APS RPAC Meeting

9/11/2025

MEETING AGENDA

Welcome & Meeting Agenda
Adam Constable
APS

Clean Energy Goals Update
Mike Eugenis
APS

Resource Adequacy Study Update
Akhil Mandadi
APS

Break

Natural Gas Pipeline Expansion Update
Jill Freret & Mike Eugenis
APS

Next Steps & Closing Remarks
Adam Constable
APS

Meeting Guidelines

Member Engagement

RPAC Member engagement is critical. Clarifying questions are welcome at any time. There will be discussion time allotted to each presentation/agenda item, as well as at the end of each meeting.

Action Items

We will keep a parking lot for items to be addressed at later meetings.

Meeting Minutes

Meeting minutes will be posted to the public website along with pending questions and items needing follow up. We will monitor and address questions in a timely fashion.

Preliminary Content

Meetings and content are preliminary in nature and prepared for RPAC discussion purposes.

July Meeting Recap

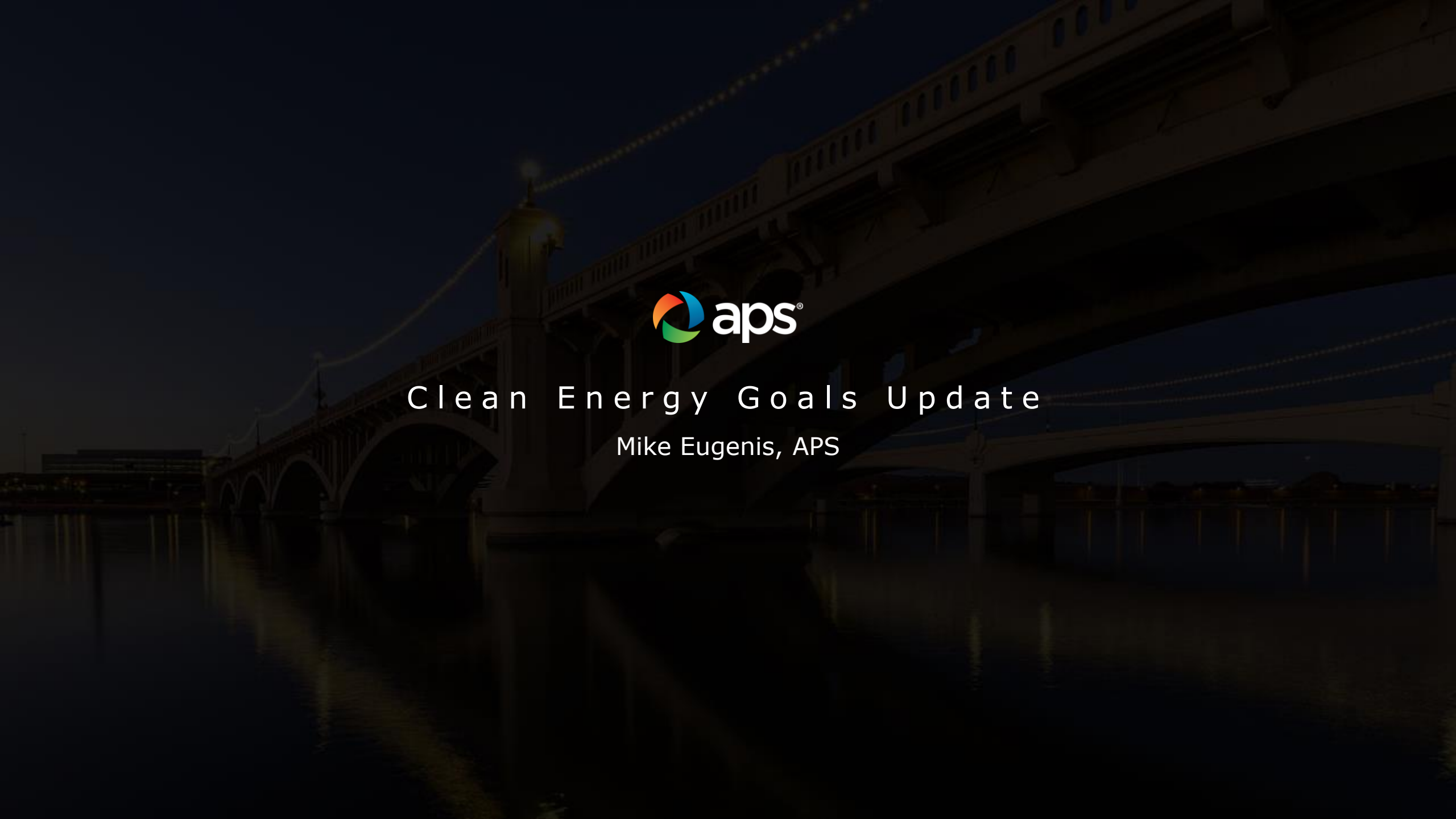
- To kick off the first in-person RPAC meeting, APS and participants introduced themselves and shared their organizations' goals for participating in the RPAC.
- APS provided an overview of its resource planning process to help bring new participants up to speed and refresh returning ones.

