

ADVANCED ENERGY UNITED
COMMENTS ON THE
I&M 2024 INTEGRATED RESOURCE PLAN

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Introduction:

Advanced Energy United (“United”) respectfully submits these comments in response to Indiana Michigan Power’s (“I&M” or “Company”) 2024 Integrated Resource Plan (“IRP”) submitted to the Indiana Utility Regulatory Commission (“Commission”) on March 28, 2025. United appreciates the effort that I&M and other stakeholders have put into developing the 2024 IRP and emphasizes the importance of continuing to forecast and plan for Indiana’s energy needs in the future. Indiana’s utilities are at a critical juncture in planning for the State’s future, facing both exponentially higher projected load growth driven by Hyperscale Business Developments (“HSL”) and a growing need to temper rising energy costs. United highlights that there are proven and readily available advanced energy technologies that can help address both of these

concerns currently plaguing Indiana Utilities. By facilitating the deployment of advanced energy technologies, I&M would be able to satisfy its obligation to cost effectively, reliably, and sustainably serve ratepayers and meet Hoosier's energy needs into the future.

United is the only national business association representing leaders in the advanced energy industry. Members include front-of-meter and behind-the-meter ("BTM") renewable energy and battery storage manufacturers and developers, electric vehicle ("EV") and EV charging equipment suppliers, providers of energy efficiency ("EE"), demand response ("DR"), and virtual power plants ("VPP"), as well as larger users of energy wanting to ensure that clean energy is available on the grid to facilitate corporate sustainability goals. United members work to enhance the United States' competitiveness and economic growth through an efficient, high-performing energy system that is clean, secure, affordable, and reliable. United works with decision-makers at the state and national level as well as regulators of energy markets to achieve this goal. In Indiana, United aims to drive the development of advanced energy by identifying growth opportunities, removing policy barriers, encouraging market-based policies, establishing partnerships, and serving as the voice of innovative companies in the advanced energy sector.

Although the Commission is unable to make direct changes to I&M's 2024 IRP, United would like to identify some concerns with I&M's IRP in the hope that the Director's Report in response to the IRP will encourage I&M to improve its processes for developing future IRPs. The five areas that United addresses in these comments are as follows: 1) Performance Indicator Development, 2) Rockport Generating Station Retirement and Future Replacement, 3) Hyperscale Business Development Impacts, 4) Demand-Side Management Technology Assumptions and Considerations, and 5) Preferred Portfolio Purchase of Existing Natural Gas Combined Cycle ("NGCC") and Natural Gas Combustion Turbine ("NGCT") Facilities. Each of these concerns is discussed in more detail within the "Key Considerations and Recommendations" section of these comments. United also takes time to discuss the impacts that 2025 Indiana House Bill 1007 has on some of the key aspects of I&M's 2024 IRP and future IRPs. Silence regarding other aspects of I&M's 2024 IRP should not be taken as support or acquiescence.



Background:

Indiana defines an IRP as “a utility's assessment of a variety of demand-side and supply-side resources to cost effectively meet customer electricity service needs”.¹ As established in Indiana Administrative Code (“IAC”) 170 4-7-2, each utility that owns generating facilities is required to submit an IRP to the Commission every three years.² I&M has previously submitted IRPs to the Commission in 2018 and 2021 respectively. As mentioned in the Final Directors Report for I&M’s 2021 IRP, the purpose of an IRP is to “develop a long-term power system resource plan that will guide investments to provide safe and reliable electric power at the lowest delivered cost reasonably possible.”³ Furthermore, it is critical for IRPs to be flexible, as well as support the unprecedented pace of change currently occurring in the production, delivery, and use of electricity.

Following the submission of an IRP by a utility, the Commission does not have the authority to make direct changes to an IRP, however, as established in Indiana Code 8-1-8.5-3.3, “the director of the commission's research, policy, and planning division shall evaluate and comment in the commission's final director's report for the plan as to whether the electric utility's preferred resource portfolio takes into account the attributes of electric utility service including: 1) reliability; 2) affordability; 3) resiliency; 4) stability; and 5) environmental sustainability”.⁴ The Director’s Report is a critical document, as it takes into account outside stakeholders’ comments and serves as the main conduit for influencing and guiding utilities’ future IRP proposals. The Final Director’s Report for I&M’s 2021 IRP and subsequent stakeholder comments has therefore served as an informative resource when understanding I&M’s 2024 IRP.

In preparation for the 2024 IRP filing, I&M engaged with stakeholders to receive feedback on the development of the IRP and hosted five public advisory meetings between June 2024 and March 2025 to promote transparency and encourage feedback on the IRP process. I&M states that roughly 50 participants attended each of the five public advisory meetings and the attendance generally included residential customers, commercial and industrial customers, regulators, advocacy groups, fuel suppliers, and elected officials. In addition to the public advisory meetings, I&M also

¹ See Indiana Administrative Code 170 17.1-2-11

² See Indiana Administrative Code 170 4-7-2

³ See Final Director’s Report for Indiana Michigan Power Company’s 2021 Integrated Resource Plan, February 12, 2024

⁴ See Indiana Administrative Code 8-1-8.5-3.3



hosted two technical conferences for stakeholders who were interested in the specific modeling scenarios and technical details of the IRP process. I&M accepted written thoughts and questions through its website as well. I&M utilized this stakeholder feedback for finalizing the 2024 IRP, and on March 28, 2025, I&M officially submitted the final 2024 IRP to the Commission.

