I&M Exhibit: _____

Cause No. 45576

INDIANA MICHIGAN POWER COMPANY

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

DAVID A. LUCAS

Content

DIRECT TESTIMONY OF DAVID A. LUCAS
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY

I. Introduction of Witness

Q1. Please state your name and business address.

My name is David A. Lucas and my business address is Indiana Michigan Power Center, P.O. Box 60, Fort Wayne, IN 46801.

Q2. By whom are you employed and in what capacity?

I am employed by Indiana Michigan Power Company (I&M or Company) as Vice President – Regulatory and Finance.

Q3. Briefly describe your educational background and professional experience.

I have a Bachelor Degree in Business Management and a Master of Business Administration from Marshall University. I have completed the Program for Leadership Development at Harvard Business School and the American Electric Power (AEP) Leadership Development Program at The Ohio State University.

I am a registered Project Management Professional (PMP). Prior to joining AEP, I worked for more than 12 years in the heavy industrial construction industry. I was an officer and Director of Business Operations for Williams Service Group, Inc. My responsibilities in this position included working with the executive management teams in multiple business units to develop strategic plans and manage the financial functions of the business units.

I joined AEP in January 2005 as Manager – Financial Analysis & Budgeting SCR and Environmental. My primary roles since joining AEP have been in the

areas of project management, budgeting, and project controls where I have served as Manager – Project Cost Management and Director – Project Controls.

I also held the position of Director – Environmental Retrofits from November 2010 – January 2013. In April 2014, I was named I&M's Vice President of Finance. In November 2016, I was named I&M's Vice President Finance and Customer Experience. In January 2021, I began my current role as Vice President Regulatory and Finance.

Q4. Have you previously testified before any regulatory commissions?

Yes. I have provided testimony in I&M's two most recent rate cases before the Indiana Utility Regulatory Commission (IURC or Commission) docketed as Cause Nos. 45235 and 44967. I also provided testimony in the South Bend Solar case - Cause No. 45245. I have provided testimony in Michigan Public Service Commission (MPSC) Case Nos. U-20359 and U-18370.

Q5. What are your responsibilities as Vice President – Regulatory and Finance?

I am responsible for managing the integrated financial plan and strategic planning process for all I&M business units – Fossil & Hydro Generation, Nuclear Generation, Transmission, and Utility Operations – which includes distribution, customer services and marketing, regulatory services, energy efficiency and demand side management, and other corporate support groups.

I am also responsible for managing the business operations, project controls, continuous improvement, energy efficiency strategy and regulatory services organizations. I also serve as an Executive Sponsor on various projects and strategic initiatives across the Company.

II. Purpose of Testimony

Q6. What is the purpose of your testimony?

The purpose of my testimony is to:

- explain the forecast approach and methods used to develop the operation and maintenance (O&M) expenses and capital expenditures included in I&M's financial forecast for the forward-looking test year (Test Year or TY);
- describe I&M's Test Year O&M and the capital forecast incorporated into the forecast;
- support the customer engagement and education plan related to our Advanced Metering Infrastructure (AMI) deployment plan in Indiana;
- present customer programs that the Company proposes to utilize as a component of the AMI deployment in Indiana; and
- address related matters as outlined in my testimony below.

Q7. Are you sponsoring any attachments?

Yes, I am sponsoring the following attachments:

- Attachment DAL – 1 – Historical and Forecasted O&M Expenses
- Attachment DAL – 2 – Historical and Forecasted Capital Expenditures
- Attachment DAL – 3 – AMI Customer Engagement Plan
- Attachment DAL – 4 – AMI Residential Customer Engagement Platform
- Attachment DAL – 5 – AMI Commercial and Industrial Customer Engagement Platform

Q8. Are you sponsoring any workpapers?

Yes, I am sponsoring the following workpapers:

- WP-DAL-1 – Income Statement O&M Summary
- WP-DAL-2 – Project Life File (Capital Forecast by Project)
- WP-A-O&M-11 – AMI Operational Savings and Incremental O&M

Q9. Were the attachments and workpapers that you sponsor prepared or assembled by you or under your direction?

Yes.

Q10. Please summarize your testimony.

I&M has successfully managed its O&M and capital investment expenditures and will continue to do so in a manner that prudently serves its customers. I&M cost projections hold business unit O&M expenses essentially flat, as compared to the Historical Year, unadjusted for inflation. This is particularly noteworthy given that the baseline Historical Year reflects the temporary cost-cutting measures taken in reaction to the business effects of COVID.

Specifically, I&M's projected O&M expenses for Steam Generation, Nuclear Generation, Hydro Generation, Other Generation, Distribution, Customer and Information, Sales, and Administrative and General reflect a 1.2% increase from 2020 actuals and a 0.1% increase on average compared to the previous five years of actual expenses. Transmission O&M expenses are expected to increase 16% from 2020 levels driven by increases in costs that are largely outside the control of the Company, such as PJM Network Integration Transmission Service (NITS) and Enhancements.

Similarly, I&M's projected investments over the Capital Forecast Period demonstrate the careful manner in which the Company deploys capital. The

average annual capital expenditures in 2021 – 2022 are forecasted to be $539.9 million, compared to $566.3 million in the previous five years of actual expenses.

Specifically, capital investment in generation is projected to be significantly lower than the previous five years of actuals, in light of the end of major projects at those sites. Transmission capital investment will remain essentially flat, while capital projects in Distribution reflect an increase, primarily driven by AMI and Grid Modernization investments to improve reliability and the customer experience.

Information Technology (IT) capital investment is also forecasted to increase primarily driven by investments in cybersecurity and modernizing critical systems. Considering inflationary factors and the capital programs taking place during the Capital Forecast Period, the overall amount is reasonable.

A significant benefit associated with the deployment of AMI technology is the opportunity for customers to have access to better information to make informed decisions about their energy consumption. As a result, I&M will be engaging in customer education and initiating the use of a customer engagement platform that allows residential and commercial customers to access information on their home or business energy usage, energy costs, and energy savings tips. The costs associated with these activities are included in I&M's forecast.

Additionally, I&M is proposing certain voluntary tariff changes and programs to allow customers to take full advantage of AMI and better manage energy usage and costs for their own benefit, and ultimately, the benefit of all I&M customers. These activities are supported by the AMI Cost Benefit Analysis performed by Accenture and presented by Company witness Bech.

III. O&M and Capital Forecasts

Q11. What is the purpose of a forecast?

A forecast takes the assumptions developed from the Company's management experience, knowledge and judgment and uses those to develop the work plans that become the basis for I&M's forecast.

I&M uses the forecasting processes as a forum to engage leaders across the Company in creating work plans that seek to maximize reliability, safety, and customer benefit within the context of the Company's financial position. The forecast that is generated as a result of these activities is based on data from the past and present along with analysis of trends to provide an expected future picture to rely upon for planning.

Company witness Heimberger explains how the Company's O&M and capital forecasts are used as inputs into the financial forecast she supports.

Q12. Can you describe how the O&M and capital components of the financial forecasts are developed?

I&M's financial management team coordinates the planned activities necessary to complete the forecasting process with AEP's corporate planning & budgeting (CP&B) group. I&M and CP&B work collaboratively at the start of the forecasting process to establish capital and O&M guardrails for each business unit to utilize as a planning basis when preparing their work plans and forecasts.

The O&M and capital forecasts prepared by each business unit are based on work plans that use business objectives to prioritize work activities. In addition to the functional business unit forecasts, I&M also incorporates the capital and O&M budgets and long-range forecasts from AEP Service Corporation for corporate services including, but not limited to, IT and shared services.

Q13. Can you please identify I&M's business units?

I&M is comprised of four business units:

1) Fossil, Hydro & Solar Generation,
2) Nuclear Generation,
3) Transmission, and
4) Utility Operations

Each of these organizations has management teams and budgeting personnel that are responsible for coordinating the forecasting activities within their group. Each I&M business unit is responsible for preparing the capital and O&M budgets and long range forecasts for its area of responsibility.

I&M management works across business units to evaluate the drivers behind the components of the work plan to ensure capital and O&M are prioritized, allocated properly, and are within available capital and O&M guardrails.

Q14. Who are the business unit witnesses supporting the capital and O&M activity relied upon for the financial forecast?

The following individuals will provide testimony on the underlying work planned by the business units that is incorporated into the financial forecast:

- Tim Kerns – Fossil, Hydro, & Solar Generation;
- Quinton (Shane) Lies – Nuclear Generation;
- Nicolas Koehler – Transmission; and
- David Isaacson – Distribution, which is part of the Utility Operations business unit.

Q15. Please describe how capital is prioritized and allocated across I&M's business units.

I&M's business units go through an effort to identify a work plan consisting of a list of prioritized capital projects for the future. Each business unit uses drivers specific to its area of the business to determine which projects to include and the timing by which the projects need to be completed.

Some examples of common business drivers include environmental compliance, regulatory compliance (e.g. Nuclear Regulatory Commission or "NRC"), PJM compliance, public/employee safety, aging infrastructure, reliability improvements, and performance improvements.

Once each business unit determines its work plan and associated business unit drivers, the business unit is required to estimate the costs and schedule durations associated with each individual program or project. A necessary step that occurs during each business unit review is determining the level of capital that is associated with environmental, regulatory, risk mitigation or operational requirements, and the amount of capital available for remaining projects.

After the highest priority capital projects are approved, I&M's business unit leaders work collaboratively to prioritize remaining projects within I&M's overall capital limitations.

Q16. Please describe how O&M is prioritized and allocated across I&M's business units.

Each business unit develops its O&M budget based on the costs necessary to maintain ongoing operations plus incremental O&M needs. Ongoing operations costs typically include items such as labor, fringe benefits, fleet vehicles, insurance, consumable materials and chemicals, right of way maintenance, mandated fees, and other items necessary for the business unit to manage its core operations.

Each budget is prepared in accordance with Corporate Budgeting Guidelines, which include various assumptions and provide guidance for things such as labor escalation factors. Incremental O&M includes the cost associated with scheduled outages at major generating facilities and major inspection or maintenance programs within distribution and transmission.

Once ongoing operations O&M has been approved, proposed business unit incremental needs are evaluated and prioritized by I&M business unit leaders in order of greatest operational and/or customer benefit.

Q17. Please describe how capital and O&M outside the business units are prioritized and allocated.

AEP Service Corporation departments responsible for items such as IT and shared services are required to prepare strategic plans and financial forecasts that are presented to the AEP Investment Review Committee (IRC) to obtain approval for capital and O&M allocations. I&M reviews this information and provides input based on the specific impact and benefits to I&M.

Q18. How does I&M manage changes to the plans represented by the forecast?

I&M has multiple processes that are used in the ongoing management of capital and O&M throughout the year. I&M updates budgets annually and makes changes based on the updated needs of the business.

I&M also works with each business unit throughout the year to re-forecast capital and O&M expenditures and manage changes to the budget.

These processes provide platforms for open communications among the business units, I&M, and CP&B to ensure funds are prioritized and allocated effectively throughout the year.

Q19. Why are the changes to plans represented by the forecast reasonable and necessary in between forecast cycles?

Changes to the plans are reasonable and necessary to address new facts and circumstances that were not known at the time the plan was finalized to establish the forecast. These changes occur as a result of many emerging business needs, including change in timing and scope of existing projects, new operational needs, new customer needs, weather events and new regulatory compliance requirements.

Q20. Can you please describe how the impacts of COVID-19 are reflected in the O&M and capital forecast you are presenting in this case?

Yes. The primary impacts of COVID-19 on the Company's capital and O&M expenses are in the 2020 Historical Period. Like most companies, I&M recognized in the late first quarter and early second quarter of 2020 that the situation around COVID-19 would have financial impacts to the Company.

In order to mitigate these impacts, I&M quickly brought together all of the business units to evaluate opportunities for reductions in expenses, including one-time reductions and deferrals, as well as deferral of capital projects. The actions taken by the business units helped to safeguard the financial health of the Company and provided time to determine the overall, long term impact to the Company.

These actions were taken in concert with I&M's efforts to work with customers impacted by COVID-19. Consistent with the Commission's order in Cause No. 43580, I&M put a disconnect moratorium in place and offered extended payment plans to help customers with their individual situations.

It is customary in future TY proceedings for the Company to present the TY forecast and provide comparative analysis to the Historical Period. It is important in this proceeding to recognize that the Historical Period is a highly unusual year

given the COVID-19 impacts. Prudent management decisions were made by the Company during the Historical Period that are certainly not sustainable to maintain the safe and reliable operations of the Company.

In all Attachments I have provided in this proceeding to support the Capital and O&M expenses, I have provided multiple years of actual costs to provide a more representative comparative basis.

IV. Operations and Maintenance Expenses

Q21. Have you reviewed the TY level of projected O&M expenses for reasonableness?

Yes. I have evaluated O&M included in the TY and compared this to the actual expenses in previous years, including the calendar year 2020 Historical Period.

In cases where there are increases or decreases in expenses compared to historical trends I have reviewed the work plans utilized to develop the forecast to determine the underlying cause(s) of the change. I have also considered forecast assumptions, including escalation factors, as a part of my evaluation.

Attachment DAL-1 provides a summary of actual O&M expenses for the years 2016 through 2020 and of the forecasted expenses for the TY. All numbers in this attachment are Total Company O&M expenses. This Attachment also shows the projected growth in O&M by account grouping.

Company witnesses Kerns, Lies, and Isaacson provide further support for the projected level of O&M expenses included in the forecast for their respective I&M functional business units.

Q22. Why have you provided several years of actual data in Attachment DAL-1?

Annual O&M expenses are dependent upon many factors including specific work plans, emergent work performed in a particular year, and impacts of external factors such as COVID-19 in the Historical Period. As such, actual and projected O&M expenses may vary significantly year to year.

By comparing the TY level of O&M spending to a variety of recent years' actual data and understanding specific changes in expenses, I can confirm the TY level of O&M expense is reasonable. I examined not only the differences between the TY and Historical Period expense levels, but also the five-year average and compound annual growth rate over the last five years.