Following Up

- Action Items from Previous Meetings:
  - Load Forecast Update
  - 2026 IRP Timeline
  - RA Study Findings
- Ongoing Commitments:
  - Distribute meeting materials in a timely fashion
  - Transparency and dialogue
  - Respectful participation by all participants

Current / Upcoming Procurement Activity

Large Customer Subscription Program	All-Source RFP (ASRFP)	Southline RFI
Open solicitation for potential customer participation and negotiation of terms for accelerated service	Update on ASRFP progress & upcoming activities	Surveying market to understand resources that may utilize the Southline transmission project



Clean Energy Goals Update

Mike Eugenis, APS

The start of a journey; APS's 2020 Clean Energy Commitment

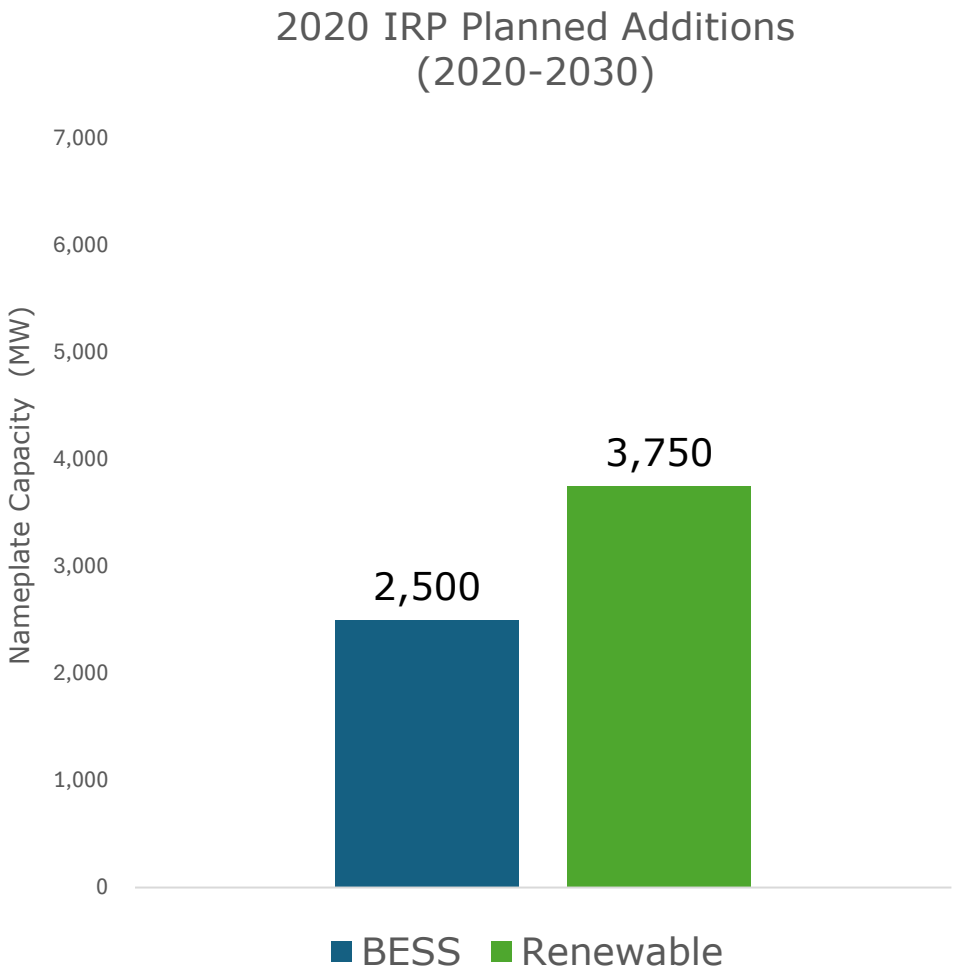
2020 Clean Energy Commitment

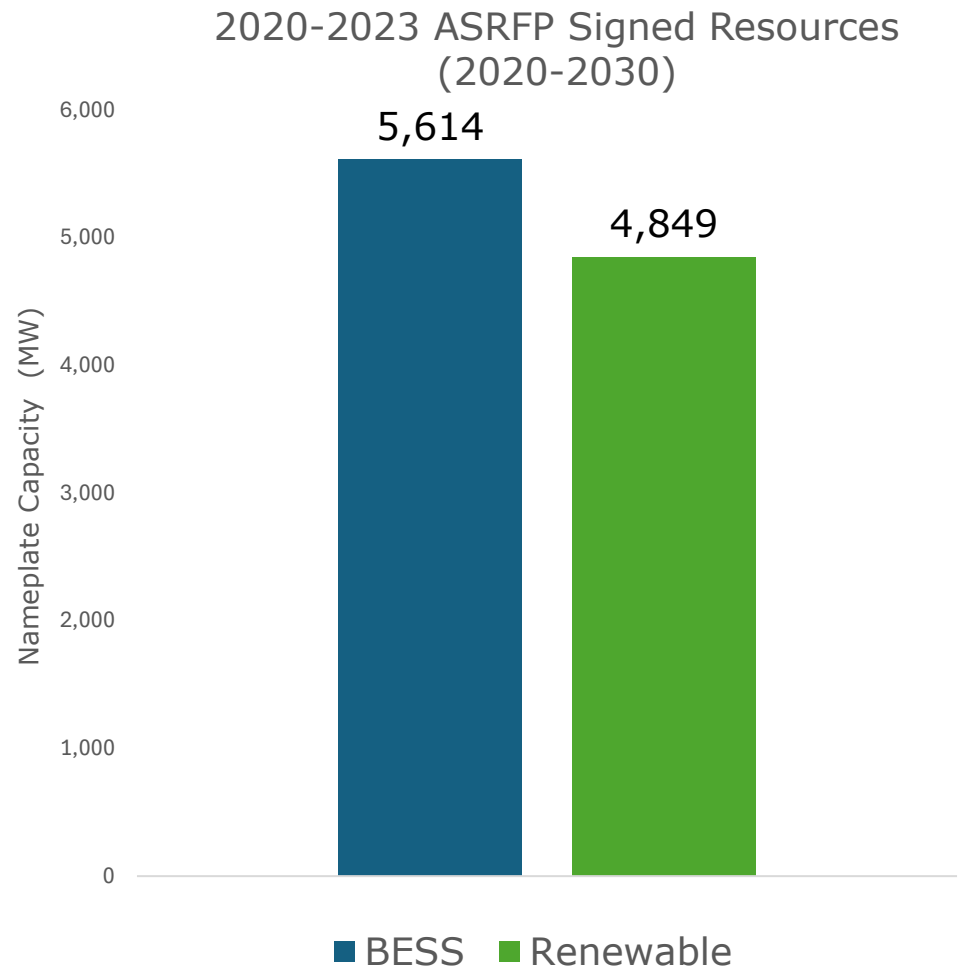
- By 2050, APS intends to deliver 100 percent clean, carbon–free and affordable electricity to our customers.
- Includes a nearer–term 2030 target of 65 percent clean energy, with 45 percent of our generation portfolio coming from renewable energy.
- APS will exit all coal–fired generation by 2031

