



2024 Mid-Cycle Report



Executive Summary

Since completing the 2024 Integrated Resource Plan (2024 IRP) —built on a futures-based planning approach and extensive stakeholder engagement—Entergy Arkansas, LLC (EAL) has advanced several major supply side initiatives that support a balanced mix of dispatchable and renewable resources. Key additions already online include the West Memphis Solar, Walnut Bend Solar, Driver Solar, Flat Fork Solar and Forgeview Solar facilities. EAL has also received Arkansas Public Service Commission (APSC) approval for strategically important resources such as the Ironwood combustion turbine (CT), Jefferson Power Station combined-cycle combustion turbine (CCCT), and the Arkansas Cypress Solar and Battery project, all of which remain on schedule and align with the capacity needs identified in the 2024 IRP.

Load growth across EAL's service territory—driven by significant new industrial developments such as those announced by Avaio and Google—continues to track with the 2024 IRP's Future 2 forecast. This growth reinforces the need for additional capacity to maintain reliability and support economic expansion.

Technology and market conditions continue to evolve, with strong demand contributing to rising costs for natural-gas-fired generation, while solar and battery technologies show more modest cost trends. EAL continues to assess future solar, battery, and gas resources to optimize reliability, cost-effectiveness, and renewable integration, supported by insights from its 2025 Request for Proposal (RFP) processes. EAL is also evaluating a potential fuel conversion of the White Bluff Steam Electric Station from coal to natural gas—an extensive effort given the scale and unique nature of such a retrofit.

Overall, the Mid-Cycle Report demonstrates that EAL's 2024 Preferred Portfolio remains the correct strategy to meet reliability needs, support growing industrial demand, and advance a balanced, flexible resource mix. EAL will continue executing its current resource strategy while preparing for the 2027 IRP, ensuring that planning remains responsive to uncertainty, market dynamics, and stakeholder input.

Introduction

In October 2024, EAL filed its 2024 IRP in Docket No. 07-016-U. The 2024 IRP Report filing was the culmination of more than a year-long effort including detailed, long-term forecasts and assumptions, portfolio production cost modeling, and stakeholder engagement process. The 2024 IRP development began in late 2023 and the first stakeholder meeting took place in January 2024. Instead of analyzing and planning for a single scenario, EAL's 2024 IRP employed a "futures"-based approach to evaluate portfolios across a broad range of potential future conditions as well as four additional sensitivity portfolios, taking into account EAL's existing and planned resources. The chart below shows the supply additions in the 2024 IRP Preferred Portfolio (Portfolio 2A CC) that are incremental to EAL's existing and planned resources.

The next IRP is planned to be completed in 2027.

Figure 1: Preferred Resource Plan from 2024 IRP

2024 IRP Preferred Resource Plan (MW)



The Preferred Portfolio features a balanced mix of renewable, baseload, and peaking resources supporting EAL's load growth. The results of the 2024 IRP support the conclusion that EAL's initial future supply-side resources should be focused on a combination of new dispatchable CT and CCCT resources as well as renewable resources. The updates and changes that have occurred since filing the 2024 EAL IRP are discussed below and continue to support the focus of the Preferred Portfolio.

EAL's 2024 IRP Mid-Cycle Report reflects the fact that uncertainty remains an issue that must be considered in long-term resource planning, with no outcome providing absolute certainty as to the appropriate path for the utility to take.

Purpose of Mid-Cycle Report²

The Mid-Cycle Report is intended to provide an update to stakeholders on the progress and success of implementing the 2024 IRP and in no way affects or relieves EAL of its separate obligation to obtain regulatory approval for the acquisition of any resources that may be described in the report.

Portfolio updates since the 2024 IRP

Supply Side Resources

Since the finalization of the 2024 IRP, EAL has brought online the 180MW West Memphis Solar facility (November 2024) and the 250MW Driver Solar facility (December 2024). Additionally, EAL began receiving power via power purchase agreements from the 200MW Flat Fork Solar (August 2025) and 200MW Forgeview Solar (December 2025) facilities.

EAL has also received APSC approval for several key resources. These include:



The 446-MW Ironwood CT that will replace the existing Lake Catherine 4 unit at its current site (Docket No. 24-072-U). This resource was reflected in the 2024 IRP as a planned resource with a 2028 target commercial operation date (COD), which it is on schedule to meet (Q4 2028).



The 754-MW Jefferson Power Station, a 1x1 CCCT (Docket No. 25-047-U). This resource was reflected in the 2024 IRP as a planned resource with a 2029 target COD, which it is on schedule to meet (Q4 2029).