I&M's 2024 IRP – Overview:

I&M's 2024 IRP indicates that the Company is expected to undergo significant changes to its business practices in the future in response to various market-wide transformations that are occurring or expected to occur in the near future. I&M is expecting large increases in energy demand in the future with peak energy demand expected to increase at an average rate of 4.8% per year through 2044.⁵ This sizeable expected annual increase in peak energy demand is driven largely by commercial sector growth due to data centers or “hyperscale” developments (defined as projects with electricity capacity requirements exceeding 500 Megawatts) within I&M's service territory. Due to the energization of data centers, I&M's commercial usage per customer is projected to increase by 28.7% per year for the 2021-2023 time period (a massive year-to-year increase).⁶ I&M estimates that by the end of 2030, HSL customers will represent approximately 60% of I&M's jurisdiction peak load.⁷ In addition to the anticipated large growth due to the energization of data centers, I&M is also experiencing changes in its generation resource composition with the Company expecting its Rockport Unit 1 coal generation plant to retire by the end of 2028, and the potential license renewal of the Company's Cook Nuclear Plant Units 1 and 2 occurring in 2034 and 2037 respectively.⁸ The growth in peak energy demand due to the energization of data centers and the decisions I&M will have to make in the future regarding its' generation resource mix are two critical variables impacting the 2024 IRP and will be discussed in further detail below.

In developing the 2024 IRP, I&M modeled potential energy portfolios based on four distinct scenarios given various market and regulatory conditions: 1) Base Reference Case, 2) Enhanced Environmental Regulations Case, 3) High Economic Growth Case,

⁵ See Indiana Michigan Power's 'Indiana Integrated Resource Planning Report' submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at P. 33

⁶ *Id.* At P. 45

⁷ *Id.* At P. 1

⁸ *Id.* At P. 93



and 4) Low Economic Growth Case. I&M also utilized eleven alternative sensitivities intended to capture broad market impacts and input and assumption changes in order to further model the above-mentioned scenarios. To evaluate the potential energy portfolios under the four different scenarios, I&M developed specific performance indicators to measure and compare the successfulness of each portfolio in meeting I&M's needs. The performance indicators were specifically chosen to align with the Five Pillars of Indiana energy policy as well as the specific Commission-established IRP objectives. As an example of the developed performance indicators, energy market exposure for purchases and sales and planning reserves were used to measure the accomplishment of the reliability pillar as well as the IRP objective of maintaining a capacity reserve margin. The specifics of the performance indicators are discussed in more detail in the sections below. Based on the results of the performance indicators, I&M selected three energy portfolios to evaluate further: 1) Base Reference Case, 2) Low Carbon: Transition to Objective, and 3) Expanded Wind Availability. Using a risk analysis as well as the results of the performance indicators, I&M developed a Preferred Portfolio which is based on modifications to the Expanded Wind Availability energy portfolio. The development of I&M's Preferred Portfolio is the ultimate goal of the 2024 IRP as the Preferred Portfolio identifies the amount, timing, and type of resources required to supply energy in both the near-term (2025-2030) and long-term (2031-2044).

I&M states that its Preferred Portfolio for the 2024 IRP was selected because it better positions I&M for existing and future Environmental Protection Agency ("EPA") greenhouse gas regulation compliance, leverages existing natural gas resources while also increasing resource diversity from renewable and clean energy resources, and results in less variability in future cost risk when compared to the base reference case portfolio.⁹ I&M states that "The Preferred Portfolio reflects a diverse mix of wind, solar, storage, natural gas, nuclear and demand-side resources that is maintained throughout the planning horizon, including taking advantage of near-term expanded wind availability based on market intelligence gained from I&M's 2024 RFPs."¹⁰ The Preferred Portfolio ultimately results in near-term (2025-2031) capacity additions of 1400 MW of wind, 599 MW of solar, 50 MW of storage, 4500 MW of existing NGCC, 1500 MW of existing NGCT, and 690 MW of new NGCT. In the long-term (2032-2044) the Preferred Portfolio results in capacity additions of 2600 MW of wind, 2057 MW of

⁹ *Id.* At P. 10

¹⁰ *Id.* At P. 11



solar, and 2480 MW of nuclear generation (which includes 600 MW of Small Modular Reactor (“SMR”) nuclear generation). **Table 1** below shows I&M’s cumulative nameplate capacity additions by resource from 2025 through 2044.

Table 1: I&M Preferred Portfolio Cumulative Nameplate Capacity Additions¹¹

Year	Nameplate MW								Accredited MW	
	Wind	Solar	Storage	New Acro	Existing NGCC	New NGCT	Existing NGCT	Nuclear Cook SLR & SMR	DR, EE, DER, CVR	Short Term Capacity
2025	0	0	0	0	0	0	0	0	0	325
2026	0	0	0	0	0	0	0	0	33	1,500
2027	0	0	0	0	0	0	0	0	61	1,875
2028	1,000	599	50	0	1,800	0	1,000	0	92	0
2029	1,000	596	50	0	2,700	0	1,000	0	116	0
2030	1,000	593	50	0	3,600	690	1,000	0	132	0
2031	1,400	590	50	0	4,500	690	1,500	0	148	0
2032	1,800	886	50	0	4,500	690	1,500	0	144	0
2033	2,200	1,480	50	0	4,500	690	1,500	0	138	0
2034	2,600	2,071	50	0	4,500	690	1,500	0	134	0
2035	3,000	2,210	50	0	4,500	690	1,500	888	134	0
2036	3,200	2,199	50	0	4,500	690	1,500	1,188	131	0
2037	3,600	2,636	50	0	4,500	690	1,500	1,488	128	0
2038	4,000	2,623	50	0	4,500	690	1,500	2,480	125	0
2039	4,000	2,609	50	0	4,500	690	1,500	2,480	122	0
2040	4,000	2,596	50	0	4,500	690	1,500	2,480	119	0
2041	4,000	2,582	50	0	4,500	690	1,500	2,480	111	0
2042	4,000	2,569	50	0	4,500	690	1,500	2,480	105	0
2043	3,000	2,555	50	0	4,500	690	1,500	2,480	99	0
2044	3,000	2,542	50	0	4,500	690	1,500	2,480	94	0