This comparison provides an even longer view to help evaluate the reasonableness of the TY O&M data. I want to emphasize that the comparisons included in Attachment DAL-1 *a*re dollar-for-dollar comparisons without adjusting for inflation over the five-year period. An inflationary adjustment to historical costs would be necessary to correctly reflect that cost during the TY.

Q23. What conclusion did you reach as a result of your comparison?

The Company has been engaged in a consistent review of O&M expenses and has successfully taken actions to optimize expenses. Overall O&M expenses are reasonable in aggregate as compared to actual expenses.

Total O&M expenses, excluding Transmission, are forecasted to be in essence flat compared to the five most recent calendar years (2016 through 2020), not including any inflationary adjustments to historical costs.

Q24. What conclusions did you reach as a result of your comparison of Generation O&M data?

I concluded that each category of TY Generation O&M expenses is reasonable in relation to actual expenses. The compound annual growth in projected Steam Generation O&M expenses (excluding account 501 fuel, 502 emissions control, and 509 allowances) is -1.7% on average for the last five calendar years, without any inflationary adjustment to historical costs. The reductions in O&M during the TY are the result of management's review of market conditions and optimizing expenses based on future operational plans. Company witness Kerns will further discuss the Steam Generation O&M expenses.

The level of projected Nuclear Generation O&M expenses (excluding account 518 fuel) in the TY is projected to be down -0.4% compared to the average over the five-year historical period, without any inflationary adjustments to historical costs. Company witness Lies will discuss the details of the Nuclear Generation O&M expenses.

The compound annual growth rate in TY Hydro Generation O&M expense is 5.0% on average compared to the last five-year historical period, without any inflationary adjustments to historical costs. Company witness Kerns will discuss the details of the Hydro Generation O&M expense.

The compound annual growth in TY Other Generation O&M expenses is down -26.1% on average for the last five calendar years, without any inflationary adjustments to historical costs. The decreases for the TY are largely driven by the manner in which the costs are forecasted versus how actual costs are recorded.

The costs associated with accounts 556 and 557 are forecasted as a component of the AEP Service Corporation billing process and a portion resides in purchased power expense. When the actual costs are recorded they are

booked as an O&M expense; consequently, the historical actual Other Generation O&M is higher than the forecasted amount in the TY.

Q25. Who discusses the proposed ratemaking treatment of I&M's transmission related costs and revenues?

Company witness Fischer discusses I&M's proposed ratemaking treatment of transmission related costs and revenues.

Q26. What conclusions did you reach as a result of your comparison of O&M data related to distribution?

My review shows that TY Distribution O&M expenses are reasonable in relation to historical expenses. The TY level of Distribution O&M expenses reflects a compound annual growth in Distribution of O&M expenses of 0.9% on average for the last five calendar years, without any inflationary adjustments to historical costs.

The O&M forecast reflects increases in O&M spend for vegetation management activities and reductions in all other areas of Distribution O&M. Excluding the increase in vegetation management expenses, the remaining Distribution O&M expenses during the TY results in a compound annual growth rate of -0.7% on average compared to the last five calendar years, without any inflationary adjustments to historical costs. Company witness Isaacson further discusses Distribution O&M expenses.

Q27. What conclusions did you reach as a result of your comparison of O&M related to Customer and Information expenses and Sales expenses?

I concluded the TY level of Customer and Information expenses and Sales expenses are reasonable compared to the five most recent years. For

comparison purposes I exclude the costs which are addressed and recovered in separate rider rate proceedings (e.g. demand side management (DSM) costs).

The compound annual growth rate in TY expenses is 0.5% over the last five calendar years, without any inflationary adjustments to historical costs.

Q28. What conclusions did you reach as a result of your comparison of O&M expenses related to Administrative and General?

I concluded that the TY level of Administrative and General expenses are reasonable compared to the five most recent years. The compound annual growth rate in TY expenses is 5.4% over the last five calendar years, without any inflationary adjustments to historical costs.

I would note that the variance compared to the Historical Period is primarily associated with an uncharacteristically high Nuclear Electric Insurance Limited (NEIL) refund amount in the Historical Period and areas where costs are forecasted at the corporate level but actualized at a business unit or department level with the offset primarily in nuclear expense.

The remaining increases in A&G expense in the TY are primarily associated with increased costs to maintain IT and security infrastructure and realigning some support level costs that were impacted in 2020 back to normal business levels.

Q29. Can you please explain Adjustment O&M-11?

Yes. Adjustment O&M-11 identifies AMI related operational savings and increases the O&M expense related to AMI programs that were not included in the Company’s forecast.

The O&M savings are associated with remote disconnection / reconnection, reduction in bad debt expense, reduction in tamper and theft costs, and reduction in costs associated with reduced unauthorized energy use.

This adjustment provides these savings as a credit assuming the AMI implementation and customer programs as proposed by the Company in this case are approved. The cost savings are included in the Cost Benefit Analysis supported by Company witness Bech.

The O&M costs included in this adjustment are associated with AMI related program administration costs the Company plans to implement upon approval by the Commission and are necessary to realize the benefits of the AMI program. These program costs represent adding certain full time equivalent positions to monitor system data generated by the AMI systems to identify theft on the system, monitor distribution system functions, and administer the remote disconnect/reconnect process as supported by Company witness Isaacson.

Additionally, administrative support will be added to administer demand response customer enrollments and rebates associated with direct load control programs supported by Company witness Walter.

Q30. What would happen if this Adjustment was not made?

Without this adjustment, I&M's base rates would not reflect the program costs and benefits associated with the AMI-related programs the Company plans to implement as provided in this case.

Q31. Why were these costs and savings not included in the forecast used for this case?

These costs and benefits were not included in the forecast for this case because through this case the Company is seeking Commission authority to implement these programs. Although the Company believes all of the AMI-related

programs serve our customers' interests and should be authorized for implementation, if any individual program is not approved, it can separately be removed from the Test Year.

Q32. Is the level of O&M expense included in the TY accurate and reasonable?

Yes, the TY level of O&M expense in the forecast, combined with the adjustments proposed in this case, is accurate, reasonable, and representative of I&M's costs of providing service. The TY levels are justified by the projected needs of the utility and are not excessive.

I&M has demonstrated proactive management that has successfully allowed I&M to maintain O&M expenses with minimal or no increase over the past several years while at the same time absorbing inflationary impacts. As discussed above, I&M's functional witnesses describe the basis for the TY O&M expense in greater detail.

V. Capital Forecast

Q33. Please describe the Capital Forecast Period in this case.

The Capital Forecast Period presented in this case is defined as January 2021 through December 2022.

Q34. Have you reviewed the level of capital costs during the Capital Forecast Period for reasonableness?

Yes. I have evaluated the capital included in the Capital Forecast Period and compared this to actual capital expenditures in previous years, including the Historical Period. In cases where there are increases or decreases in capital expenditures compared to historical trends I have reviewed the work plans

utilized to develop the forecast to determine the underlying cause(s) of the change.

I have also considered forecast assumptions, including escalation factors, as part of my evaluation. Attachment DAL-2 provides a summary of actual capital expenditures for the years 2016 through 2020 and the forecasted capital expenditures for the Capital Forecast Period. All numbers presented in this attachment are Total Company capital expenditures.

Q35. What conclusions did you reach as a result of your comparison?

First, I was able to determine that the overall level of forecasted capital expenditures during the Capital Forecast Period is reasonable compared to the last five years of actual capital expenditures. The average annual capital expenditures in 2021 – 2022 is forecast to be $539.9 million compared to an average of $566.3 million from 2016 – 2020. Considering inflationary factors and capital programs taking place during the Capital Forecast Period the overall amount is reasonable compared to historical actual expenditures.

Second, I was able to determine that the allocation of capital across business units is consistent with I&M business unit work plans and accurately represents our capital investment during this time period.

Q36. Can you describe the primary elements of I&M's capital investments during the Capital Forecast Period?

I&M's capital investment continues to be focused on infrastructure improvements, integrating new technology, improving the customer experience and environmental and regulatory compliance.

I&M has worked with each business unit to develop a work plan specific to their needs and opportunities within the construct of our overall capital investments.

The work plans were then reviewed and consolidated company-wide to balance required projects, infrastructure improvements, and strategic opportunities.

Q37. Have you provided project level details that support the work plans and capital expenditures in the Capital Forecast Period?

Yes. WP-DAL-2 Project Life File contains a list of all capital projects; capital expenditures by month during the Capital Forecast Period; and plant in-service information. All information is broken down by function (Distribution, Generation, Nuclear, Transmission, and Corporate).

Q38. Can you summarize the primary generation components of I&M's capital investment during the Capital Forecast Period?

I&M's generation forecast during the Capital Forecast Period continues to reflect a reduction in capital as the Company's investments in the nuclear Life Cycle Management (LCM) program and Rockport major environmental projects are significantly reduced.

The average annual capital spend in generation capital categories during the Capital Forecast Period is $104.7 million compared to $224.1 million average annual capital spend in the previous five years (2016 through 2020) and $187.0 million from 2018-2020.

The Nuclear capital program in the Capital Forecast Period includes a combination of technology modernization, regulatory compliance, and infrastructure improvements that are essential to ongoing plant operations. Company witness Lies describes the capital programs at Cook in more detail.

At our Rockport facility, I&M's capital forecast includes investments to comply with the Coal Combustion Residual (CCR) and Steam Electric Effluent Limitation Guidelines (ELG). Additionally, the capital forecast includes estimated

infrastructure improvements that are necessary for ongoing plant operations at our Rockport facility.

Last, I&M has included capital expenditures in the Capital Forecast Period for the completion of the St. Joseph solar facility approved in Cause No. 45245, which was placed in-service on March 31, 2021; the administration of the Company's 450MW renewable request for proposal (RFP); and necessary infrastructure improvements at the Company's hydro facilities.

Company witness Kerns will provide additional details on the capital forecast for Rockport, hydro and renewable projects.

Q39. Can you summarize the transmission components of I&M's capital investment during the Capital Forecast Period?

A significant component of I&M's capital investments since 2016 has been to transition its capital investments into the Transmission and Distribution systems. There are significant needs on the wires side of our business to invest in infrastructure and technological improvements that will result in customer reliability improvements, economic development opportunities, as well as improve the efficiency of our system.

From 2016 – 2020 the average actual capital expenditures per year for capital investments in Transmission were $90.9 million. During the Capital Forecast Period, the average capital forecast per year is $88.6 million.

The projects included in this forecast are primarily focused on physical security and local infrastructure improvement projects. Company witness Koehler will provide more details on the Transmission capital forecast.

Q40. Can you summarize the primary distribution components of I&M's capital investment during the Capital Forecast Period?

I&M's capital investments include increased investments in the Distribution system, primarily focused on asset renewal, grid modernization, and improved customer engagement.

The asset renewal components of the portfolio are based on a prioritized list of projects that are incorporated into the distribution work plan specifically to address customer reliability issues and aging infrastructure. The grid modernization components of the distribution work plan incorporate technologies such as smart reclosures, smart circuit ties, conservation voltage reduction (CVR), supervisory control and data acquisition (SCADA), distribution line sensors, and distribution automation.

In addition to these ongoing programs, I&M's capital investments also include new technologies designed to increase customer engagement and improve the overall customer experience. During the Capital Forecast Period, I&M has included $85.5 million in the capital plan for the initial phases of a program to install AMI to all I&M customers (Indiana and Michigan). The total project costs for the full Indiana AMI program (2021 – 2024), including meter deployment, network implementation, program management, IT systems, and customer experience engagement is estimated to be $121.3 million.

Company witness Isaacson discusses the AMI program from an operational standpoint. My testimony below explains how AMI technology will provide access to data that I&M will use to inform and empower customers to make better decisions about their electric consumption habits and manage their monthly budgets.

Overall, when evaluating the Distribution capital forecast, the average actual annual spend from 2016 – 2020 was $193.3 million per year. During the Capital Forecast Period the average annual forecast is $252.8 million per year.

The primary drivers for the increase are associated the AMI program and further expansion of the Grid Modernization program to improve reliability and the customer experience. Company witness Isaacson will provide further details on all elements of the Distribution capital forecast in his testimony.

Q41. Please summarize the primary corporate/other investment components of I&M's capital investments during the Capital Forecast Period.

The capital investments associated with corporate / other investments are primarily focused on IT related investments such as continued necessary investments in security related projects; upgrading aged systems to more modern and better supported technology platforms; opportunities to increase productivity and efficiency through automation and new technologies; and updating customer interface systems to provide an improved customer experience.

The average annual capital forecast for IT investments is projected to be $93.7 million in 2021 and 2022. This is compared to an average annual actual spend of $58.0 million from 2016 through 2020. A primary driver to this increase is associated with a necessary upgrade to the work management system at the Company's Cook nuclear facility. During the Capital Forecast Period the forecasted capital expenditures for this upgrade are $24.7 million.

Company witness Lies will provide more details on this project and how the technology is used in the daily operation of the nuclear facility.

Q42. Is the level of capital investments included in the Capital Forecast Period accurate and reasonable?

Yes. The TY level of capital investments, combined with adjustments proposed in this case, is reasonable, necessary and representative of I&M's costs of providing service.

The Capital Forecast Period levels are justified by the projected needs of the utility and are not excessive. As described above, I&M's functional witnesses describe the basis for the forecasted capital expenditures in greater detail.

VI. AMI Customer Engagement and Education

Q43. Please describe the purpose of your testimony related to I&M's AMI deployment.

My testimony supports the following:

- Our customer engagement plan as AMI is deployed throughout our service territory;
- The technology that will enable customers to access data made available by I&M;
- How AMI will provide customers with additional resources and options that will allow them to better manage their electric usage and further customize the service they receive from I&M; and
- Customer programs the Company proposes to offer that will leverage the AMI platform to provide more options for customers to choose from to meet their needs.

