STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA MICHIGAN POWER COMPANY, AN INDIANA CORPORATION, FOR (1) AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC UTILITY SERVICE THROUGH A PHASE IN RATE ADJUSTMENT; (2) APPROVAL OF: REVISED DEPRECIATION RATES; ACCOUNTING RELIEF; INCLUSION IN BASIC RATES AND CHARGES OF QUALIFIED POLLUTION CONTROL PROPERTY, CLEAN ENERGY PROJECTS AND COST OF BRINGING I&M'S SYSTEM TO ITS PRESENT STATE OF EFFICIENCY; RATE ADJUSTMENT MECHANISM PROPOSALS; COST DEFERRALS; MAJOR STORM DAMAGE RESTORATION RESERVE AND DISTRIBUTION VEGETATION MANAGEMENT PROGRAM RESERVE; AND AMORTIZATIONS; AND (3) FOR APPROVAL OF NEW SCHEDULES OF RATES, RULES AND REGULATIONS.	)	**CAUSE NO. 44967**

SUBMISSION OF PERFORMANCE METRICS REPORT
COMPLIANCE FILING

In accordance with Section 7.G of the Commission's May 30, 2018 order in Cause No. 44967, Indiana Michigan Power Company submits its annual Performance Metrics report.

Respectfully submitted,

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INDIANA MICHIGAN POWER
An AEP Company
BOUNDLESS ENERGY

Indiana Performance Metrics Report

2021

July 1, 2022

Cause No. 44967

Contents of Report

Executive Summary

This report examines the performance of Indiana Michigan Power Company in seven areas over a ten-year period. Most of the qualitative content concerns 2021 data. Unless otherwise stated, metrics reflect the company's Indiana jurisdiction.

Safety. I&M received its fourth consecutive Koselke Outstanding Safety Award by the Indiana Energy Association. Efforts continue to focus on improving safety focus, driving attention, and protecting against COVID. The Days Away, Restricted, or Transferred (DART) rate fell to its lowest rate in the reporting period. Business district structures identified through routine inspection to have stray voltages also fell to the lowest level in the reporting period.

Reliability. The Indiana service territory experienced unusually severe weather in 2021. I&M received more weather alerts than in any previous period. However, when the major event days are excluded, the average service interruption was the lowest in the last seven years. Much of this is attributed to the targeted investments in infrastructure, improvements in transmission performance, and scheduled outage management.

Additionally, the company completed its transition to a four-year vegetation management cycle. The transition plan included an expansion of many line corridors, which requires more labor than ongoing maintenance of existing corridors.

Generation. The St. Joseph Solar Farm came online in March 2021. Nuclear generation continued to provide customers with reliable, steady energy. Over sixty percent of the company's purchased and generated power did not result in any greenhouse gas emissions. Longer maintenance outages and reduced river flow cause hydro availability to fall.

Customer Service. Although the average speed of answer increased by ten seconds due to labor shortages, the abandonment rate fell from 5.5% to 4.5%. The J.D. Power score fell but remained higher than the 2019 score. The increase in the J.D. Power score in 2020 was likely due to I&M's efforts to work and communicate with its customers during the pandemic. These actions included the disconnection moratorium and extended payment plans. The Commission found that less than six percent of filed customer complaints were substantiated.

Expense. After falling almost 5% in 2020, commercial and industrial sales regained 2% in 2021. However, wholesale sales fell for the fourth straight year and total sales were the lowest in over a decade. Normalized use per residential customer has fallen by an average of 1.1% annually in the last ten years. I&M continues to work to maintain reasonably flat O&M expense and offset inflationary increases.

Affordability. Arrearages rebounded from COVID, while disconnections also rose back to more typical levels. The Commission approved a slight decrease to base rates in February 2022.

Employees. Retirements increased significantly, following a national trend. Senior management continues to focus on diversity and inclusion initiatives. Diverse candidates filled recent vacancies for the positions of Communications Director and Vice President of External Affairs & Customer Experience.

1. Safety

The health and safety of employees, business partners, and the public is one of I&M's core values. Our Environmental Health and Safety Philosophy states "No aspect of operations is more important than the health and safety of people. Our customers' needs are met in harmony with environmental protection."

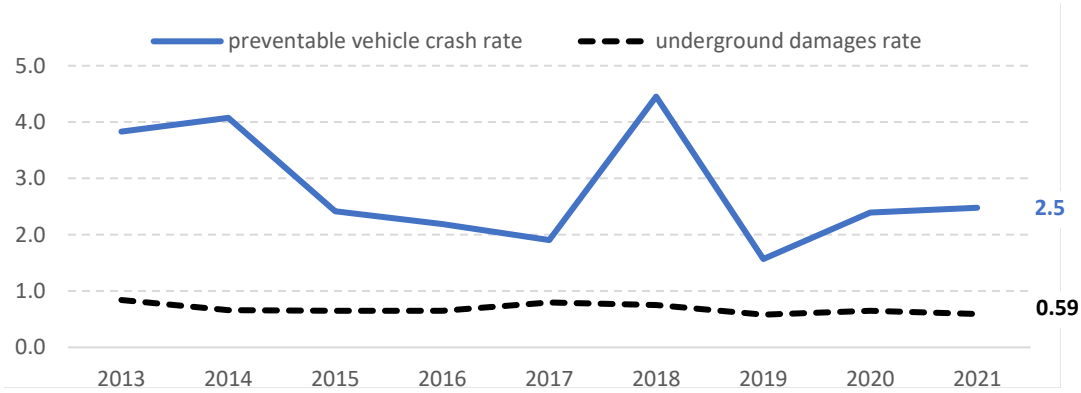
I&M has established a strong safety culture and expects any employee or business partner to stop a job if they identify a safety concern. Each quarter, leadership conducts CORE (*Coaching through Observation, Recognition, and Engagement)* visits, the purpose of which is to engage leaders and employees in a two-way dialogue that enhances safety and performance.

Property Safety

The **preventable vehicle crash rate** represents *total* company vehicle events per one million miles driven in which an employee could have taken actions to avoid the event.

The **underground damages rate** represents underground damages to I&M facilities that cause an outage, per 1,000 locate tickets.

Figure 1. Property Safety



2018 Preventable accidents increased, in part, because of an influx of employees new to the industry.

2019 Accidents fell due to an increased focus on safety. A speeding function was added to the company's driving software. Supervisors receive reminders if they have not coached a driver on a safety issue within three days of the incident.

2020 Due to COVID, employees completed the non-driving portion of the company's Smith Driving Training program virtually. The driving portion will be completed in 2021.

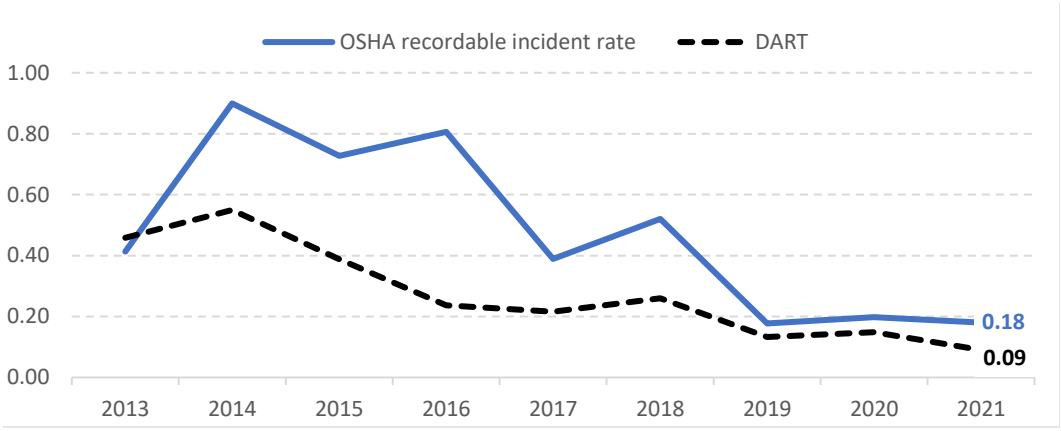
Employee Safety

I&M routinely reviews safety programs and initiatives with its employees and business partners. The company reinforces Human Performance Improvement concepts that help employees predict, recognize, and avoid error-likely situations. Safety professionals proactively track "good catches" and near misses to identify trends that can be addressed before serious events occur.

The **OSHA recordable incident rate** represents the number of *total* company employee injuries or illnesses, per 200,000 hours worked, that result in medical treatment beyond first aid or loss of consciousness.

The **Days Away, Restricted, or Transferred (DART) rate** represents the number of *total* company employee injuries or illnesses, per 200,000 hours worked, that result in death, days away from work, restricted work, or a job transfer, and prevent employees from performing typical duties.

Figure 2. Employee Safety



2015 In response to a rise in injuries, I&M implemented an injury prevention program and emphasized proactive safety, which it calls the "Good Catch Program." An employee makes a "good catch" when he or she formally notes an oversight that could have resulted in an injury. Safety personnel incorporate the observations into future training programs.

2018 A jump in the OSHA rate was likely due to an increase in apprenticeship employees and the resulting knowledge gap during risk exposure.

2019 I&M implemented Advanced Distribution Line Training to reinforce safety for seasoned employees. Safety professionals now spend at least 70% of their time in the field. Observations are entered into a system and a weekly report on vulnerabilities is sent to senior leadership.

2020 I&M continued to focus on overreaching and overexertion, which can result in sprain and strain injuries. The physical workforce completed a program on Lifting and Weight Awareness.

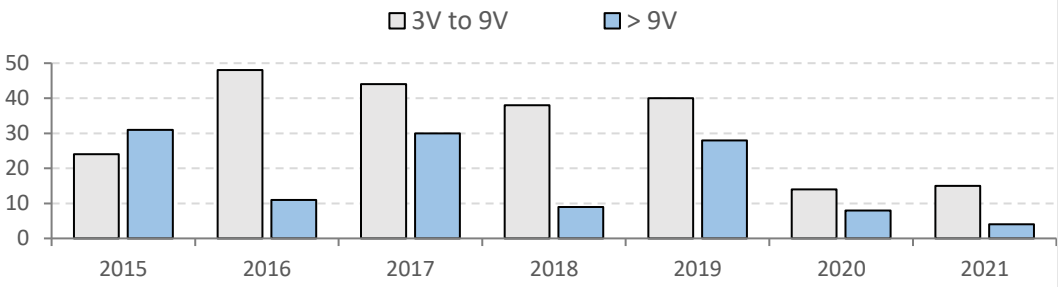
2021 Continuation of the focused efforts in 2020 along with the expansion of targeted field visits.

Underground Network Safety

I&M has underground electric distribution networks in its South Bend, Elkhart, Fort Wayne, and Muncie downtown districts. It surveys these networks for stray voltages, which can be dangerous if touched.

An **energized structure** is any property in those business districts discovered to have stray voltage.

Figure 3. Energized Structures



I&M conducts surveys at night so its crews can identify energized streetlights. Structures with voltages more than nine volts are immediately addressed due to their increased potential to injure the public.