Since I&M’s 2021 IRP, the Company has made various changes to its IRP methodology, incorporating recommendations made in the 2021 Director’s Report. These changes include: 1) utilizing an updated Market Potential Study from 2024 that assesses the potential for future EE, DR, and distributed energy resources (“DER”), 2) notifying PJM of its intention to continue as a Fixed Resource Requirement entity through May 31, 2026, 3) issuing four RFPs in September 2024 targeting 4,000 MW of solar, wind, storage, thermal, and supplemental capacity resources, 4) conducted all-source RFPs

¹¹ *Id.* At P. 11



in 2022 and 2023 to acquire generation resources necessary to replace the energy and capacity needs associated with the Rockport generating station retirement in 2028, and 5) complying with IRP commitments set forth in the settlement agreements within Cause Nos. 45546 and 45933. The aforementioned incorporated changes assisted in shaping I&M's final preferred portfolio for both the near-term and long-term of I&M's business activities. I&M states that the developed preferred portfolio leverages key opportunities to expand the Company's resource diversity and positions I&M to significantly expand clean energy resources and prepare for potential future environmental regulations while mitigating potential cost risks to customers.

For immediate next steps, I&M developed a short-term action plan based on the results of the preferred portfolio. The short-term action plan states that I&M will take the necessary steps to transition the Rockport Coal site including the completion of a competitive procurement process and reuse of transmission interconnection infrastructure for NGCT resources at the Rockport site. I&M will also initiate an early site permit process and continue to pursue project development options for a SMR at the Rockport site. Additionally, I&M is planning on taking the appropriate steps to implement the Subsequent License Renewal process for the Cook nuclear reactor, as well as finalizing the evaluation of the Elkhart and Mottville hydropower generating stations for license renewal. This short-term action plan also states that I&M will continue to make the necessary planning and regulatory actions to implement a cost-effective portfolio of Demand-Side Management ("DSM") programs. Finally, I&M will continue to engage in competitive procurement activities and bilateral capacity purchases to ensure that energy capacity is sufficient in the near future.

Key Considerations and Recommendations:

United has reviewed I&M's 2024 IRP and appreciates the work that I&M invested into the process. Nevertheless, United has identified shortcomings within the 2024 IRP and provides the following general considerations on the IRP as a whole, as well as specific recommendations and analysis on the individual topics mentioned below.

1. Performance Indicator Development

To effectively determine the final preferred portfolio, I&M established 11 performance indicators that it would use to measure, evaluate, and compare the various energy resource portfolios that the Company developed. Each individual performance indicator is intended to align with one of the five IURC pillars of



utility regulation: Reliability, Affordability, Resiliency, Stability, and Environmental Sustainability. The ultimate goal of the performance indicators is to ensure that I&M's preferred portfolio developed in the 2024 IRP is in-line with and complies with each of the IURC pillars of utility regulation. Each performance indicator and the corresponding IURC pillar are listed below in **Table 2**.

Table 2: I&M's Developed Portfolio Performance Indicators¹²

IURC Pillar	IRP Objective	Performance Indicator
Reliability	Maintain capacity reserve margin and the consideration of reliance on the market for the benefit of customers.	Energy Market Exposure – Purchases
		Energy Market Exposure – Sales
		Planning Reserves
Affordability	Maintain focus on power supply cost and risks to customers	Net Present Value Revenue Requirement (NPVRR)
		Near-Term Power Supply Cost Impacts (CAGR)
		Portfolio Resilience
Resiliency	Maintain diversity of resources and fleet dispatchability	Resource Diversity
(Grid) Stability	Maintain fleet of flexible and dispatchable resources	Fleet Resiliency
Environmental Sustainability	Maintain focus on portfolio environmental sustainability benefits and compliance costs	Emissions Change
		Net Present Value Revenue Requirement (NPVRR)

Understanding the performance indicators that I&M utilized to compare its 2024 IRP energy resource portfolios, United has some concerns related to the development and applicability of the performance indicators.

Regarding the affordability-related performance indicators, I&M utilized various measurements of Power Supply Costs to determine the effectiveness of accomplishing affordable customer service. I&M specifically acknowledges that the measurements of Power Supply Costs do not represent the total costs of electric service applicable to customers and only consider the generation component of service.¹³ Despite an IRP being largely focused on the generation aspect of utility service, United notes that it is important to consider all aspects of electric service costs when seeking to ensure customer affordability. Energy affordability is generally understood as a customers' ability to pay for energy costs, of which the U.S. Department of Energy defines Energy Cost as “the

¹² *Id.* At P. 5

¹³ *Id.* At P. 24



amount of household expenditures spent on electricity, gas, and other fuels”.¹⁴ Customer affordability should be holistic of all costs that a customer has to pay for electricity and should therefore consider the cost of electricity generation in accompaniment with the cost of distribution and transmission costs. Furthermore, I&M utilizes a Portfolio Resilience performance indicator to represent affordability. United contends that, while energy portfolio resilience is important to protect customers against market volatility, it is not necessarily a suitable indicator of customer affordability. A performance indicator that measures the average customer electricity cost (including generation, distribution, and transmission costs) across a variety of customer classes as a result of the different portfolios may be a more suitable metric to properly analyze affordability. Energy portfolio resilience does not guarantee a customers’ ability to pay for electricity costs nor does it adequately represent a utility’s ability to provide affordable electric service.