Q44. What efforts is I&M taking to notify customers of the AMI deployment?

I&M recognizes that an important component of rolling out any new technology to customers is education and awareness. Prior to the implementation of the AMI smart meters, I&M provides customers with a variety of opportunities to learn about AMI technology and the benefits that AMI meters bring to customers.

I&M also provides directions on how customers can opt-out of receiving an AMI meter, consistent with the opt-out provisions in the Company's Terms and Conditions of Service as approved in the Cause No. 45235.[1]

Q45. How does I&M notify customers regarding the installation of AMI meters?

I&M has implemented a customer engagement and communication process for its AMI deployment, including utilizing the experience of I&M's sister companies during their AMI deployments. The process focuses on providing customers with information necessary to understand the benefits they receive from AMI and make informed decisions about the use of AMI technology. The customer engagement and communication process, described in Attachment DAL-3 includes the following components:

- *Post Card and E-Mail Notifications* – At least sixty days prior to smart meter installation, customers receive a post card notifying customers of the AMI deployment, providing a high level overview of the benefits of the technology, and providing customers with a link to the page on I&M's website specifically addressing the AMI deployment, as well as a phone number to the call center to answer any questions customers may have. In addition to the post card, at least forty-five days before installation I&M also sends an e-mail containing similar information to customers with an e-mail address on file.
- *I&M Website* – I&M has established a specific landing page on its website to address all matters related to smart meters.[2] This webpage explains the details of the smart meter program, includes

[1] Indiana Michigan Power Company Terms and Conditions of Service, "Advanced Meter Infrastructure (AMI) Meter Opt-out Provision (Residential Customers Only)", Original Sheet No. 3.22.

[2] https://www.indianamichiganpower.com/community/projects/smart-meters/

a list of Frequently Asked Questions (FAQs), provides links to information about AMI from other credible sources, and provides a link to customers to opt-out of receiving a smart meter.

- *Customer Letter* – At least thirty days prior to smart meter installation, customers receive a letter explaining how a smart meter works, the benefits of a smart meter, the next step in the notification process, and provides customers with the option to opt out of receiving a smart meter.
- *Customer Phone Call* – At least ten days prior to smart meter installation, all customers receive a phone call from I&M to notify them of a date range during which they will receive their new smart meter and to provide them with a phone number if they have any questions or concerns.
- *Door Hanger* – At the time of meter installation, all customers are left with a door hanger notifying them that either the meter has been successfully installed or that I&M was unable to gain access to install the smart meter. If the smart meter could not be installed, the door hanger will include a phone number for the customer to call to schedule an appointment.
- *Follow Up Phone Call* – If the initial smart meter installation was unsuccessful and I&M has not received a phone call from the customer to schedule an appointment within ten days of the door hanger being left, I&M will call the customer to schedule an appointment. If I&M is unable to make a connection with the customer to schedule an appointment after thirty days of the door hanger being left, I&M will follow its standard notification process for an inability to access situation.

This process includes multiple notifications to contact the customer to either gain access to install the smart meter or confirm the customer wishes to opt-out of the program. In the rare instances I&M is unable to contact the customer after multiple notifications and/or a known hazardous situation exists, I&M will take action to disconnect the customer.

- *Customer Engagement Platform* – Between thirty (30) and sixty (60) days after a customer receives a new smart meter, the customer receives a letter and e-mail (if available) welcoming them to the new Customer Engagement Platform. This letter and e-mail will highlight the benefits customers can receive by using the customer engagement platform, the ways to enroll, and will provide them with a website address and phone number to call to enroll or ask questions.

  Approximately ninety days after receiving a new smart meter, the customer will receive a customer education participation report that provides customers with customized insights into their energy usage habits and tools that are available to help manage their energy use and costs.

Q46. What information are customers provided regarding AMI technology?

On I&M's website, a landing page provides customers with a number of different resources to assist in the education and awareness of AMI technology. I&M has utilized a FAQ format to provide customers with answers to many of the questions that have surfaced from other utilities that have implemented AMI technology.

The following are examples of the types of topics that I&M has included on its website:

- How AMI technology works
- Customer benefits
- Accuracy of smart meters
- Public safety
- Privacy of information
- Notification process
- AMI opt-out process

In the answers I&M provides to the FAQs, I&M provides links to credible, independent, and third party resources to support I&M's responses.

For those customers that request additional information, I&M's call center forwards those customers to our customer service professionals that are available to answer AMI related questions.

Q47. Do residential customers have an opportunity to opt-out of having a standard AMI meter installed prior to its installation?

Yes. Residential customers that do not want a smart meter installed are provided with an opportunity to opt-out prior to installation. This option is included in the customer communications described above and is also included on I&M's website. Customers have the ability to provide their contact information on the website for I&M to contact them directly or customers can also call I&M's call center to opt-out of the AMI program.

Q48. Do opt-out customers have the ability to "opt-in" at a later date?

Yes. Customers have the ability to "opt-in" at a later date by calling I&M's call center and requesting a smart meter be installed at their location.

Q49. Please explain the need for a customer engagement platform and customer education program.

A significant benefit associated with the AMI technology after it is deployed is the opportunity for customers to have access to better information to make informed decisions about their energy consumption. AMI metering provides granular and timely data that I&M and its customers can use to better understand their energy usage and behaviors.

The customer engagement platform provides a multi-channel platform for residential and commercial customers to access insights specific to their home or business on energy usage, energy costs, and energy savings tips.

Q50. Can you describe the customer engagement platform in more detail?

Yes. I&M utilizes the data generated from the AMI technology to develop a robust platform that provides customer access to information on their energy usage and costs that they do not have without a smart meter.

As reflected in Attachment DAL-4, the residential customer engagement platform provides customer access to daily and weekly information on the amount of energy used and the costs for electric service, high bill alerts, bill comparisons, and bill forecasts. Having access to this information provides customers with a much better ability to take action during the month to manage their energy costs. This is a very significant, positive change that will impact all customers, but particularly income qualified or fixed income customers that are often managing within a monthly budget amount.

To deliver this type of functionality for residential customers, I&M has partnered with Opower who specializes in Home Energy Management platforms. Opower is responsible for working with I&M in the development, integration, and ongoing maintenance of the customer engagement platform.

Opower is working closely with I&M to integrate their platform with I&M's billing systems, meter data management systems, energy efficiency program management databases, and to develop a multi-channel engagement platform that customers can use to access specific usage data and energy savings tips.

Q51. Is there a similar platform for commercial and industrial customers receiving an AMI meter?

Yes. I&M is partnering with Uplight to bring the First Fuel commercial and industrial customer engagement platform to our customers that receive an AMI meter. As reflected in Attachment DAL – 5, the commercial and industrial customer engagement platform provides customers with an opportunity to access daily information on the amount of energy used and costs for electric service.

It also provides the opportunity for customers to download various reports that can be useful in their internal budgeting, forecasting, and other financial processes. Additionally for customers that have multiple accounts, this platform provides a more efficient way for customers to access data for their use in analyzing data and making decisions about the energy usage and costs.

In addition to the benefits customers will have in more efficiently and effectively viewing and using the energy usage and costs data, I&M will also gain valuable insights from this platform that will allow the Company to provide more tailored products and services to customers and improve the customer experience.

The Company can perform comparative analysis of energy usage across similar customer segments and characteristics to determine if certain customers that use more energy than their peers can benefit through an energy audit and a more in-depth review of their business processes and facilities to identify potential energy savings opportunities.

Q52. Will the customer engagement platforms proposed by the Company allow customers to share the energy usage data?

Yes. Both platforms provide the customer with the ability to download their energy usage information in a format compatible with Green Button Download My Data where the data can be shared at the customer's discretion.

Q53. Is I&M engaging in customer outreach activities to support this platform?

Yes. I&M is working closely with our technology partners in a comprehensive education and awareness campaign. At the time this testimony is being prepared, certain elements of the field outreach activities remain impacted by the restrictions associated with COVID-19.

However, the Company is utilizing e-mails, educational materials, marketing, and direct mail to inform customers on the benefits of AMI technology; the customer engagement platform; and how to effectively use the new information to manage their energy usage and costs.

As restrictions get lifted, the Company will also engage in customer workshops and other field activities to engage directly with customers on the opportunities the customer engagement platforms provide.

Q54. How does I&M evaluate the effectiveness of the customer engagement platform?

I&M is implementing a project management approach to initiate, plan, execute, monitor, and close the project. The project management team has established metrics to evaluate the effectiveness of the customer engagement platform throughout the implementation.

During the initial stages of the program, I&M is monitoring the number of "opens" on e-mail messages, number of views on the I&M AMI webpage, and customer feedback on the quality and content of the various communication methods.

During the enrollment and engagement phase, I&M is tracking the number of customers who have enrolled in the mobile App, the number of customers that have accessed the web portal, the number of "opens" on e-mail messages, the number of customer "opt-outs", and the number of customers that the Company is unable to contact for their AMI installation.

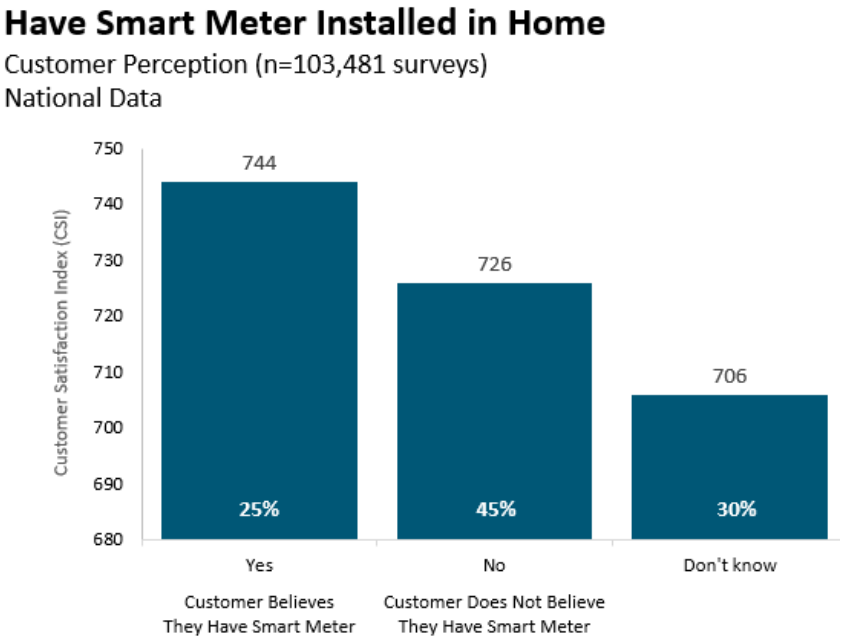
I&M will also be using various methods to obtain customer feedback on the program throughout the process, including customer surveys, social media posts, and call center activity.

Q55. Does the Company have information that supports the position that customers with AMI technology that use a customer engagement platform have a higher level of satisfaction?

Yes. The Company has evaluated the customer surveys completed by J.D. Power regarding AMI technology.

As shown in *Figure DAL-1*, J.D. Power survey results show that customers that believe they have a smart meter have a higher level of satisfaction than customers that do not believe or do not know they have a smart meter.

Figure DAL-1. Smart Meter Customer Satisfaction[3]



Q56. Are the capital costs associated with the IT enhancements, including the customer engagement platform, included in the TY forecast?

Yes. As discussed by Company witness Isaacson, the Company is beginning its AMI deployment in 2021. In order for customers to be able to receive the benefits from the customer engagement platform described above, the Company has included the necessary capital and O&M expenditures in the forecast.

In 2021 – 2022, the Company has included $8.2 million in IT infrastructure to fully develop IT enhancements and interfaces that take the data from the meter

[3] 2020 Electric Utility Residential Customer Satisfaction Study, J.D. Power

and integrate it with billing systems, operational data systems, the residential and commercial and industrial customer engagement platforms, and the multi-channel customer interfaces.

Q57. Are the capital costs associated with the customer education and outreach included in the Capital Forecast Period?

Yes. The Company has included the necessary costs to execute its plan to notify customers of the AMI meter deployment, educate customers on the value of the AMI technology, and inform customers on how to take advantage of the benefits of the customer engagement platforms. In 2021 – 2022, the Company has included $3.6 million for these activities.

Q58. Are the costs for the customer engagement platform and customer education and outreach included in the Cost Benefit Analysis conducted by Accenture for the AMI project?

Yes. Accenture has included both the upfront capital and O&M expenses necessary to develop and deploy the customer engagement platform, as well as the ongoing expenses to maintain and update the platform over the 20-year period of the AMI study. Accenture has also included the costs for the customer education and outreach activities described above.

VII. AMI Customer Programs

Q59. Is the Company proposing new customer programs to be implemented as a component of the AMI deployment?

Yes. In order for I&M's customers to be able to fully receive the benefits of the AMI technology, the Company is proposing certain voluntary customer programs to specifically utilize the AMI technology and allow customers to better manage

their energy usage and costs for their benefit and the benefit of all I&M customers.

The Company is requesting approval of the following:

- Changes to existing tariffs RS-TOD, GS-TOD, RS-TOD2, and GS-TOD2
- New Residential Critical Peak Pricing Tariff
- New General Service Critical Peak Pricing Tariff
- Changes to the existing Home Energy Management (HEM) Rider, including:
    - Residential Customer Engagement Demand Response
    - Residential AMI HVAC Direct Load Control
    - Residential AMI Electric Water Heater Direct Load Control
- Changes to existing Work Energy Management (WEM) Rider to include Small Business AMI Direct Load Control
- I&M Flex Pay Program

Q60. Why is the Company proposing new customer programs at this time?

The programs proposed by the Company will ensure I&M's customers have access to a diversified suite of options to utilize AMI technology. Implementation of the proposed rate options and customer programs also will provide useful information for future consideration of AMI-based customer programs. In addition to the direct benefits voluntary participants are expected to receive, all customers will benefit through reduced future energy and load requirements.

