

November 2, 2022

EAL Mid-Cycle IRP Update

EAL Resource Planning



Welcome & Meeting Guidelines 🚾

- EAL is pleased to welcome the IRP Stakeholder Group to the presentation of the 2021 Integrated
 Resource Plan ("IRP") mid-cycle update
- Please mute your line to reduce background noise and prevent interruptions
- Q&A Process
 - Questions can be submitted during today's meeting via the WebEx Chat Window or to the EAL IRP inbox at <u>EALIRP@ENTERGY.COM</u>
 - Questions will be gathered during the meeting for a Q&A Session following the presentations
 - Time constraints may limit the number of questions answered during today's meeting; EAL
 will post written responses to all questions to its IRP website within two weeks
 - https://www.entergy-arkansas.com/integrated_resource_planning/





Meeting Agenda

Topic	Presenter
Introduction and Overview	Kandice Fielder
Modeling Framework	Monica Chandra
Load Forecast Update	Charles John
Total Relevant Supply Cost Results	Caroline Weatherly
Q&A	All
Closing	Kandice Fielder



2021 IRP Update Overview

Entergy Arkansas, LLC ("EAL") filed its 2021 Integrated Resource Plan ("2021 IRP") in APSC Docket No. 07-016-U on October 29, 2021.

- The 2021 IRP consisted of a futures-based modeling approach with eight portfolios evaluated for the 2023-2042 time period.
- The report describes the analysis, preferred portfolio, stakeholder engagement process and the action plan.

EAL is currently developing a mid-cycle update to the 2021 IRP, which will also be filed at the APSC upon completion.

- The purpose of this presentation is to inform stakeholders of the update.
- The update to the report will describe the updated analysis, preferred portfolio and the current progress of the action plan items.



Portfolios

Mid-cycle IRP Portfolios were developed based on Future 1 Manual Portfolio 4 from the 2021 IRP, with the changes below.



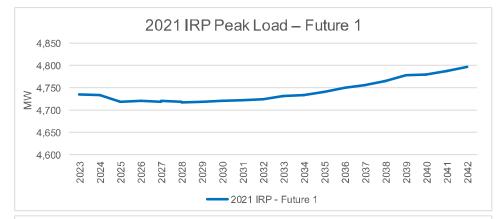
Load Forecast

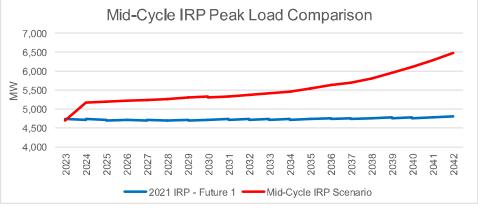
2021 IRP - Future 1

- Relatively flat peak growth through early 2030s
- Noticeable peak growth starting mid-2030s due to EV adoption

2022 Mid-Cycle IRP Scenario

- Early period step-change growth driven by new industrial projects and expansions
- Continued increase in trajectory driven by:
 - Significantly higher EV adoption, including fleet vehicles
 - Increased residential and commercial electrification of space/water heating
 - Increased commercial and industrial electrification supporting ESG goals







Total Relevant Supply Cost Results

The two proposed EAL portfolios, P1 and P2, and the updated EAL load forecast were modeled in the Aurora production cost model under the same construct and market assumptions as the 2021 IRP; EAL variable supply cost projections were produced and included in the total relevant supply cost analysis.

The Total Relevant Supply Cost (TRSC) is calculated using:

- •Variable Supply Cost The variable output from the AURORA model for all of Entergy Arkansas' fleet, which includes fuel costs, variable O&M, emissions costs, startup costs, energy revenue, make-whole payments, and uplift revenue
- •Levelized-Real Non-Fuel Fixed Costs Return of and on capital investment, fixed O&M, and property tax for the incremental resource additions in each portfolio, calculated on a levelized real basis
- •Demand Side Management (DSM) Costs Costs associated with DSM programs less any capacity value associated with the program
- •Capacity Purchases/(Benefit) The capacity above or below the target reserve margin in each portfolio multiplied by the assumed capacity value
- •PTC Benefits The value associated with the renewable energy production tax credits authorized under the recently passed Inflation Reduction Act
- •REC Benefits The value of the renewable energy credits associated with the energy produced by the renewable resources

Portfolio Name	TRSC Results [\$MM, 2021\$ NPV]
P1	\$8,849
P2	\$8,087

Note: The Total Relevant Supply Cost results above include the impact of the Production Tax Credits under the Inflation Reduction Act. The current analysis assumes that the \$26/MWh PTC will be achieved through compliance with the prevailing wage and apprenticeship requirements of the IRA. This does not factor in the additional effects of the domestic content and energy community provisions under the IRA, nor does it factor in the effects of the book minimum tax. We continue to assess these impacts and as such, the final value of the PTCs may be higher or lower than estimated here. We are also valuing the impact of the REC Values in the Total Relevant Supply Cost Results above.

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Q&A/Closing

Thank you for your participation in today's meeting.

Inquiries related to EAL's integrated resource planning may be submitted to EALIRP@entergy.com.

