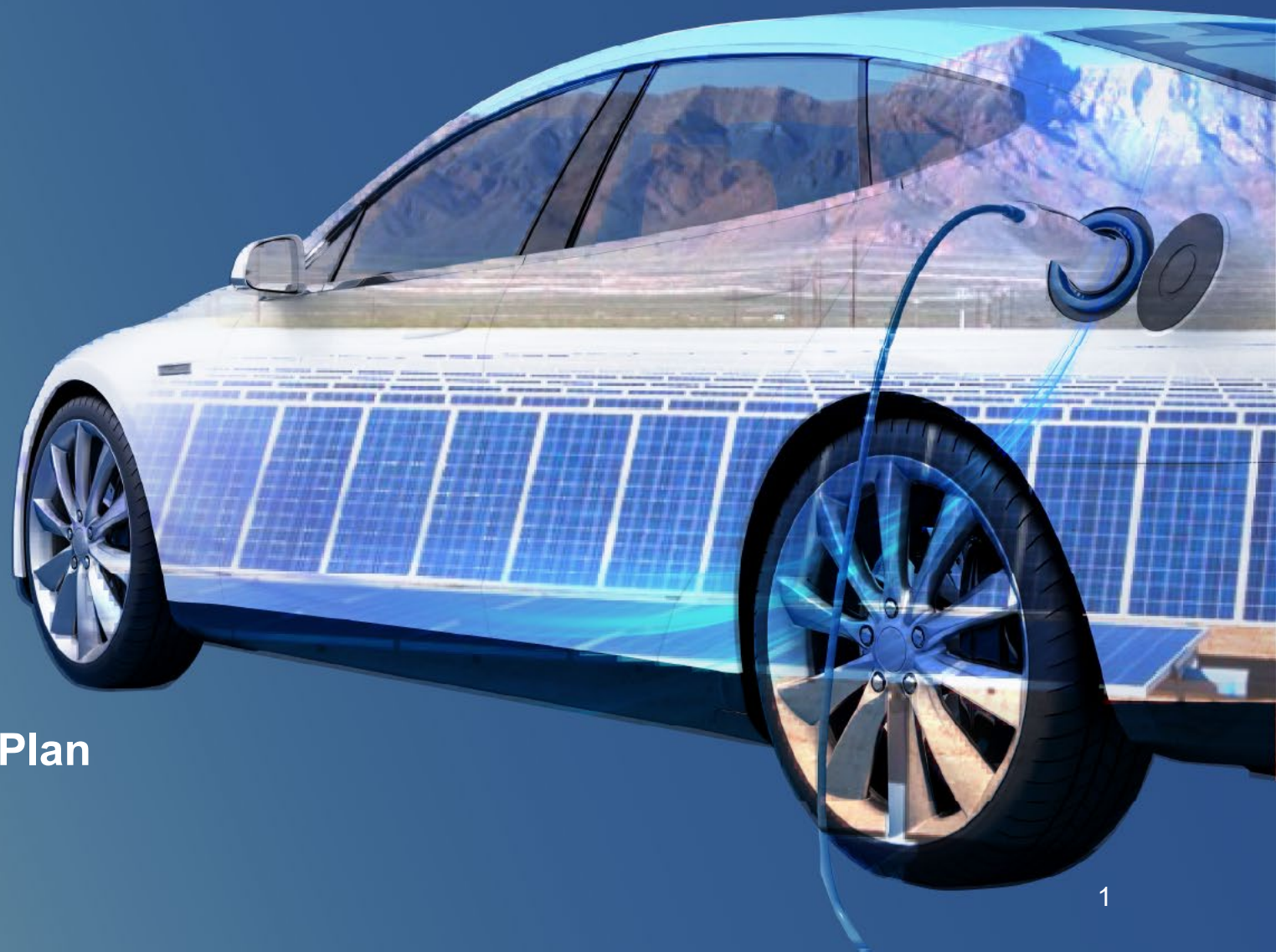
TRANSFORMING THE ENERGY LANDSCAPE

The Electric Company®

El Paso Electric



El Paso Electric Company
2025 New Mexico Integrated Resource Plan

Stakeholder Engagement Workshop #8
July 24, 2025

Welcome

2025 El Paso Electric Company Integrated Resource Plan

Public Participation Workshop

Agenda:

- Welcome
- Safe Harbor
- Introduction & Overview
- EPE Vision & ELT Member Introduction
- Summary of Modeling Results
- Statement of Need and Action Plan

Safe Harbor

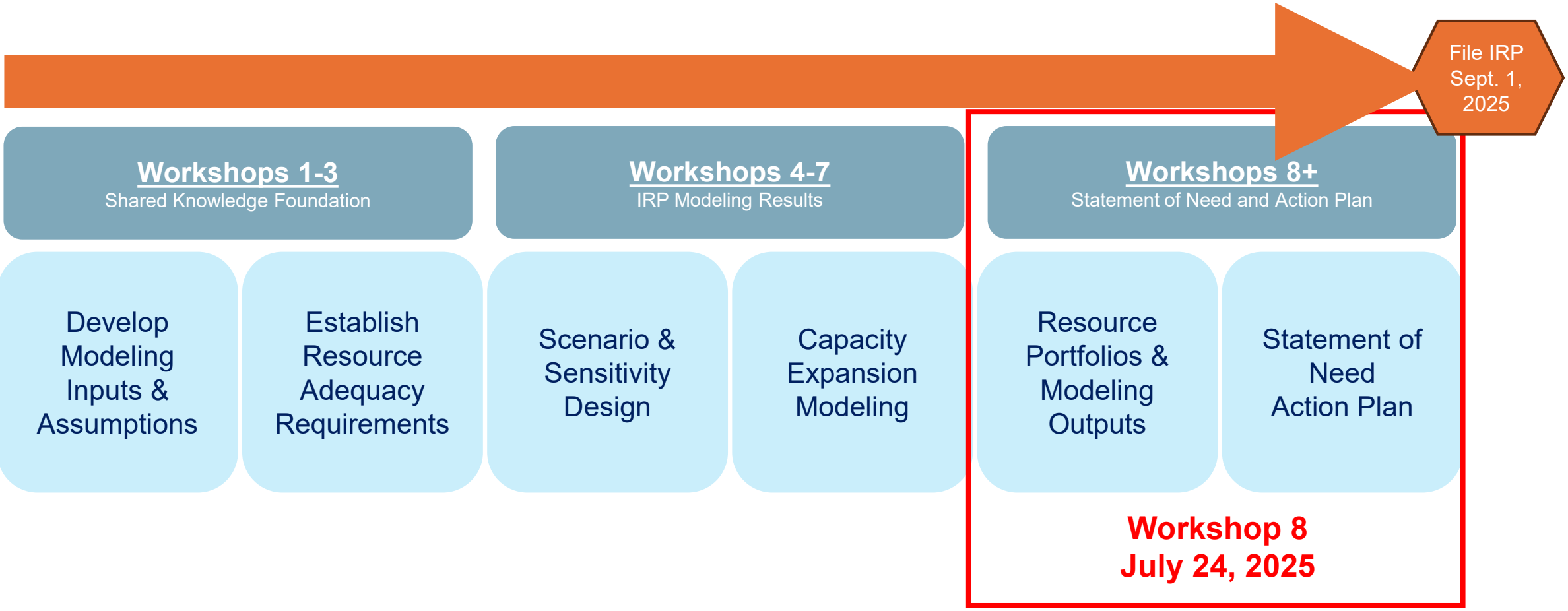
Certain matters discussed in this Integrated Resource Plan ("IRP") facilitated stakeholder process presentation other than statements of historical information are "forward-looking statements" made pursuant to the safe harbor provisions of the Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended.

Forward-looking statements often include words like we “believe”, “anticipate”, “target”, “project”, “expect”, “predict”, “pro forma”, “estimate”, “intend”, “will”, “is designed to”, “plan” and words of similar meaning, or are indicated by the Company’s discussion of strategies or trends. Forward-looking statements describe the Company’s future plans, objectives, expectations or goals and include, but are not limited to, statements regarding [anticipated future generation costs, resource need, customer growth rates, rate structure, fuel costs, purchased power pricing]. Such statements are subject to a variety of risks, uncertainties and other factors, most of which are beyond El Paso Electric Company's ("EPE" or the "Company") control, and many of which could have a significant impact on the Company's operations, results of operations, and financial condition, and could cause actual results to differ materially from those anticipated.. Any such forward-looking statement is qualified by reference to these risks and factors. EPE cautions that these risks and factors are not exclusive.

Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, no assurances can be given that these expectations will prove to be correct. Forward-looking statements by their nature that could substantial risks and uncertainties that could significantly impact expected results, and actual future results could differ materially from those described in such statements. Management cautions against putting undue reliance on forward-looking statements or projecting any future assumptions based on such statements. Forward-looking statements speak only as of the date of this IRP facilitated stakeholder process presentation, and EPE does not undertake to update any forward-looking statement contained herein, except to the extent the events or circumstances constitute material changes in this IRP that are required to be reported to the New Mexico Public Regulation Commission ("NMPRC" or "Commission") pursuant to its IRP Rule, 17.7.3 New Mexico Administrative Code.