Additionally, I&M seeks to offer these AMI-based programs during the deployment of AMI because doing so presents a unique opportunity to capture customer interest in the technology, time variable rate options and load management programs, plus it allows I&M to further learn about, develop and

build end-use demand resources. With interest captured early on, the customer engagement, education, and enrollment process is more effective, where I&M can directly demonstrate the benefits from specific AMI-based products.

Q61. Are these programs included the Cost Benefit Analysis conducted by Accenture for the AMI project?

Yes. The Company worked with Accenture to estimate both the costs and expected benefits for all of the programs above and have incorporated them into the Cost Benefit Analysis study.

Company witness Bech describes how the programs were modeled in the Accenture Cost Benefit Analysis study. Company witness Walter describes certain assumptions that were utilized in the study related to these programs.

Q62. Which I&M witness presents the proposed tariff changes and additions associated with the proposed programs?

Please refer to the testimony of Company witness Cooper for information on the tariff related changes associated with proposed customer programs.

Q63. Which I&M witness will discuss the details of the new critical peak pricing program and customer programs under the HEM and WEM riders?

Company witness Walter provides detailed testimony on the four customer programs that fall under the load management umbrella but provide different levels of customer engagement.

The first residential program, the residential customer engagement demand response program, requires customer intervention. The other two residential programs are direct load control (DLC) based, where the Company will manage the end-use devices on behalf of customers.

Company witness Walter also provides testimony on the DLC-based C&I program that allow small business customers to take advantage of demand response opportunities.

Q64. Can you please provide additional information on I&M's proposed Flex Pay Program?

The Flex Pay program is a voluntary payment option that allows residential customers to prepay for their electric service without incurring the cost of a deposit or other fees associated with the current post-pay billing. Flex Pay customers will make deposits to their Flex Pay accounts at such times and in such amounts as are most convenient to them.

The only requirement is that the Flex Pay customers maintain a positive balance in their Flex Pay account. With greater control over the frequency and timing of their payments, customers will be able to gain a better understanding of their consumption and better manage their account with the Company.

Q65. What are the eligibility requirements to participate in the Flex Pay program?

I&M's Flex Pay program will be available to all residential services with an AMI meter rated up to 200 amps, except residential customers taking service under tariff R.S. D. – Residential Service Demand Metered. Customers on tariff R.S. – EZB – Residential EZ Bill are also not eligible.

In addition, customers with certain medical and/or life threatening conditions, customers on partial payment plans, Average Monthly Payment plan (AMP) customers, Equal Payment Plan (Budget) customers, and customers having on-site generation operated in parallel with the Company's system will not be eligible to participate in the program because of the unique characteristics of their situation.

Q66. What rate schedule will apply to Flex Pay customers?

Flex Pay customers will continue to be billed under their current, applicable tariff with portions of the rate converted to a daily rate. In other words, the standard tariff remains the basis for the bill calculation. It will be based on the customer's daily usage within a 24-hour period, the effective base rate, the rate, and all applicable riders and fees at the time of purchase.

Fixed charges will be charged daily and prorated based on the number of days in the billing cycle. These amounts will be subtracted from the customer's daily account balance. Company witness Cooper discusses proposed modifications to the Company's Terms and Conditions to incorporate the Flex Pay offering.

Figure DAL-2 shows a comparison of the Flex Pay to traditional post pay billing.

Figure DAL-2. Traditional versus Flex Pay Billing [4]

Category	Traditional Post-Pay Billing	Flex Pay Billing
Timing of Payments	Energy billed and paid after consumption	Daily bill amounts are subtracted from account balance each day
Account Establishment	Service reconnection fee Deposit required	Service reconnection fee No initial deposit required Initial payment of $40
Fee Requirements	Late fees Reconnection fees	No late fees No reconnection fees
Debt/Customer Balances	Service disconnection typically occurs after a substantial notice period during which credit is extended creating accumulation of sizable debt	Service disconnected the next business day after balance reaches $0.00
Service Reconnect	After disconnection, customer pays balance owed plus reconnection fee.	Customer reconnected within 15 minutes following positive account balance

[4] Termination notices generate the day after a new monthly bill is issued for customers who have a past due balance and are eligible for termination. This timeframe allows an average of 30 days following the original bill issue date before a termination notice is generated. The termination notice provides 15 calendar days from the date the notice is issued before service termination.

The initial payment of $40 is not a fee. It is an initial deposit to the Flex Pay account balance approximately equal to one week of service based on the daily cost of approximately $5.00 for an average residential customer.

Q67. How will customers enroll in the Flex Pay program?

Eligible customers can enroll by calling I&M's Customer Solutions Center.

To help illustrate the customer enrollment process, I describe below three different scenarios that may apply to customers enrolling in the program:

- *New account:* A customer establishing a new account must make an initial payment of $40 to enroll in the program. Although an initial payment is required to fund the Flex Pay account, the $40 payment is immediately available to pay for electric service.

  In addition, new customers establishing a Flex Pay account do not have to make a deposit. The initial payment must be made within two days of enrollment into the program; otherwise, the new customer will automatically revert to the post-payment option.

- *Existing customer with deposit and no arrears balance:* An existing customer with a deposit who wishes to enroll in Flex Pay would still need to make an initial payment of $40. However, if the customer's deposit credit is sufficient to cover the initial $40 prepayment, the customer would not be required to make an additional payment to enroll.

  Any remaining deposit balance also would be applied to the Flex Pay balance and would be available for future electric use.

- *Existing customer with a deposit and arrears amount*: Customers with a deposit and a past due amount who want to enroll in Flex Pay would be required to pay at least 50% of the entire account balance plus an initial

$40 payment. However, the customer's deposit could be credited against this 50% payment.

The remaining account balance will be carried into an arrears amount that will be paid with each future payment at an 80/20 split: 80% will be applied to the Flex Pay balance, and the remaining 20% will be applied to the arrears amount.

Figure DAL-3 summarizes these enrollment scenarios.

Figure DAL-3. Customer Enrollment Scenarios

Scenario	Deposit	Initial Payment	Payments Going Forward
New Customer	No deposit required	$40 Initial Flex Pay payment	No further amount for future payments. Customers are only required to keep a positive balance.
Existing Customer with Deposit	Existing deposit will be applied to customer's account as credit	$40 Initial Flex Pay payment. If deposit credit is sufficient to cover the $40, no other payment is necessary.	No further amount for future payments. Customers are only required to keep a positive balance.
Existing Customer with Deposit and Past Due Amount	Existing deposit will be applied to customer's account as credit	Customer required to pay at least 50% of entire account balance. However, the customer's deposit would be included as part of this 50% amount.	No further amount for future payments. Customers are only required to keep a positive balance.

Q68. How will I&M communicate account information with Flex Pay customers?

As part of the enrollment process, a customer must choose at least one preferred channel to receive all communications related to the Flex Pay program. The communication channels available to Flex Pay customers are e-mail, text, or both.

In addition to the selected communication channel, customers will also be able to check their account balance by calling the customer operations center, calling an Interactive Voice Request (IVR), or logging into their account at www.indianamichiganpower.com or on the Company's mobile app. Customers will be required to keep their contact information up-to-date to remain enrolled in the program.

If I&M is unable to communicate with the customer either by e-mail or text, a letter will be sent to the customer letting them know they have thirty days to enroll in the chosen communication method in order to remain enrolled in the program, or the customer will be removed from the Flex Pay program and enrolled in traditional post – pay billing. The customer will receive information about this process when enrolling into the program.

In addition to selecting a preferred communication method(s), participants must also select a low-balance amount of at least $25 for notification purposes. The low balance notification amount is for notification purposes only, and does not represent the minimum amount that must be kept in the account in order to continue receiving electric service.

The customer will be notified when the account balance reaches the customer-selected low balance notification amount, or the amount of $25, whichever is greater. The customer will continue to receive daily alerts so long as their account remains below the low balance notification amount.

In addition to the individual communications, Flex Pay participants will also have access to the customer engagement platform. As discussed above, this tool provides access to energy usage and cost information during the billing period, allowing customers to take action during the month to manage energy costs.

Q69. Has Flex Pay or a similar program been implemented by an I&M affiliate to help reduce overall arrearages?

Yes. Public Service Company of Oklahoma's Power Pay™ is a similar program that has been in operation since November 2016. The 80/20 split, where 80% of a customer's payment is applied to the Power Pay balance, with the remaining 20% applied to the arrears amount, enabled Power Pay customers to reduce their beginning arrearages of $5.1 million by approximately $3.5 million since the program began.

Q70. What happens when a participant's account balance reaches zero?

In addition to customers having access to daily account balances, the customer will be notified through the customer's preferred communication method when a participant's account balance reaches zero.

The customer will have until the beginning of the next business day to make a payment to re-establish a positive balance. Otherwise, the customer's meter will automatically be disconnected during normal business hours (normal business hours are 8:00 a.m. to 3:00 p.m., Monday through Thursday and 8:00 a.m. to 12:00 p.m. on Friday, excluding Company-observed holidays).

Customers will be required to adjust their payment to cover any accrued balance for usage during weekends, holidays, and moratoriums. For example, if a customer's account balance is positive on a Thursday, with Friday being a holiday, and the customer's balance goes negative over the long weekend, then in addition to the daily minimum balance alerts sent to the customer, the customer would be sent a disconnect notice on Monday using the customer's preferred method of communication.

Actual disconnection of the customer's service would occur on Tuesday unless the customer made a payment sufficient to establish a positive account balance.

Q71. How will service be reconnected following disconnection for an insufficient balance?

Following disconnection, a participant must re-establish a positive account balance through an authorized payment channel. Electric service is then automatically reconnected, typically within 15 minutes after the payment has posted. Other than establishing a positive balance, there are no minimum payments necessary, nor are there any reconnection or late fees assessed to participating customers.

Q72. Will Flex Pay customers have access to available financial assistance programs?

Generally, yes. Flex Pay customers will have the same access to energy assistance as they would on standard billing. Flex Pay customers who receive energy assistance will be able to apply payments from the Low Income Home Energy Assistance Program (LIHEAP) or Social Agencies. I&M will apply all payments to the customer's account when received.

However, any customer on Flex Pay who seeks financial hardship payment arrangements, home energy assistance under 170 IAC 4-1-16.6, or protection from disconnection by medical certificate pursuant to 170 IAC 4-1-16(c) would be removed from Flex Pay and placed onto an appropriate tariff with post-pay service plan.

Q73. Please describe the payment channels that program participants may utilize.

Authorized payment channels available to Flex Pay participants include immediate payment via telephone or website using electronic check, debit or credit cards, and any authorized in-person pay stations.

Q74. Are there costs associated with the Flex Pay program?

The estimated one-time capital expense for establishing the Flex Pay program is approximately $650,000 (Total Company). These costs include software and programming changes necessary to enable the Company's billing system to accommodate Flex Pay. These costs have been incorporated in the Cost Benefit Analysis conducted by Accenture for the overall AMI program.

Q75. What are the benefits of the Flex Pay program?

Flex Pay provides a number of benefits. First, the program provides I&M's customers with more choices regarding when and how to pay for electric service. Offering customers additional voluntary payment options allows them to decide which payment options and schedules best meet their individual needs.

Customers may choose to make smaller, but more frequent payments that may be more in-line with their cash flows, rather than a larger, single monthly payment. Not only does a prepay program help customers avoid larger than expected bills, it also provides customers more flexibility in many situations.

As shown in *Figure DAL-4*, J.D. Power's Electric Utility Residential Customer Satisfaction Study, billing and payment represents 17% of the customer satisfaction scoring index.

Figure DAL-4. Customer Satisfaction Component Weighting [5]

In evaluating the breakdown of the components of the billing payment score, there are four categories: ease of paying bill, variety of methods to pay bill, clarity of information on bill, and reasonableness of billing cycle.

The proposed Flex Pay program supports these key drivers to customer satisfaction by providing additional options, flexible billing cycles, and an easy to understand method to manage energy costs.

Second, as previously mentioned, Flex Pay allows participants to avoid deposits, reconnection fees, and late fees. By avoiding these fees, Flex Pay

[5] 2020 Electric Utility Residential Customer Satisfaction Study, J.D. Power

provides participants with flexibility, removes barriers arising as a result of the need for new customers to make deposits to establish electric service, and helps customers remain current on payment of their electric bill. Avoiding additional fees can also help to decrease account balances, benefiting all customers through a potential of reducing bad debt.

Additionally, Flex Pay enables participants to better observe the correlation between usage and cost, thus fostering more control over energy usage and the opportunity to achieve savings. In other words, customers gain a better understanding of how much their electricity usage actually costs, making them more aware of how long their dollars last, and are able to better manage energy consumption.

Q76. Has I&M included the benefits of the Flex Pay program in the Cost Benefit Analysis conducted by Accenture for the AMI program?

Yes. I&M has included benefits from the Flex Pay program in the Cost Benefit Analysis. Company witness Bech describes how the program was modeled in the Cost Benefit Analysis study. Company witness Walter describes certain assumptions that were utilized in the study.

Q77. Please describe how I&M will educate and engage its customers about the Flex Pay program.

I&M's communications plan will include several means of outreach with its customers including printed material, email, social media, and information on I&M's website. The communications plan will include information designed to manage customer expectations and allow customers to understand all aspects of Flex Pay prior to enrollment.

The education efforts will continue beyond the initial outreach for enrollment. When a customer initially enrolls in the program, they will receive alert

notifications via e-mail, text messaging, or both depending on their chosen communication method. Customers will know they are enrolled in the program by receiving a “Welcome to Flex Pay” alert message. After receiving the initial alert message, alerts are triggered by customer activity such as payments received and daily balance information, and notifications from I&M.

Flex Pay customers have the potential to receive up to nineteen types of alerts that will continue throughout a customer’s participation in the program. Energy savings and tools will be available 24/7 on the customer engagement platform.