Structures with voltages between three and nine volts are reported for follow up action. The company notifies property owners when stray voltages are found.

An **underground network event** is defined as a sustained fire, smoke emanating from a manhole or a transformer vault, or the de-energization of an underground network. Not all events are significant or caused by company equipment.

Figure 4. Infrastructure Safety

	2014	2015	2016	2017	2018	2019	2020	2021
Energized structure ownership								
I&M	N/A	7	4	1	5	6	0	0
Unaffiliated party	N/A	48	55	73	42	62	22	19
Underground network events	1	0	0	0	1	1	0	0

2016 I&M began to replace manhole covers with swivel lock manhole covers, which provide an extra layer of protection in the unlikely event of an underground explosion.

2018 A planned outage in downtown Fort Wayne was executed to energize a new substation.

2019 A planned outage in downtown Elkhart was executed to energize a new substation.

2021 Decreasing discovery of energized structures is an indicator that I&M's annual stray voltage safety program is having a positive effect on reducing the volume of these potential safety risks.

2. Reliability

IEEE Indices (MED)

Electric service outages affect household and business activities. I&M is investing in modern, smart technology and increasing its vegetation management to maximize service reliability.

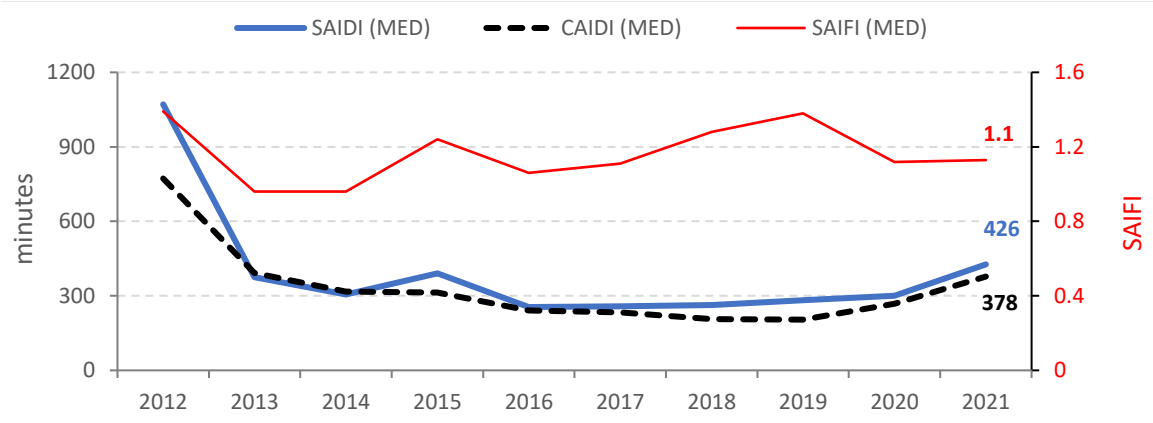
Figure 5 illustrates the company's reliability indices when major event days are included. A major event day will be defined and then backed out of the indices in the next subsection.

The **System Average Interruption Duration Index (SAIDI)** is the average duration of interruptions for customers served during the period. [1]

The **System Average Interruption Frequency Index (SAIFI)** is the average number of interruptions, lasting five minutes or longer, for customers during the period. [2]

The **Customer Average Interruption Duration Index (CAIDI)** is the average duration of an outage experienced by a customer during the period. [3]

Figure 5. Reliability Indices (MED)



2012 Extreme weather brought wind gusts more than 90 mph across northeast Indiana.

2019 The increase in SAIFI was driven mostly by non-MED events, but there was an increase in MED outages related to stations serving more customers.

2020 Outages due to vehicle accidents, trees, equipment, and station interruptions all fell.

2021 2021 was an exceptional storm year; I&M received more weather alerts than in any previous tracked year and experienced the highest number of JMED events since 2015.

[1] SAIDI = customer outage minutes / total customers

[2] SAIFI = customer outages / total customers

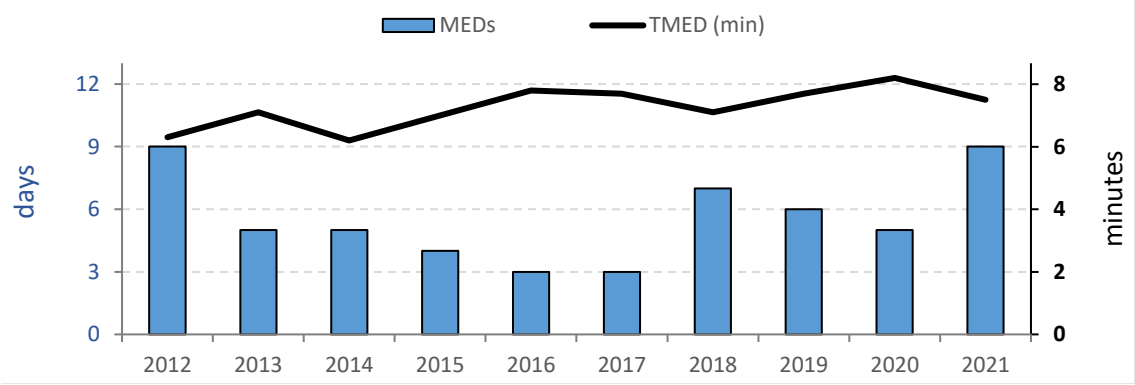
[3] CAIDI = customer outage minutes / customer outages

IEEE Indices (non-MED)

The **MED threshold (TMED)** is a benchmark calculated annually by each utility that is based on the last five years of reliability data. [4]

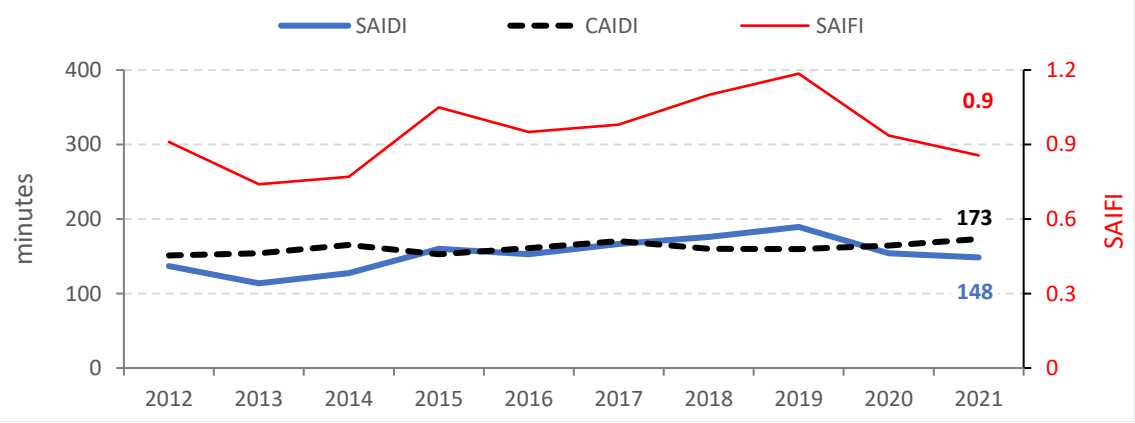
A **major event day** is a day on which a utility's SAIDI exceeds its TMED.

Figure 6. Major Event Day Data



When TMED is used to identify major event days during a period, utilities can recalculate their reliability indices without those days to better identify day-to-day performance.

Figure 7. Reliability Indices (non-MED)



2020 Outages due to vehicle accidents, trees, equipment, and station interruptions all fell.

2021 Outages for equipment, station and vehicle accidents all fell for the second year in a row.

[4] The calculation is based on a utility's most recent five years of data and must align with IEEE Std. 1366-2012.

Vegetation Management

Figure 8. Overhead Line Maintenance

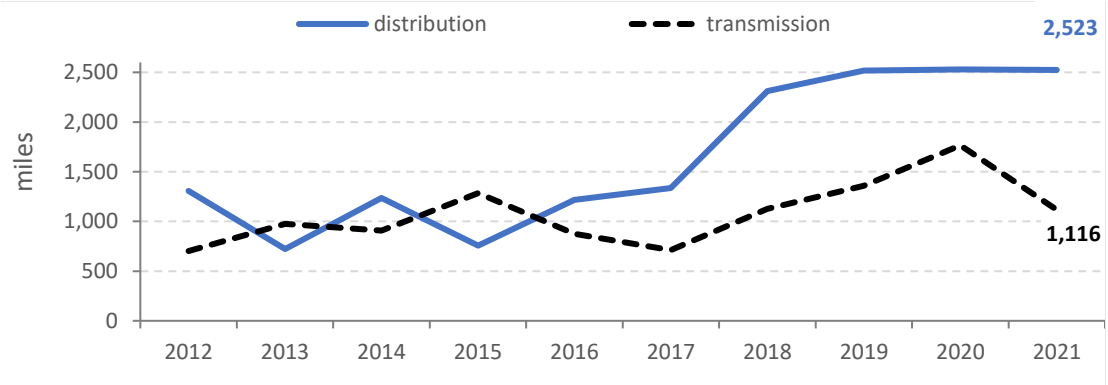
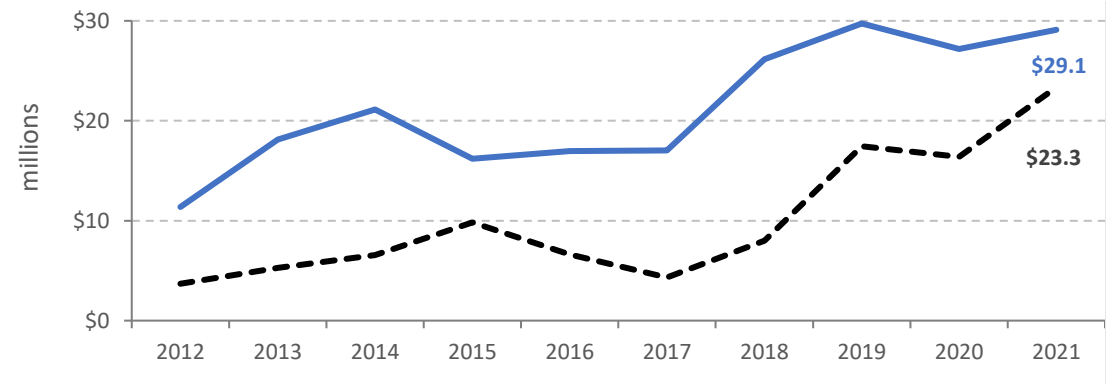


