

Wabash Valley Power 2017 Integrated Resource Plan Executive Summary January 2018



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What is an Integrated Resource Plan (IRP)?

Wabash Valley Power Association's (Wabash Valley or the Company) 2017 IRP is a planning document that evaluates the next 20 years to assess our Members' requirements for electricity and our ability to meet that need in a reliable and competitive manner.

Why do we prepare an IRP?

Every electric utility in the State of Indiana that is publicly, municipally or cooperatively owned must prepare an IRP every two years, soon to be three years, to comply with the Indiana Utility Regulatory Commission's (IURC) "Rule 7", technically 170 IAC 4-7.

What does Wabash Valley's IRP contain?

We divide Wabash Valley's 2017 IRP into the following five sections plus a technical appendix:

1. **Overview** – We discuss our system profile, including the Members we serve and our service area, and describe our process for developing the IRP.
2. **Resource Assessment** – We provide general characteristics of our load, such as our historical summer and winter peaks. We also provide a description of Wabash Valley's existing generation resources (supply-side) and end-customer resources (demand response, energy efficiency and distributed generation).
3. **Load Forecast and Forecasting Methodology** – We summarize our methodology for forecasting our Members' electricity requirements and we provide both a base case forecast and range forecasts for the next 20 years.
4. **Selection of Resource Options** – We review and analyze potential future resource options to meet our forecasted peak and energy requirements and determine our base resource plan.
5. **Scenario Analysis** – We develop scenarios to examine the impact of various uncertainties and develop alternate expansion plans to meet those requirements. We also outline our short-term action plan for the next three years.

The following Executive Summary shares a brief overview of Wabash Valley's 2017 IRP and is intended to communicate the key concepts to our Members, other interested parties and the public.

Executive Summary

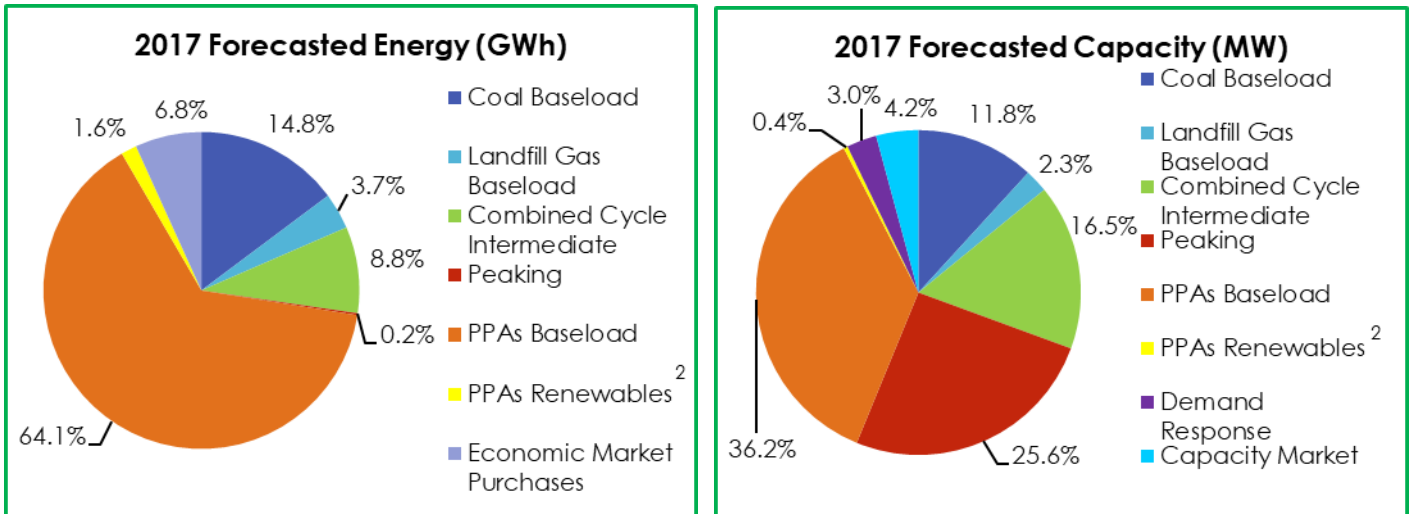
Wabash Valley is a generation and transmission (G&T) cooperative based in Indianapolis, Indiana, that provides wholesale electricity to twenty-three Members: nineteen in the northern half of Indiana, three in Illinois and one in Missouri. In turn, these distribution cooperatives supply electricity to more than 313,000 retail members. Just over 75 percent of our retail customer base resides in Indiana, with approximately 16 percent in Illinois, and 9 percent in Missouri.