Regarding the resiliency and stability related performance indicators, there is significant overlap between the measurements of these two indicators. The resiliency performance indicator uses both resource diversity and fleet resiliency as measurements, and the stability performance indicator uses only fleet resiliency as a measurement. United has concerns regarding the overlap between these two performance indicators and the fact that they cover the same measurements. United recommends that the performance indicator measurements be unique from one another. Resiliency can generally be defined as a utility’s ability to serve customers during non-blue-sky days (i.e., during outage events or otherwise). Thus, an improved performance indicator measurement for resiliency could be outage restoration time. Stability, on the other hand, is not extensively defined by I&M within its 2024 IRP, but I&M does state that the objective is “to maintain a fleet of flexible and dispatchable resources”.¹⁵ United believes that stability should represent I&M’s ability to consistently provide electricity to customers (especially in an environment

¹⁴ See U.S. Department of Energy’s Webpage for the Low-Income Energy Affordability Data Tool available here: <https://www.energy.gov/scep/low-income-energy-affordability-data-lead-tool>

¹⁵ See Indiana Michigan Power’s ‘Indiana Integrated Resource Planning Report’ submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at P. 26



experiencing significant load growth and increased demand) versus I&M's definition which may be more aligned with the resiliency performance indicator.

When crafting performance indicators related to environmental sustainability, United has concerns with the specific indicators that I&M has developed to reflect this “pillar” of focus. I&M uses the same Net Present Value Revenue Requirement indicator as used for the affordability objective when focusing on environmental sustainability. I&M states that this is done to reflect the affordability concerns and costs associated with achieving environmental sustainability.¹⁶ United contends that this creates confusion between the affordability and environmental sustainability pillars and notes that while seeking affordability for achieving environmental sustainability goals is admirable, it is not reflective of whether environmental sustainability is achieved. Furthermore, I&M uses an emissions change performance indicator for environmental sustainability which reflects CO₂, NO_x, and SO₂ emissions change in 2034 and 2044 compared to 2005 levels.¹⁷ Within the 2024 IRP, it is unclear if I&M analyzes overall emission changes or emission changes specifically associated with its generation resources. If I&M is using overall emission changes, United notes that this may not be a proper performance indicator when measuring environmental sustainability associated with a utility due to the fact that numerous factors contribute to CO₂, NO_x, and SO₂ emissions that are entirely outside of the utility's control. Rather a more suitable performance indicator reflecting environmental sustainability is the change in CO₂, NO_x, and SO₂ emissions that are directly associated with electricity generation resources within I&M's portfolio.

The development and applicability of the performance indicators has direct impacts on I&M's 2024 IRP, as these performance indicators dictate what preferred portfolio is ultimately utilized by I&M, and therefore what decisions the Company will make in both the near-term and long-term. Without the proper development of performance indicators that accurately reflect the IURC's five pillars of utility regulation, it becomes unclear if the developed preferred

¹⁶ See Indiana Michigan Power's 'Indiana Integrated Resource Planning Report' submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at P. 26

¹⁷ *Id.*



portfolio is truly in-line with the goals of the State of Indiana. United therefore urges the Commission to direct I&M to further refine and redevelop its performance indicators for future IRPs.

2. Rockport Generating Station Retirement and Future Replacement

The Rockport Generating Station (“Rockport”) has a nameplate capacity of 1,300 MW and is I&M’s last remaining coal-fired generating station in Indiana. In response to a Supreme Court decision and the U.S. Environmental Protection Agency’s Effluent Limitations Guidelines (“ELG”), Rockport filed a notice of planned participation which stated that it will not install the required additional controls to meet the ELG limits provided that Rockport commits to cease coal combustion by December 31, 2028. Because of this, Rockport is currently planning to cease operations on December 31, 2028 and I&M built this information into its portfolio development as well as the possibility of retiring either in 2025 or 2026 in compliance with the settlement agreement in Cause No. 455¹⁸ Ultimately, I&M’s preferred portfolio assumes that Rockport will retire on December 31, 2028 and includes plans to utilize the existing interconnection and transmission infrastructure at the Rockport site to develop future NGCT resources and SMRs. Specifically, I&M’s Planned Portfolio includes the construction of 690 MW of NGCT facilities in 2030 and 600 MW of SMR facilities in 2036 and 2037 at the Rockport site. Due to the reuse of the Rockport interconnection and transmission infrastructure, I&M estimates that it will realize a 15% cost reduction for NGCT construction and a 30% cost reduction for SMR construction comparatively to if these technologies were constructed elsewhere on the electricity ¹⁹

United is supportive of I&M’s actions to cease coal use and retire Rockport by December 31, 2028, however, United has concerns related to the assumptions surrounding the future use of natural gas at the site within I&M’s preferred portfolio. Notably, it is not clear if any resources other than new NGCT or SMR resources were contemplated for reuse of the existing Rockport interconnection and transmission infrastructure. Specifically, I&M should clearly indicate in

¹⁸ *Id.* At P. 72

¹⁹ *Id.* At P. 209



future IRPs whether it considered the full scope of advanced generation technologies, including solar and wind, in such situations. United notes that the Levelized Cost of Energy (“LCOE”) for onshore wind resources and utility-scale solar resources has been shown to be less and operate within a smaller cost range than traditional gas combined cycle resources.²⁰ United further asserts that a majority of the cost reductions associated with developing new NGCTs at the Rockport site may be realized largely due I&M leveraging favorable equipment pricing through AEP supply chain opportunities.²¹ All of these factors call into question whether onshore wind and utility-scale solar would have been more cost-effective options to be developed at the Rockport site as opposed to new NGCT resources.²² United, therefore recommends that proper consideration for the reuse of existing interconnection and transmission infrastructure be provided to wind and solar resources in I&M’s future IRPs.

Within the 2024 IRP, I&M considers both existing and forecasted levels of DSM programs specifically related to DSM programs’ ability to reduce the need for increased supply resources through customer energy conservation efforts or direct intervention in customer energy use (usually through utility rebates or bill credit payments as incentives). The considerations and assumptions of DSM programs are discussed in greater detail within United’s recommendation 4. United notes that the ability for DSM programs to reduce the need for increased supply resources can directly lead to a reduced need to develop new generation resources such as the new NGCT and SMR resources being proposed at the Rockport site. It is unclear in the 2024 IRP if DSM program impacts were considered prior to I&M’s determination that NGCT and SMR resources were needed at the Rockport site. United therefore recommends that in future IRPs, before I&M determines if new generation resources are needed, I&M should maximize the cost-effective investment in DSM programs to better understand if reduced new generation is warranted or if new generation is needed at all.