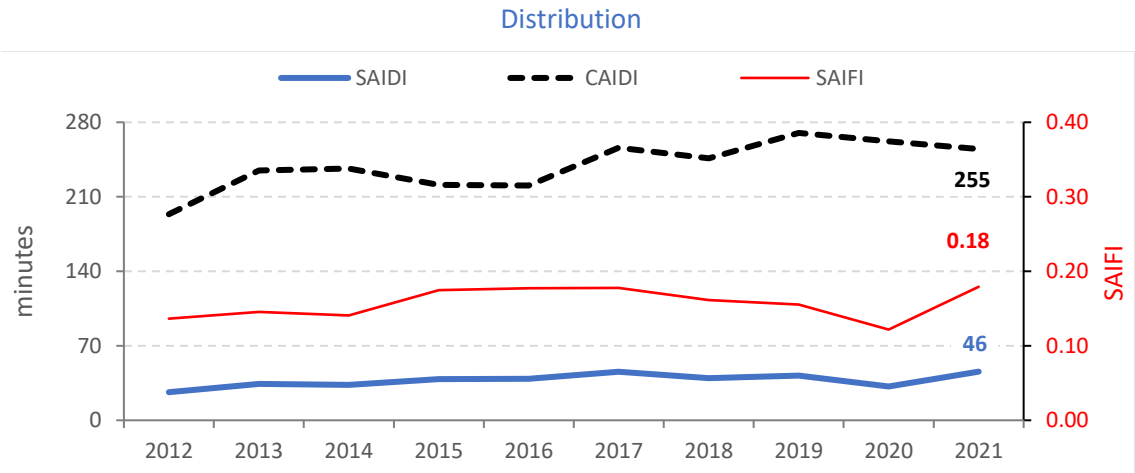
Figure 9. Vegetation Management Investment



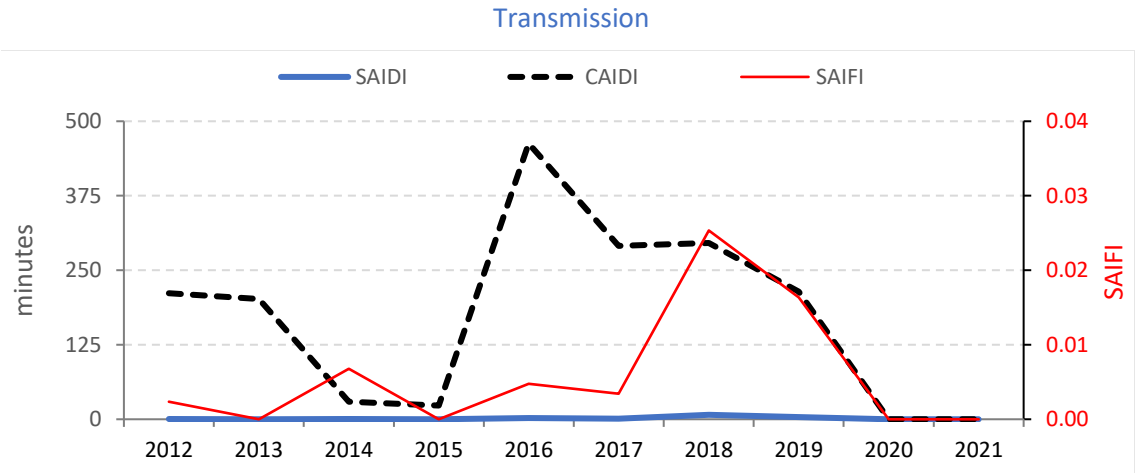
2018 I&M began transitioning from a performance-based tree-trimming strategy, in which work is conducted in areas of highest encroachment scattered around a service territory, to a cycle-based strategy, in which work is geographically concentrated according to a plan.

2021 Distribution completed the final year of its first four-year vegetation management cycle. Despite a decrease in maintenance miles, transmission spending increased due to corridor widening and the extension of FERC requirements to transmission above 100kV.

Figure 10. Reliability issues due to forestry (non-MED)



2021 Outages increased due to the excessive storm activity.



3. Generation

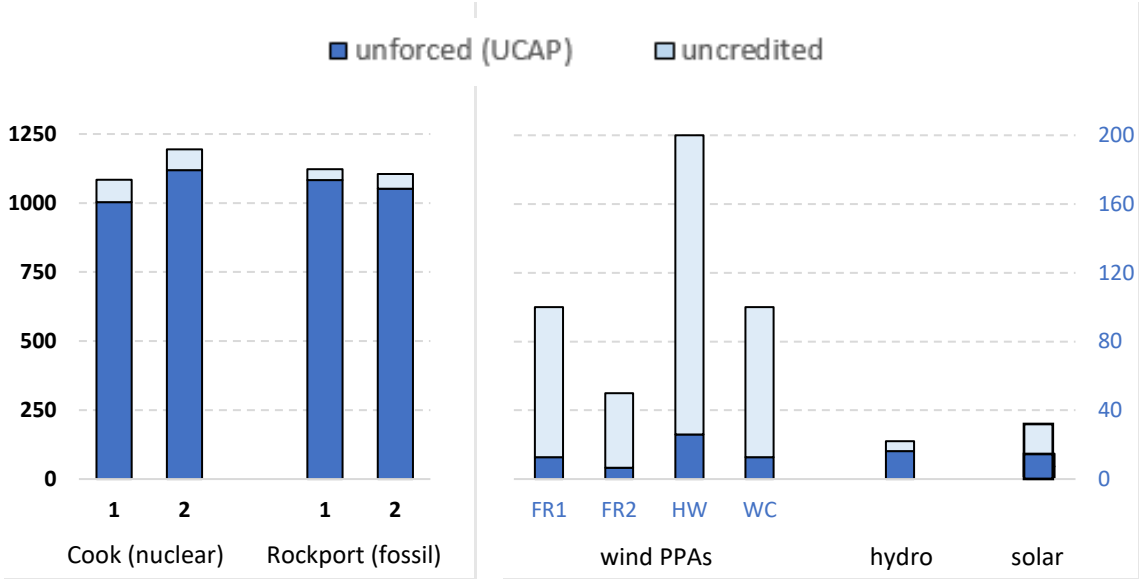
Capacity

I&M supplies energy to its customers through two baseload plants, four wind purchase agreements, and eleven total hydro and solar units.

Unforced Capacity (UCAP) is the portion of a plant's generating capacity available to meet its RTO reliability obligations.

Uncredited Capacity is the difference between a plant's installed capacity (ICAP) and its UCAP. Forced outages, historical intermittency of renewable energy sources, and auxilary power requirements all contribute to a plant's uncredited capacity.

Figure 11. Capacity of Supply Portfolio



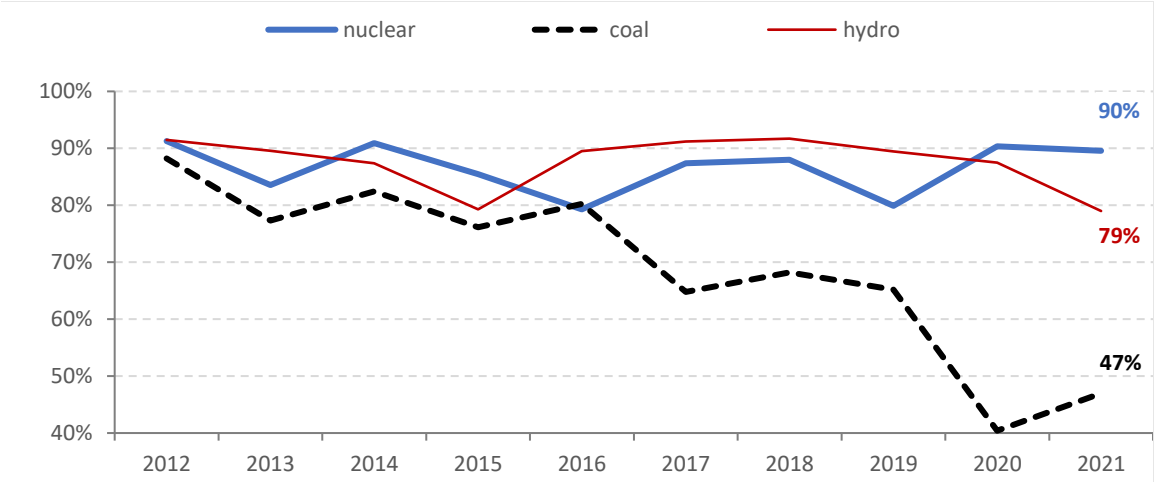
Cook	Unit 1 and Unit 2 are licensed by the Nuclear Regulatory Commission to operate through 2034 and 2037, respectively. The NRC, through its Revised Reactor Oversight Process, has awarded the plant the highest acceptable rating.
Rockport	I&M and AEP Generating Company co-own and co-lease Rockport units 1 and 2, respectively
Wind	450 MW of total PPAs with Fowler Ridge 1 and 2, Headwaters, and Wildcat farms, all of which are in Indiana
Hydro	22 MW of capacity from six units in the company's service territories
Solar	34.7 MW of capacity from the Deer Creek, Olive, St Joseph, and Twin Branch sites in northeast Indiana and the Watervliet site in southern Michigan. The 20MW St. Joseph facility came online in March 2021.

Performance

A plant's **Equivalent Availability Factor (EAF)** is the portion of time the plant was available to generate power if called upon by the market. [5]

A unit is unavailable to generate when it has been forced offline, is undergoing maintenance, or has been derated. Extreme air and water temperatures, certain maintenance operations such as slag blowing, or minor equipment failure can all cause an operator to derate a generating unit.

Figure 12. Equivalent Availability Factor



2017 Rockport 1 was offline for fifteen weeks to install Selective Catalytic Reduction technology necessary to reduce the plant's nitrogen oxide emissions.

2019 Units 1 and 2 at the Cook Nuclear Plant were separately taken offline for their scheduled refueling outages. These outages typically occur every eighteen months, so they take place in the same year every three years.

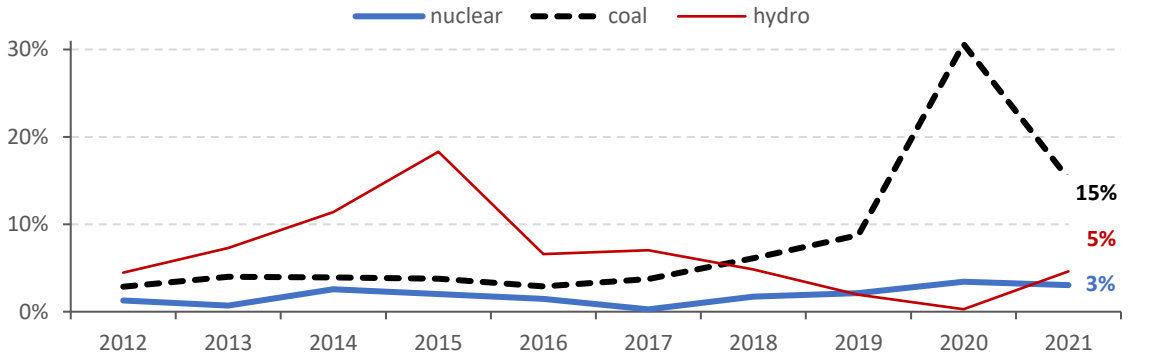
2020 Rockport 2 was offline for 12 weeks to complete the SCR project. Rockport 1 was offline for ten weeks to tie-in the Enhanced DSI project and to replace the High-Pressure Rotor.