Prior to implementation of Flex Pay, I&M customer service employees will receive specific training related to Flex Pay to better support both interested customers and ongoing participants.

Q78. Is the Company requesting any waivers in this proceeding in order to implement the Flex Pay program?

Yes. Company witness Seger-Lawson will discuss the waivers that are required for the Flex Pay program.

VIII. Conclusion

Q79. Are the projected values that you have provided for the TY reasonable, accurate and representative of the operations and maintenance costs and capital investment activity likely to occur during that period?

Yes. The levels of expense and investment included in the forecast I have presented, combined with the adjustments proposed in this case, are reasonable and necessary in the provision of service to I&M’s customers and are justified by I&M’s projected needs as supported by myself and I&M’s other witnesses.

Q80. Are the programs that you have sponsored for Customer Engagement Platform and AMI Customer Programs reasonable and necessary?

Yes. Each of the programs that I have presented are reasonable and necessary, and will provide substantial benefits to I&M customers as described in this testimony.

Q81. Does this conclude your pre-filed verified direct testimony?

Yes.

VERIFICATION

I, David A. Lucas, I&M Vice President – Regulatory and Finance, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Date: June 25, 2021

David A. Lucas

David A. Lucas

Indiana Michigan Power Company
Historic and Forecasted O&M Expenses
($000)

		Operations and Maintenance Expense					
Line	Item	2016	2017	2018	2019	2020	TY 2022
1	Steam Generation	$ 95,149	$ 97,137	$ 104,990	$ 95,622	$ 94,495	$ 91,199
2	Nuclear Generation	$ 252,159	$ 244,149	$ 257,277	$ 248,374	$ 240,256	$ 243,111
3	Hydro Generation	$ 3,583	$ 4,134	$ 5,018	$ 4,319	$ 3,206	$ 4,572
4	Other Generation	$ 6,638	$ 6,497	$ 6,856	$ 6,046	$ 4,624	$ 2,001
5	Transmission	$ 102,717	$ 145,829	$ 125,182	$ 172,146	$ 185,163	$ 248,979
6	Distribution	$ 67,675	$ 67,241	$ 81,401	$ 81,866	$ 74,701	$ 77,892
7	Customer and Information	$ 44,404	$ 47,076	$ 52,365	$ 60,265	$ 58,798	$ 47,240
8	Sales	$ 66	$ 211	$ 215	$ 272	$ 435	$ 354
9	Administrative and General	$ 114,723	$ 107,631	$ 95,144	$ 101,839	$ 96,746	$ 120,796
10	**Total O&M Expense**	**$ 687,114**	**$ 719,906**	**$ 728,447**	**$ 770,751**	**$ 758,424**	**$ 836,146**
11	**Total O&M Expense (excluding Transmission)**	**$ 584,397**	**$ 574,077**	**$ 603,265**	**$ 598,605**	**$ 573,261**	**$ 587,167**

		2022 Growth over Prior Years					
	Item	2016	2017	2018	2019	2020	Average
12	Steam Generation	-0.7%	-1.3%	-3.5%	-1.6%	-1.8%	-1.7%
13	Nuclear Generation	-0.6%	-0.1%	-1.4%	-0.7%	0.6%	-0.4%
14	Hydro Generation	4.1%	2.0%	-2.3%	1.9%	19.4%	5.0%
15	Other Generation	-18.1%	-21.0%	-26.5%	-30.8%	-34.2%	-26.1%
16	Transmission	15.9%	11.3%	18.8%	13.1%	16.0%	15.0%
17	Distribution	2.4%	3.0%	-1.1%	-1.6%	2.1%	0.9%
18	Customer and Information	1.0%	0.1%	-2.5%	-7.8%	-10.4%	-3.9%
19	Sales	32.4%	10.9%	13.2%	9.1%	-9.7%	11.2%
20	Administrative and General	0.9%	2.3%	6.1%	5.9%	11.7%	5.4%
21	**Total O&M Expense**	**3.3%**	**3.0%**	**3.5%**	**2.8%**	**5.0%**	**3.5%**
22	**Total O&M Expense (excluding Transmission)**	**0.1%**	**0.5%**	**-0.7%**	**-0.6%**	**1.2%**	**0.1%**

		Transmission O&M					
	Item	2016	2017	2018	2019	2020	TY 2022
23	Enhancement and Other PJM Costs	$ 35,841	$ 48,817	$ 6,790	$ 27,887	$ 20,416	$ 36,255
24	PJM NITS Costs	$ 43,332	$ 80,083	$ 91,507	$ 116,653	$ 141,727	$ 192,461
25	Other Transmission O&M	$ 23,544	$ 16,928	$ 26,884	$ 27,607	$ 23,020	$ 20,263
26	Total Transmission Expense	$ 102,717	$ 145,829	$ 125,182	$ 172,146	$ 185,163	$ 248,979

		2022 Transmission Growth over Prior Years					
	Item	2016	2017	2018	2019	2020	Average
27	Enhancement and Other PJM Costs	0.2%	-5.8%	52.0%	9.1%	33.3%	17.8%
28	PJM NITS Costs	28.2%	19.2%	20.4%	18.2%	16.5%	20.5%
29	Other Transmission O&M	-2.5%	3.7%	-6.8%	-9.8%	-6.2%	-4.3%
30	Total Transmission Expense	15.9%	11.3%	18.8%	13.1%	16.0%	15.0%

		Distribution O&M					
	Item	2016	2017	2018	2019	2020	TY 2022
31	Vegetation Management Program Expense	$ 17,110	$ 19,940	$ 28,843	$ 29,946	$ 26,737	$ 29,197
32	Other Distribution O&M	$ 50,565	$ 47,302	$ 52,558	$ 51,921	$ 47,964	$ 48,695
33	Total Distribution Expense	$ 67,675	$ 67,241	$ 81,401	$ 81,866	$ 74,701	$ 77,892

		2022 Distribution Growth over Prior Years					
	Item	2016	2017	2018	2019	2020	Average
34	Vegetation Management Program Expense	9.3%	7.9%	0.3%	-0.8%	4.5%	4.2%
35	Other Distribution O&M	-0.6%	0.6%	-1.9%	-2.1%	0.8%	-0.7%
36	Total Distribution Expense	2.4%	3.0%	-1.1%	-1.6%	2.1%	0.9%

		Customer and Information O&M					
	Item	2016	2017	2018	2019	2020	TY 2022
37	DSM Expense	$ 14,959	$ 19,164	$ 20,756	$ 23,096	$ 24,311	$ 13,780
38	Other Customer and Information O&M	$ 29,445	$ 27,911	$ 31,609	$ 37,168	$ 34,487	$ 33,460
39	Total Customer and Information Expense	$ 44,404	$ 47,076	$ 52,365	$ 60,265	$ 58,798	$ 47,240

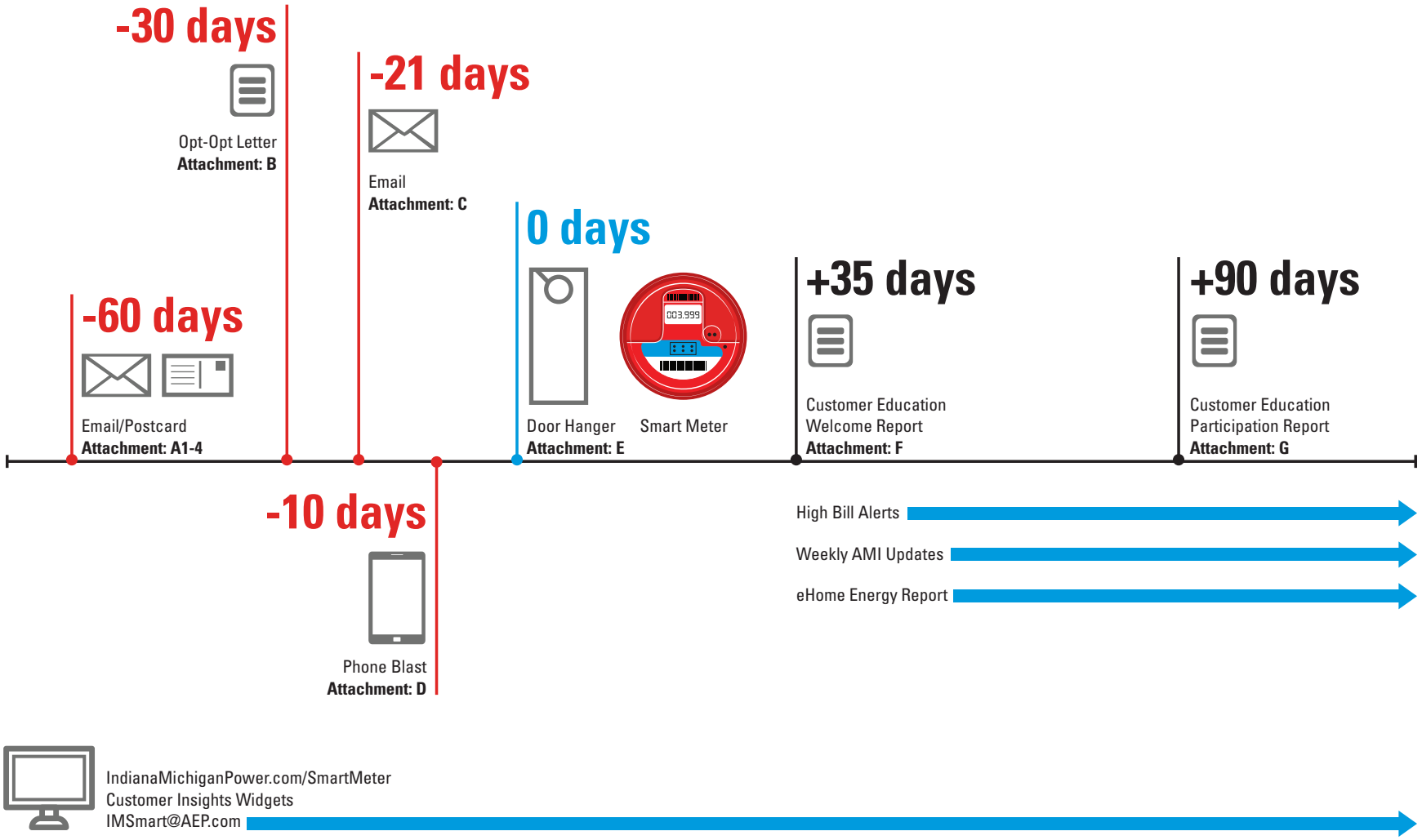
		2022 Customer and Information Growth over Prior Years					
	Item	2016	2017	2018	2019	2020	Average
40	DSM Expense	-1.4%	-6.4%	-9.7%	-15.8%	-24.7%	-11.6%
41	Other Customer and Information O&M	2.2%	3.7%	1.4%	-3.4%	-1.5%	0.5%
42	Total Customer and Information Expense	1.0%	0.1%	-2.5%	-7.8%	-10.4%	-3.9%

Account 575.7 is shown here at transmission rather than generation.
WP-DAL-1 excludes Accretion Line of Credit Fees and excludes fuel, consumables, allowances, and purchased power.

Indiana Michigan Power Company
Historic and Forecasted Capital Expenditures
Excluding AFUDC
($000)

	Actual					Forecast	
Fully Functionalized View	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Nuclear Generation	217,533	174,567	174,855	150,361	67,880	62,727	79,311
Other Generation	14,955	19,252	8,763	5,938	7,757	13,231	21,138
Environmental Generation	64,242	41,339	30,784	55,838	31,266	14,857	14,920
New Generation	22,391	36	-	(9)	3	6	
Reg Renewables		5,126	3	1,364	26,270	1,289	2,000
Transmission	93,196	91,680	80,314	89,767	99,687	98,098	79,182
Distribution	156,312	213,349	205,988	199,048	191,925	254,505	251,148
Corporate/Other	27,676	61,869	51,247	64,342	84,810	99,657	87,688
Total Capital Expense	**596,305**	**607,218**	**551,955**	**566,649**	**509,600**	**544,370**	**535,387**

AMI Customer Experience



SMART METERS

GIVE YOU THE
POWER TO SAVE

Coming Soon

800-311-4634
IndianaMichiganPower.com/**SmartMeters**

INDIANA MICHIGAN POWER
An AEP Company
P.O. Box 60
Fort Wayne, IN 46801

More than 98 million U.S. homes have safe, secure and reliable smart meters.

Soon that will include your home, because I&M will be installing a smart meter for you. Smart meters give you more control over your energy use and your bill. Monitor what you are using – in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com**.

You will be notified when we are installing meters in your neighborhood. Our crews will follow COVID-19 guidelines issued by the Centers for Disease Control and Prevention (CDC) to ensure the safety and health of our customers and our employees.

Benefits for You

- See What You Are Spending with 24/7 Access
- Create Good Energy-saving Habits
- Get Proactive Alerts
- Eliminate Manual Meter Readings

RES 2/21

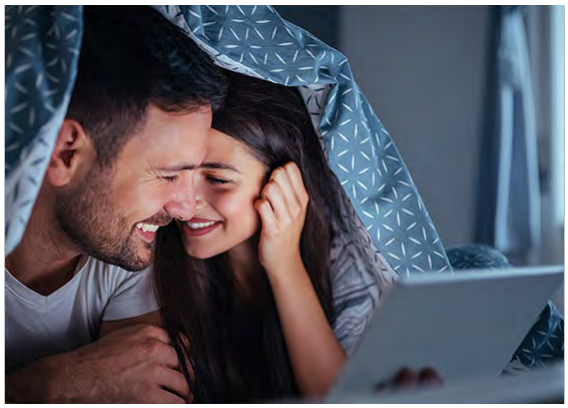
Charlotte J Heaston

From: Indiana Michigan Power <news@impoweraep.com>
Sent: Wednesday, July 22, 2020 9:00 AM
To: Charlotte J Heaston
Subject: [EXTERNAL] Get Control Over Your Energy Use

More than 98 million U.S. homes have safe, secure and reliable smart meters.