Core Principles:

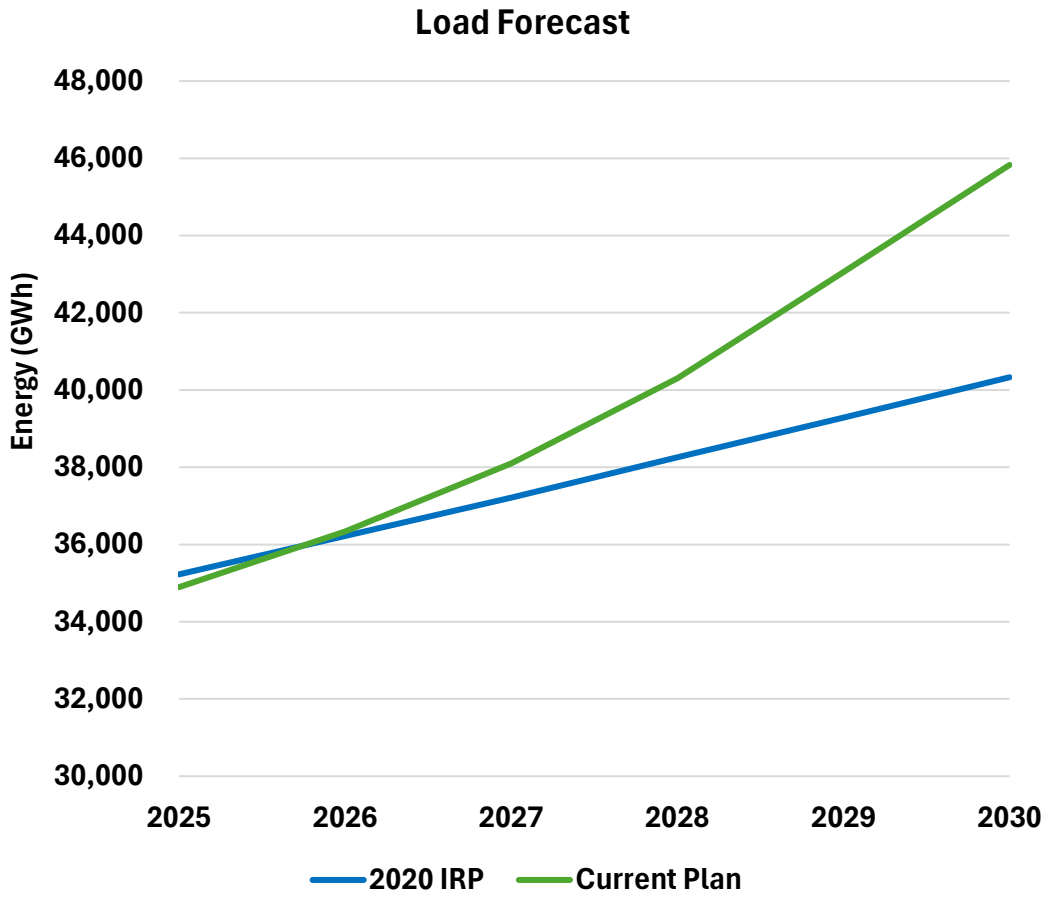
- Reliable
- Affordable
- Clean
- Customer Focused