Overview & Introduction

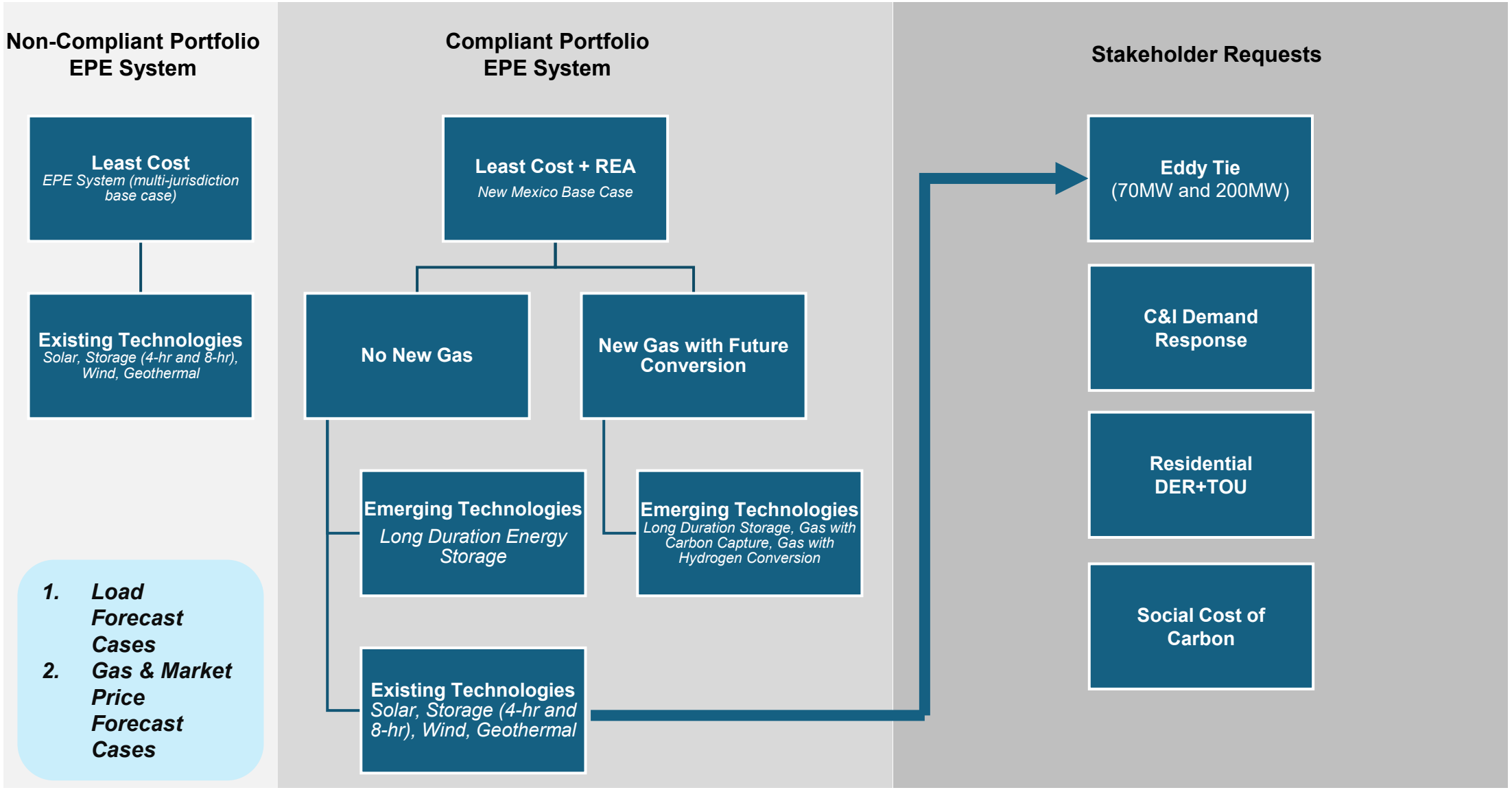
IRP Overview



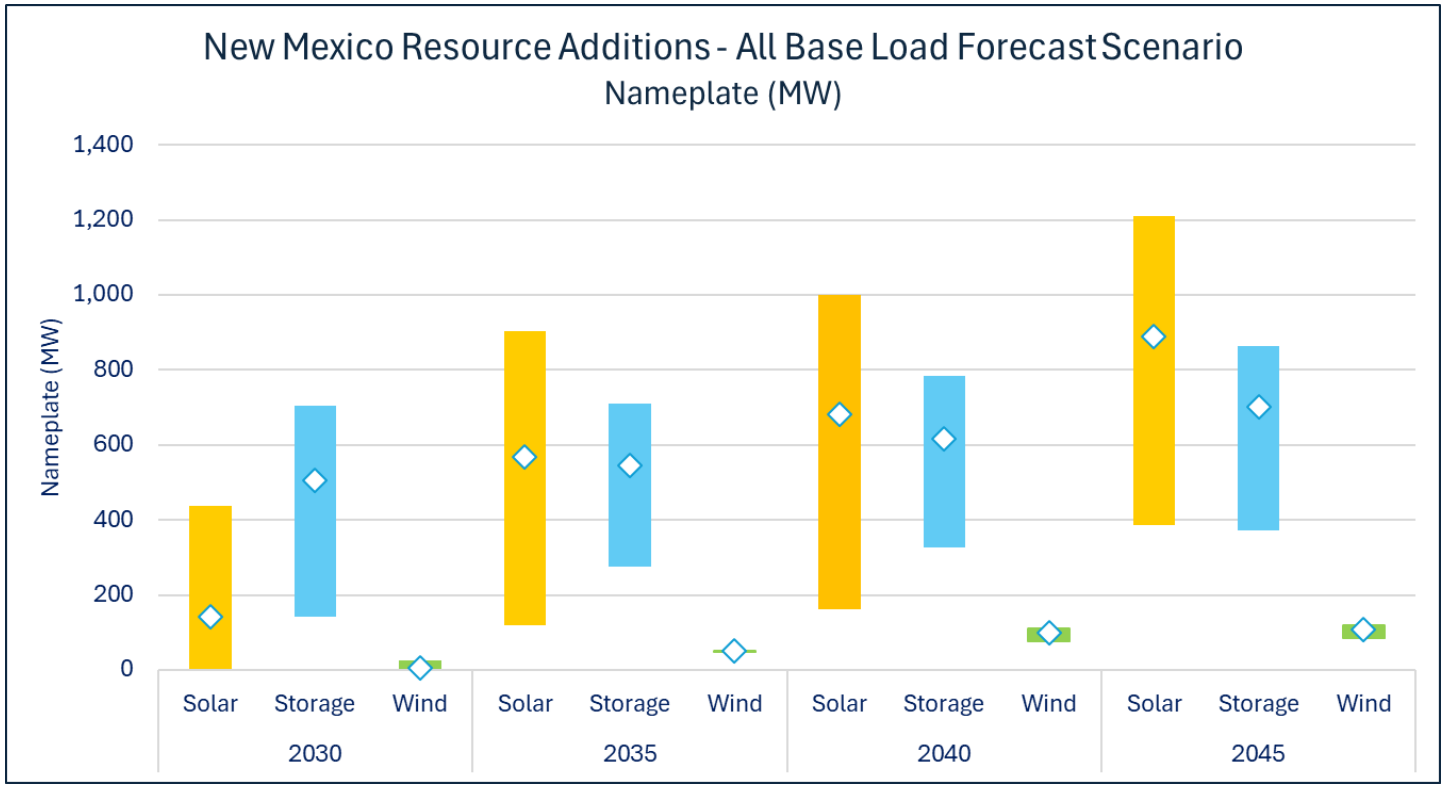
EPE Vision
&
ELT Member Introduction

Modeling Results Overview

IRP Modeling Framework



New Mexico Resource Additions
Base Load Forecast Scenarios - Nameplate (MW)



Group by PELXOS Categories				
Year	Technology	Min	Max	Avg
2030	Solar	0	437	143
	Storage	142	705	505
	Wind	0	25	7
2035	Solar	119	903	567
	Storage	276	710	547
	Wind	49	52	50
2040	Solar	162	1001	682
	Storage	328	784	617
	Wind	78	112	99
2045	Solar	387	1209	888
	Storage	372	863	701
	Wind	85	120	110