Illustrative battery storage system

The Arkansas Cypress Solar and Battery project, a 600-MW solar photovoltaic (“PV”) facility paired with a 350-MW battery energy storage system (“BESS”) (Docket No. 25-054-U). This resource was listed in the 2024 IRP as a planned resource with a 2030 target COD, however, the project is expected to be in-service ahead of schedule.

Additionally, in January 2026, EAL filed for APSC approval for the Big Island Solar PPA, a 440MW solar PV facility procured from the 2022 Renewable and Storage RFP (Docket No. 26-003-U). The 2024 IRP assumed a target COD of 2029; however, the project is expected to be online ahead of schedule.

Lastly, in Q1 2026, EAL completed and made selections out of its 2025 CCCT RFP. The chosen project has a 2031 COD, and this shift is reflected in Figures 2 and 3, where the 2030 CCCT assumption from EAL’s 2024 IRP Preferred Portfolio (see Figure 1) is shown shifting to a Winter 2031 start date.

²23 CAR § 459-105.

Load Forecast

The load growth forecast reflected in Future 2 in the 2024 IRP continues to materialize, with EAL executing agreements with Avaio, Google, and others for new power supply of ~1GWs in the last 12 months alone, with additional large industrial growth potential on the horizon. Together, these projects broaden the state's industrial mix, increasing regional economic activity.

The Preferred Portfolio remains the correct strategy

Since the 2024 IRP, EAL has advanced its resource acquisition strategy significantly as described above. The revised summer and winter Load and Capability charts are provided below in Figures 2 and 3.

The 2024 IRP Mid-Cycle Report demonstrates that EAL requires new generating capacity throughout the 20-year planning period to maintain reliable customer service. Accounting for impacts to existing resources (like the deactivation of Lake Catherine Unit 4 and the cessation of coal operations at EAL's White Bluff and Independence Steam Electric Stations (White Bluff and Independence), as well as projected load growth, estimates indicate a potential slight deficit by summer 2027, which grows in winter 2027 and summer 2028. The analysis supports a near-term focus on a balanced portfolio of dispatchable CTs and CCCTs, as well as renewable energy resources. These additions are necessary to address substantial capacity and energy requirements driven by industrial growth and steady residential demand. If customer load begins to increase at a pace faster than projected in the load forecast, it may become necessary to adjust the resource plans by bringing forward the schedule for adding new resources where possible, to ensure reliability over the long term.

As provided in Action Plan Item #5 listed below, EAL will also continue to assess solar, battery, and gas resources to optimize capacity, energy, and reliability while supporting renewable integration. These evaluations will inform future RFP processes.



Entergy Arkansas powers Google's \$4B investment in the state

Delivering big wins for customers and communities

Posted: Oct 2, 2025 | Posted: [Arkansas Team](#) | Category: [News release](#) |

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Figure 2: 2024 IRP Mid-Cycle Report - Summer Capacity Position

