

2025 Integrated Resource Plan

IRP)







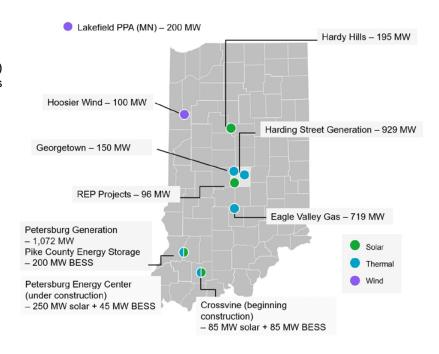


Background

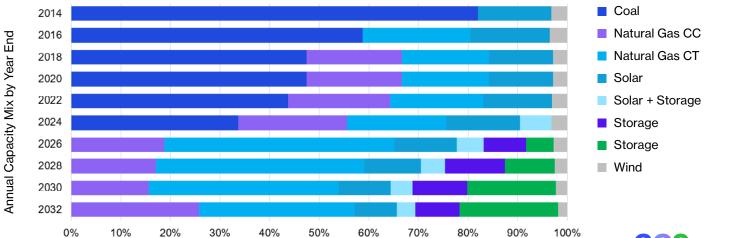
AES Indiana generates, transmits, distributes, and sells electricity to approximately 531,000 retail customers in Indianapolis and neighboring areas up to 40 miles from Indianapolis. AES Indiana's service area covers about 528 square miles. AES Indiana is subject to the regulatory authority of the Indiana Utility Regulatory Commission ("IURC") and the Federal Energy Regulatory Commission ("FERC"). AES Indiana fully participates in the electricity markets managed by the Midcontinent Independent System Operator ("MISO"). AES Indiana is a transmission company member of Reliability First ("RF"). RF is one of eight Regional Reliability Councils under the North American Reliability Corporation ("NERC"), which has been designated as the Electric Reliability Organization under the Energy Policy Act of 2005.

Every three years, AES Indiana submits an Integrated Resource Plan ("IRP") to the IURC in accordance with the provisions in the Indiana Administrative Code ("IAC") (IAC 170 4-7) to describe expected electrical load requirements, potential risks, possible future scenarios, and defines a preferred resource portfolio to meet those requirements over a forward-looking 20-year study period based upon analysis of all factors. This process includes extensive collaboration with stakeholders known as a "Public Advisory" process.

The IRP is viewed as a guide for future resource decisions made at a snapshot in time. Resource decisions, particularly those beyond the five-year horizon, are subject to change based on future analyses and regulatory filings. Any new resource additions, including supply-side and demand-side resources, may require regulatory approval.



Annual Capacity Mix





The future of energy is here

AES Indiana is powering an energy transition with a balanced and diverse energy mix with grid capacity, stability, and resiliency.

Reliability



Affordability



Sustainability



Preferred Resource Portfolio and Short-Term Action Plan

AES Indiana's 2025 Integrated Resource Plan was developed in unprecedented times. Because of the rise of large-load customers including data centers, AES Indiana is presenting two preferred portfolios.

- → A no data center portfolio designed to service native load growth
- → A data center portfolio that will allow AES Indiana to serve data centers should they commit to locating within the AES service territory.

At this time, AES Indiana is experiencing interest from large loads to locate within the AES service territory; AES Indiana has an obligation to serve within its territory, so needs to be prepared to support new loads that want to interconnect into the system. If those new large loads were to locate within the AES Indiana service territory, AES Indiana would have to install additional resources. However, if the loads go elsewhere, then AES Indiana would not install additional resources. As such, AES Indiana created the two portfolios: one to show what is needed no matter the large load integration, and the other to identify what other resources would have to come online to support these large loads. Resource selection will be subject to large load contracting, availability, and cost-benefit analysis.

AES Indiana's Preferred Resource Portfolios and Short-Term Action Plan will:

No data center portfolio

→ 118 MW of demand response and energy efficiency by 2028 and 285 MW by 2032

Mid data center portfolio

- → Battery storage (40 MW by 2032 and up to additional 820 MW by 2032 if a large-load customer is contracted)
- → Natural gas (up to 700 MW if a large-load customer is contracted) by 2032

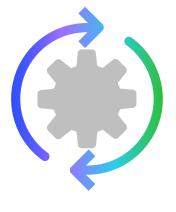


In our 2025 IRP, several key themes shaped the way AES Indiana approached the development of its preferred plans and supporting analysis:



Long-term planning:

Prepares for the calibration of potential large-load customers with a combination of demand response, energy efficiency, natural gas generation and battery storage



Flexibility and adaptability:

Meets potential new sources of load growth in the AES Indiana service territory while still planning to meet the needs of all AES Indiana customers



Risk and opportunity:

Considers fuel price volatility, regulatory changes, and demand fluctuations









IRP Objective

AES Indiana's 2025 Integrated Resource Plan (IRP) charts a path to best meet the energy needs of our customers for the next 20 years, and it is updated every three years. In Indiana, we have a robust, longstanding framework of the IRP process to ensure our future plans are aligned with the five pillars that are the foundation of our state's energy policy. These pillars include reliability, resilience, stability, affordability, and environmental sustainability. The 2025 plan reflects the increasing demand within the electric industry, the changing needs and behaviors of our customers, and evolving energy pillars and market rules.