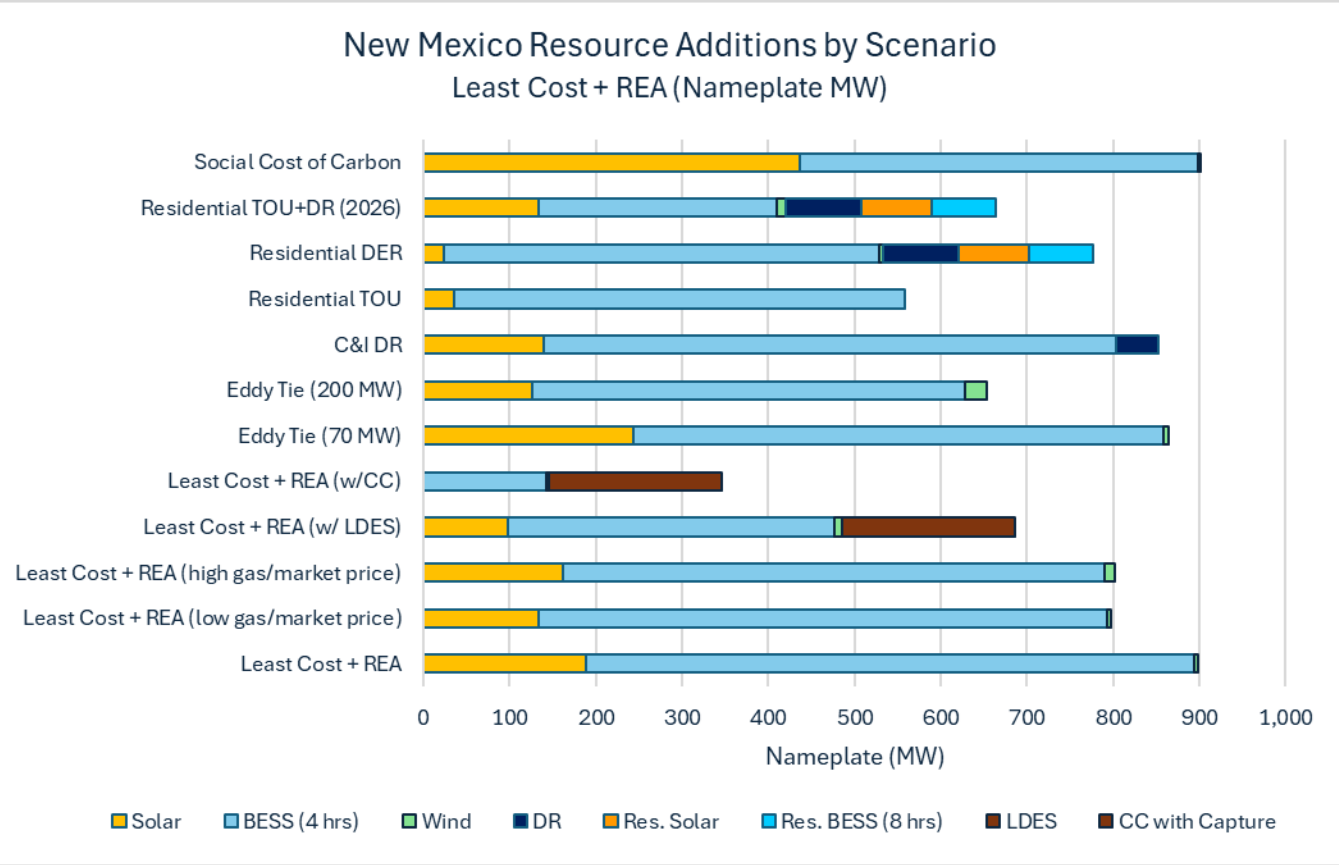
Other supply and demand-side resources are not shown on the above graph, as only fixed quantities were added into specific scenarios. They are included in the next slide.

New Mexico Resource Build 2030 – By Scenario
Nameplate (MW)

		Supply-Side Utility Scale			Demand Side Solutions			Emerging Tech	
	Scenario	Solar	BESS (4 hrs)	Wind	DR	Res. Solar	Res. BESS (8 hrs)	LDES	CC with Capture
Base Load Forecast	Least Cost + REA	189	705	4	-	-	-	-	-
	Least Cost + REA (low gas/market price)	134	659	4	-	-	-	-	-
	Least Cost + REA (high gas/market price)	161	629	12	-	-	-	-	-
	Least Cost + REA (w/ LDES)	98	379	9	-	-	-	200	-
	Least Cost + REA (w/CC)	-	142	4	-	-	-	-	200
	Eddy Tie (70 MW)	244	614	7	-	-	-	-	-
	Eddy Tie (200 MW)	126	502	25	-	-	-	-	-
	C&I DR	139	664	-	50	-	-	-	-
	Residential TOU	35	523	-	-	-	-	-	-
	Residential DER	24	505	4	88	81	75	-	-
	Residential TOU+DR (2026)	134	276	10	88	81	75	-	-
	Social Cost of Carbon	437	461	4	-	-	-	-	-
Least Cost + REA	Base Load Forecast	189	705	4	-	-	-	-	-
	High Electrification	177	595	16	-	-	-	-	-
	Additional Large-Load Customers *	859	1,051	57	-	-	-	-	-

*Annual build limitations were removed to solve the Additional Large-Load Customers

New Mexico Resource Build 2030 – By Scenario
Base Load Forecast - Nameplate (MW)



Resource Build:

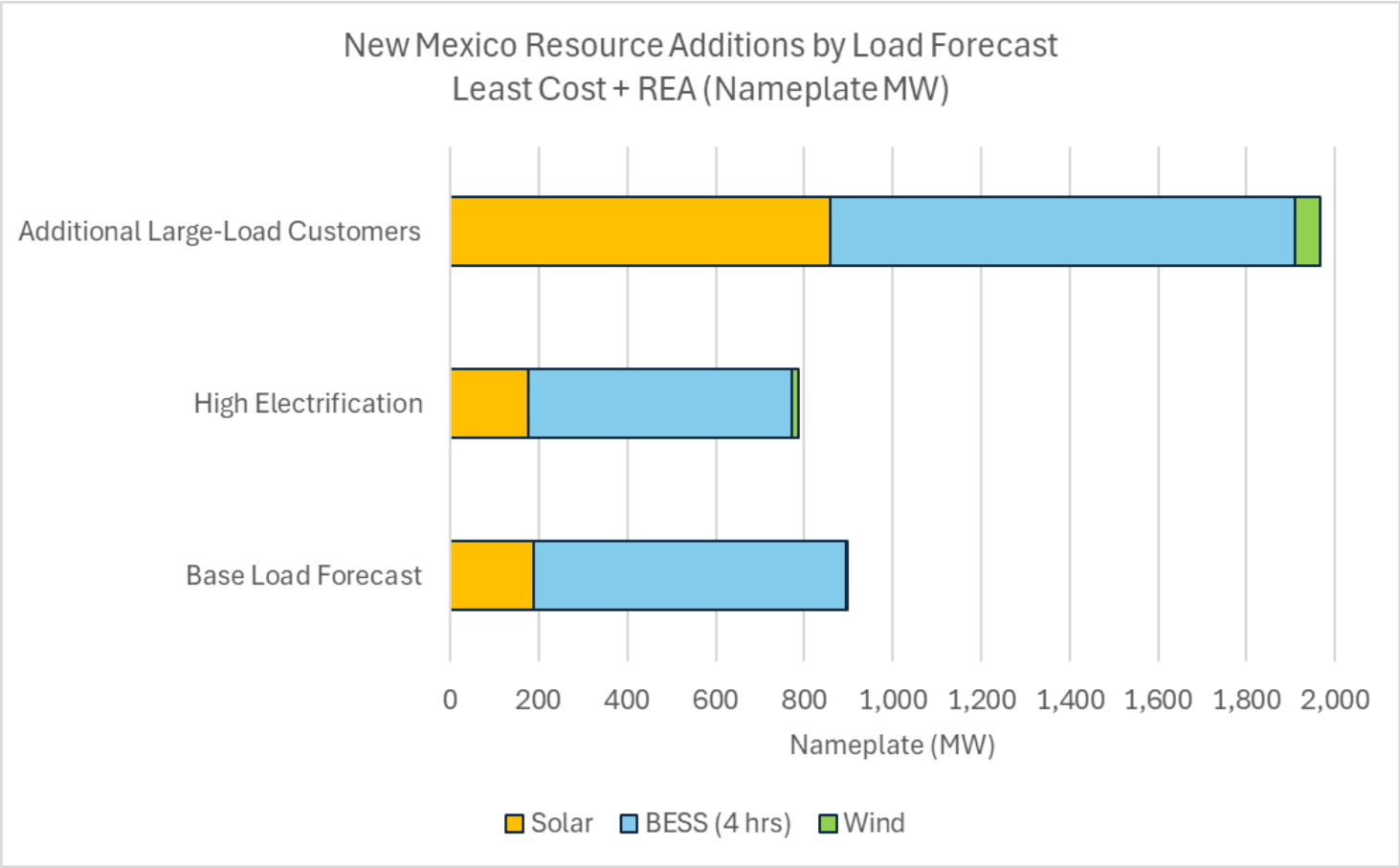
1. All scenario (exc. emerging tech) include between 420 MW and 902 MW of new generic solar, 4-hour BESS, and wind

2. A continued build-out of utility-scale solar generation:
   - ✓ 11 out of 12 scenarios include new solar
   - ✓ Ranging from 24 MW to 437 MW