²⁰ See Lazard Levelized Cost of Energy+ Report issued June 2025 available here:

<https://www.lazard.com/research-insights/levelized-cost-of-energyplus-lcoeplus/>

²¹ See Indiana Michigan Power’s ‘Indiana Integrated Resource Planning Report’ submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at P. 209

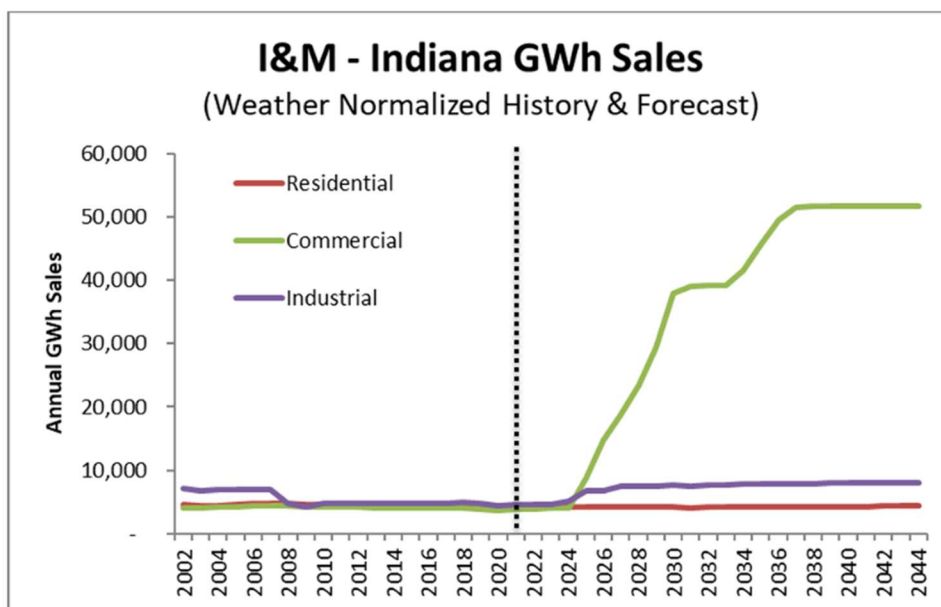
²² *Id.* At P. 210



3. Hyperscale (HSL) Business Development Impacts

I&M is anticipating major impacts to its business practices being driven by the development of HSL businesses, including data centers, with electric capacity requirements exceeding 500 MW. I&M is estimating HSL impacts based on customers that have signed an HSL-specific Letter of Agreement through 2030 and planned loads anticipated after additional transmission capacity is available. Specifically, I&M is forecasting that load growth by the end of 2030 will more than double the Company's peak load from 2023 and that by the end of 2030, HSL customers are forecasted to represent roughly 60% of I&M's peak load. From 2025 through 2044, I&M's retail sales are expected to grow 9.8% per year for commercial classes, and internal energy and peak demand are expected to increase at an average rate of 5.7% and 4.8% per year for all classes.²³ Additionally, I&M forecasts that normalized electricity use per customer for commercial customers is expected to greatly increase in the future driven largely by HSL customers with commercial usage per customer projected to increase by 28.7% per year for 2021 through 2023.²⁴ This information is shown in **Table 3**, **Table 4**, and **Table 5** below.

Table 3: I&M Indiana Historical and Forecasted Retail Sales (GWh)²⁵



²³ *Id.* At P. 33

²⁴ *Id.* At P. 45

²⁵ *Id.* At P. 42



Table 4: Indiana Historical and Forecast Peak Demand Forecast (MW)²⁶

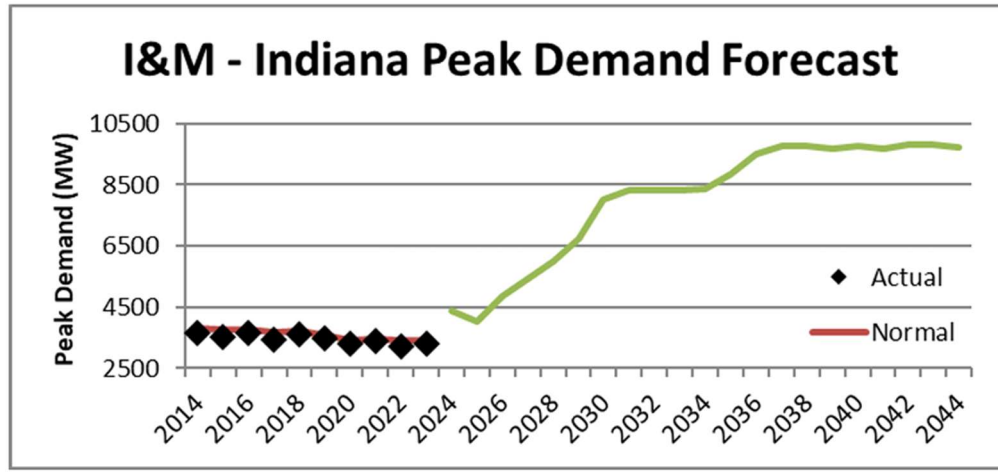
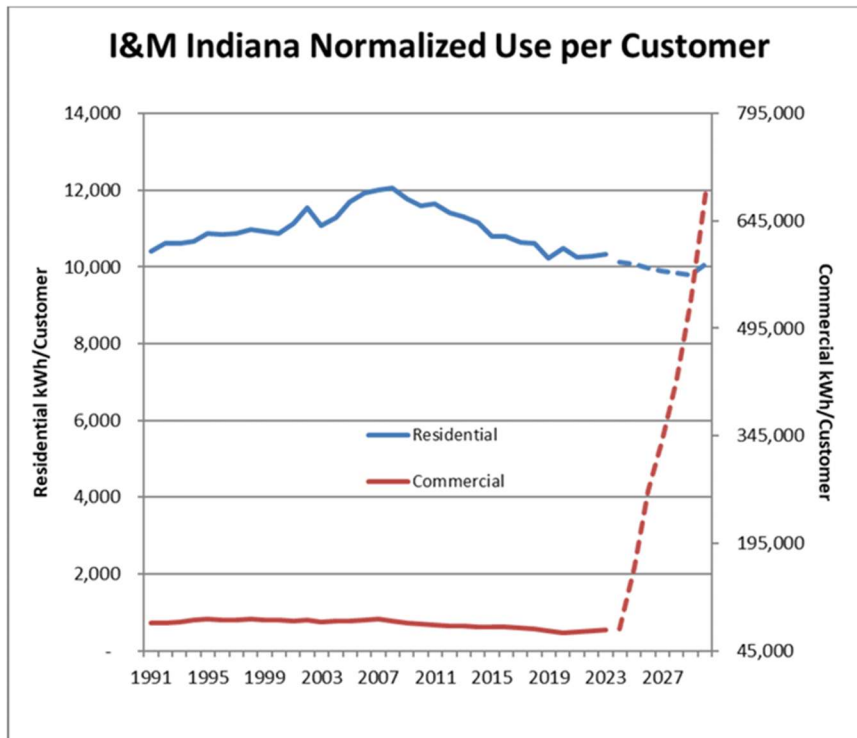