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IRP Process

Every three years, AES Indiana submits and Integrated Resource Plan to the IURC in accordance with Indiana Code (IAC 170 4-7). The IRP describes expected electrical load requirements, discusses potential risks, and possible future scenarios. The IRP defines a preferred resource portfolio, or two in the 2025 IRP, to meet those requirements over a forward looking 20-year study period based on analysis of all factors. This process includes extensive collaboration with stakeholders known as the "Public Advisory" process.

Public Advisory Process

AES Indiana hosted four (4) public advisory meetings and four (4) technical meetings to discuss the IRP process with interested parties and solicit feedback from stakeholders. The meeting agendas from each meeting are highlighted here. For all meeting notes, presentations and other materials, see AES Indiana's IRP webpage at aesindiana.com/integrated-resource-plan. AES Indiana incorporated feedback from stakeholders to shape the scenarios, develop metrics, and clarify the data presented. Stakeholder and public input process. Public advisory meetings were held virtually via Microsoft Teams and attended by stakeholders, AES Indiana employees and members of the public.

Public Advisory Meeting #1 January 29, 2025

Materials covered: Overview of IRP process, review of existing AES Indiana resources, load related assumptions Public Advisory Meeting #2 July 24, 2025

Materials covered: All price assumptions, introduce 2025 IRP analysis portfolio framework, IRP analysis scorecard, reliability analysis Public Advisory Meeting #3 September 10, 2025

Materials covered: Preliminary results presented

Public Advisory Meeting #4 October 22, 2025

Materials covered: Preferred resource portfolios presented and short term action plan announced



2025 IRP Framework

AES Indiana utilized a portfolio matrix scenario framework that evaluated 4 different levels of large load integration across four unique worldviews, or scenarios.

The four levels of large load integration included the following:

- 1 No additional load
- 2 500 MW by 2035
- 3 1,500 MW by 2035
- 2,500 MW by 2035

The four levels of large load integration were optimized in a model to select new resources in the following scenarios:

- Reference Case Today's inflationary markets and environmental policies
- Gas Infrastructure Challenges Higher natural gas prices
- High Regulatory: Environmental A return to tax credits under the Inflation Reduction Act and restrictions on new natural gas operations under the proposed EPA 111 rules. Higher costs for thermal resources. Higher load as electrification increases. Higher EV and distributed solar adoption
- Stable Markets Scenario Capital costs for new resources, natural gas prices, and load decline as markets revert to pre-pandemic trends

This created 16 different portfolios, or resource mixes. Portfolios were run through the scenarios, generating 64 unique model runs.

2025 IRP Candidate Portfolios: Cumulative New Installed Capacity through 2035

		DR	EE	Storage	Gas CCGT	Gas Peaking	Solar	Wind
	Reference Case Portfolio	223	191	100	0	0	0	0
No Data Center Load	Gas Infrastructure Portfolio	223	191	100	0	0	0	0
NO Data Center Load	High Regulatory Portfolio	223	191	120	0	0	25	900
	Stable Markets Portfolio	87	191	0	0	0	0	0
	Reference Case Portfolio	218	191	420	0	480	0	0
Low Data Center	Gas Infrastructure Portfolio	218	191	160	700	0	0	0
Load (500 MW)	High Regulatory Portfolio	223	191	780	0	0	350	1,350
	Stable Markets Portfolio	218	191	120	0	480	50	0
	Reference Case Portfolio	200	191	860	700	480	0	0
Mid Data Center	Gas Infrastructure Portfolio	223	191	380	1,400	108	50	0
Load (1,500 MW)	High Regulatory Portfolio	223	191	1,840	0	0	1,050	2,750
	Stable Markets Portfolio	223	191	720	0	960	100	0
	Reference Case Portfolio	218	191	640	2,100	294	0	0
High Data Center Load (2,500 MW)	Gas Infrastructure Portfolio	223	191	620	2,800	0	25	0
	High Regulatory Portfolio	223	191	2,480	0	480	1,225	2,800
	Stable Markets Portfolio	218	191	960	700	1,440	100	0



Scorecard Evaluation and Results Summary

AES Indiana created a Scorecard to help evaluate portfolio performance. The Scorecard categories were based on the Five Pillars of Electric Service, as defined by the 21st Century Energy Policy Development Task Force to include affordability, reliability, resiliency, and environmental sustainability. AES Indiana also included metrics for risk and opportunity.