2024 IRP Mid-Cycle Report: Summer Capacity Position

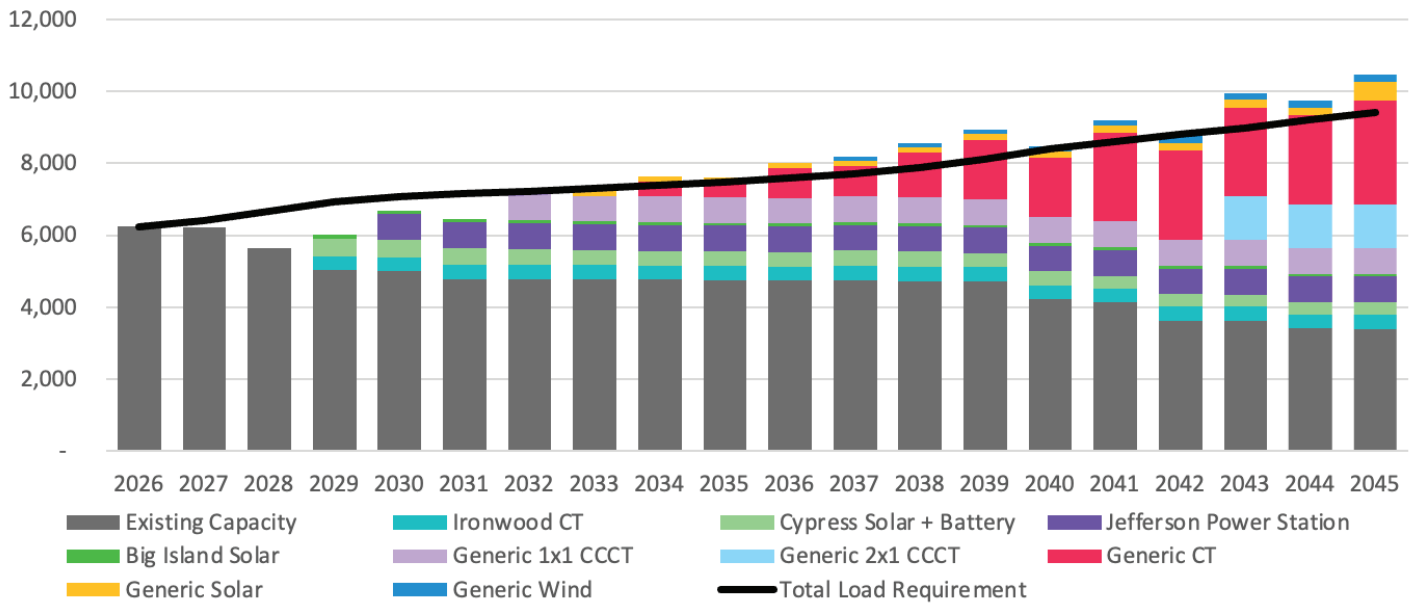
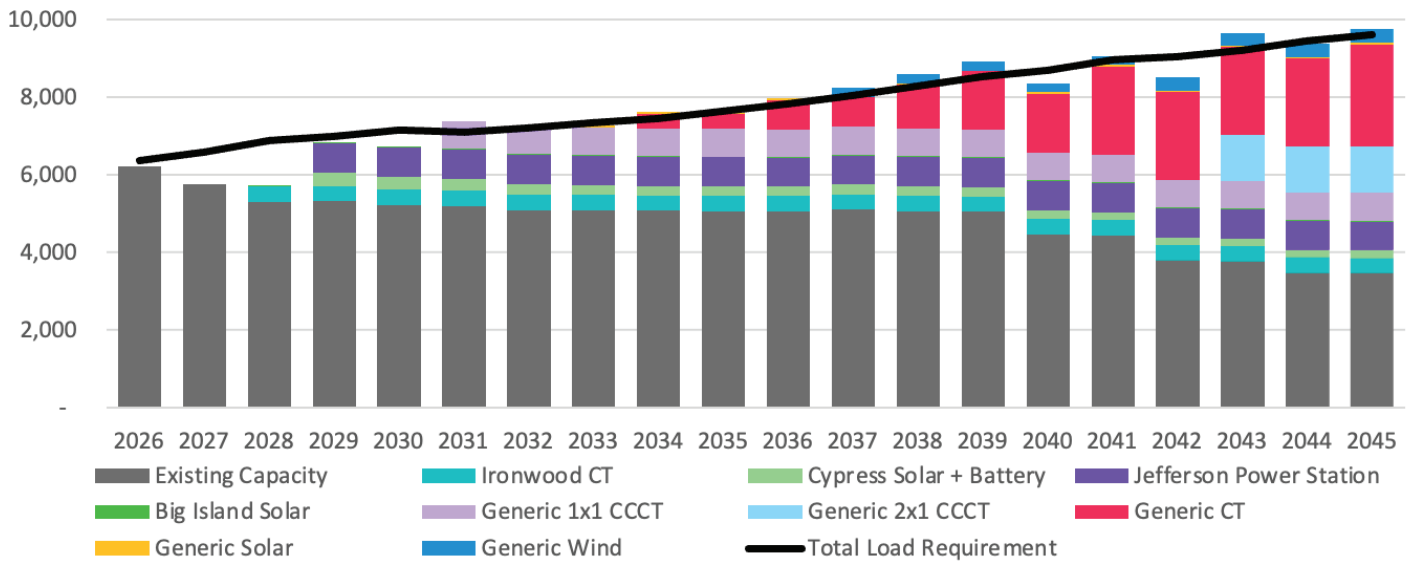


Figure 3: 2024 IRP Mid-Cycle Report - Winter Capacity Position

2024 IRP Mid-Cycle Report: Winter Capacity Position



Implementation of Plan

The action items below represent a pragmatic approach to EAL's integrated planning over the 2024-2027 timeframe. In reviewing the 2024 IRP Action Plan, EAL concluded that the action items are progressing as planned. The status of each item as of the first quarter of 2026 is summarized below.

2024 IRP Action Plan Progress

1. Complete agreements and seek approval of resources selected in the 2022 Renewable and Storage RFP

EAL filed for approval of the Big Island Solar PPA, a 440 MW solar PV array, in Docket No. 26-003-U on January 29, 2026, and continues to evaluate other renewable resources from the 2022 RFP. Additionally, EAL is advancing proposals selected from its 2025 Renewables and Storage RFP, which concluded in November 2025.