Table 5: I&M Normalized kWh Usage per Customer – Historical and Forecast²⁷



²⁶ *Id.* At P. 43

²⁷ *Id.* At P. 45



United expresses concern regarding the impact of HSL businesses on I&M's forecasted load and customer usage in the future. More specifically, United is concerned with the tactics I&M plans to deploy in order to adequately meet this load. United notes that I&M's large forecasted resource additions (especially NGCC and NGCT resources) are likely in response to the significant load growth the Company anticipates due to HSL businesses. United recommends that I&M consider alternative strategies to meeting the substantial load growth associated with HSL businesses, such as the greater use of tariffs specific to large load customers such as the one developed in Cause No. 46097.²⁸ United also recommends that the Commission consider a broader investigation into appropriate terms and conditions for tariffs serving large load customers. United and RMI partnered in the development of large load tariff principles that would be useful in such an investigation.²⁹ DSM and the strategies that are included in the provisions of HEA 1007 from 2025 also warrant consideration as means to effectively address the load growth experienced by the Company. United further discusses DSM and HEA 1007 below.

4. Demand-Side Management Technology Considerations and Assumptions

Within the 2024 IRP, I&M considers both existing levels of DSM programs and estimated future levels of DSM programs regarding their impact on the Company's energy resource portfolio. DSM programs are structured to reduce the need for increased supply resources through customer energy conservation efforts or direct intervention in customer energy use, usually using utility rebates or bill credit payments as incentives. The programs that I&M considers as DSM include its programs related to: EE, DR, Conservation Voltage Reduction ("CVR"), and Distributed Generation ("DG").³⁰ I&M estimates that existing EE programs in 2025 will reduce peak demand by 18 MW and reduce energy consumption by 108 GWh.³¹ Existing DR programs will lead to an estimated 204 MW load shape reduction (largely achieved through interruptible load agreements).³² Existing DG programs cover roughly 818 customers with a total

²⁸ See Final Order of the Indiana Utility Regulatory Commission in Cause No. 46097 on February 19, 2025

²⁹ <https://rmi.org/insight/large-load-tariff-principles/>

³⁰ *Id.* At P. 73

³¹ *Id.* At P. 74

³² *Id.*



capacity of approximately 18 MW.³³ I&M has 108 distribution circuits with installed CVR and 27 substations with installed CVR that lead to an estimated 42,820,865 kWh of energy savings and 1,080 kW of demand savings.³⁴ For 2025, I&M applied energy and demand savings from existing DSM programs. For years beyond 2025, the IRP selected optimal levels of incremental economic DSM programs.³⁵

In addition to existing DSM resources, I&M utilized a 2024 market potential study developed by the GDS Team to evaluate the potential for future DSM resources.³⁶ Specifically, this study evaluated DSM programs, measures, costs, and energy and demand savings over a 20-year time period to forecast the impact of DSM resources for I&M's IRP. I&M also discusses that two adjustments were made to the Market Potential Study prior to the inclusion in the 2024 IRP: 1) the provision of program potential savings at the generator level, and 2) a net-to-gross adjustment was made to align EE projections with embedded efficiency trends.³⁷ Furthermore, I&M states that the 2024 IRP Capacity Expansion Model does not include avoided transmission and distribution cost benefits, and the Market Potential Study accounts for this. DSM resources were taken into account in developing I&M's preferred portfolio, and the 2024 IRP shows a peak of 148 MW of accredited DSM in 2031 with a consistent decrease in accredited MW for DSM in each subsequent year. This trend can be seen in **Table 1**.³⁸

United appreciates I&M's consideration of DSM programs on a utility's resource portfolio and future decisions, however, United has concerns regarding the I&M's characterization of the impact that DSM programs can have on resource portfolios. Specifically, United disagrees with I&M's forecast that the accredited MW of capacity additions within the preferred portfolio will decrease between 2031 and 2044. United believes that customer adoption (and subsequent associated capacity accreditation) of DSM technologies will increase at a

³³ *Id.*

³⁴ *Id.* At P. 123

³⁵ *Id.* At P. 123

³⁶ *Id.* At P. 113

³⁷ *Id.* At P. 120

³⁸ *Id.*



consistent pace in the future through 2044. This is due to the broad customer uptake of programs across the country that support and incentivize the adoption of DSM technologies such as the implementation of FERC Order No. 2222 for DER Aggregators and development of Virtual Power Plant policies. Indiana would be wise to encourage further deployment of DERs to help meet energy demand. Furthermore, adoption and use of DSM technologies should increase in the future as they provide customers with the ability to reduce their energy usage (and thus their energy bill) which is becoming increasingly important as customers face higher energy bills during a time of ever-growing energy demand.