This map illustrates Wabash Valley's composite service area. The areas identified on this system are not exclusively served by the Members. Numerous municipal electric utilities, as well as investor-owned utilities, permeate this service area.



Wabash Valley's goal is to develop and maintain a diverse portfolio of power supply resources with contract terms, fuel supplies, counterparties, and ownership options that promote reliable, low-cost service to our Members. Wabash Valley's 2017 resources are depicted in the following charts:

2017 Resources¹



Wabash Valley employs end-customer resources as part of our power supply portfolio. Wabash Valley offers the following energy efficiency (EE) and demand response (DR) programs to help customers use energy more wisely and efficiently.

Programs

EE – Residential

- Air Source Heat Pump Rebate
- Geothermal Heat Pump Rebate
- Touchstone Energy Home Program
- LED Discount Program
- LED Security Lights

EE – Commercial & Industrial (C&I)

- Lighting Retrofit Incentives
- HVAC Retrofit Incentives
- Schools Retrofit Program
- Agricultural Retrofit Program
- C&I Custom Retrofit Program
- Business New Construction Program

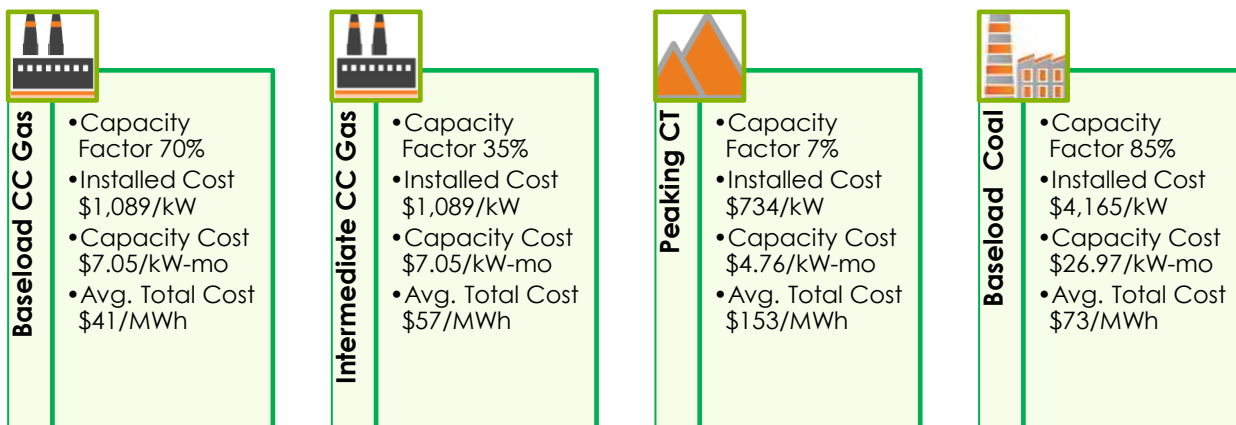
DR

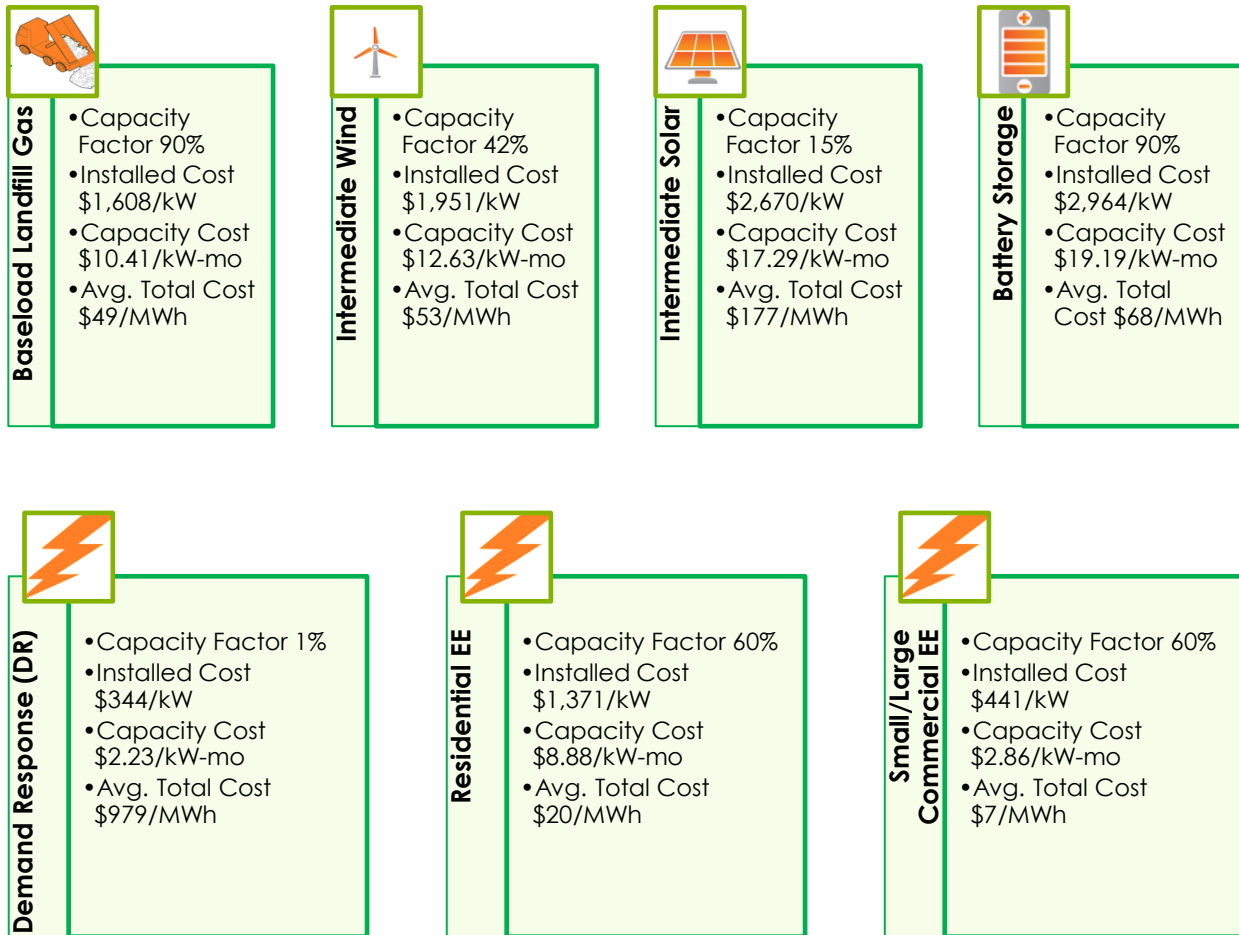
- Water Heater Program
- Air Conditioner Program
- Pool Pump Program
- Field Irrigation Program
- Entire Home Interrupt Program
- Ditch Pump Program
- Grain Dryer Program

Wabash Valley's 2017 IRP is based on the Company's 2017 Power Requirements Study that combines the forecasts of the twenty-three individual Members. Pass-Through Loads are certain large power customers who are included in the Company's total planning load because Wabash Valley has the ultimate responsibility to meet the large power customers' energy requirements and make purchases at market to meet the minimum reliability requirements. However, the Pass-Through Loads customers have the ability to customize their power supply portfolio based on their respective risk tolerances. Wabash Valley's base case load forecast indicates the following:

Key Data	Average Growth		
	2018	2036	%
Energy Growth (GWh) (excl. Pass-Through Loads)	7,277	8,531	0.9%
Energy Growth (GWh) (incl. Pass-Through Loads)	8,192	9,450	0.8%
Demand Growth Coincident Peak Demand (MW) (excl. Pass-Through Loads)	1,472	1,719	0.9%
Demand Growth Coincident Peak Demand (MW) (incl. Pass-Through Loads)	1,597	1,844	0.8%

Wabash Valley consistently examines potential new peaking, intermediate and baseload generating resources (both independently and jointly, both existing and new) in anticipation of capacity needs in 2018 and beyond. Wabash Valley employs several decision making factors in selecting new power supply resources. While price is clearly important, and is depicted below, Wabash Valley also considers the technical viability of a proposed project, operational flexibility, resource deliverability and location, impact on diversification of Wabash Valley's power portfolio, overall price risk exposure, equity requirements and contract term. Additionally, Wabash Valley assesses each alternative's environmental impact.

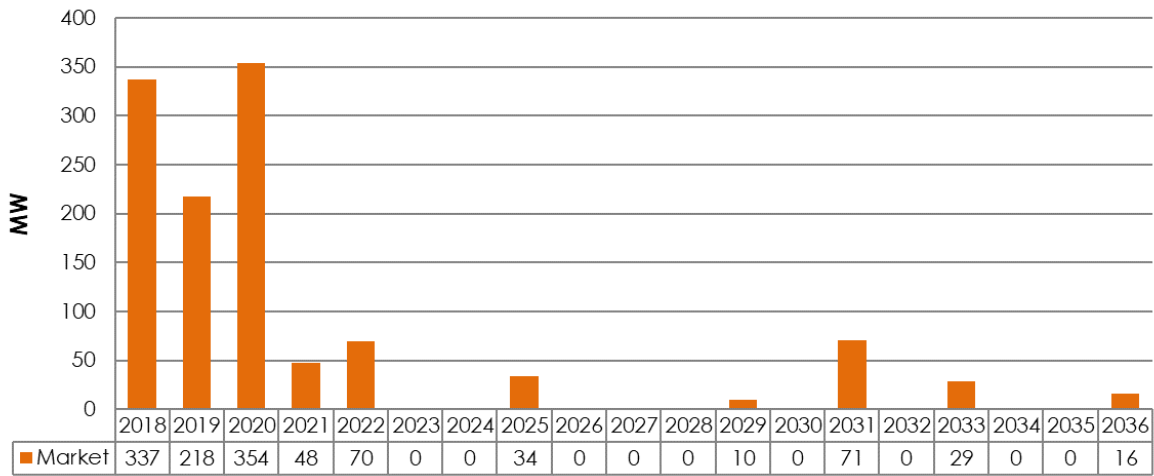




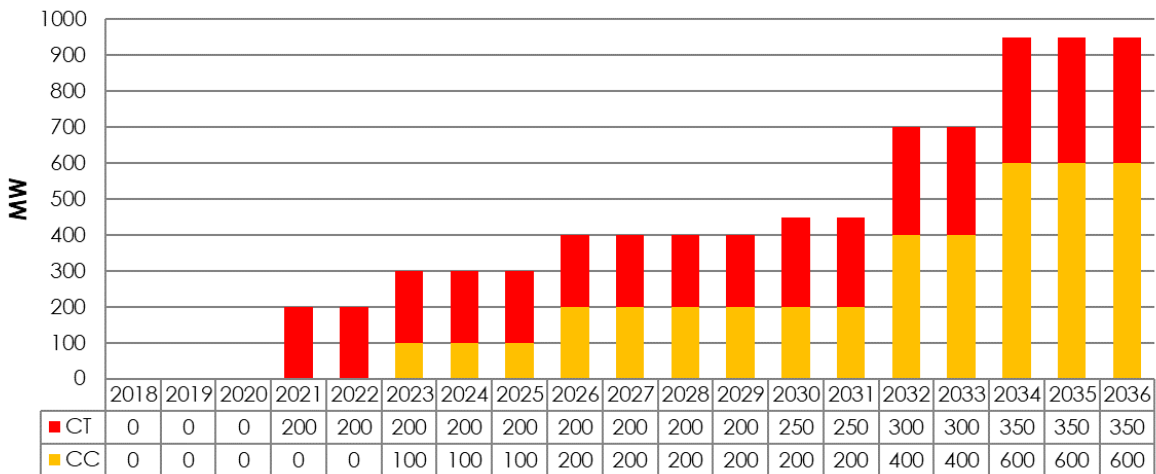
Wabash Valley has developed and maintains a detailed resource plan to serve forecasted Member load requirements. Since Wabash Valley's composite load requirements show an average load factor of approximately 55% to 65%, the Company plans to attain a power supply resource