3. A need for dispatchable resources ("BESS") to maintain system reliability:
   - ✓ All scenarios include new 4-hour BESS
   - ✓ Ranging from 142 MW to 705 MW

4. Generic wind is only selected in minor quantities, if at all

New Mexico Resource Build 2030 – By Load Forecast
Nameplate (MW)



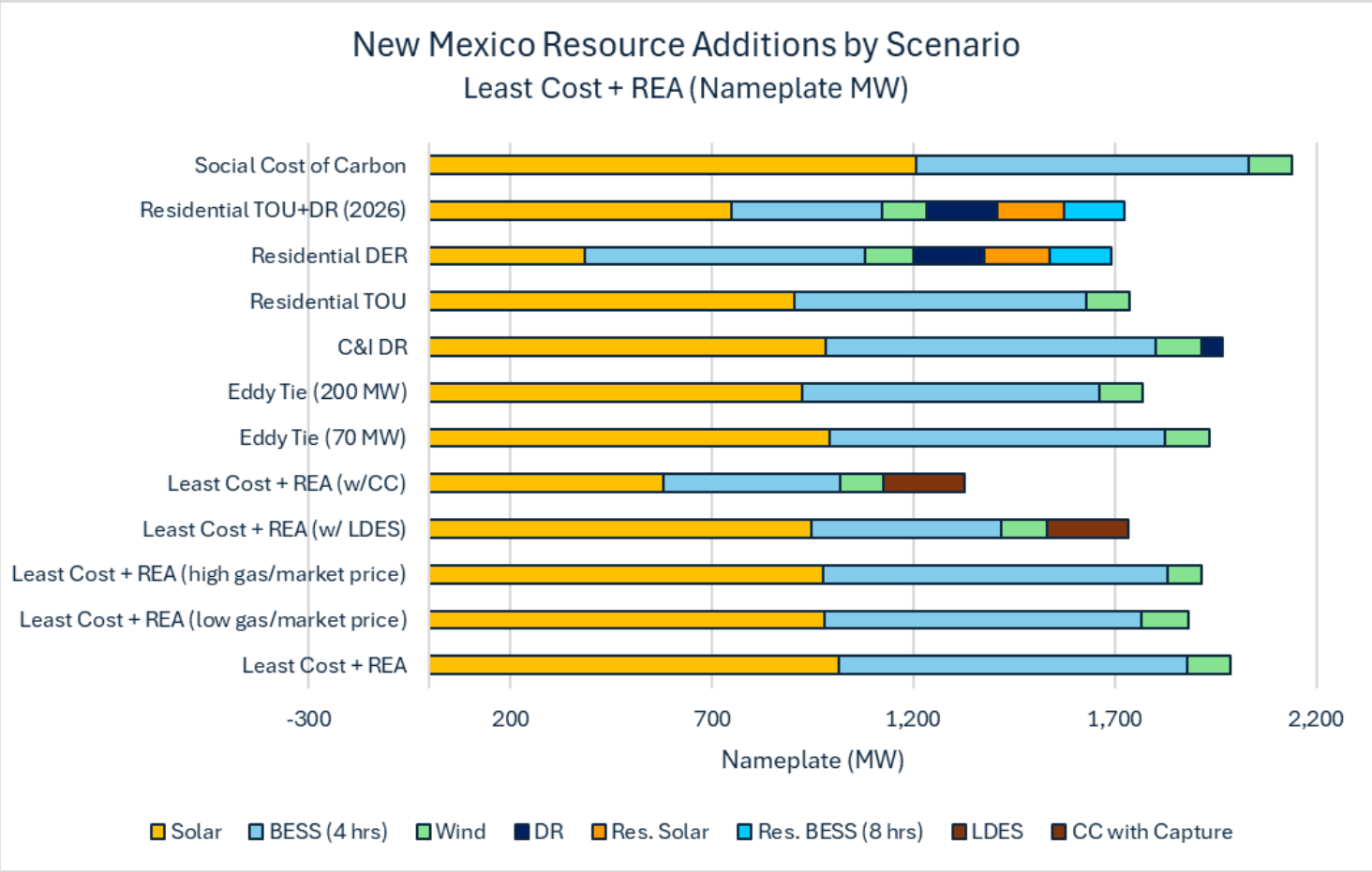
- In the near-term the resource build under the base load forecast and high electrification forecast is similar….
- Under the additional Large-Load Customer scenario there's a significant need for additional solar and storage

New Mexico Resource Build 2045 – By Scenario
Nameplate (MW)

		Supply-Side Utility Scale			Demand Side Solutions			Emerging Tech	
	Scenario	Solar	BESS (4 hrs)	Wind	DR	Res. Solar	Res. BESS (8 hrs)	LDES	CC with Capture
Base Load Forecast	Least Cost + REA	1,016	863	108	-	-	-	-	-
	Least Cost + REA (low gas/market price)	981	784	119	-	-	-	-	-
	Least Cost + REA (high gas/market price)	978	854	85	-	-	-	-	-
	Least Cost + REA (w/ LDES)	949	471	113	-	-	-	200	-
	Least Cost + REA (w/CC)	581	438	108	-	-	-	-	200
	Eddy Tie (70 MW)	993	831	110	-	-	-	-	-
	Eddy Tie (200 MW)	924	737	109	-	-	-	-	-
	C&I DR	984	819	113	50	-	-	-	-
	Residential TOU	904	726	108	-	-	-	-	-
	Residential DER	387	695	120	175	163	150	-	-
	Residential TOU+DR (2026)	750	372	113	175	163	150	-	-
	Social Cost of Carbon	1,209	824	108	-	-	-	-	-
Least Cost + REA	Base Load Forecast	1,016	863	108	-	-	-	-	-
	High Electrification	1,251	1,307	82	-	-	-	-	-
	Additional Large-Load Customers *	3,489	3,267	90	-	-	-	-	-

*Annual build limitations were removed to solve the Additional Large-Load Customers

New Mexico Resource Build 2045 – By Scenario
Nameplate (MW)



Resource Need:

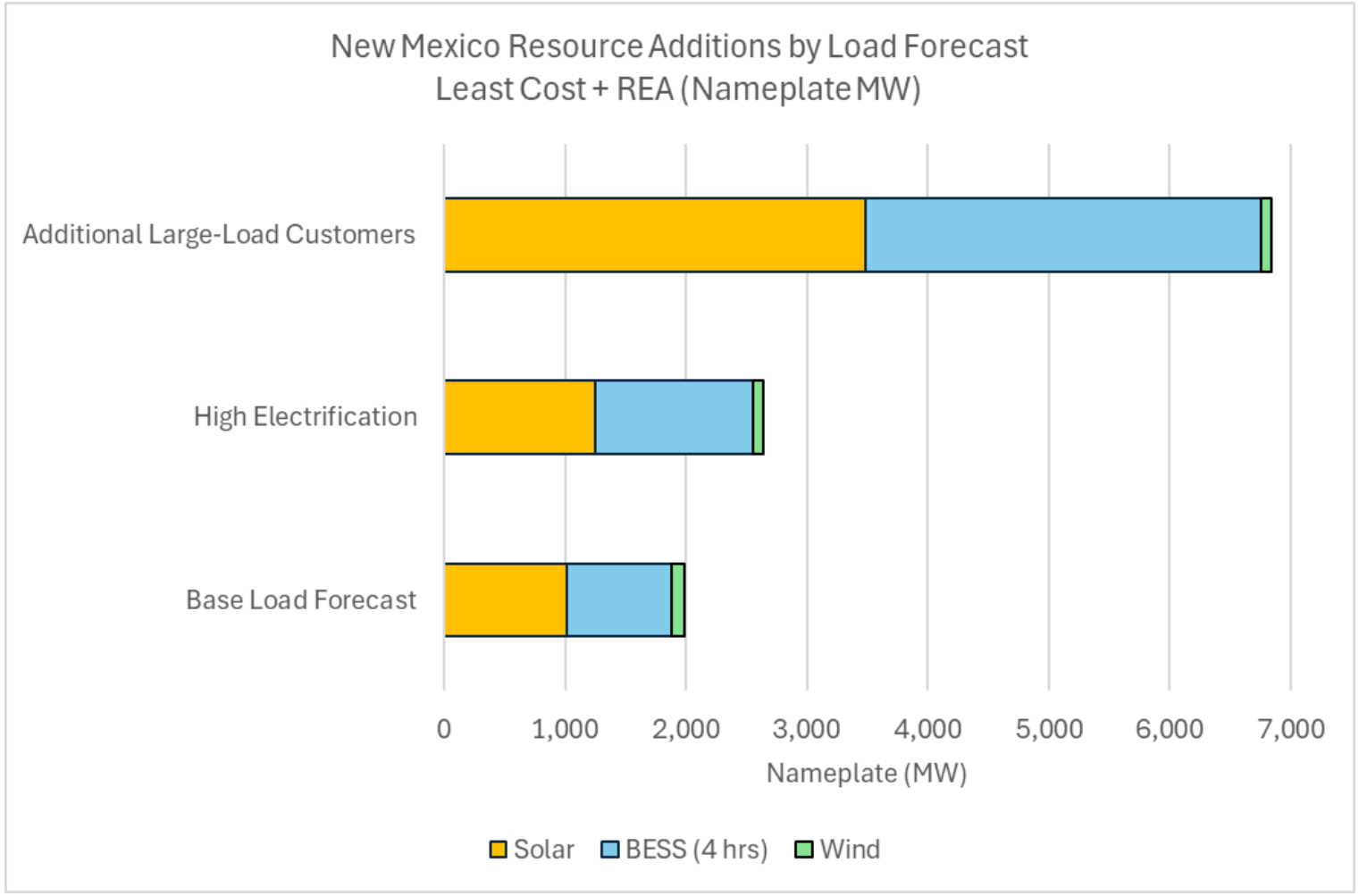
1. All scenarios (exc. emerging tech) include between 1,202 MW and 2,141 MW of new generic solar, 4-hour BESS, and wind