2021 Although Rockport availability increased, higher Planned Outage and Maintenance Outage Factors of 21% and 25%, respectively, contributed to lower availability. Hydro availability was also impacted by a higher Maintenance Outage Factor.

[5] EAF = (hours in period – forced outage hours – maintenance hours – derated hours) / hours in period

A plant's **Equivalent Forced Outage Rate (EFOR)** is the portion of time the plant was unavailable to generate due to unplanned outages. [6]

Figure 13. Equivalent Forced Outage Rate



2014 Planetary gear and turbine blade failures at the company's Berrien Springs and Twin Branch hydro plants forced those two sites offline.

2015 The hydro outages that began the previous year extended into 2015 due to the long lead-time associated with obtaining the replacement equipment.

2019 Rockport Unit 2 was forced offline twice. The first outage was due to an issue on a precipitator auxiliary transformer and the second was due to a ground on the Reheat Generator.

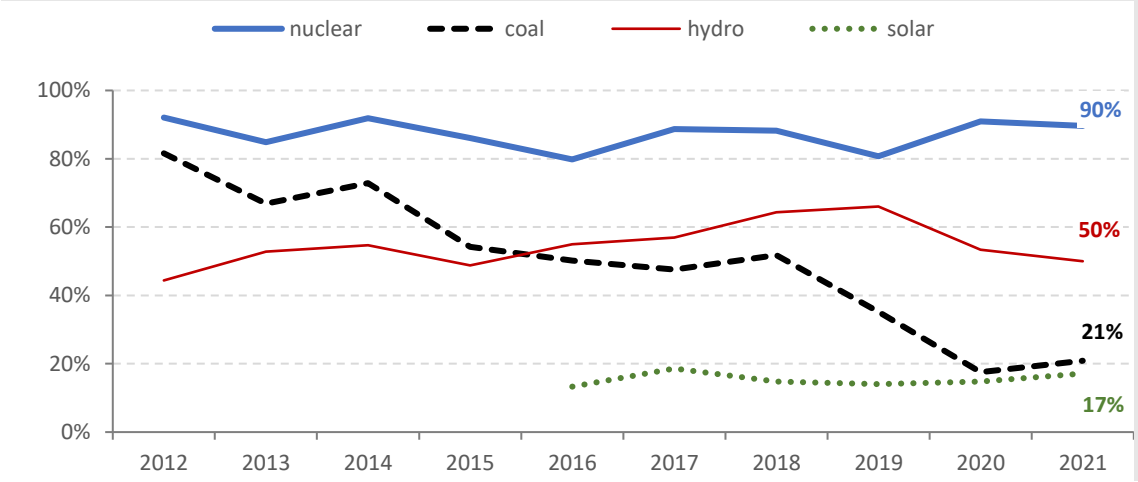
2020 Rockport Unit 1 had an EFOR of 49% due, in part, to a high-pressure turbine failure. Unit 2's EFOR was 5%.

2021 Rockport Unit 1 had an EFOR of 19.8%. The significant contributor to the Unit 1 EFOR was a turning gear assembly failure. The Rockport Unit 2 EFOR was 9.0%.

[6] EFOR = (forced outage hours + forced derated hours) / hours in period

A plant's **Net Capacity Factor** is the percent of its maximum capacity it generated on average during a period. The difference between a plant's NCF and its EAF is the amount of energy it could have generated but did not because it was not selected to generate by its transmission operator. [7]

Figure 14. Net Capacity Factor



2018 Rockport continued to be impacted by market conditions, due to the low price of natural gas. The decrease in solar NCF is discussed in the EAF section.

The Cook nuclear plant performed impressively, resulting in a capacity factor 0.23% greater than its availability factor (due to favorable Lake Michigan water temperatures).

2019 Cook Unit 1 was brought offline in March for a refueling outage after 463 consecutive days of operation at a capacity factor of 102%. The refueling team also successfully completed I&M's multiyear effort to replace the unit's baffle bolts. The unit was brought back online in May.

Cook Unit 2 was brought offline in October for refueling. It posted a capacity factor of 99% since its last refueling.

Declining average energy prices caused the Rockport plant to run less often.

2020 The turbine failure at Rockport 1 was the primary driver of the decrease in net capacity factor for fossil generation.

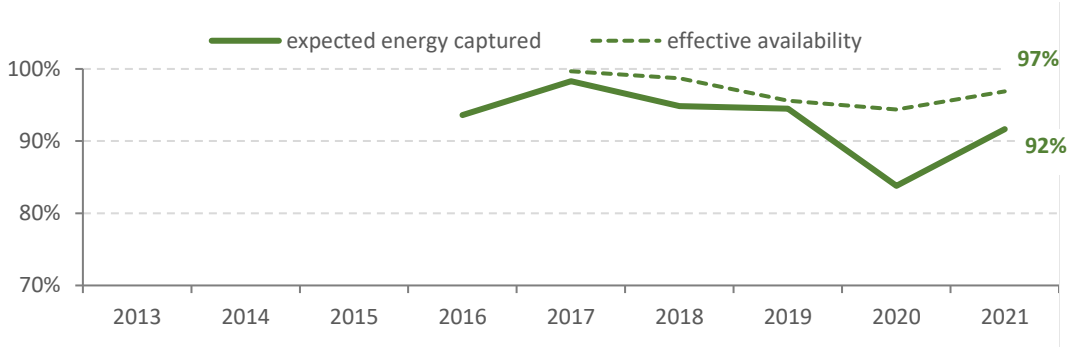
2021 The Rockport capacity factor increased slightly due to higher energy demand in the second half of the year. The hydro facilities' capacity factor fell slightly due to lower river levels and longer maintenance outages.

[7] NCF = net generation / (hours in period × net maximum capacity)

Expected Solar Energy Captured is an industry term used to identify actual generation as a percentage of expected solar generation. Solar production is dependent upon the age of a solar farm's arrays, the shade from trees and buildings, and environmental factors such as clouds, snow, and frost.

Effective Availability for solar is not measured the same as for other types of generation. It is equal to expected energy captured plus energy not captured due to maintenance.

Figure 15. Solar Generation



2016 Because the Olive and Watervliet solar sites did not come online until late in the year, after the period of peak insolation, their average daily production was lower than it will be in future years.

2018 The Deer Creek solar site was taken offline after two dry-type transformers failed. Different transformers were ordered but did not arrive until the following year due to long equipment lead times. The other solar sites do not use the type of transformers that failed at Deer Creek.

2020 Three inverter failures forced a few of the sites offline, decreasing the capture of available energy. The cost of replacement was fully covered under warranty.

2021 Increased inverter reliability and the addition of the St Joseph facility contributed to the improved performance.

4. Customer Service

One of I&M's core values is exceptional customer service. The company constantly strives to identify areas in which it can better serve the people, businesses, and industries in its territory.

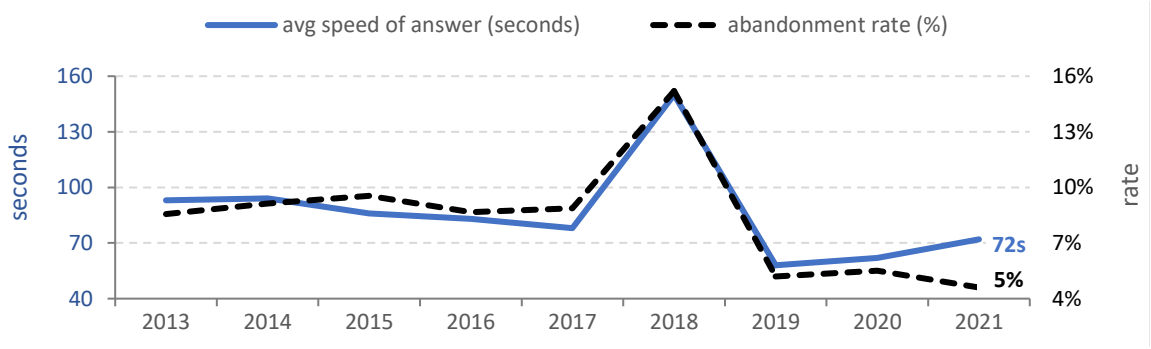
Call Center Operations

Average Speed of Answer (ASA) is the average seconds an Indiana customer waits before the call is answered by a resource ready to help.

Utilities do not all calculate their ASA metric identically. I&M begins to measure wait time when the AT&T network first accepts the call. Other utilities do not begin to measure wait time until their customers have listened to the initial, pre-recorded message and select an option.

Abandonment Rate represents the percent of phone calls made by Indiana customers that are abandoned by the customer before speaking with an agent or utilizing call automation.

Figure 16. Call Center Operations



2017 I&M's parent, AEP, began to upgrade the call handling operations of its subsidiaries.

2018 The upgrade that began in 2017 was not completed until November 2018. During the upgrade, the ability of the customer call centers of each AEP subsidiary to share calls across the system decreased. In addition, calls increased early in the year due to high bills from extreme weather.

2019 New training and an increase in call center employees led to the company's best performance in the observation period. New call routing software allows I&M to offer callbacks and a virtual waiting queue. This investment will also allow customers to more conveniently email and chat with customer service representatives.

2021 I&M is experiencing staffing shortages due to a competitive labor market.

Service Efficiency

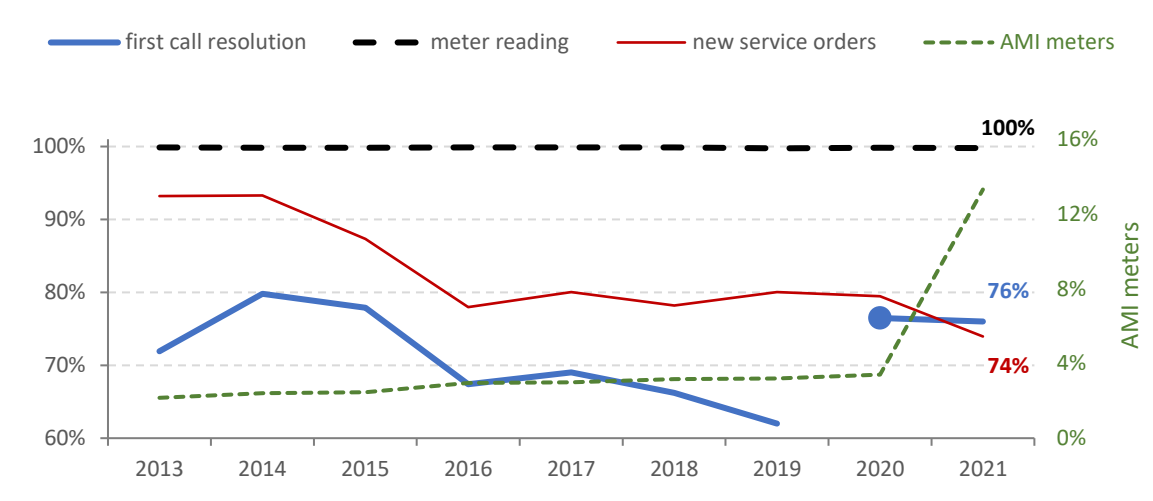
Meter reading is the percent of total meters with actual reads for the period of time.