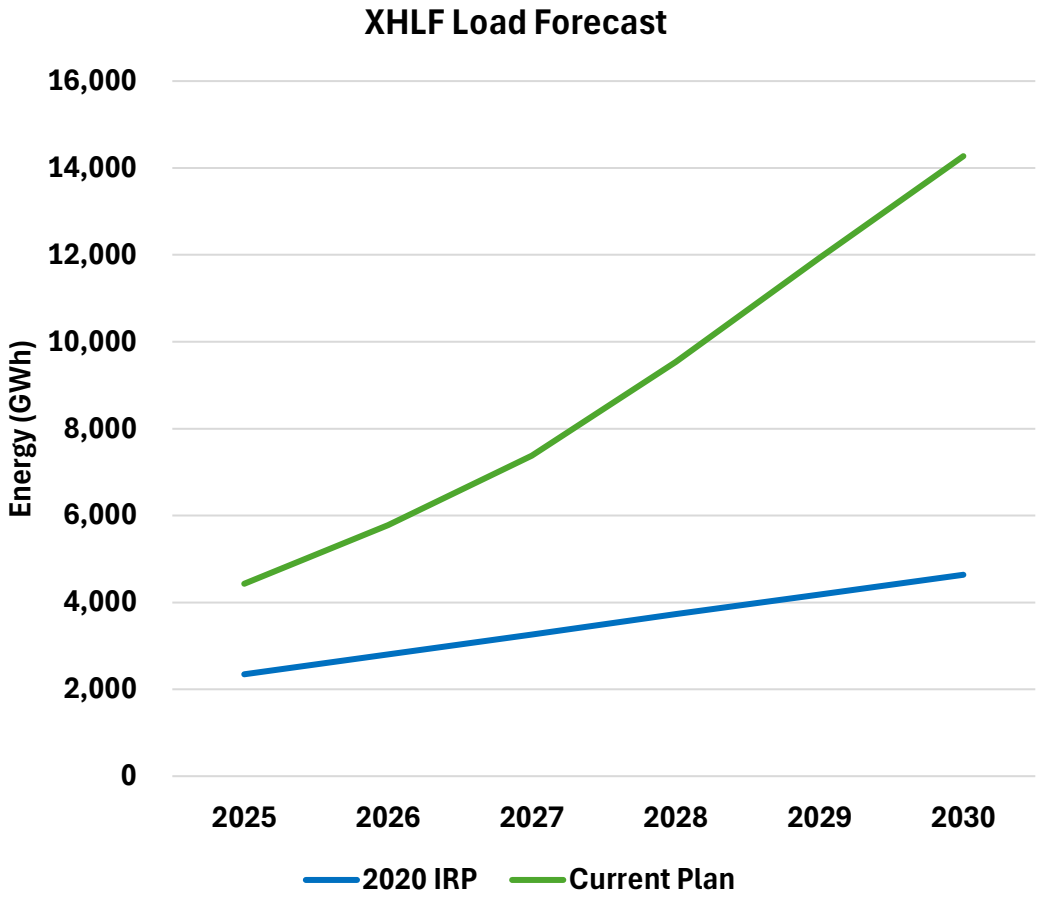
APS has procured more utility scale clean resources than the 2020 IRP identified





The world has changed, with much higher demand from customers than forecasted in 2020