2. A continued build-out of utility-scale solar generation:
   - ✓ All scenarios include new solar
   - ✓ Ranging from 387 to 1,209 MW

3. A need for dispatchable resources ("BESS") to maintain system reliability:
   - ✓ All scenarios include new 4-hour BESS
   - ✓ Ranging from 372 to 863 MW

4. Between 85 MW and 120 MW of generic wind in all scenarios

New Mexico Resource Build 2045 – By Load Forecast
Nameplate (MW)



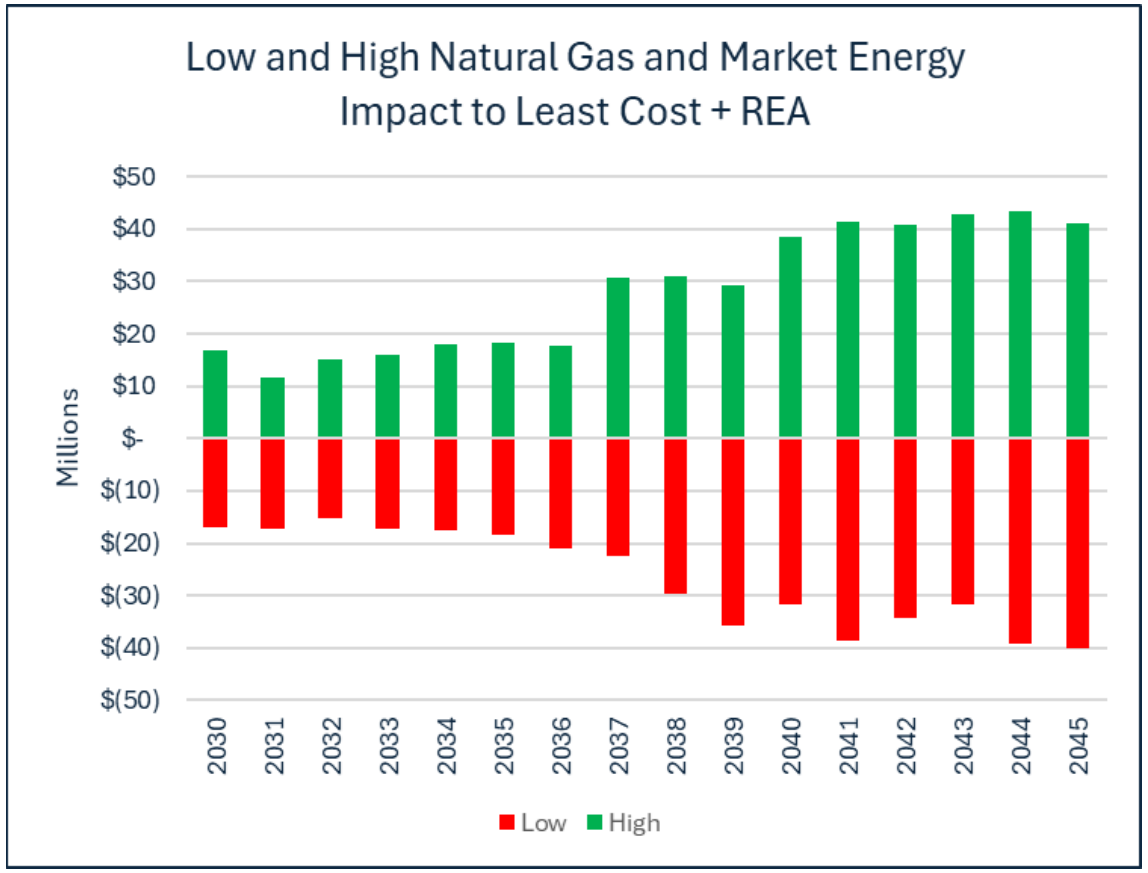
- Over the 20-year planning period the resource build under the high electrification forecast increases year-on-year over the base load forecast….
- Under the additional Large-Load Customer scenario there's a significant need for additional solar and storage

Avoided Cost Analysis – Stakeholder Requests

The benefits show on this graph do not include the cost of implementing the program or rebuilding the Eddy HVDC tie

Sensitivity	+/- ($M) Nominal	+/- ($M) NPV	Notes
Eddy 70	$(820.83)	($374.23)	~$50 million per year, $260/kW-year
Eddy 200	$(1,183.20)	($537.57)	~$75 million per year, $375/kW-year
C&I DR	$(242.60)	($114.68)	~$15.0 million per year, $150/kW-year
Residential TOU	$(662.74)	($322.12)	~$50M per year initially, trending downs a net peak pushes into evening hours
Residential DER	$(1,719.12)	($757.76)	$100 million per year, increasing to $140 million per year over the planning horizon, $200/kW-yr to $280/kW-yr (based on 20kW per home)
Residential TOU+DR (2026)	$(2,850.10)	($1,320.42)	Combined provided on average 18.2% additional avoided costs

Low and High Natural Gas + Market Energy Price Forecasts

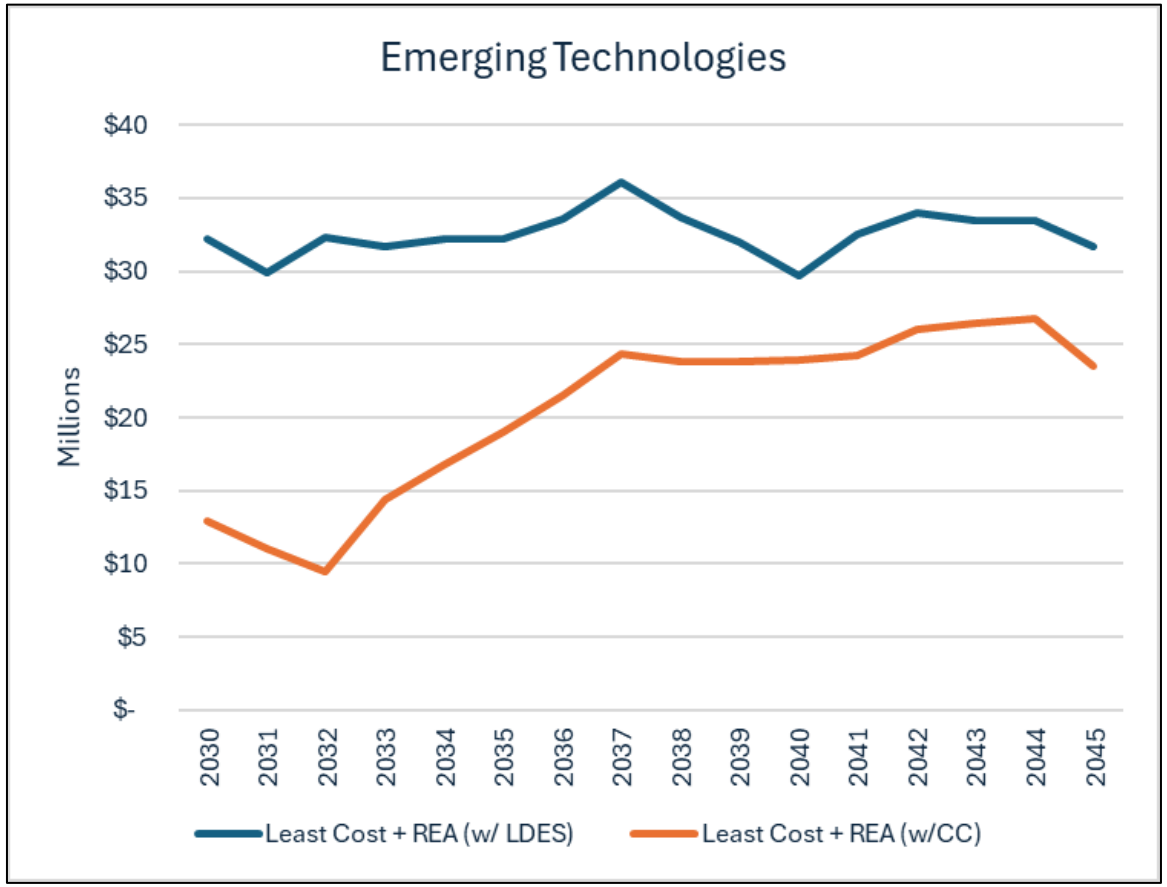


- No new natural gas-fired resources without carbon capture in New Mexico in any scenario
- There is minimal impact to the resource build – less than +/- 100 MW through 2045
- Changes to portfolio cost large driven by lower or higher commodity prices