ratio of approximately 60% baseload/intermediate capacity to 40% peaking capacity with a move toward a greater percentage of natural gas units (e.g. combined cycle and peakers). The base expansion plan indicates capacity needs starting in 2018, and Wabash Valley anticipates meeting these needs in a diversified manner. From 2018 to 2020, Wabash Valley expects to meet our incremental capacity needs primarily by purchasing capacity through the regional transmission organization (RTO) capacity auctions or bilateral transactions. In the near term, market capacity prices appear favorable, as supported by indicative bilateral quotes, and our optimization model selected capacity market purchases as the preferred option. Although market capacity prices remain favorable beyond 2020, the risk of relying on that option increases. Therefore, we limit the amount of capacity market purchases our optimization model may select resulting in more competition among all supply-side and demand-side resource options. Incremental capacity market purchases and cumulative planned additions, stated in

installed capacity (ICAP) values, over the 20-year plan horizon for the base expansion plan are depicted in the following graphs.

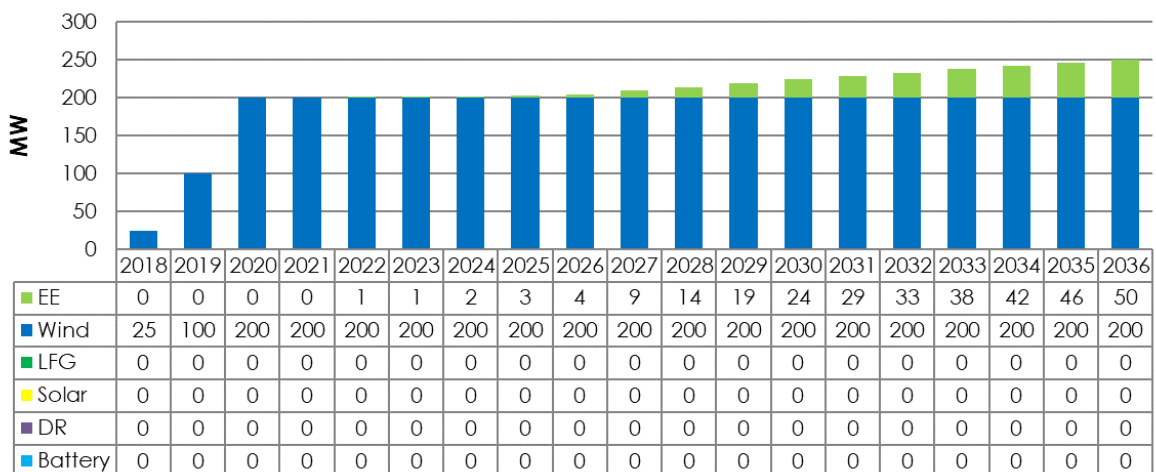
Incremental Capacity Market Purchases



Cumulative Natural Gas Planned Additions (ICAP)



Cumulative Renewable² & EE/DR Planned Additions (ICAP)