First call resolution represents the ability to meet a customer's needs during their first phone call to the company. Data previous to 2020 represents both state service territories.

New service orders represent the percentage of standard orders for new service that are completed within ten business days, which is an internal goal.

AMI meters indicates the percentage of customers that have an AMI meter installed on their account. [8]

Figure 17. Service Efficiency



2020 In May, the company switched from using an outside vendor to obtain the first call resolution metric to using automated software that can isolate responses by jurisdiction. For this reason, performance cannot be fairly compared with that from previous years.

The increase in first call resolution is likely attributable to both the new technology and improvements to the customer service knowledge base documents. These improvements help agents to address customers' issues more often on the first call.

The company's efforts to extend more liberal payment agreements to customers due to the COVID pandemic may have also boosted the metric.

2021 I&M is creating a Distribution Operations Customer Support team to better serve the increased development in its Indiana service territory. Team representatives will be a customer's primary point of contact until new service is established. The team will educate developers on the necessary steps to receive new service to housing developments. Labor and equipment shortages have affected new service deliveries.

[8] AMI meters were installed on eight distribution circuits in South Bend in 2008 as part of a pilot project. Any new residence served from those circuits receives an AMI meter. All other new meters installed in South Bend are AMR.

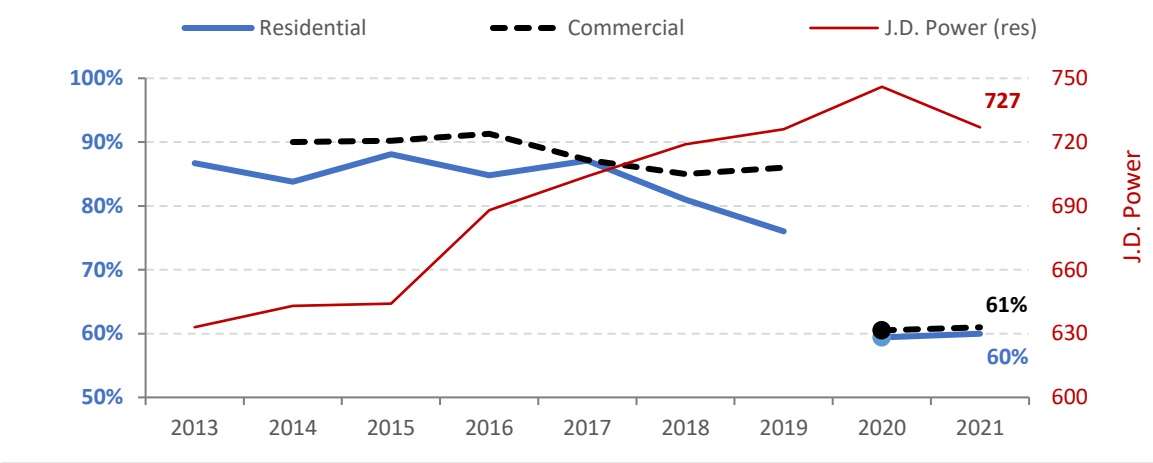
Customer Satisfaction

I&M uses a software tool to randomly survey customers by email after they have interacted with its customer service team. The **residential and commercial scores** represent the percentage of customers that rated I&M a 9 or 10 on a ten-point scale. This software was adopted in 2020, which makes it difficult to compare scores prior to that year.

The **J.D. Power residential score** is reported in *J.D. Power's Electric Utility Customer Satisfaction Study* each year. Results are on a 1,000 point scale. I&M subscribes to the underlying study.

The score reflects overall Indiana customer satisfaction in six areas: power quality & reliability, price, billing & payment, communications, corporate citizenship, and customer service.

Figure 18. Customer Satisfaction



2020 Prior to May, I&M used a third-party research firm to randomly sample seventy-five residential and fifty commercial customers each month to determine how satisfied they were with I&M.

The resulting scores reported indicated the percent of those customers that were *Very satisfied* or *Somewhat satisfied*, as opposed to *Neither satisfied nor dissatisfied*, *Somewhat dissatisfied*, or *Very dissatisfied*.

The company now uses a technology package called Medallia that measures satisfaction in a different way. Due to the change, the results are not comparable to previous scores.

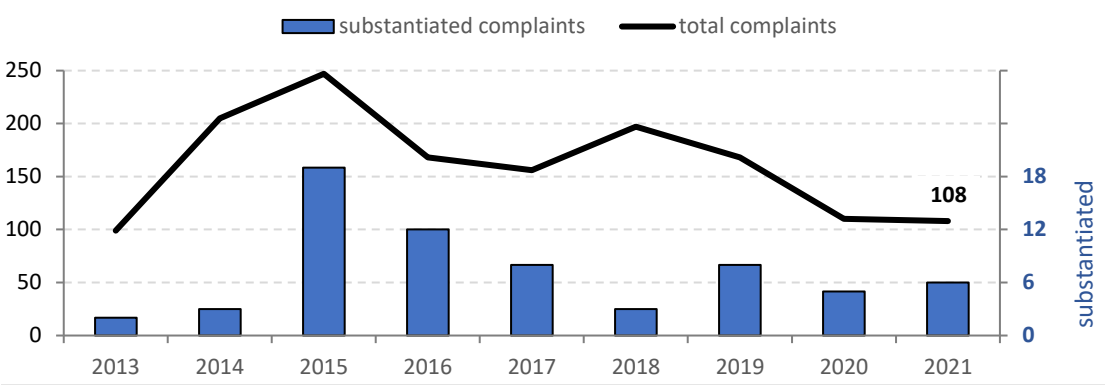
The decrease in the residential and commercial scores is likely due to the change in survey method. In previous years, a customer was reflected in the metric as being satisfied if they chose one of the first two of five responses (the top 40%). Now, the customer must choose a '9' or '10' on a ten-point scale (the top 20%).

2021 Although the J.D. Power score fell, it remained higher than in any other year in which the disconnections were not suspended due to COVID.

A **substantiated complaint** is a customer complaint filed at the Indiana Utility Regulatory Commission that is determined to have merit by the agency's Consumer Affairs division.

Since 2013, Consumers Affairs has determined that 4% of the complaints filed against I&M were substantiated. During that time, 21% of the complaints have concerned disconnection of service, 13% have concerned high bills, 10% have concerned requested deposits, and 10% have concerned payment arrangements.

Figure 19. Consumer Complaints



2015 The peak in total complaints was driven by general billing issues and disconnection of service

2020 There was a sharp drop in complaints related to high bills and payment arrangements.

5. Expense

This section illustrates I&M's operation and maintenance expenses (O&M) as a function of either energy sales or total retail customers.[9] The first subsection, Determinants, provides information on the denominators used in the ratios in this part of the report.

Determinants

Figure 20. Energy Sales

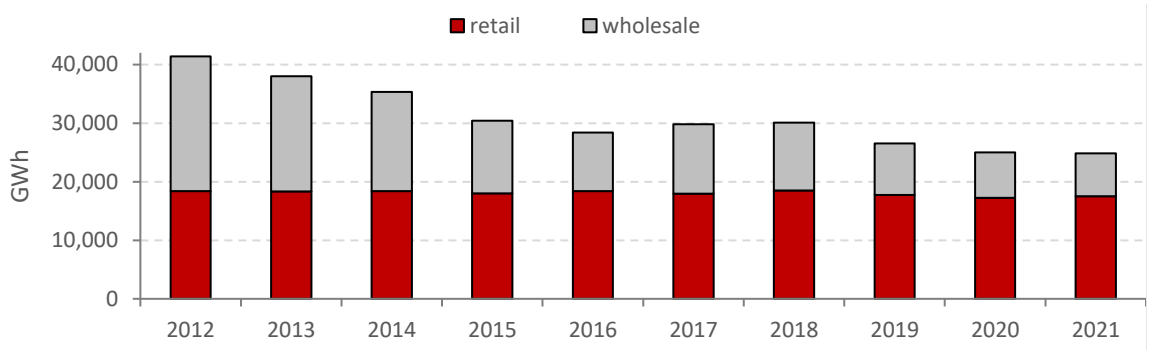
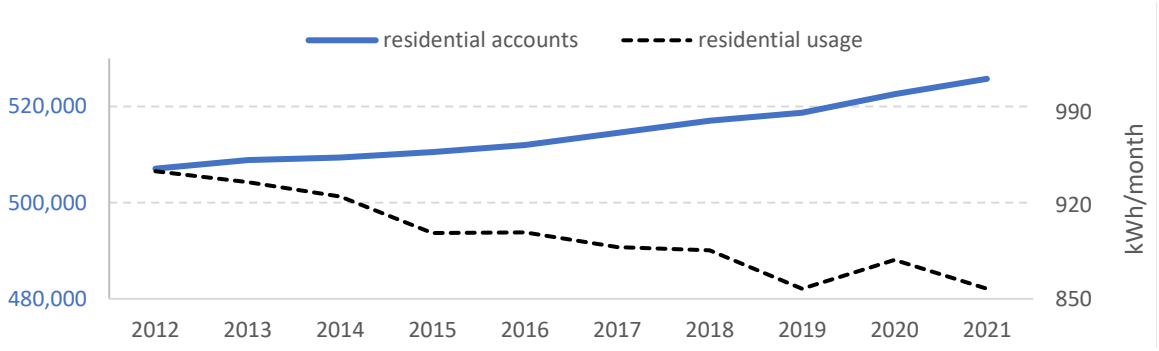


Figure 21. Residential Indices



2021 Total sales fell for the third straight year. Retail increased by 1.5% but wholesale fell by 6%. Since 2012, residential customer accounts have risen 0.4% annually and normalized residential consumption has fallen by 1.1% annually.