United also has a strong concern regarding I&M not considering transmission and distribution benefits associated with DSM measures within its capacity expansion model and 2024 IRP. United contends that this may likely be one of the reasons why I&M predicts that the capacity accreditation of DSM technologies decreases between 2031 and 2044. United asserts that a substantial benefit of DSM programs (especially DSM programs utilized by large customers) is to avoid distribution and transmission upgrades by the utility. By omitting the benefits of avoided distribution and transmission upgrades associated with DSM technologies, I&M is removing a key benefit of these programs and a key reason for why customers adopt these technologies in the first place. United opines that it is crucial to include transmission and distribution benefits associated with DSM technologies in order to accurately forecast DSM technologies in the future.

United additionally has concerns about I&M's Exhibit A-11 in Appendix 1 which shows DSM/EE included in the load forecast for I&M's 2024 IRP. This Exhibit shows unusual fluctuations in the forecast for DSM/EE including completely unchanged energy forecasts for years 2039 through 2044 stagnating at a level of 940,809 MWh for 5 years in a row. This data is unusual, and United recommends that the Commission seek clarity from I&M.³⁹

³⁹ See Indiana Michigan Power's 'Indiana Integrated Resource Planning Report: Appendix – Volume 1' submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at Exhibit A- 11



5. Preferred Portfolio Purchase of Existing NGCC and NGCT Facilities

As shown in **Table 1**, I&M included the use and purchase of existing NGCC and NGCT facilities within its Preferred Portfolio. This includes a cumulative capacity addition of 1800 MW of existing NGCC in 2028 peaking at 4500 MW by 2031. For existing NGCT facilities, this includes a cumulative capacity addition of 1000 MW in 2028 peaking at 1500 MW in 2031. For NGCC additions, I&M states that three existing NGCC resources were modeled to be available starting in 2028, with two being modeled as power purchase resources (with five and ten-year contract periods) and the third being modeled as an acquisition and ownership of an existing NGCC resource (assuming a 20 year lifespan).⁴⁰ Similar to NGCC additions, I&M states that three existing NGCT resources were modeled to be available starting in 2028 with two being modeled as power purchase resources (with five and ten-year contract periods) and the third being modeled as an acquisition and ownership of an existing NGCT resource (assuming a 20 year lifespan).⁴¹ I&M states that a main driver in the economic viability of purchasing and utilizing existing NGCCs is due to the reduced variability of energy market purchases that would otherwise be needed (as energy market purchases are significantly impacted by NGCC dispatch).⁴² Furthermore, I&M specifically states that in 2044, all of the modeled portfolios rely on similar levels of natural gas resources (between 7 and 8 GW of natural gas energy production) to support the Company's capacity needs.⁴³

United appreciates the granularity of analysis that I&M has spent with regards to existing NGCC and NGCT resources, however, United has concerns regarding the assumptions that I&M has made related to the future and economic viability of these natural gas resources. I&M states that when resources are available in 2028, NGCC and nuclear resources provide the majority of I&M's forecasted energy portfolio, but in 2030, energy generated from NGCC begins to reduce due to EPA capacity factor limitations for existing NGCC facilities.⁴⁴ This statement is abnormal because despite I&M stating that energy generated from NGCC

⁴⁰ See Indiana Michigan Power's 'Indiana Integrated Resource Planning Report' submitted to the Indiana Utility Regulatory Commission on March 28, 2025 at P. 92

⁴¹ *Id.* At P. 98

⁴² *Id.* At P. 218

⁴³ *Id.* At P. 216

⁴⁴ *Id.* At P. 214



resources begins to reduce in 2030, the preferred portfolio (as shown in **Table 1**) forecasts I&M purchasing an additional 900 MW of existing NGCC between 2030 and 2031. United contends that due to EPA capacity factor limitations for existing NGCC resources beginning in 2030, it may be less advantageous for I&M to purchase additional existing NGCC resources during this timeframe as opposed to other types of resources such as wind or solar. United also notes that the details surrounding I&M's forecasted purchase of existing NGCC or NGCT is unclear, specifically related to what explicit resources will be purchased and from where. United therefore recommends that in future IRPs, I&M include more detailed information on the existing resources that the Company is forecasted to purchase.

United notes that, as shown in **Table 1**, I&M's preferred portfolio forecasts capacity additions in wind, solar, existing NGCC, and existing NGCT technologies all beginning in 2028. United asserts that increased wind and solar capacity additions (potentially coupled with battery storage) and decreased existing NGCC and existing NGCT additions could have feasibly been included within I&M's preferred portfolio especially considering the fact that all of these capacity additions were made in the same year. United notes that the LCOE for onshore wind resources and utility-scale solar resources has been shown to be less and operate within a smaller cost range than traditional gas combined cycle resources.⁴⁵ Wind and solar resources are typically cheaper than natural gas resources when analyzing LCOE, which draws into question why more wind and solar resources were not chosen in I&M's preferred portfolio on the sole basis of cost-effectiveness. United recommends that I&M better evaluate the potential for additional wind and solar resources in future IRPs.