Compared to Least Cost + REA
(Base gas and market price forecast)

Sensitivity	+/- ($M) Nominal	+/- ($M) NPV
Low Case	$(486.49)	$(232.73)
High Case	$511.72	$239.00

Emerging Technologies



- Of the two emerging technology scenarios evaluated neither provided projected cost savings
- However, the cost of this technology could be potentially lower in the future (near and far), which could ultimately change this conclusion
- The role of emerging technologies will ultimately be determined in future IRPs/ISPs (or potentially RFPs)

Compared to Least Cost + REA
(Base gas and market price forecast)

Scenario	+/- ($M) Nominal	+/- ($M) NPV
LDES	$521.67	$244.96
Carbon Capture	$329.17	$143.97

Cumulative System-Wide Carbon Dioxide Emissions By Scenario 2030 - 2045

All modeled scenarios meet (or exceed) New Mexico's annual RPS requirement and ultimately meet New Mexico's 2045 Carbon Free Requirement

Cumulative Carbon Dioxide Emissions - Metric Tons

Scenario	2030	2035	2040	2045
Least Cost + REA	3,304,791	17,578,693	31,513,480	42,446,192
Least Cost + REA (low gas/market price)	3,311,489	17,602,538	32,664,432	44,300,848
Least Cost + REA (high gas/market price)	3,195,263	17,019,857	28,952,319	39,453,014
Least Cost + REA (w/ LDES)	3,341,201	17,796,578	31,682,881	42,634,100
Least Cost + REA (w/CC)	2,794,911	16,437,554	30,261,444	41,053,350
Eddy Tie (70 MW)	3,183,940	16,913,603	30,194,665	40,274,218
Eddy Tie (200 MW)	3,275,080	17,297,257	30,758,812	41,040,913
C&I DR	3,409,866	18,012,142	32,105,270	43,159,786
Residential TOU	3,457,141	18,595,815	32,810,858	44,584,309
Residential DER	2,913,269	15,623,676	27,626,793	37,470,225
Residential TOU+DR (2026)	3,112,656	17,383,295	31,214,982	42,134,479

Percentage Difference to Least Cost + REA

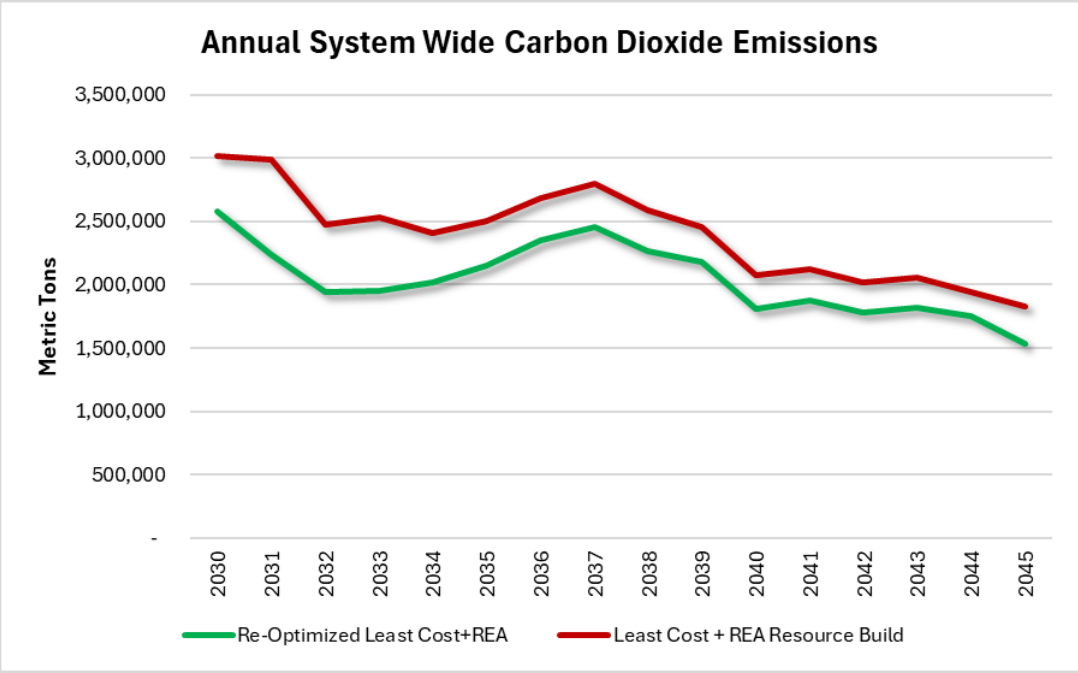
2030	2035	2040	2045
100.00%	100.00%	100.00%	100.00%
100.20%	100.14%	103.65%	104.37%
96.69%	96.82%	91.87%	92.95%
101.10%	101.24%	100.54%	100.44%
84.57%	93.51%	96.03%	96.72%
96.34%	96.22%	95.82%	94.88%
99.10%	98.40%	97.61%	96.69%
103.18%	102.47%	101.88%	101.68%
104.61%	105.79%	104.12%	105.04%
88.15%	88.88%	87.67%	88.28%
94.19%	98.89%	99.05%	99.27%

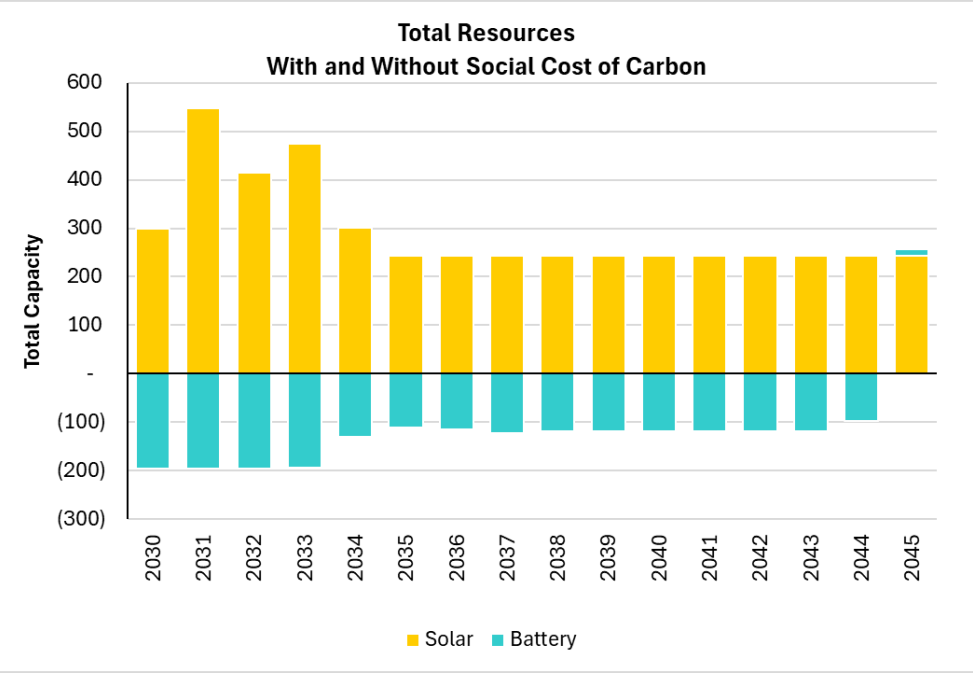
1. Residential DER scenario includes 25,000 DER enabled homes, 50% of which are assumed to be in Texas – This reduces system wide carbon dioxide emissions
2. Residential TOU scenario results in a slight increase in carbon dioxide emissions as load is pushed out of times of high solar production

Social Cost of Carbon – Additional Information

An optimized solution including the social cost of carbon….