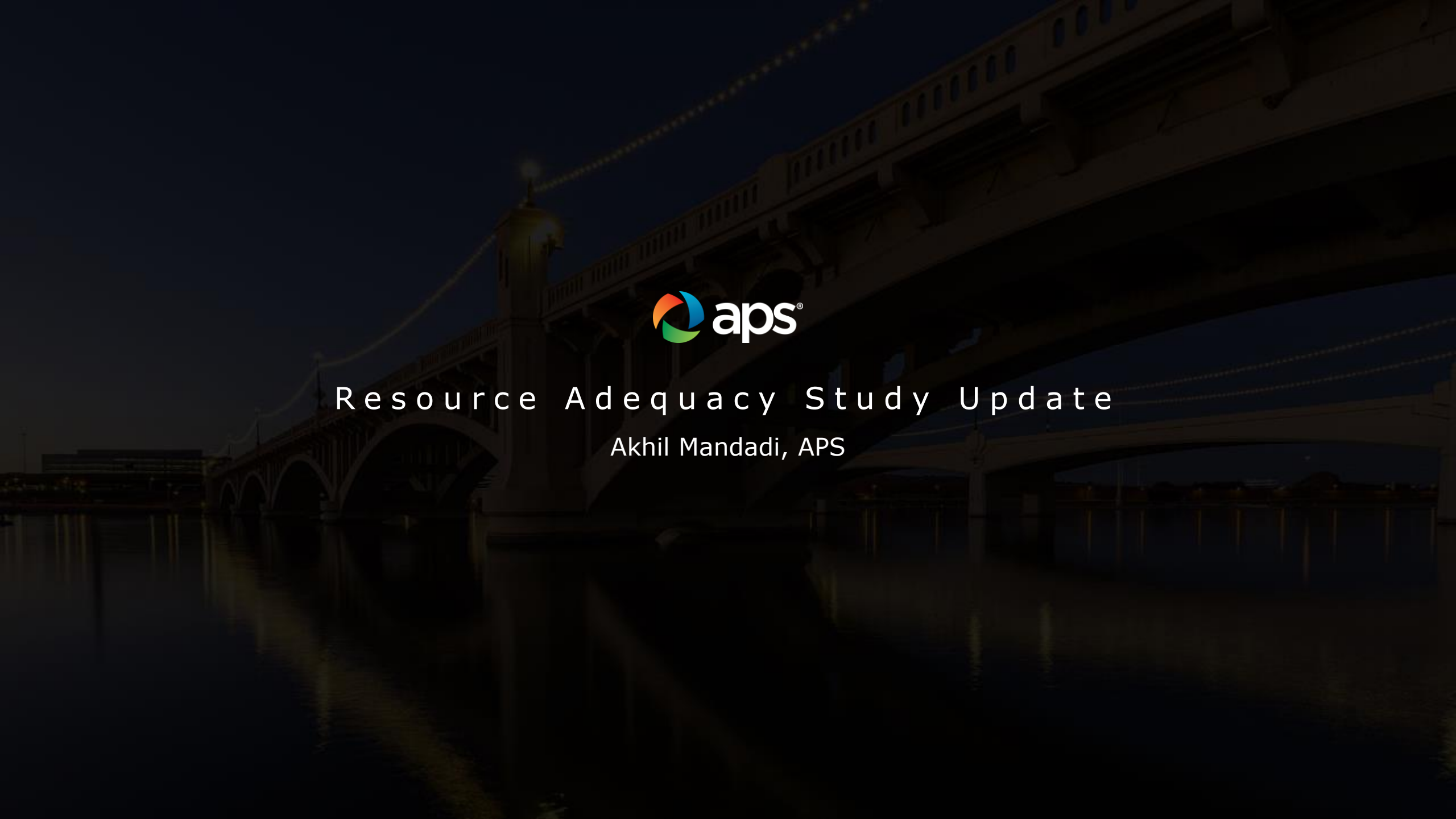
XHLF: Extra High Load Factor Customer Forecast

Our principles remain the same

- Core Principles:
  - Reliable
  - Affordable
  - Clean
  - Customer Focused

2025 Updated Clean Energy Goal

- By 2050, for any greenhouse gas emissions still produced by our electricity generation resources, we aim to offset these emissions elsewhere.
- Does not include nearer–term, interim goals.
- APS is continuing to evaluate the role of coal generation on the system.