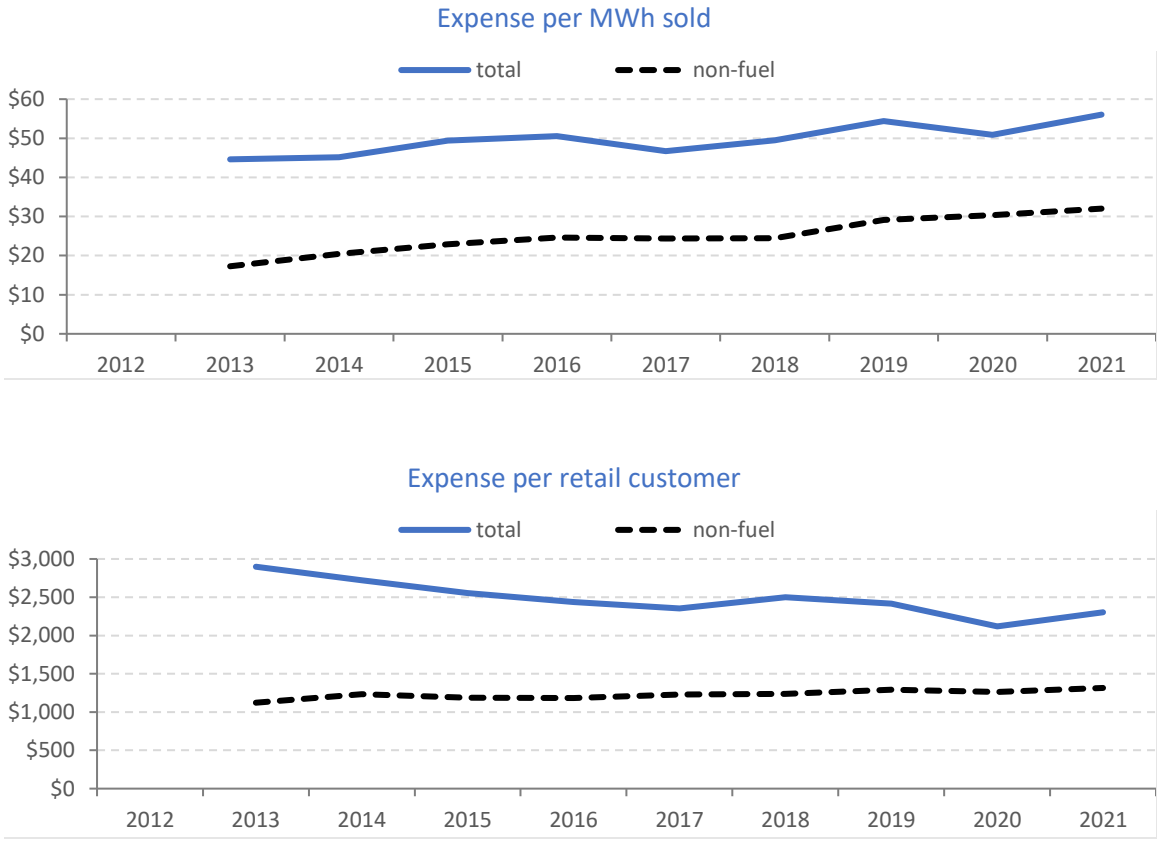
[9] The expense amounts in this section can be found in the company's FERC Form 1 filings. All metrics reflect the company's Indiana and Michigan operations because the Form 1 does not contain jurisdictionalized data.

All MWh data represent total sales unless otherwise stated. The data appendix identifies the location in the Form 1 of each component used in this section.

O&M

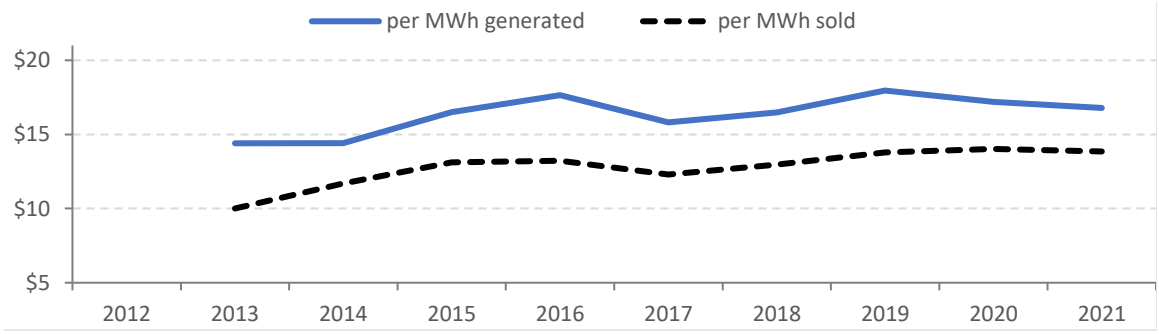
Operation and Maintenance Expenses consist of non-capitalized spending on production, transmission, distribution, customer, and general accounts.

Figure 22. O&M Expense



Non-fuel Production Expenses consist of the operation and maintenance costs, not including fuel, associated with a utility's production assets.

Figure 23. Non-fuel Production Expense

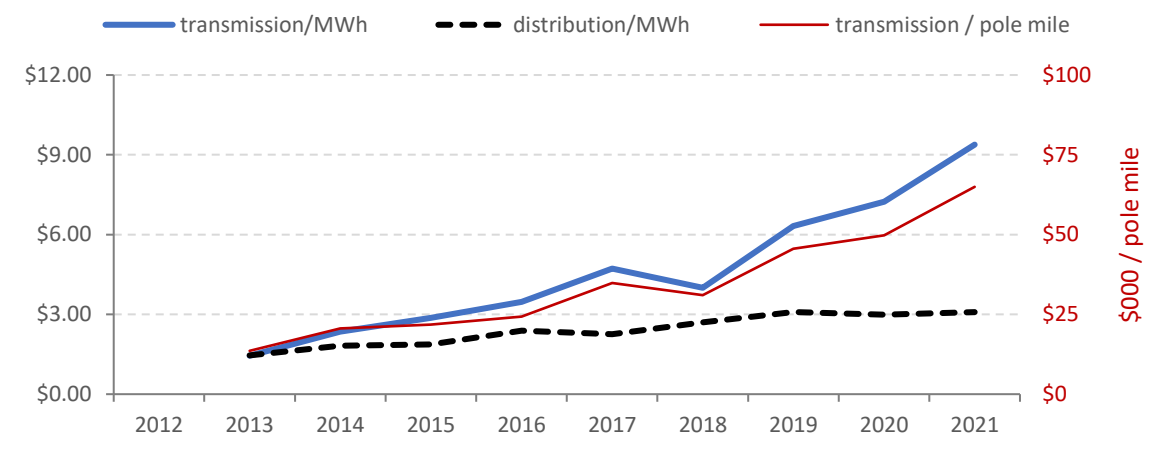


Business units

Transmission Expense consists of the cost of operating and maintaining a utility's transmission assets, which typically have a voltage of at least 69kV. Some of I&M's 34.5kV lines are categorized as transmission because they do not directly serve any customers.

Distribution Expense consists of the cost of operating and maintaining a utility's distribution assets.

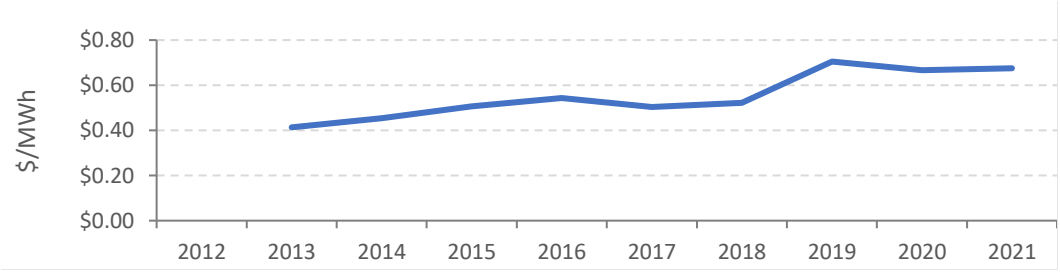
Figure 24. Transmission and Distribution Expense



2020 An increase in Account 565, Transmission of Electricity by Others led to a rise in transmission expense metrics. Account 565 includes operational, management, and administration expenses associated with I&M's membership in PJM.

Customer Accounts Expense consists of O&M expenses related to billing, meter reading, complaints, customer contracts, and other customer-related activities.

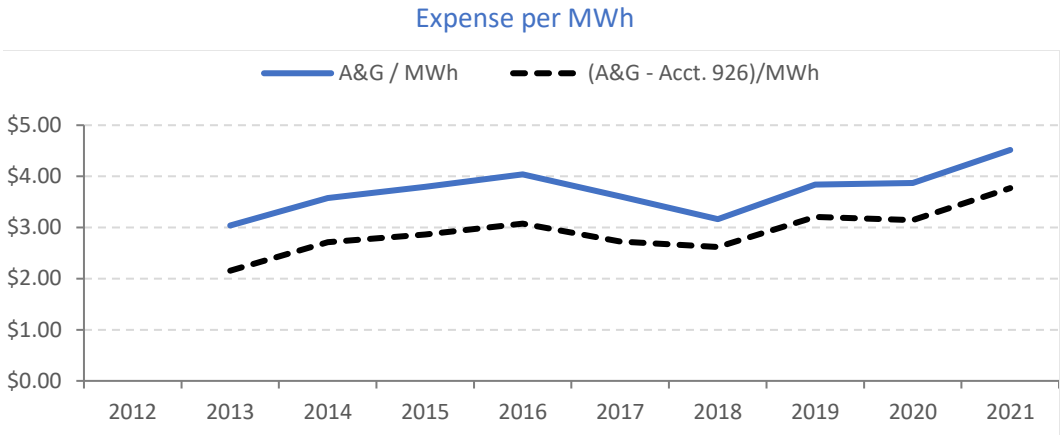
Figure 25. Customer Accounts Expense

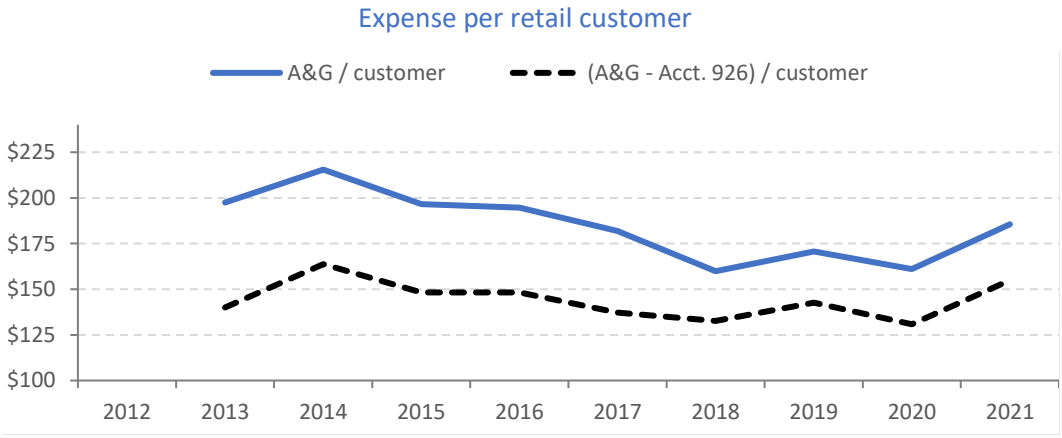


A&G

Administrative and General Expense refers to the cost of labor, benefits, outside services, and office maintenance. These expenses are shown below as both a function of energy sales and retail customers. Each ratio is also shown without employee pensions and benefits (Account 926) in the numerator.[10]

Figure 26. A&G expense





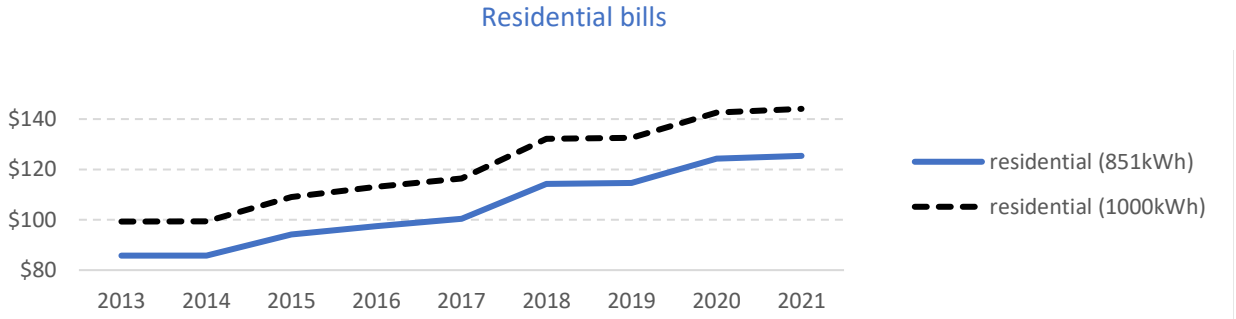
[10] Account 926 expenses are principally driven by interest rates and investment returns, which are factors outside of I&M's control.