Soon that will include your home, because I&M will be installing a smart meter for you. Smart meters give you more control over your energy use and your bill. Monitor what you are using — in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com**.

You will receive information on when your smart meter will be installed. Our crews will practice physical distancing as we follow the Centers for Disease Control and Prevention (CDC) recommendations related to the COVID-19 pandemic to ensure the safety and health of our customers and our employees.



Smart meters use secure, two-way wireless communication to send information between your meter and I&M. Cell phones, laptops, baby monitors and TV remotes also use wireless signals. Just like those devices, smart meters provide convenience and control. Plus they can help you save on energy costs.

Smart Meter Benefits for You

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

See What You Are Spending with 24/7 Access

You don't need to wait for your bill to see how much energy you're using. Monitor what you are using — in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com**.

Create Good Energy-saving Habits

Get personalized tips on easy ways to save energy. See when you are using energy by the quarter-hour, hour, day, month or year. Your use is measured in both dollars and kWh, helping you set energy goals and budgets.

Get Proactive Alerts

Set alerts to help you stick to your budget and energy goals.

Eliminate Manual Meter Readings

Manual readings are a thing of the past. Your smart meter sends your energy use details directly to I&M. If you are moving and need to start or stop service, it can be done without a field visit.

Download the I&M Mobile App from **Google Play** or the **App Store** or go to your **IndianaMichiganPower.com** account to get all the benefits.

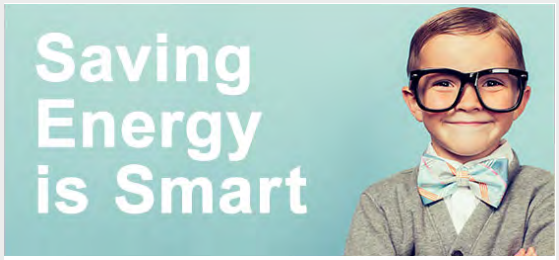
For more information, visit **IndianaMichiganPower.com/SmartMeters** or contact us at **800-311-6424** or **IMSmart@AEP.com**

It's Just Smart.

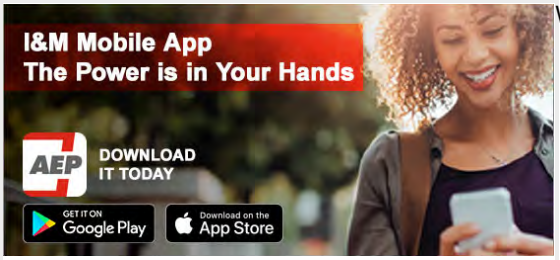
Saving Energy. That's Smart.

Save with these energy-saving products, rebates and discounts.

Attachment A2



It's easier than ever to have a more comfortable, energy-saving home and help protect the environment. Go to **ElectricIdeas.com/Home** for energy-saving products, rebates and discounts. Saving Energy. That's Smart!



With the I&M mobile app you can monitor your energy use, view and pay your bill, report or check an outage, manage your accounts, enroll in paperless billing and more! Download the **I&M Mobile app** today from the **App store** or **Google Play**.

Attachment A2

Attachment A3

INDIANA MICHIGAN POWER
An AEP Company
P.O. Box 60
Fort Wayne, IN 46801

Coming Soon

Smart meters use technology to give you more control over your business's energy use and bill.

Over the next few months, a smart meter will be installed at your business. You will be notified when we are installing meters in your neighborhood.

Our crews will follow COVID-19 guidelines issued by the Centers for Disease Control and Prevention (CDC) to ensure the safety and health of our customers and our employees.

BUS 2/21

Attachment A3

Charlotte J Heaston

From: Indiana Michigan Power <news@impoweraep.com>
Sent: Wednesday, July 22, 2020 9:00 AM
To: Charlotte J Heaston
Subject: [EXTERNAL] Get Control Over Your Energy Use

Smart meters use technology to help you make better sense of the energy your business uses. It gives you more control over your business's energy use and bill.

In the coming weeks and months, smart meters will be installed for our Michigan commercial customers. You will receive information on when your smart meter will be installed.

Our crews will practice physical distancing as we follow the Centers for Disease Control and Prevention (CDC) recommendations related to the COVID-19 pandemic to ensure the safety and health of our customers and our employees.

Smart meters use secure, two-way wireless communication to send information between your meter and I&M. Cell phones, laptops, baby monitors and TV remotes also use wireless signals. Just like those devices, smart meters provide convenience and control. Plus they can help you save on energy costs.

Attachment A4

You can access usage information at **IndianaMichiganPower.com/Account**.

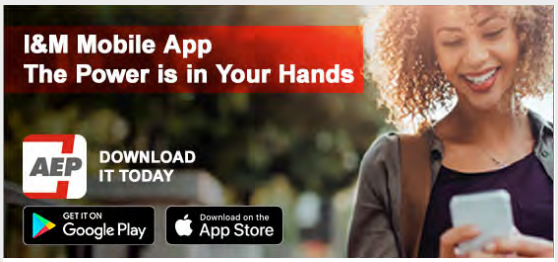
For more information, visit **IndianaMichiganPower.com/SmartMeters** or contact us at **800-311-6424** or **IMSmart@AEP.com**

It's Just Smart.

Saving Energy. That's Smart.

Save with these energy-saving products, rebates and discounts.

It's easier than ever to save energy, improve your bottom line and help protect the environment. Go to **ElectricIdeas.com/Work** to learn how to get energy savings that are right for your company. Saving energy at home and work. That's Smart!



With the I&M mobile app you can monitor your energy use, view and pay your bill, report or check an outage, manage your accounts, enroll in paperless billing and more! Download the **I&M Mobile app** today from the **App store** or **Google Play**.

Download our app!

Google Play App Store

Attachment A4

JOE CUSTOMER
1000 ABC Street
BENTON HARBOR, MI 12345

March 18, 2021

Dear Joe,

More than 98 million U.S. homes have safe, secure and reliable meters. Soon that will include your home because I&M will be installing a smart meter for you. Smart meters give you more control over your energy use and your bill. You can monitor your energy use – in near real-time with the I&M Mobile App or through your account on IndianaMichiganPower.com

What are smart meters?

Smart meters use secure, two-way wireless communication to send information between your meter and I&M. Cell phones, laptops, baby monitors and TV remotes also use wireless signals. Just like those devices, smart meters provide convenience and control. Plus, they can help you save on energy costs.

Smart Meter Benefits for You

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

- **See What You Are Spending with 24/7 Access**

You don't need to wait for your bill to see how much energy you're using. Monitor what you are using – in near real-time with the I&M Mobile App or through your account on IndianaMichiganPower.com.

- **Create Good Energy-saving Habits**

Get personalized tips on easy ways to save energy. See when you are using energy by the quarter-hour, hour, day, month or year. Your use is measured in both dollars and kWh, helping you set energy goals and budgets.

- **Get Proactive Alerts**

Set alerts to help you stick to your budget and energy goals.

- **Eliminate Manual Meter Readings**

  Manual readings are a thing of the past. Your smart meter sends your energy use details directly to I&M. If you are moving and need to start or stop service, it can be done without a field visit.

Download the I&M Mobile App from Google Play or the App Store or go to your **IndianaMichiganPower.com** account to get all the benefits.

When will I get a smart meter?

Smart meter installation begins this year for your area. We will attempt to call and leave a message about 10 days before your smart meter is installed. This is in addition to the postcards and/or email you have already received.

For your safety and security, the crews installing the smart meters will have vehicles marked with an I&M logo or an I&M contractor logo. You are not required to be present on the day of installation.

I&M is very mindful of the circumstances surrounding the COVID-19 pandemic. Our crews will practice physical distancing and follow recommendations set forth by the CDC to ensure the safety and health of our customers and our employees.

There will be a short interruption to your electric service when the smart meter is installed. You may need to reset your digital devices. Once the installation is complete, a notice will be left on your door. If for some reason the technician was not able to complete the install, you will be given information on how to reschedule the installation.

Go to **IndianaMichiganPower.com/SmartMeters** to find out more and to see a short video on the installation process.

Can I keep my existing meter?

The Indiana Utility Regulatory Commission (IURC) has approved the option for residential customers to opt out of receiving a smart meter. Customers who want to opt out should call Customer Service at 800-311-4634 or submit a request on **IndianaMichiganPower.com/SmartMeters**. Upon request, a Smart Meter Opt-Out Request form will be mailed to you to complete and confirm your decision to opt out.

The Indiana Utility Regulatory Commission has approved a $16.48 monthly fee for customers who decline the installation of a smart meter. The $16.48 monthly fee goes towards the costs associated with sending an I&M representative to read your meter. This charge will be applied to your monthly bill and payment of this fee will be required to maintain service. Failure to pay may result in disconnection. There is also a self-read option in Indiana that allows the customer to assume the meter reading responsibilities without the monthly fee.

For more information, visit **IndianaMichiganPower.com/SmartMeters** or contact us at 800-311-4634 or IMSmart@AEP.com.
Thank You

Attachment B

Charlotte J Heaston

From: Indiana Michigan Power <news@impoweraep.com>
Sent: Monday, October 26, 2020 9:01 AM
To: Charlotte J Heaston
Subject: [EXTERNAL] Your Smart Meter is Coming Soon

More than 98 million U.S. homes have safe, secure and reliable smart meters. Soon that will include your home. In the next month, I&M will be installing smart meters in your neighborhood.

Smart meters give you more control over your energy use and your bill. You can monitor the energy you are using — in near real-time with the **I&M Mobile App** or through your account on **IndianaMichiganPower.com**.

Over the next few weeks, you may see our crews in your neighborhood. For your safety and security, they will have vehicles marked with an I&M logo. We will also call and leave a message about 10-days before your smart meter is installed. The **Get Smart about Smart Meters** video explains the installation process.

I&M is very mindful of the circumstances surrounding the COVID-19 pandemic. Our crews will practice physical distancing and follow recommendations set forth by the CDC to ensure the safety and health of our customers and our employees.

Smart Meter Benefits for You

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

See What You Are Spending with 24/7 Access

You don't need to wait for your bill to see how much energy you're using. Monitor what you are using — in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com**.

Create Good Energy-saving Habits

Get personalized tips on easy ways to save energy. See when you are using energy by the quarter-hour, hour, day, month or year. Your use is measured in both dollars and kWh, helping you set energy goals and budgets.

Get Proactive Alerts

Set alerts to help you stick to your budget and energy goals.

Eliminate Manual Meter Readings

Manual readings are a thing of the past. Your smart meter sends your energy use details directly to I&M. If you are moving and need to start or stop service, it can be done without a field visit.

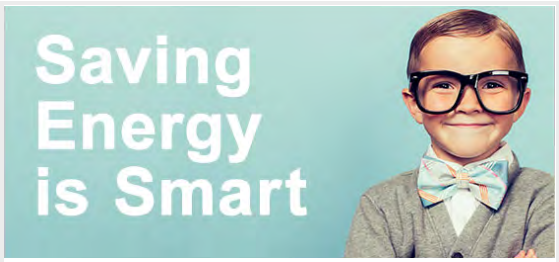
Download the I&M Mobile App from **Google Play** or the **App Store** or go to your **IndianaMichiganPower.com** account to get all the benefits.

For more information, visit **IndianaMichiganPower.com/SmartMeters** or contact us at **800-311-6424** or **IMSmart@AEP.com**

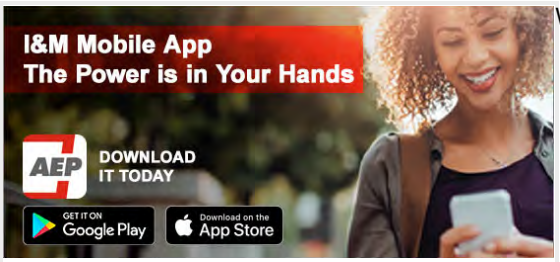
It's Just Smart.

Saving Energy. That's Smart.

Save with these energy-saving products, rebates and discounts.



It's easier than ever to have a more comfortable, energy-saving home and help protect the environment. Go to **ElectricIdeas.com/Home** for energy-saving products, rebates and discounts. Saving Energy. That's Smart!



With the I&M mobile app you can monitor your energy use, view and pay your bill, report or check an outage, manage your accounts, enroll in paperless billing and more! Download the **I&M Mobile app** today from the **App store** or **Google Play**.

Download our app!

Google Play App Store

Manage Your Preferences Contact Us Unsubscribe Privacy Policy

Indiana Michigan Power,
110 E Wayne St, Fort Wayne, IN 46802
1-800-311-4634

Attachment C

Phone Blast: AMI Notification

Please hold for an important message from Indiana Michigan Power.

This is Indiana Michigan Power, calling to inform you, we will begin installing new meters in your neighborhood in a few weeks. The new meters will enable you to better monitor and manage your energy use. Please note there may be a brief interruption in service.

I&M is very mindful of the circumstances surrounding the COVID-19 pandemic. Our crews will practice physical distancing, as well as following the recommendations set forth by the Centers for Disease Control and Prevention (CDC), to ensure safety and health of our customers and our employees.

For more information or questions, please visit our website at IndianaMichiganPower.com/SmartMeters or contact our Customer Operations Center at 1-800-311-6424, again that number is 1-800-311-6424. Thank You.

Date _____

More than 98 million U.S. homes have safe, secure and reliable smart meters. Today, was your day to get a new smart meter.

△ **Congratulations!** We installed your new smart meter today. Your new meter gives you more control over your energy use and the power to save. Go to **IndianaMichiganPower.com/SmartMeters** to learn more.

△ **We're sorry.** We weren't able to upgrade your home with a new smart meter because _____

_____

_____

Please call 800-311-4634 to schedule an installation appointment for your new smart meter. Our crews will practice physical distancing as we follow the Centers for Disease Control and Prevention (CDC) recommendations related to the COVID-19 pandemic to ensure the safety and health of our customers and our employees.

