regarding the demand response program, which is below the 2% statutory cap
3. Range from 1.04% - 1.25% regarding the electric efficiency program, which is below the 2% statutory cap

A. Are CEDI's summary findings accurate? If not, please explain how they are inaccurate.

Response:

These calculations are accurate.

June 1, 2022

MidAmerican Energy
Alliant Energy
Black Hills Energy
Cc Iowa Utilities Board
Cc Office of Consumer Advocate

Re: High Level Suggestions for Energy Efficiency Programs

The Clean Energy Districts of Iowa appreciate the opportunity to share program suggestions for the 2024-28 IOU EE Programs. We are submitting high-level comments here, and look forward to further discussion. We have found the online form impractical, due to the lack of front-end transparency, and the fact that do not yet have access to the full assessment of potential study. We look forward to further engagement around the following potential programs:

1. Full Scope, Locally-Led Energy Planning
2. First Step Energy Efficiency/Direct Install
3. Prioritized, Accelerated Heat Pump Transitioning

Full Scope, Locally-Led Energy Planning

We realize that in-person technical assistance (IPTA: audits, assessments, Home Performance with Energy Star, etc) have a long and varied history in rate-payer funded EE programs, in Iowa and elsewhere. Other than for the largest customers, the programs do not currently offer IPTA. We feel this is a serious missed opportunity. The lower cost-effectiveness of past IPTA efforts were due to many reasons, including

- Inability to track actual practice implementation and efficiency impacts post-audit
- Consequent reliance on very limited direct install deemed savings figures
- Insufficient levels of diagnostics, analysis, and planning assistance to allow customers to understand opportunities and prioritize investments
- Failure to effectively include all energy sources and uses, especially in split utility situation
- No or virtually no follow-through after the audit

The need and opportunity for IPTA is greater now than ever before. Energy burden is rising along with energy prices, but available technologies and potentials for households and small businesses continue to grow apace. A robust IPTA program could contribute uniquely and significantly to many goals, including

- Identifying and implementing suites energy efficiency measures, and deep retrofits
- Saving energy expenditures and so reducing energy burden of lower income households and small businesses throughout rural and frontline communities
- Reducing environmental injustice and improving livability and health of all customers through improved air quality and building comfort in disadvantaged and frontline communities

- Strengthening community and rural economies by developing local technical assistance workforce, keeping energy dollars local, and accelerating energy efficiency market transformation
- Significantly reducing energy related greenhouse gas emissions through the reduction of site and source energy usage
- Leveraging incentives and resources beyond the EEP program
- Improving household and community resilience by scaling up distributed energy resources

To accomplish these goals and overcome the past challenges, an IPTA program needs to be robust, innovative, and able to evolve and adapt. Central and critical to success is local leadership and local expertise. Energy Districts have had significant success implementing IPTA with very high conversion rates due in large part to their presence in the community as a qualified, trusted source. An IPTA collaborative approach among the three IOU EE programs could efficiently and effectively utilize a neutral third party to set high TA standards and reimbursement rates, define qualifications for professionals, and open the door to Iowa EE professionals serving customers within their own communities. Additional important aspects of an innovative, successful IPTA program include:

- Comprehensive scope – all energy sources and uses must be considered
- Quality diagnostics and analysis – including financial analysis – and planning to help customers actually understand, prioritize, invest, and implement
- This follow-through is absolutely critical, and TA reimbursement rates need to reflect the time required, because results-oriented IPTA is a customer driven process, not a program driven product
- Which is why, though it may be counter-intuitive, full-scope energy planning will be more expensive than “traditional” home and business assessments, but they will also be more cost-effective, both because the conversion rates are higher and because the total investment and savings per conversion are higher as well
- IPTA is especially important to lower-income, frontline, and otherwise disadvantaged or energy burdened households (including all-electric, and propane or fuel oil dependent), and should be available and no or minimal cost without needing to meet cost-effectiveness tests
- Full scope energy planning can be very effectively paired with locally-led direct install programs also, as described in the next section.

First Step Energy Efficiency/Direct Install

Direct Install programs also have a long and storied history within IOU EE programs (in Iowa and beyond), and as with IPTA, the impact varies tremendously by detail and messenger. Winneshiek Energy District (WED) has 11 years of experience implementing a “First Step Energy Efficiency Program” in partnership with Green Iowa AmeriCorps¹. After serving well over 1,300 households (the vast majority lower income), we have learned much about what makes an effective DI program, including:

- Locally and community led: similar to in person technical assistance, when a service like direct install is provided by a community-based organization, over time they become a widely trusted resource and impact grows rapidly

¹ See [Green Iowa AmeriCorps First-Step Home Efficiency Programs – Winneshiek Energy District](#) for an overview, and [Winneshiek Energy District GIA First Step Coverage Impacts](#) for an impact summary

- Green Iowa AmeriCorps is an effective program that should continue to be supported, but Iowa's EE programs should also collaboratively create a First Step Efficiency direct install program that can provide funds to community based organizations ready and willing to implement DI - especially in disadvantaged and frontline communities – even where GIA is not present
- Like IPTA, a comprehensive scope matters: WED for example has been guiding and supporting it's GIA team to install not just a handful of light bulbs, but to replace every single accessible light bulb in a household (not uncommonly 40-50), and likewise with water aerators and other simple measures
- Community based First Step programs do more than just save energy and money; when focused on frontline, disadvantaged, and lower income communities they can test for combustion safety and air quality hazards, conduct blower door tests for single family and multi-family rental as well as owned units, and make important referrals to Community Action and other partners
- Community based First Step DI programs also build community capacity, leadership, and resilience

Prioritized, Accelerated Heat Pump Transitioning

Rapidly transitioning building and hot water heating to heat pumps (primarily air source, but also ground source) must be a priority and is a good fit for Iowa's IOU EE programs. We understand the perennial debate around fuel switching: now is the time to relegate that debate to the dustbin of EE history and for all stakeholders – from utilities to IUB and OCA to intervenors, industry, and contractors – to come together to make heat pumps happen rather than find excuses to avoid committing. Why?

- Heat pumps for domestic hot water are technologically appropriate and cost-effective (especially with up-front incentives) in almost all situations
- Heat pumps are technologically appropriate for much (not all) home and small business heating needs now, and the technology is advancing rapidly
- Heat pumps are a dramatic cost- and energy savings for households and small businesses currently heated with electric resistance (eg baseboard) – and those systems can be left in place for redundancy and extreme cold situations for a time period as well
- Heat pumps are already significantly more cost-effective than propane and fuel oil, and competitive with (and now with increasing gas prices, more cost-effective than) natural gas
- A concerted effort including strong prescriptive incentives and strong community-based IPTA and DI programs is needed to ensure that frontline, rural, low-income, and otherwise disadvantaged communities don't get left behind in the heat pump adoption curve but rather are able to reap the economic, comfort, safety and air quality benefits of an inclusive transition
- This strong, concerted effort is also critical to create the market transformation conditions necessary to move the HVAC contractor community rapidly into the heat pump era
- Heating systems are long-term investments, and for purposes of greenhouse gas emissions and climate change mitigation, we should not be installing any new gas or propane HVAC systems if feasible alternatives exist

We sincerely believe these ideas hold tremendous potential to bring renewed vigor, innovation, and community leadership to Iowa's rate-payer funded energy efficiency program. We look forward to further dialogue around shared goals and opportunities.

Best,

Andrew Johnson
Executive Director
Clean Energy Districts of Iowa