		AFFORDABILITY			RELIABILITY, RESILIENCY, AND STABILITY				RISK & OPPORTUNITY				ENVIRONMENTAL			
Data Center Case	Portfolio	10-Year Levelized Supply Cost	25-Year Supply Cost	10-Year PVRR	25-Year PVRR		25-yr energy purchases, % of load	25-yr energy sales, % of load	Dispatchable Capacity, Percent of Peak (2035)		Opportunity (Mean - P5)	Risk (P95- Mean)	Enviro. Scenario Risk	Avg. % Difference from Optimal	Total CO2 Emissions (25-yr)	Carbon Intensity (25-yr avg.)
	Units →	\$2026/MWh	\$2026/MWh	2026\$MM	2026\$MM	%	%	%	%	%	%	%	2026\$MM	%	Tons	lb/MWh
No Data Center	Reference Case	\$149	\$161	\$5,126	\$10,092	26%	16%	10%	111%	90%	17%	18%	\$234	0%	147	772
	Gas Infrastructure Challenges	\$149	\$162	\$5,154	\$10,161	21%	13%	8%	111%	90%	17%	18%	\$237	4%	146	766
Load	High Regulatory: Environmental	\$156	\$188	\$5,906	\$15,455	25%	11%	14%	111%	91%	7%	9%	\$0	52%	99	523
	Stable Markets Scenario	\$149	\$161	\$5,126	\$10,070	27%	18%	9%	111%	90%	17%	19%	\$57	0%	153	805
Low Data	Reference Case	\$144	\$151	\$5,985	\$12,654	23%	15%	8%	121%	99%	14%	18%	\$239	3%	183	806
	Gas Infrastructure Challenges	\$148	\$1 53	\$6,400	\$13,047	21%	11%	10%	118%	98%	12%	15%	\$970	7%	177	777
Center	High Regulatory: Environmental	\$1 53	\$180	\$7,099	\$19,827	26%	12%	14%	117%	96%	6%	8%	\$0	53%	111	486
	Stable Markets Scenario	\$145	\$151	\$6,020	\$12,699	23%	15%	8%	119%	97%	15%	18%	\$196	1%	194	854
	Reference Case	\$138	\$139	\$7,971	\$18,187	17%	12%	5%	122%	102%	11%	16%	\$658	3%	247	812
Mid Data	Gas Infrastructure Challenges	\$139	\$140	\$8,220	\$18,499	17%	10%	7%	117%	99%	11%	15%	\$1,217	6%	232	763
Center	High Regulatory: Environmental	\$151	\$174	\$10,236	\$30,040	21%	10%	11%	118%	98%	4%	6%	\$0	60%	117	384
	Stable Markets Scenario	\$138	\$139	\$7,967	\$18,266	17%	12%	4%	121%	100%	12%	18%	\$209	2%	278	914
High Data	Reference Case	\$134	\$132	\$9,975	\$23,754	15%	10%	5%	118%	102%	11%	15%	\$1,434	3%	295	779
	Gas Infrastructure Challenges	\$135	\$133	\$10,132	\$24,032	14%	8%	7%	125%	109%	10%	14%	\$1,851	5%	292	770
Center	High Regulatory: Environmental	\$145	\$164	\$12,246	\$37,871	18%	10%	8%	120%	99%	4%	7%	\$0	52%	149	394
	Stable Markets Scenario	\$134	\$133	\$9,959	\$23,990	14%	10%	4%	133%	112%	11%	16%	\$590	2%	333	879



Short-Term Action Plans for Preferred Portfolios

		2027	2028	2029	2030	2031	2032
Demand Response	No Data Center Load	44	61	107	130	144	152
Demand Response	Mid DC Load	44	61	105	124	133	138
Energy Efficiency	No Data Center Load	34	57	78	98	116	133
Lifetgy Efficiency	Mid DC Load	34	57	78	98	116	133
Battery Storage	No Data Center Load		20	20	20	20	40
Battery Storage	Mid DC Load		200	360	580	860	860
Gas CCGT	No Data Center Load						
Gas CCG1	Mid DC Load						700
Gas CT	No Data Center Load						
Gas C1	Mid DC Load						
Gas Reciprocating Engines	No Data Center Load						
Cas Reciprocating Engines	Mid DC Load						
Solar	No Data Center Load						
Solai	Mid DC Load						
Wind	No Data Center Load						
Willia	Mid DC Load						
Summer Capacity Market	No Data Center Load	2	27	(10)	(15)	(17)	(33)
Purchases/(Sales)	Mid DC Load	2	34	49	48	(0)	(50)
Winter Capacity Market	No Data Center Load	22	41	31	28	32	44
Purchases/(Sales)	Mid DC Load	23	(43)	22	49	48	(50)



Affordability

For the first time, AES Indiana showed two distinct affordability metrics on its scorecard: the present value revenue requirements and a levelized supply cost. While the first metric shows the incremental investment required for each portfolio, discounted over time, the second metric looks at costs spread over load. The more new load on the AES system, the greater the investment required. However, that investment is spread over more sales, which can create downward pressure on total system costs.

Reliability, Resiliency, and Stability

The portfolios were designed to meet capacity and energy reliability requirements. Furthermore, Quanta conducted reliability analysis, which affirmed the reliability of the portfolios.

Risk & Opportunities

AES Indiana hired ACES to conduct stochastic modeling to evaluate risks and opportunities across varying energy prices, gas prices, loads, and renewable output. The Preferred Portfolios balanced risks across these various factors.

Sustainability

The carbon intensity of the preferred portfolios decline over time.







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