IndianaMichiganPower.com/SmartMeters

INDIANA MICHIGAN POWER

Your New Smart Meter.

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

Benefits for You

See What You Are Spending with 24/7 Access
You don't need to wait for your bill to see how much energy you're using. Monitor what you are using – in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com**.

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Eliminate Manual Meter Readings
Manual readings are a thing of the past. Your smart meter sends your energy use details directly to I&M. If you are moving and need to start or stop service, it can be done without a field visit.

Download the I&M Mobile App or go to your **IndianaMichiganPower.com** account to get all the benefits.

It's Just Smart

IndianaMichiganPower.com/SmartMeters

INDIANA MICHIGAN POWER

4/20

Attachment E

Indiana Michigan Power
PO Box 60
Fort Wayne, IN 46801

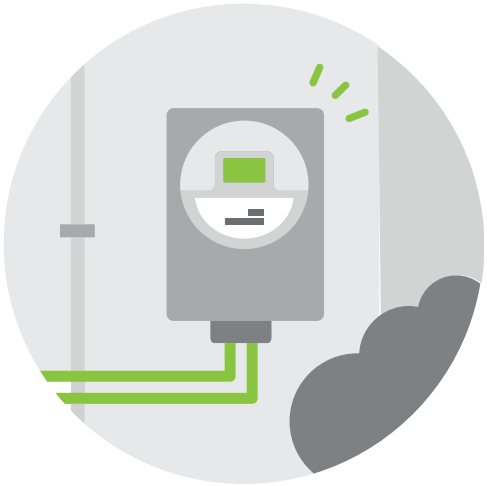
Your new smart meter gives you more insights into your energy use than ever. Knowing how your home uses energy helps you make smarter energy choices. Find energy-saving products, rebates and discounts.

- **ElectricIdeas.com/Home**

Have you taken advantage of your smart meter yet?

You can now discover more about your energy use end receive personalized alerts.

- **Learn more at IndianaMichiganPower.com/SmartMeters**



What is a smart meter?

Using secure wireless technology, Smart meters send your home's energy use to Indiana Michigan Power - no more estimated bills or manual reads.

Why a smart meter?

Smart meters give you more control over your energy use and the power to save. You have 24/7 access to your current bill with near-real time hourly usage information.

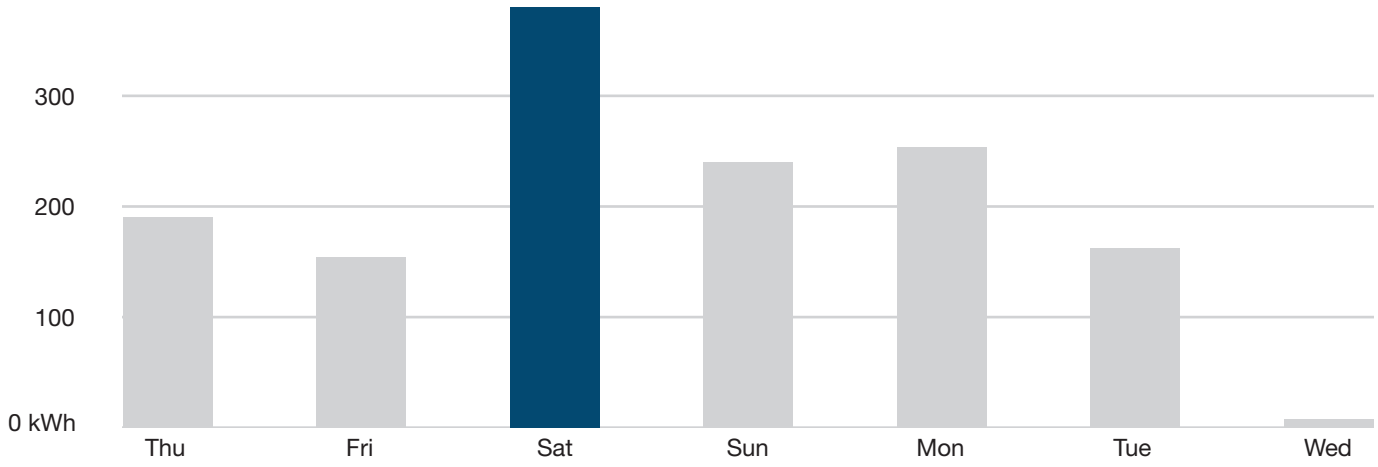
How is this good for me?

Smart meters empower your with personalized data. Plus, get easy, affordable tips on how to save. Go to My Account on **IndianaMichiganPower.com** to confirm your preferred email address and to access your real-time energy use.

For more information on your energy use, visit IndianaMichiganPower.com

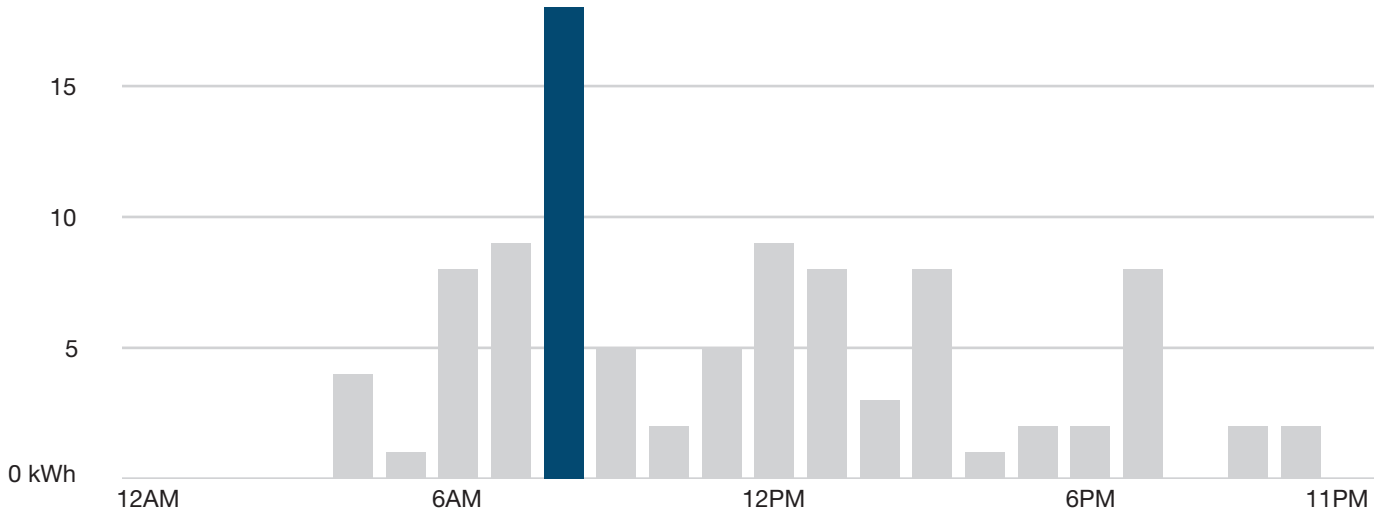
Your smart meter insights

This week, you used the most energy on Saturday



Oct 09, 2014 - Oct 15, 2014

On Sunday, you used the most energy from 8AM - 9AM.



Oct 12, 2014

Get weekly email reports

Receive weekly emails that highlight how your home uses energy. Plus, get easy, affordable tips on how to save. Go to My Account on **IndianaMichiganPower.com** to confirm your preferred email address and access your near real-time energy use.

Attachment F

Indiana Michigan Power
PO Box 60
Fort Wayne, IN 46801

Have you taken advantage of your smart meter yet?

Your new smart meter gives you more insights into your energy use than ever. Knowing how your home uses energy helps you make smarter energy choices. Find energy-saving products, rebates and discounts.

- **ElectricIdeas.com/Home**

New! Your smart meter insight:

You're a Morning User

You used the most energy from 6am - 12pm.

Mornings	**6am - 12pm**	**40%**
Afternoons	12pm - 6pm	10%
Evenings	6pm - 12am	15%
Nights	12am - 6am	35%

July 31, 2014 - September 30, 2014

Ways to save for Morning Users

- **Shower time**
  Try cutting 1 minute off your shower time.
- **Making coffee**
  Keep coffee in a thermos so it stays warm longer.

See tools powered by your smart meter:

Home Profile
Update your home's information to get personalized energy-saving tips.

High Usage Alerts
Stop high bills before they come with email message alerts.

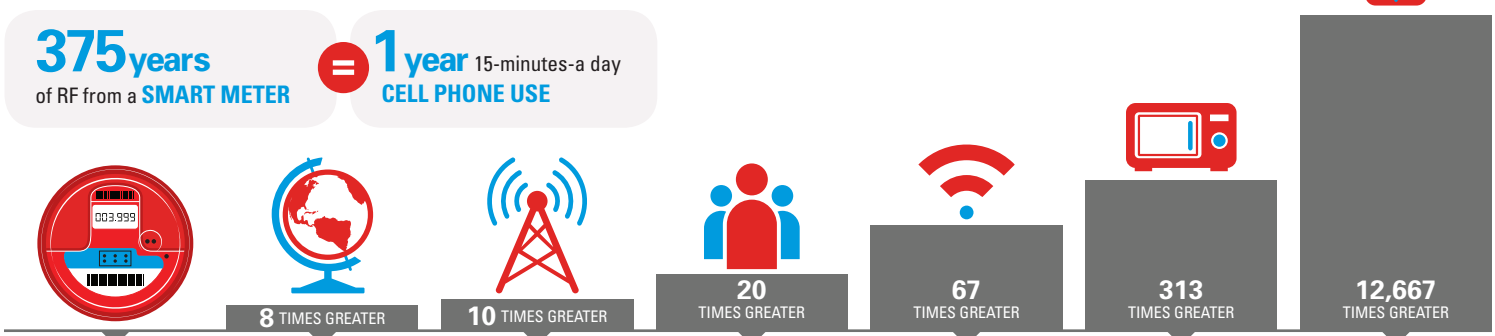
Weekly Reports
Enroll in weekly emails to see your energy use and ways to save.

- **Visit IndianaMichiganPower.com for more information.**

Attachment G

Smart Meter Radio Frequency Comparison

375 years of RF from a **SMART METER** = **1 year** 15-minutes-a day **CELL PHONE USE**



Smart Meter Outside at 1 yd. Away	Natural RF from the Earth	TV, Radio, and Cell Towers	Natural RF from the Human Body	Wi-Fi Signal	Microwave Oven	Cell Phone Next to Your Head
0.000015 mW/cm^2	0.00013 mW/cm^2	0.00015 mW/cm^2	0.0003 mW/cm^2	0.0010 mW/cm^2	0.0047 mW/cm^2	0.19 mW/cm^2

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

Smart meters use secure, two-way wireless communication to send information between your meter and I&M. Cell phones, laptops, baby monitors, microwaves and TV remotes also use wireless Radio Frequency signals.

In today's world, you are continuously exposed to very low levels of man-made RF signals. In fact, even the earth's surface and the human body are constant sources of RF.

Download the I&M Mobile App or go to your **IndianaMichiganPower.com** account to get all the benefits.

It's Just Smart

mW/cm^2 = Milliwatts per Square Centimeter

Source: Electromagnetic Interference and Exposure From Household Wireless Networks by Dr. Yakov P. Shkolnikov, Ph.D. Electrical Engineering, Princeton University, 2005, M.A., Electrical Engineering, Princeton University, 2004, B.S., Engineering Physics, Cornell University (summa cum laude), 1999.

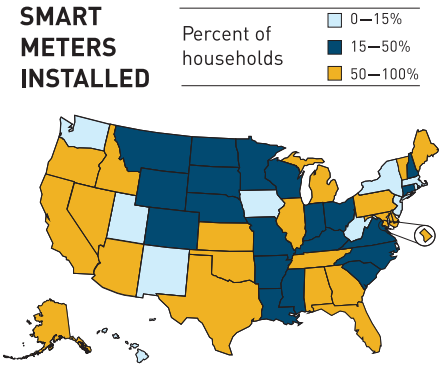
IndianaMichiganPower.com/**SmartMeters**

INDIANA MICHIGAN POWER

Smart Meters

Smart meters use technology to give you more control over your energy use and help you save. More than 98 million U.S. homes have safe, secure and reliable smart meters.

In today's digital world, we depend more than ever on reliable energy to power the technology we use in our daily lives. Smart meters are helping to create a smarter, stronger and more efficient electric grid to meet your energy needs.



75%
of U.S. households have a smart meter

Benefits for You

Smart meters use technology to help you make sense of the energy you use. They give you more control over your energy use and your bill.

See What You Are Spending with 24/7 Access
You don't need to wait for your bill to see how much energy you're using. Monitor what you are using – in near real-time with the I&M Mobile App or through your account on **IndianaMichiganPower.com.**

Create Good Energy-saving Habits
Get personalized tips on easy ways to save energy. See when you are using energy by the quarter-hour, hour, day, month or year. Your use is measured in both dollars and kWh, helping you set energy goals and budgets.

Get Proactive Alerts
Set alerts to help you stick to your budget and energy goals.

Eliminate Manual Meter Readings
Manual readings are a thing of the past. Your smart meter sends your energy use details directly to I&M. If you are moving and need to start or stop service, it can be done without a field visit.

Download the I&M Mobile App or go to your **IndianaMichiganPower.com** account to get all the benefits.

How a Smart Meter Works

Smart meters use secure, two-way wireless communication to send information between your meter and I&M. Cell phones, laptops, baby monitors and TV remotes also use wireless signals. Just like those devices, smart meters provide convenience and control.

It's Just Smart

800-311-4634
IndianaMichiganPower.com/**SmartMeters**

INDIANA MICHIGAN POWER

Home Energy Management Platform

Powered by Oracle Utilities

Proactive communications and experiences that deliver personalized, actionable insights giving customers control of their energy use while deepening AEP's role as a trusted energy advisor.