- Model adds 244 MW of additional solar through and 118 MW fewer batteries through 2043 when compared to the Least-Cost + REA
- Up to 548 MW of additional solar generation and up to 194 MW fewer batteries in 2031 when compared to the Least-Cost + REA
- Increases costs by $465M between 2026 – 2045 (or $213M on an NPV basis) compared to the Least-Cost + REA portfolio re-ran with a social cost of carbon added





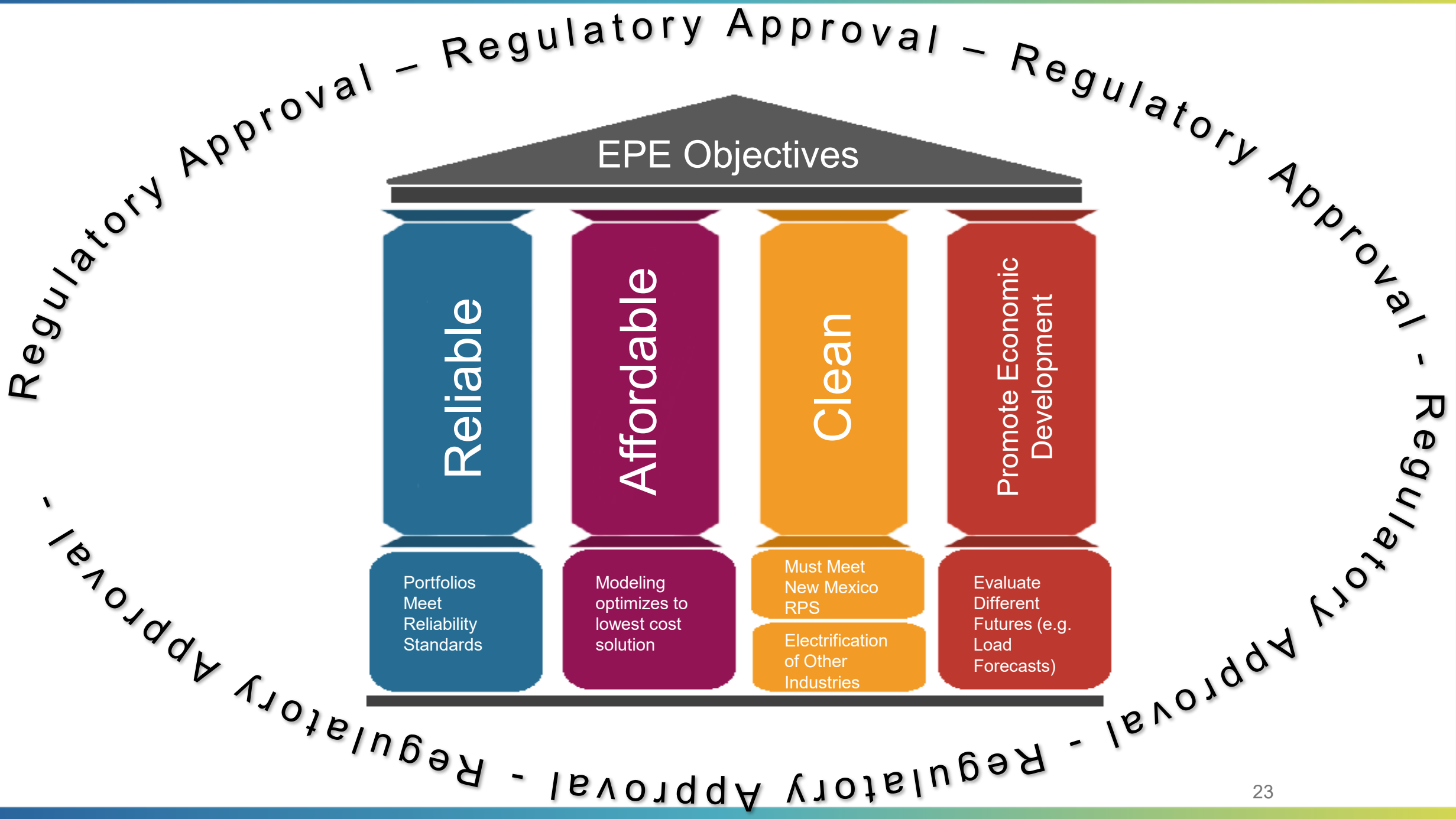
Statement of Need
and
Action Plan

Statement of Need

17.7.3.10 STATEMENT OF NEED:

A. The statement of need is a description and explanation of the amount and the types of new resources, including the technical characteristics of any proposed new resources, to be procured, expressed in terms of energy or capacity, necessary to reliably meet an identified level of electricity demand in the planning horizon and to effect state policies.

B. The statement of need shall not solely be based on projections of peak load. The need may be attributed to, but not limited by, incremental load growth, renewable energy customer programs, or replacement of existing resources, and may be defined in terms of meeting net capacity, providing reliability reserves, securing flexible resources, securing demand-side resources, securing renewable energy, expanding or modifying transmission or distribution grids, or securing energy storage as required to comply with resource requirements established by statute or commission decisions.

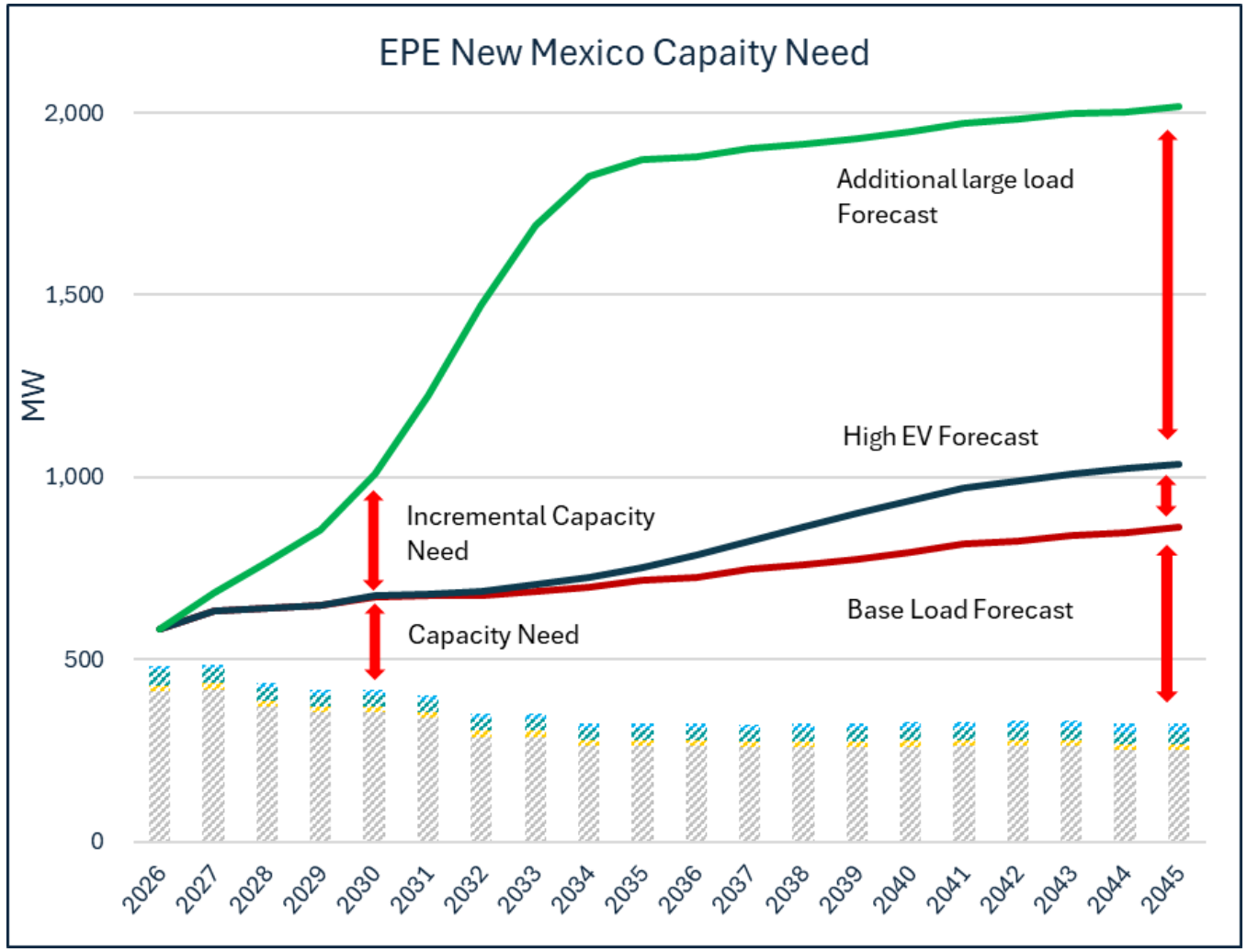

Regulatory Approval – Regulatory Approval – Regulatory Approval - Regulatory Approval - Regulatory Approval - Regulatory Approval -
EPE Objectives
Reliable
Affordable
Clean
Promote Economic Development
Portfolios Meet Reliability Standards
Modeling optimizes to lowest cost solution
Must Meet New Mexico RPS
Electrification of Other Industries
Evaluate Different Futures (e.g. Load Forecasts)

STATEMENT OF NEED
New Mexico Capacity & Energy Need

1. EPE's current New Mexico system: 485 MW
2. EPE's New Mexico capacity need by load forecast
    i. Base Load Forecast: **254 MW** by 2030, **537 MW** by 2045
    ii. High Electrification: **257 MW** by 2030, **713 MW** by 2045
    iii. Additional Large-Load Customers: **594 MW** by 2030, **1,692 MW** by 2045

3. EPE's RPS need by load forecast
    i. Base Load Forecast: **412 GWh** by 2030, **2,300 GWh** by 2045
    ii. High Electrification: **423 GWh** by 2030, **3,048 GWh** by 2045
    iii. Additional Large-Load Customers: **1,663 GWh** by 2030, **10,919 GWh** by 2045