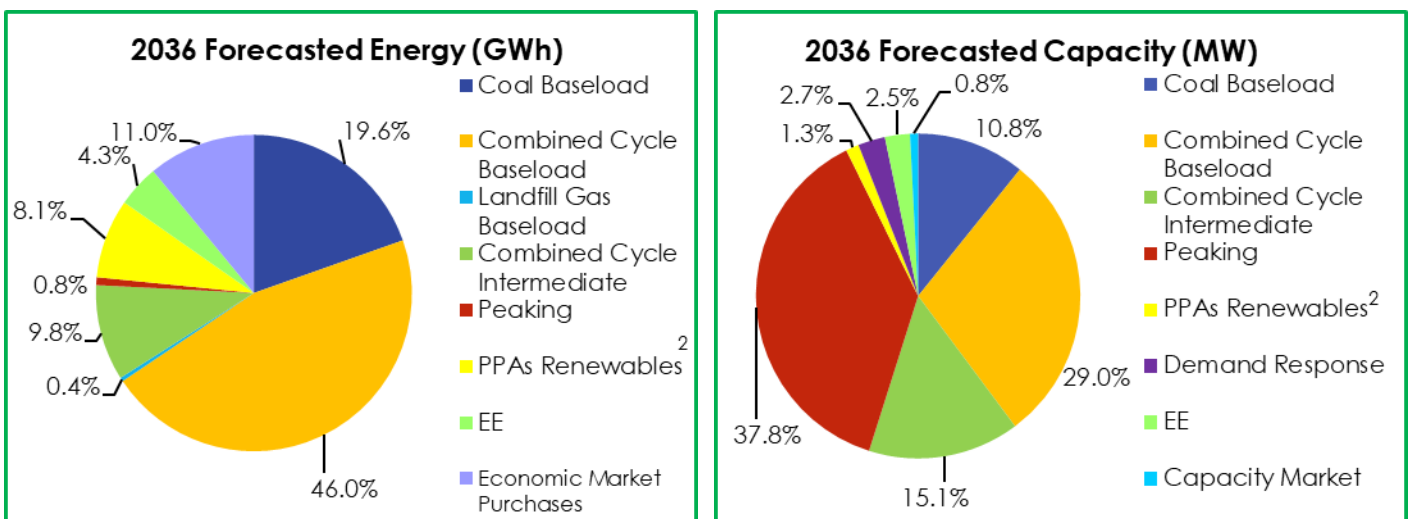
In addition to making incremental capacity market purchases, Wabash Valley will commence purchasing output from three wind projects from 2018 to 2020. Additions include 25 MW of wind power in 2018, 75 MW in 2019 and another 100 MW in 2020. Although our optimization model did not choose EE and DR programs in the early years of our 20-year plan horizon, at the request of our Members Wabash Valley will continue to run and enhance our EE program offerings and may choose to continue to build DR resources in the near term.

Past 2020, Wabash Valley's base resource plan capacity needs are largely met by building 600 MW of baseload combined cycle resources and 350 MW of peaking combustion turbine resources along with 50 MW of EE. The expiration of existing purchase power agreements drives the need for these resources.

Wabash Valley will continually evaluate available projects that show potential to provide cost effective renewable² energy and seek alliances, partnerships and opportunities for joint operations with other electric utilities.

At the end of our 20-year plan horizon in 2036, Wabash Valley's current base expansion plan forecasts that our energy and capacity needs will be served as depicted in the following charts.

2036 Resources¹



Wabash Valley's power supply team analyzes all opportunities to improve the Company's power supply portfolio while being cognizant of any regulation that may affect these sources. These opportunities may include the purchase/sale of generating assets, purchase/sale of cost-based power agreements and purchase/sale of fixed priced forward contracts. We analyze these opportunities to evaluate risk, reliability, and cost impact to our Members. While Wabash Valley has developed and maintains a detailed resource plan to serve forecasted Member load requirements, we may adjust that plan if we are able to take advantage of economic opportunities that arise.

¹ Forecasted Capacity (MW) stated in unforced capacity (UCAP) values.

² Wabash Valley supports renewable energy by owning landfill gas generation and purchasing the output from wind farms and biogas generators. Wabash Valley sells, separately, the environmental attributes associated with this generation to its members and third parties, and therefore does not claim this generation as renewable within our own supply portfolio.