Customer Engagement Reports (CER)	Oracle Utilities AMI Customer Education Reports are proactive outreach for customers who are transitioning to an AMI smart meter. The AMI CER customer experience includes two alerts, each delivered at a different moment in the customer's AMI journey: a Welcome Letter and a Participation Letter. The Welcome Letter addresses common questions that customers are likely to have about their new smart meters shortly after installation, followed by personalized insights from that customers' own daily and hourly data. The Participation Letter re-engages customers around ninety days after smart meter installation with fresh AMI data insights. It encourages them to continue exploring on the web and motives customer to opt-in to programs and services available from AEP.
High Bill Alerts	High Bill (or high usage) Alerts (HBAs) use interval data to notify customers when they are trending toward a higher-than-usual bill. Customers receive a heads up before they get a high bill and directed online for deeper engagement. AMI data is used to guide customers on how best to adjust their energy use before the end of the billing period. HBAs drive engagement by reaching customers with energy advice at a moment when that information is most likely to be actionable.
Weekly Energy Usage Alerts	Weekly Energy Updates offer weekly energy usage insights for your AMI customers. They showcase each customer's week-over-week usage and highlight trends over time. These emails use AMI data to provide actionable usage and billing information that enables customers to learn more about their energy usage patterns, trends, and projected energy usage or costs.
Bill Comparison	Providing customers with an intuitive bill comparison tool unlocks tremendous value for utilities, With Bill Comparison, customers can quickly and easily make relevant bill comparisons without sifting through all their bill details. Bill Comparison supplies personalized explanations for changes in customer's bills along with recommendations. This personal advice is designed to answer common questions in order to help avoid the need for customers to make a call into the contact center.
Bill Forecast	Bill Forecast (AMI) helps customers predict and manage their upcoming bills. The projection shows customers their current usage or cost to date in the billing period, their projected usage or cost for the billing period, and their typical usage or cost for the period, based on their past usage.
Data Browser	Data Browser helps customers visualize and explore trends in their energy behavior. Customers view their energy use over time alongside relevant comparisons based on weather, neighbors, and prior usage. Customers can review an entire year, or those with AMI data can also drill down to view usage and comparisons within a specific bill period or day.
Ways to Save	Ways to Save provides customers with reasonable actions that they can take to control their energy use and save on their bills. Each energy saving tip comes with an accompanying dollar savings estimate. The widget uses Oracle Utilities dynamic Intelligent Tip Targeting (ITT) algorithm to prioritize the tips that appear for each customer based on their historical interactions and unique customer profiles.

Customer Education Reports

Oracle Utilities AMI Customer Education Reports are proactive outreach for customers who are transitioning to an AMI smart meter

Welcome Experience

Customers receive their Welcome Letter/Email one month after smart meter installation. The main purpose of this communication is to educate customers on what a smart meter is and highlight the new benefits including detailed energy use and helpful alerts.

Participation Experience

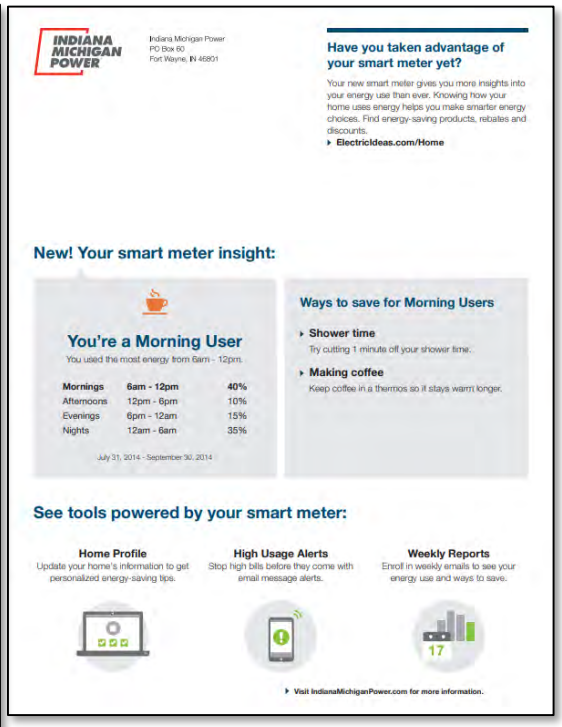
3 months after smart meter installation, customers receive a Participation Letter/Email. The main purpose of this communication is to highlight new smart meter enabled insights and programs and drive customers to enroll online. Customers are informed when they use energy and which of the four load archetype they belong to.

Welcome Letter

Participation Experience

Email

Paper

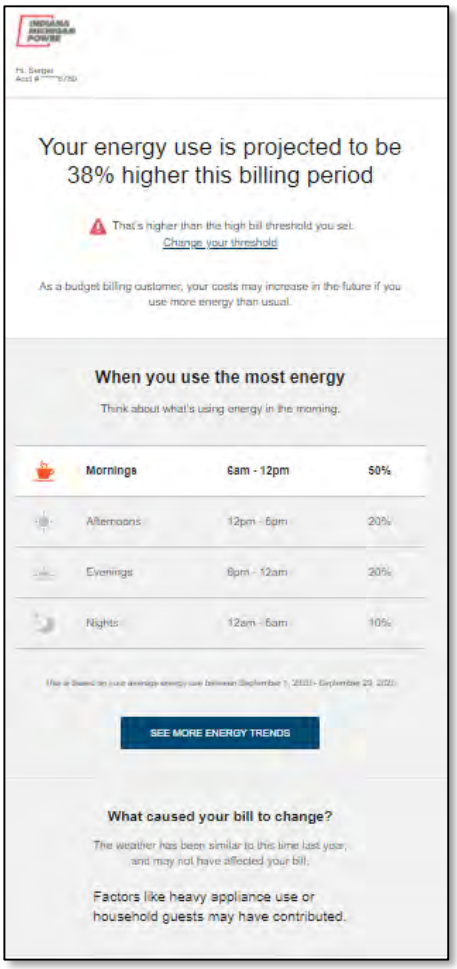


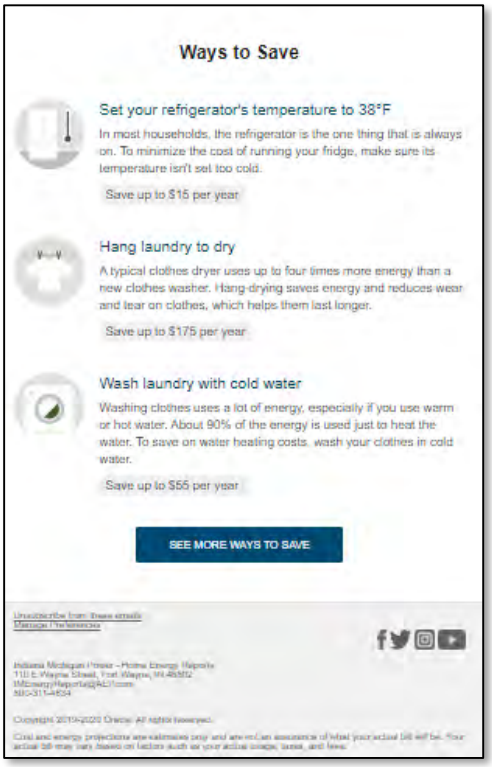
Proactive Alerts

High Bill Alerts

High Bill (or high usage) Alerts (HBAs) use interval data to notify customers when they are trending toward a higher-than-usual bill. Customers receive a heads up before they get a high bill and directed online for deeper engagement.

High Bill Alert Email

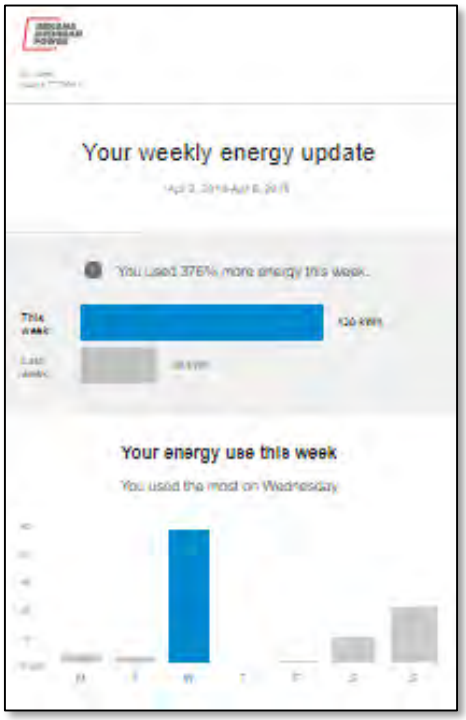


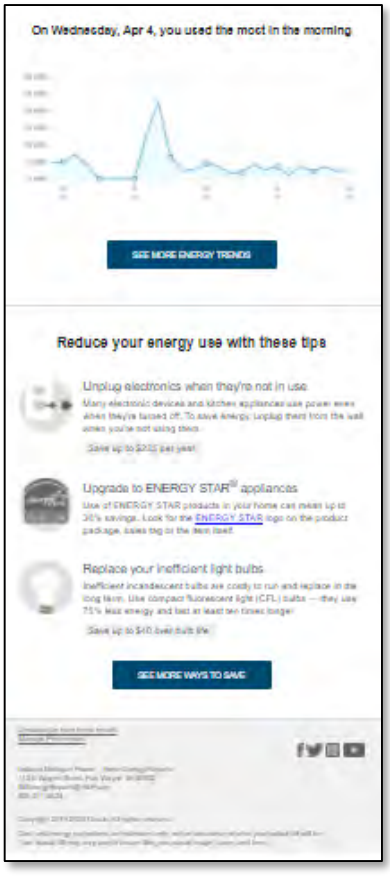


Weekly Energy Updates

By providing actionable information about energy habits, these emails help customers understand how their actions correspond to their utility bills, get a preview of their usage or bill, and get helpful insights on how to adjust their energy habits for lower bills.

Weekly Energy Update Email





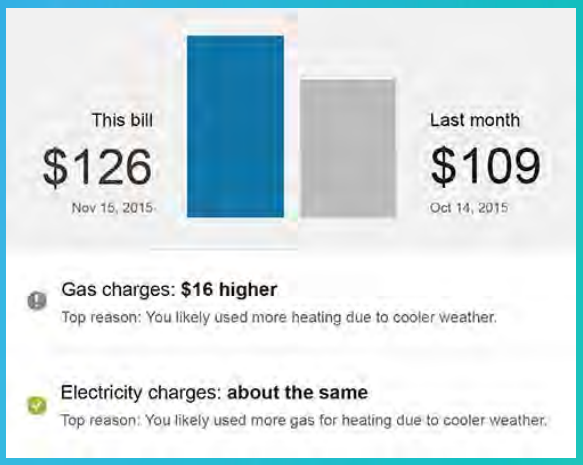
Web Experience

Embedded Opower widgets deliver a personalized web experience

Once driven online, customers find personalized, insight-rich web tools that strengthen the customer relationship and increase self-service. Wdigets are embedded directly on to IndianaMichiganPower.com. Doing so allows customers personalized data, analysis, energy use projections, and energy savings tips at their fingertips.

Bill forecast

Bill comparison



Data browser

Ways to save

New Ways to Manage Your Energy Usage Online

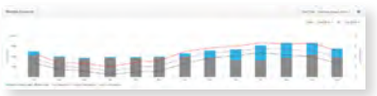
Your online account makes it easy to see your bill, choose your payment method, track your usage and more — from any of your devices, including desktop, tablet or mobile.

We've enhanced the data available to business customers so that you can more easily track your energy usage over time and make smart budgeting decisions. If you haven't already, register for your online account at **IndianaMichiganPower.com/Account** to access these features and manage your bill.[1]

Key Features

1. USAGE/DEMAND OVERVIEW

Analyze your energy usage and annual demand trends.



Usage Over Time
View up to three years of monthly energy usage data. Customers with interval data will be able to drill down to daily and 15-minute intervals. Demand (kW), power factor and Green Button DMD are also available through this chart.

Year to Year Energy Consumption
View energy consumption for each calendar month rather than bill cycle. See how your monthly energy usage compares across different years.

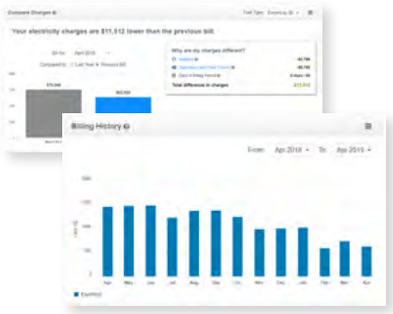
Weather Impact
See how weather impacts your energy usage. Depending on your business, you may see a more dramatic change than others.

[1] If setting up your account for the first time, it may take up to 24 hours for enhancements to appear.

Continued →

2. BILLING INSIGHTS

Compare charges from previous billing cycles and year over year.



Compare Charges

Compare charges from previous bill cycles or the previous year, and receive a high-level explanation of the changes.

Billing History

View your billing history trends and compare bill cycle periods.

3. FACILITY INSIGHTS

Complete a facility profile to receive personalized energy efficiency recommendations, end use disaggregation data, and peer comparisons based on your facility type.

Energy Efficiency Recommendations

Receive savings recommendations based on information about your facility.

End Use Disaggregation Chart

Get an idea of what's consuming the most energy in your facility. Compare specific energy drivers to similar and energy efficient sites. Customers with access to interval data will see enhanced features.

Cumulative and Peer Comparison

View a summary of your site's entire usage compared to similar and energy efficient sites. Customers with multiple accounts will have the ability to view cumulative and comparative data.

Operating Schedule/Daily Demand[2]

Identify high demand outside of operating hours with this chart that provides a look at average daily demand based on your schedule.

Annual Demand[2]

See the impact weather has on your facility with a heat map that displays annual demand data alongside heating and cooling.

[2] This chart is only available for customers with access to interval data.

Questions? Contact Customer Service at 1 800-311-4634.