2025 Indiana House Bill 1007

On May 6, 2025 House Bill 1007 ("HEA 1007") on Energy Generation Resources was signed by Governor Braun and enacted into law which amended various sections of the Indiana Code concerning utilities.⁴⁶ HEA 1007 contains new provisions that impact

⁴⁵ See Lazard Levelized Cost of Energy+ Report issued June 2025 available here:

<https://www.lazard.com/research-insights/levelized-cost-of-energyplus-lcoeplus/>

⁴⁶ See 2025 Indiana House Bill 1007 on Energy Generation Resources available here:

<https://iga.in.gov/legislative/2025/bills/house/1007/details>



Investor-Owned Utilities ("IOU") and the broader energy industry within Indiana, including provisions on Expedited Generation Resource ("EGR") Plans, Generation Resource Submittals, Petitions for Projects Serving Large Load Customers, and SMR Manufacturing Expense Tax Credits. These provisions have a substantial interaction and impact on the development of an IOU's IRP, and United provides the following comments related to these provisions.

The language within HEA 1007 on EGR Plans allows a utility to develop a plan for acquiring or developing generation resources to meet load growth that either: a) exceeds 5% of the utility's average peak demand over the most recent three calendar years, or b) exceeds 150 MW. A utility is required to submit a developed EGR Plan to the Commission for approval and the plan must meet the explicit requirements laid-out within the law. These requirements include, but are not limited to the provision of: a detailed explanation of how the utility will acquire generation resources to meet the anticipated load growth, a demonstration of the need for generation capacity, identification of the type and amount of capacity and energy that is included in the plan, a load growth forecast for a minimum of five years, an explanation of how the plan is consistent with or differs from the utility's most recent IRP, and a description of how the utility considered implementing grid-enhancing technologies to defer or minimize the need for additional investment in generation. Within an EGR Plan, a utility can specifically request the procurement/development of an individual generation resource through the submission of a Generation Resource Submittal to the Commission. For EGR Plans and Generation Resource Submittals, the Commission has the ability to approve, deny, or modify the submissions pending whether the plan or submittal is just, reasonable, and within the public interest.

United notes that there is significant overlap between the goals of a utility IRP and the goals of an EGR Plan and Generation Resource Submittal. Although HEA 1007 came about following the submission of I&M's 2024 IRP, United believes that the concepts embodied in EGR Plans may prove useful to resolve some of the issues that I&M highlights within its 2024 IRP. Specifically, I&M forecasts the need for substantial resource capacity additions between 2025 and 2044 which can be assumed as a response to the large increase in energy demand from HSL business customers. Whereas an IRP is focused on broad utility resource planning efforts, an EGR Plan focuses specifically on establishing generation resources to meet short-term increased load growth (which is precisely the issue that I&M is facing). United believes that both IRPs and EGR Plans are useful in their own respect and encourages I&M and all IOUs



to continue to file appropriately developed IRPs and EGR Plans. However, United suggests that IRPs be utilized for overarching utility forecasting/planning purposes, and EGR Plans be utilized solely to resolve issues associated with short-term increased load growth. Furthermore, United strongly supports the provision within an EGR Plan that requires a utility to demonstrate how it considered implementing grid-enhancing technologies to defer or minimize additional investment in generation. In fact, United suggests that a stronger emphasis be placed on the ability of grid-enhancing technologies' to defer generation investment in both future EGR Plans and future utility IRPs.

Additionally, within an EGR plan, a utility may also submit to the Commission a Petition for a Project Serving a Large Load Customer. The requirements to submit a petition include, but are not limited to: requiring the large load customer to commit to meaningful financial assurances that cover at least 80% of the project costs, requiring the large load customer to protect customers from future costs reasonably allocable to the large load customer, and a description of the DSM and self-generation options reviewed by the large load customer. Additionally, HEA 1007 defines a "Large Load Customer" as a new or existing customer that: 1) requests new or additional electricity demand that, in aggregate, exceeds 5% of the utility's average peak demand over the most recent three calendar years, or exceeds 150 MW, 2) plans to make a capital investment that exceeds \$500 million in a new or expanded facility in Indiana, and 3) plans to employ at the new or expanded facility in Indiana at least 50 full-time employees. In accordance with this definition, a Petition for a Project Serving a Large Load Customer can be submitted for up to four customers, so long as the definition of a "Large Load Customer" is adhered to.

United supports the future use of utility Petitions for a Project Serving a Large Load Customer in the ability to target and address the main driver of forecasted increased utility energy demand. However, United strongly emphasizes that projects developed with the explicit intent to serve large load customers should be accomplished using cost-effective clean and advanced energy resources. United reiterates that the LCOE for onshore wind resources and utility-scale solar resources has been shown to be less and operate within a small cost range than traditional gas combined cycle resources.⁴⁷ Furthermore, United strongly supports the requirement within a Petition for large load

⁴⁷ See Lazard Levelized Cost of Energy+ Report issued June 2025 available here: <https://www.lazard.com/research-insights/levelized-cost-of-energyplus-lcoeplus/>



customers to review DSM and self-generation options for the purpose of potentially avoiding investment in large-scale generation resources.

Conclusion:

United greatly appreciates the opportunity to provide comments on I&M's 2024 IRP and notes that it has significant concerns on the following topics of the 2024 IRP: 1) Performance Indicator Development, 2) Rockport Generating Station Retirement and Future Replacement, 3) Hyperscale Business Development Impacts, 4) Demand-Side Management Technology Assumptions and Considerations, and 5) Preferred Portfolio Purchase of Existing NGCC and NGCT Facilities. United has specific considerations/recommendations on each of the topics within these comments, and recommends that I&M consider the suggested improvements in each topic area for applicability in future IRPs. United also offers comments on the intersection between IRPs and 2025 Indiana House Bill 1007, explicitly addressing EGR Plans. United respectfully asks that the Commission and specifically the Commission's Director of Research, Policy, and Planning to consider these comments.