2. Monitor MISO Resource Adequacy Requirements

EAL continues to monitor its capacity position and potential need for incremental short-term capacity to address the currently projected seasonal capacity deficit from 2027 to 2029. Specifically, EAL is monitoring MISO's proposed Demand Response and Emergency Resource ("DR & ER") reforms (dockets ER25-1729, ER25-2050, ER25-1886, ER25-2845, ER26-148, and ER26-513), and MISO's proposed revisions to the Planning Reserve Margin Requirement ("PRMR") allocation methodology, deliverability application in resource accreditation, co-located resource accreditation, and MISO's forthcoming proposal to change planned outage exemptions.

3. Generation Replacement at Lake Catherine

EAL received APSC approval for Ironwood CT in Docket No. 24-072-U. The Certificate of Environmental Compatibility and Public Need was granted in Order No.9 issued on April 8, 2025. This unit utilizes the remaining interconnection rights from Lake Catherine Unit 4. The unit is expected to begin operations in Q4 2028. Civil work is currently underway, including grading, topsoil, and fill work. Notice to proceed with permanent construction will be issued once air permit approval has been received, currently expected in late-May.

4. Continue Participation in EE

EAL continues to offer cost effective EE and DR programs within the Commission's Rules for Conservation and EE Programs and subsequent future Commission orders as provided through Arkansas law, including targets adopted in EAL's 2024 – 2026 EE Program Plan as filed in Docket No. 07-085-TF. EAL was approved to replicate its current plan for 2027. See Docket No. 07-085-TF, Order No. 187 for details on EAL's EE three-year plan (2024-2026) and Docket No. 13-002-U Order No. 79 extending existing plan into 2027.

5. Evaluate opportunities for adding dispatchable resources to serve capacity and energy needs in the future.

EAL continues to assess potential resource opportunities to ensure capacity, energy, and reliability in supporting integration of renewable resources, including those resources evaluated during its 2025 RFPs for renewables, storage, and CCCTs.

Strong nationwide demand driven by data centers, electrification, industrial growth, and international turbine orders has increased competition for generation equipment and contributed to inflationary pressures. The latest technology assessment shows substantial cost increases for natural gas fired generation, particularly large frame CTs and CCCTs, while solar costs have risen only modestly and BESS costs have declined.

EAL is actively evaluating the development of a fuel conversion from coal to natural gas at the White Bluff facility. The facility consists of two coal fired steam electric units located near Redfield, Arkansas, collectively rated at 1,659 MW. Unit 1 began commercial operation in 1980 and Unit 2 in 1981. Given that this is a first-of-its-kind retrofit for the Company, extensive work is required to ensure safety, project feasibility, reliability, cost and schedule accuracy. To accomplish these objectives, EAL is working with the original equipment manufacturer and a third-party engineering firm to complete various critical path activities that will support the development of the project.

EAL continues to monitor cost trends, supply chain constraints, and technology availability to assess impacts on resource procurement and ensure the long-term resource plan remains aligned with capacity, energy, and reliability needs.

6. Pursue Power Resiliency

EAL will develop and implement customer-centric power resiliency solutions. Power Through represents EAL's initial power resiliency offering. On July 11, 2024, EAL made a compliance filing with the APSC that explicitly conforms with Commission Order Nos. 11 and 13 in Docket No. 20-049-U. EAL received approval of the compliance tariff in Order No. 18 filed on November 22, 2024. Upon APSC approval, EAL has begun offering Power Through to its customers and has, to date, filed for and received approval for one 2MW Power Through project at the Arkansas Heart Hospital. On March 31, 2026, EAL filed with the APSC a request to update the Capacity Value used to allocate costs between host and other customers. The update is needed to reflect cost increases in generation since EAL's initial filing.

7. Monitor Carbon Capture and Storage, Hydrogen, and Renewables to complement future gas-fired resource additions

While carbon capture and storage (CCS) technology is proven in a limited number of commercial applications, cost-effective, large-scale deployment of post combustion carbon capture on CCCTs currently remains a challenge. CCS is a viable technology for reducing carbon emissions, however there are some challenges that need to be navigated. EAL continues to evaluate the cost effectiveness of CCS, which it will continue to monitor amid political uncertainties.

Additionally, EAL continues to assess geographic locations to find opportunities for suitable carbon storage sites. As the political climate changes and political priorities shift, EAL will evaluate the availability of the tax credit and adjust its long-term strategy.

8. Evaluate Stakeholder Engagement

The stakeholder engagement for the 2024 IRP was robust and an important component of the process. EAL will continue to review the stakeholder report, which can be found in Appendix G of the 2024 IRP report and continue taking steps to address concerns in the Company's IRP process.