STATEMENT OF NEED
Load Forecast Slide



Capacity Need:

1. Under the base forecast, EPE has a New Mexico capacity need of **254 MW** in 2030 increasing to **537 MW** in 2045

2. Under the high electrification forecast, EPE has a New Mexico capacity need of **257 MW** in 2030 increasing to **713 MW** in 2045

3. Under the additional large load customer forecast, EPE has a New Mexico capacity need of **594 MW** in 2030, increasing to **1,692 MW** in 2045

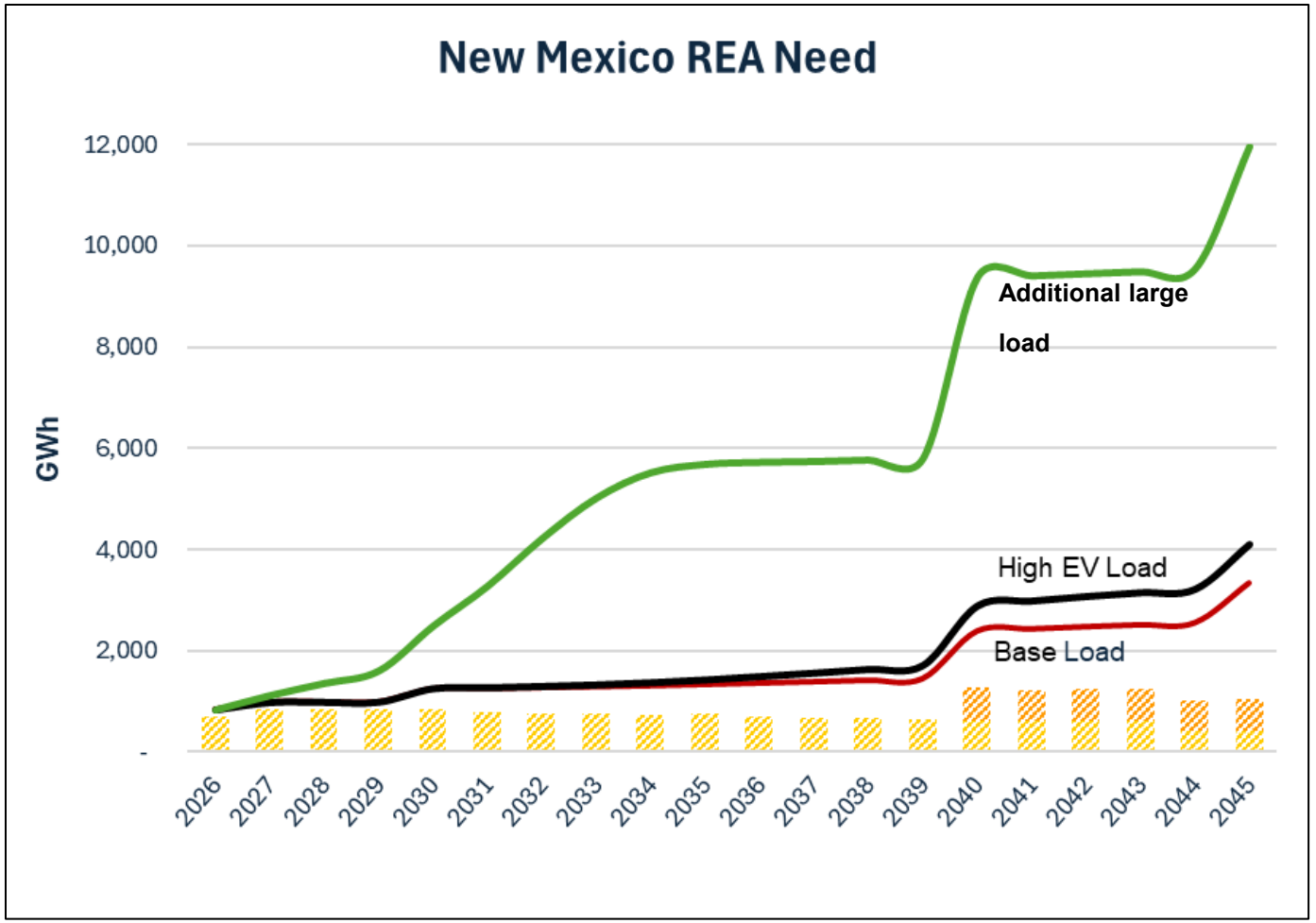
STATEMENT OF NEED
RPS Need

Energy Need:

1. Under the base forecast, EPE has a RPS need of **412 GWh** in 2030 increasing to **2,301 GWh** in 2045

2. Under the high electrification forecast, EPE has a RPS need of **423 GWh** in 2030 increasing to **3,048 GWh** in 2045

3. Under the additional large load customer forecast, EPE has a New Mexico capacity need of **1,663 GWh** in 2030, increasing to **10,919 GWh** in 2045



Resource Need

1. To meet the base load forecast EPE will need to procure between:
    1. **420 MW** and **902 MW** of new utility-scale renewables and storage by **2030,** increasing to,
    2. **1,202 MW** and **2,141 MW** of new utility-scale renewables and storage by **2045**

2. The total 2045 resource need increases by **653 MW** under the high electrification forecast

3. Under the large-load forecast EPE will need to procure up to:
    1. **1,967 MW** of new utility-scale renewables and storage by 2030, increasing to,
    2. **6,846 MW** on new utility-scale renewables and storage by 2045

4. Overbuilding solar and 4-hour battery energy storage under all load forecasts can be costly - alternatives to existing commercially available supply-side resources studied as part of the IRP include:
    1. Demand-side alternatives (e.g., DER, DR, TOU) – Subject to customer participation and program cost
    2. Increased market capability with the Southwest Power Pool
    3. Emerging technology (e.g., long duration energy storage)

ACTION PLAN

17.7.3.11 ACTION PLAN:

A. The utility's action plan shall:

(1) detail the specific actions the utility shall take to implement the IRP spanning a three-year period following the filing of the utility's IRP;

(2) detail the specific actions the utility shall take to develop any resource solicitations or contracting activities to fulfill the statement of need as accepted by the commission; and

(3) include a status report of the specific actions contained in the previous action plan.

B. The utility shall update the commission by filing two reports describing the utility's implementation of the action plan. These reports shall be filed in the existing IRP docket one year after the filing of the IRP, and two years after the filing of the IRP, respectively.

C. An action plan does not replace or supplant any requirements for applications for approval of resource additions set forth in New Mexico law or commission regulations.

D. The utility shall promptly notify the commission and participants of material events that would have the effect of changing the results of the utility's action plan had those events been recognized when the action plan was developed.

E. In accepting the action plan, the commission shall take into consideration contractual obligations as between the utility and any regional transmission organizations or balancing authorities of which the utility is a member.

ACTION PLAN

1. EPE will take the necessary steps to support the practical completion and commercial operation of its resources selected from the 2021 RFP.
2. EPE will continue to pursue resources selected from its 2023 RFP and seek all necessary regulatory approvals.
3. EPE will integrate the results of EPE's 2025 RFP into the needs identified in the 2025 IRP, dependent upon the Commission's action on EPE's Motion for Clarification/Variance in Docket No. 25-00045-UT.
4. EPE will issue an RFP for supply side and demand side resources to address the current capacity needs and renewable portfolio standards (RPS) resource needs to meet Renewable Energy Act (REA) targets through 2030.

ACTION PLAN

5 EPE will design and implement one or more pilot programs, contingent on receiving any necessary regulatory approvals, to explore innovative distributed energy resources (DER) configurations to evaluate their potential benefits.

6 EPE will evaluate the performance of the electric vehicle (EV) managed charging program approved in EPE's Transportation Electrification Plan (TEP) in March 2024 to guide potential expansion and integration into broader demand-side management strategies.

7 EPE will explore vehicle-to-grid (V2G) opportunities and bidirectional EV charging, with the goal of evaluating its potential to support grid operations, enhance customer value, and integration with distributed energy management strategies.

8 EPE will continue to work on grid modernization efforts, including evaluating AMI-enabled capabilities to support DER coordination, demand response, and customer engagement.

ACTION PLAN

9 EPE will continue to evaluate time-of-day (TOD) rates recently approved by the NMPRC in EPE's 2020 rate case for system betterment and utilization for New Mexico customers.

10 EPE will take steps to initiate replacing the Eddy Tie and seek all necessary regulatory approvals.

11 EPE will explore tariffs and customer protection mechanisms for large load customers and other New Mexico rate classes. EPE expects to use this information to inform an expected upcoming filing for a large load tariff.

12 EPE will continue to explore expanded regional market participation and take proactive measures to implement its selected market, Markets+.

13 EPE will implement its New Mexico time varying rate pilot program (TVRPP) filing that was recently approved by the NMPRC, including recruiting participants, launching the program, and analyzing usage data to inform future TOD rates and other programs.


TRANSFORMING THE
The Electric Company
El Paso Electric
ENERGY LANDSCAPE