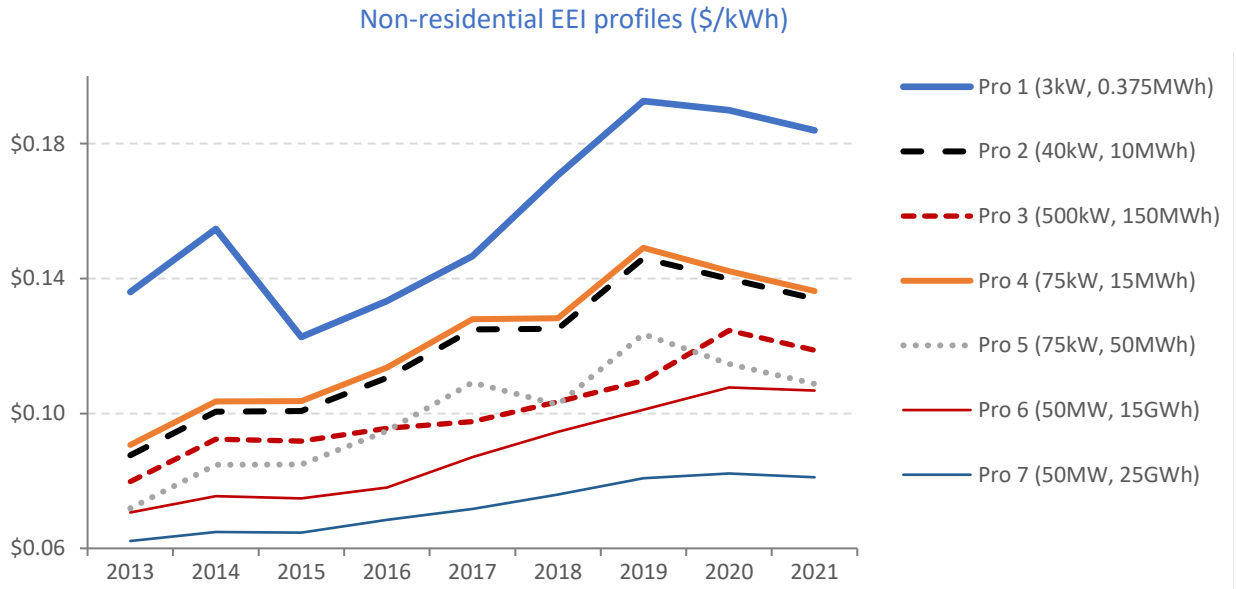
6. Affordability

The average residential customer in the company's Indiana service territory used 866 kWh per month during 2021.[11] **Figure 27** shows the trend at 851kWh, the average usage in the 2018 test year.

The non-residential EEI profiles identify the cost under I&M's tariffs of a selection of energy and demand combinations published in EEI's semiannual *Typical Bills and Average Rates Report*.

Figure 27. Bills and Energy Cost





2020 The rate case removed a portion of the subsidy provided by the General Service rates. The removal of this subsidy caused the average cost per kWh of profiles 1, 2, 4, and 5 to fall.

[11] The IURC issued final base rate orders to I&M in 2013, 2018, 2020, and 2022.

Bill Delinquency

A **disconnection notice** is mailed to a customer if their account is more than thirty days past due and the outstanding balance is at least $50.

The **accounts in arrears** metric represents the average percentage of total accounts that had past due balances greater than thirty days.

Figure 28. Disconnections for non-payment

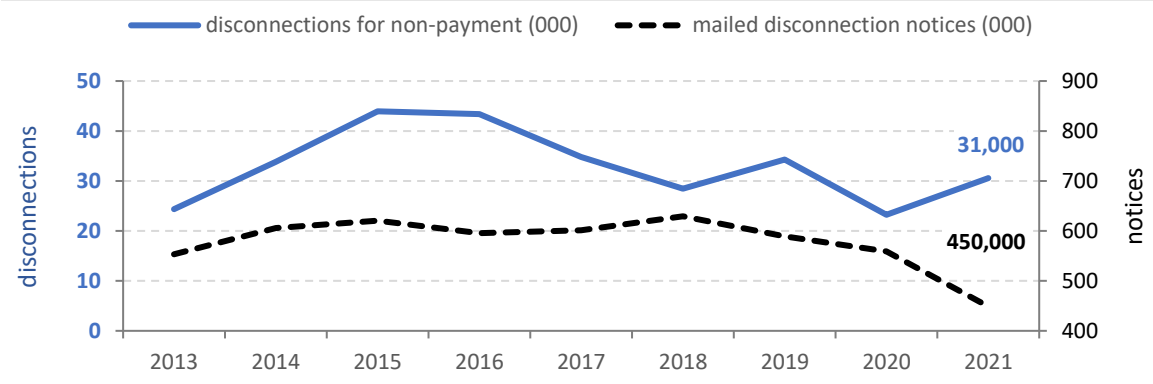
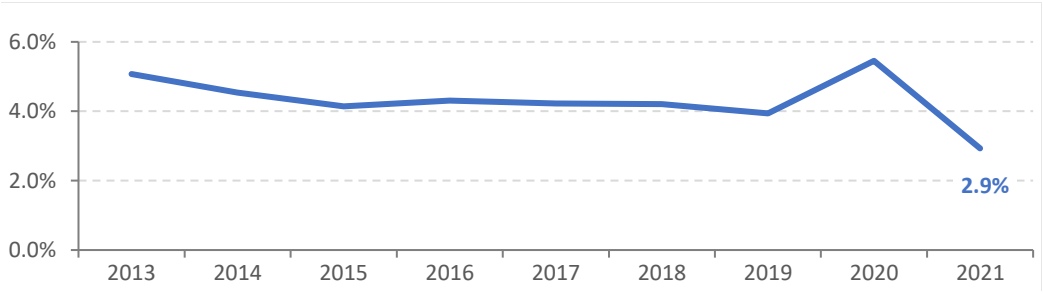


Figure 29. Accounts in Arrears



2019 Accounts in arrears and disconnect notices decreased as meter revenue employees who had been reallocated to assist in other operations were returned to their original responsibilities. I&M found that, in many instances, delaying disconnections led to an increase in nonpayment.

2020 I&M did not disconnect customers for delinquent accounts from the middle of March through the beginning of September due to the COVID pandemic.

7. Employees

I&M seeks to build and sustain a diverse workforce that reflects its customers and other stakeholders.

Employee Turnover reflects company employees who voluntarily or involuntarily left I&M, divided by the number of employees at the beginning of the year. [12]

The **Age Distribution** of the company's employees by function is illustrated in **Figure 31**.

Figure 30. Employee Turnover

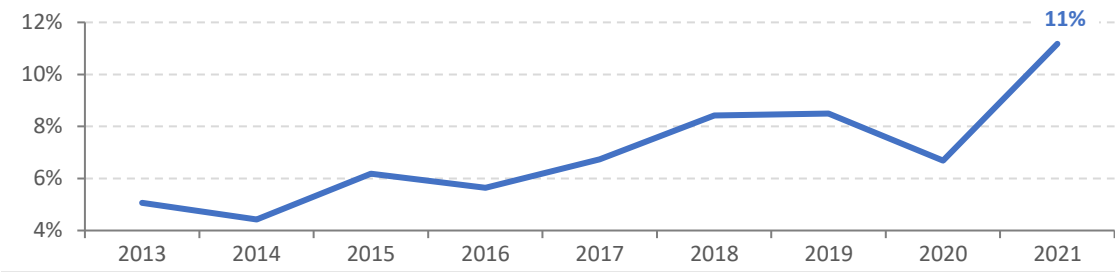
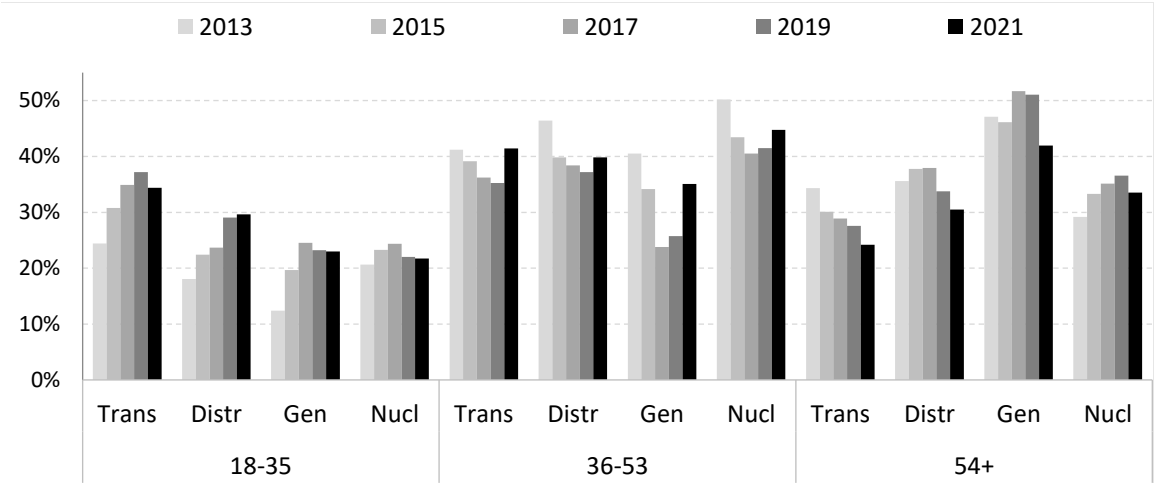


Figure 31. Employee Age Distribution



2019 Low unemployment rates continued to create strong competition for labor and increase labor mobility. The workforce in the electric utility industry is aging and I&M has implemented programs and policies to encourage knowledge transfer and increase interest in the industry.

2021 Employee retirements increased from 3.6% to almost 6%. This reflects a national trend.

[12] This data includes employees who work for I&M's parent company, but who are wholly assigned to support I&M. Part-time employees and interns are also included.

Employee Characteristics reflects the diversity of I&M's workforce. The company has Employee Resource Groups intended to build awareness, respect, and inclusiveness in the workplace. Senior management discusses diversity and inclusion initiatives monthly. I&M's parent company established the position of Chief Diversity & Inclusion Officer to bring further focus and support for this area.

Figure 32. Employee EEO Characteristics

	Male	*Female*	*White*	*Black*	*Asian*	*Hispanic*	*Other*	*Total*
2021	1342	290	1514	57	19	27	15	1632
2020	1828	361	2018	81	23	44	23	2189
2019	1895	375	2107	85	22	43	13	2270

2020 Provided training to leaders on inherent bias. Conducted a "listening tour" with field employees to understand perspectives on diversity and inclusion.

2021 Hired diverse candidates to fill the roles of Communications Director and Vice President of External Affairs & Customer Experience. Will shortly implement a rule that requires I&M to interview a diverse candidate for leadership positions, which are salary grades above 11.

Seventy-two transmission employees previously located in an I&M building in Michigan moved to their own building and are no longer reflected in the totals above, which are based on location.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Safety										
Preventable crash rate		3.83	4.08	2.41	2.19	1.91	4.45	1.57	2.40	2.48
Underground damages rate		0.84	0.66	0.65	0.65	0.80	0.75	0.58	0.65	0.59
OSHA rec. incident rate		0.41	0.90	0.73	0.81	0.39	0.52	0.18	0.20	0.18
DART		0.46	0.55	0.39	0.24	0.22	0.26	0.13	0.15	0.09
Network contact voltage										
Locations with 3V to 9V				24	48	44	38	40	14	15
Locations with >9V				31	11	30	9	28	8	4
Reliability										
non-MED indices										
SAIDI	137	114	128	160	153	166	176	189	154	148
SAIFI	0.91	0.74	0.77	1.05	0.95	0.98	1.10	1.19	0.94	0.86
CAIDI	151	154	165	153	161	170	160	160	165	173
MED indices										
SAIDI	1071	375	306	390	255	258	263	282	300	426
SAIFI	1.39	0.96	0.96	1.24	1.06	1.11	1.28	1.38	1.12	1.13
CAIDI	773	392	318	314	241	233	206	204	268	378
Major event days	9	5	5	4	3	3	7	6	5	9
TMED (minutes)	6.3	7.1	6.2	7	7.8	7.7	7.1	7.7	8.2	7.5
Vegetation Management										
SAIDI due to forestry (distr.)	26	34	33	39	39	46	40	42	32	46
(trans.)	1	0	0	0	2	1	8	4	0	0
Overhead line maintenance (miles)										
distribution	1,306	722	1,236	755	1,216	1,336	2,312	2,518	2,529	2,523
transmission	702	976	909	1,283	877	710	1,127	1,357	1,765	1,116
Investment ($M, O&M and capital)										
distribution	$11.4	$18.1	$21.1	$16.2	$17.0	$17.0	$26.1	$29.7	$27.2	$29.1
transmission	$3.7	$5.3	$6.6	$9.8	$6.6	$4.3	$8.0	$17.5	$16.4	$23.3

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Generation										
EAF										
Nuclear (Cook)	91%	84%	91%	85%	79%	87%	88%	80%	90%	90%
Fossil (Rockport)	88%	77%	82%	76%	80%	65%	68%	65%	40%	47%
Hydro	91.47%	89.58%	87.38%	79.28%	89.52%	91.21%	91.70%	89.45%	87.50%	78.99%
EFOR										
Nuclear (Cook)	1%	1%	3%	2%	1%	0%	2%	2%	3%	3%
Fossil (Rockport)	3%	4%	4%	4%	3%	4%	6%	9%	31%	15%
Hydro	4.48%	7.28%	11.40%	18.30%	6.61%	7.03%	4.82%	1.93%	0.28%	4.61%
Net capacity factor										
Nuclear (Cook)	92%	85%	92%	86%	80%	89%	88%	81%	91%	90%
Fossil (Rockport)	82%	67%	73%	54%	50%	48%	52%	35%	18%	21%
Hydro	44.39%	52.83%	54.69%	48.75%	54.93%	56.90%	64.36%	66.03%	53.35%	50.05%
Solar					13%	19%	15%	14%	15%	17%
Solar										
Energy captured					94%	98%	95%	95%	84%	92%
Effective availability						100%	99%	96%	94%	97%
Service										
Avg speed of answer (sec)		93	94	86	83	78	150	58	62	72
Abandonment rate		8.6%	9.1%	9.5%	8.7%	8.9%	15.2%	5.2%	5.5%	4.6%
First call resolution		72%	80%	78%	67%	69%	66%	62%	77%	76%
Meter reading		99.9%	99.8%	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%
New service order rate	94%	93%	93%	87%	78%	80%	78%	80%	79%	74%
AMI meters		2.2%	2.4%	2.5%	3.0%	3.0%	3.2%	3.2%	3.4%	13.3%
Customer satisfaction										
residential		87%	84%	88%	85%	87%	81%	76%	59%	60%
commercial			90%	90%	91%	87%	85%	86%	61%	61%
J.D. Power (IN, residential)		633	643	644	688	704	719	726	746	727
Complaints to regulator										
Substantiated		2	3	19	12	8	3	8	5	6
Total		99	205	247	168	156	197	168	110	108

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Expense												
O&M per MWh		(total)		$45	$45	$49	$51	$47	$49	$54	$51	$56
		(non-fuel)		$17	$20	$23	$25	$24	$24	$29	$30	$32
O&M per customer		(total)		$2,899	$2,723	$2,556	$2,437	$2,352	$2,502	$2,415	$2,119	$2,302
		(non-fuel)		$1,122	$1,233	$1,187	$1,184	$1,229	$1,236	$1,292	$1,264	$1,315
Non-fuel production O&M												
per MWh sold				$10.0	$11.7	$13.1	$13.2	$12.3	$13.0	$13.8	$14.0	$13.9
per MWH generated				$14.4	$14.4	$16.5	$17.7	$15.8	$16.5	$18.0	$17.2	$16.8
Transmission per MWh				$1.45	$2.35	$2.87	$3.46	$4.72	$3.99	$6.32	$7.23	$9.38
Transmission per pole mile ($000)				$14	$21	$22	$24	$35	$31	$46	$50	$65
Distribution expense per MWh				$1.46	$1.83	$1.86	$2.38	$2.25	$2.70	$3.09	$2.99	$3.09
Cust. Accts expense per MWh				$0.41	$0.45	$0.51	$0.54	$0.50	$0.52	$0.70	$0.67	$0.67
A&G per MWh				$3.04	$3.57	$3.80	$4.04	$3.61	$3.16	$3.84	$3.87	$4.52
excluding Acct. 926				$2.15	$2.71	$2.86	$3.08	$2.72	$2.62	$3.21	$3.14	$3.77
A&G per customer				$197	$215	$197	$195	$182	$160	$171	$161	$185
excluding Acct. 926				$140	$164	$148	$148	$137	$133	$143	$131	$155
Affordability												
Residential bill (851kWh)				$85.77	$85.80	$94.13	$97.50	$100.43	$114.25	$114.59	$124.35	$125.39
Residential bill (1000kWh)				$99.29	$99.33	$109.10	$113.05	$116.47	$132.14	$132.53	$142.55	$144.07
EEI energy profiles												
Profile	*kW*	*MWh*										
1	3	0.375	GS-SEC	$0.1360	$0.1547	$0.1227	$0.1333	$0.1467	$0.1707	$0.1926	$0.1899	$0.1839
2	40	10	GS-SEC	$0.0876	$0.1005	$0.1007	$0.1106	$0.1249	$0.1251	$0.1460	$0.1399	$0.1340
3	500	150	GS-SEC	$0.0798	$0.0923	$0.0918	$0.0956	$0.0976	$0.1035	$0.1097	$0.1246	$0.1187
Industrial rates			GS-SEC									
			GS-SEC									
4	75	15	GS-SEC	$0.0907	$0.1035	$0.1037	$0.1136	$0.1279	$0.1282	$0.1491	$0.1422	$0.1363
5	75	50	GS-SEC	$0.0719	$0.0848	$0.0849	$0.0948	$0.1091	$0.1026	$0.1235	$0.1147	$0.1088
6	50,000	15,000	IP-TRAN	$0.0706	$0.0755	$0.0748	$0.0781	$0.0871	$0.0945	$0.1011	$0.1077	$0.1068
7	50,000	25,000	IP-TRAN	$0.0622	$0.0649	$0.0647	$0.0684	$0.0717	$0.0760	$0.0808	$0.0822	$0.0811
Residential disconnections												
for non-payment				24,375	33,810	43,936	43,367	34,817	28,421	34,284	23,229	30,583
notices sent				553,160	606,017	620,785	595,447	601,056	629,253	589,387	558,878	448,760
Arrearages (>60 days)				5.1%	4.5%	4.1%	4.3%	4.2%	4.2%	3.9%	5.5%	2.9%

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Staffing												
Employee turnover				5.1%	4.4%	6.2%	5.6%	6.7%	8.4%	8.5%	6.7%	11.2%
Employee age distribution												
18-35	Trans	120		32	44	44	51	52	54	58	53	54
	Distr	170		105	111	134	147	149	183	197	192	200
	Gen	132		47	54	64	65	65	64	55	45	40
	Nucl	190		240	257	275	279	281	267	236	233	211
36-53	Trans			54	55	56	59	54	50	55	56	65
	Distr			270	255	238	239	242	247	252	258	269
	Gen			154	132	111	91	63	59	61	60	61
	Nucl			583	546	514	493	467	455	445	426	435
54+	Trans			45	50	43	42	43	44	43	41	38
	Distr			207	218	226	232	239	241	229	223	206
	Gen			179	190	150	140	137	125	121	110	73
	Nucl			339	377	394	405	405	405	392	370	326
Form 1 data		*Page* , line										
Expense ($M)												
Total O&M		*323* , 198	$1,621	$1,697	$1,595	$1,501	$1,436	$1,393	$1,489	$1,441	$1,274	$1,392
Fuel		*320* , 5+25+63+76	$976	$1,040	$873	$804	$738	$665	$753	$670	$514	$597
Production		*321* , 80	$1,355	$1,420	$1,287	$1,202	$1,113	$1,031	$1,144	$1,036	$865	$941
Transmission		*321* , 112	$40	$55	$83	$87	$98	$141	$120	$168	$181	$233
Distribution		*322* , 156	$54	$55	$65	$57	$68	$67	$81	$82	$75	$77
Cust. Accts.		*322* , 164	$18	$16	$16	$15	$15	$15	$16	$19	$17	$17
A&G		*323* , 197	$128	$116	$126	$115	$115	$108	$95	$102	$97	$112
EP&B		*323* , 187	$38	$34	$30	$28	$27	$26	$16	$17	$18	$19
Data												
Retail cust.		*301* , 14(f)	583,362	585,386	585,874	587,252	589,041	591,984	595,192	596,731	600,946	604,549
GWh sold		*301* , 14(d)	41,399	38,037	35,331	30,405	28,379	29,820	30,103	26,514	25,014	24,830
GWh gener.		*401a* , 9	30,016	26,425	28,701	24,137	21,255	23,185	23,694	20,365	20,402	20,490
Transm. miles		*422* , 36	4,053	4,051	4,041	4,006	4,051	4,050	3,871	3,680	3,638	3,586