Resource Adequacy Study Update

Akhil Mandadi, APS

Resource Adequacy Study Framework

Study Motivation:

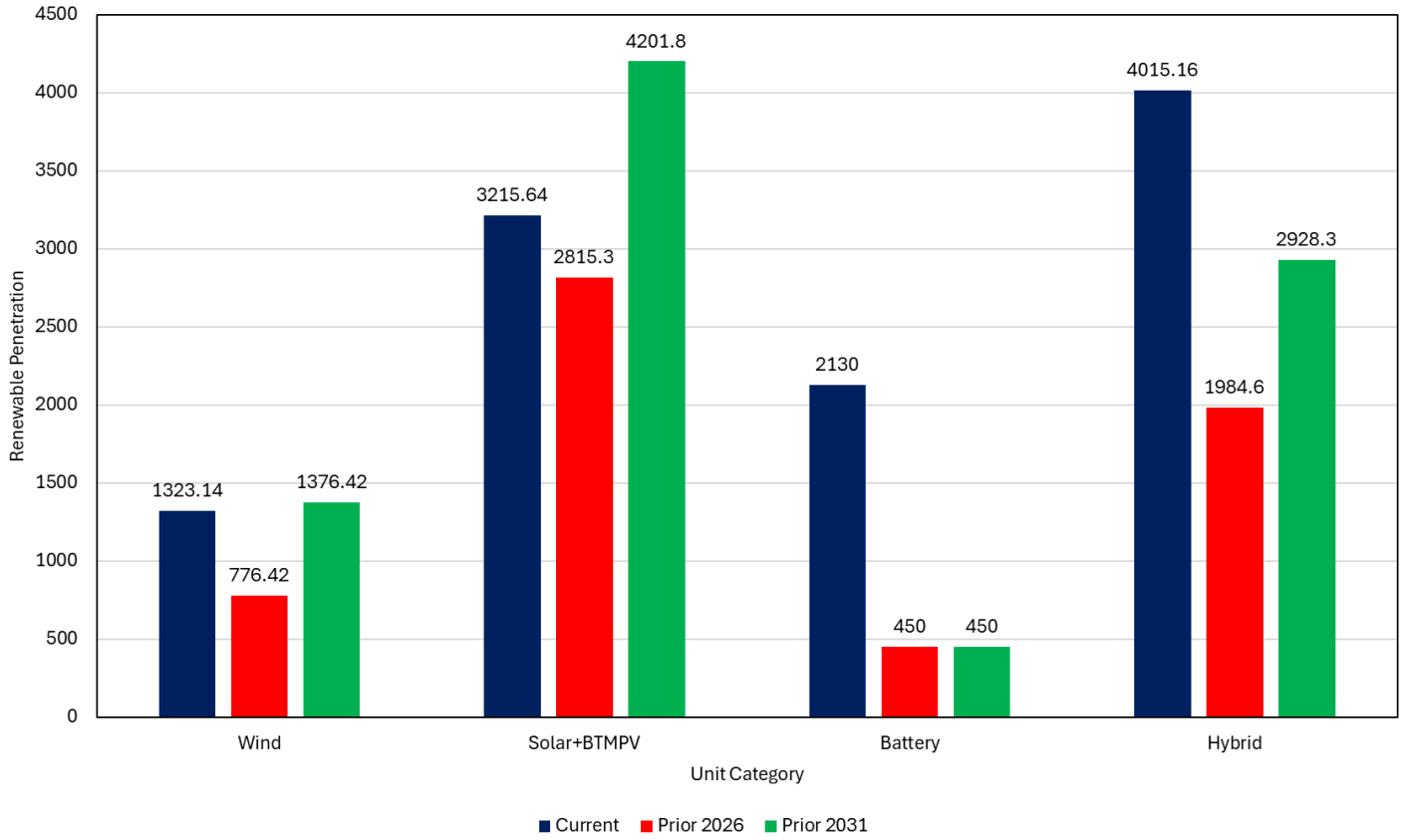
- To assess the adequacy of the planned APS system in 2030
  - ➢ Planning Reserve Margin
  - ➢ Establish resource accreditation to perform capacity expansion

Inputs & Assumptions:

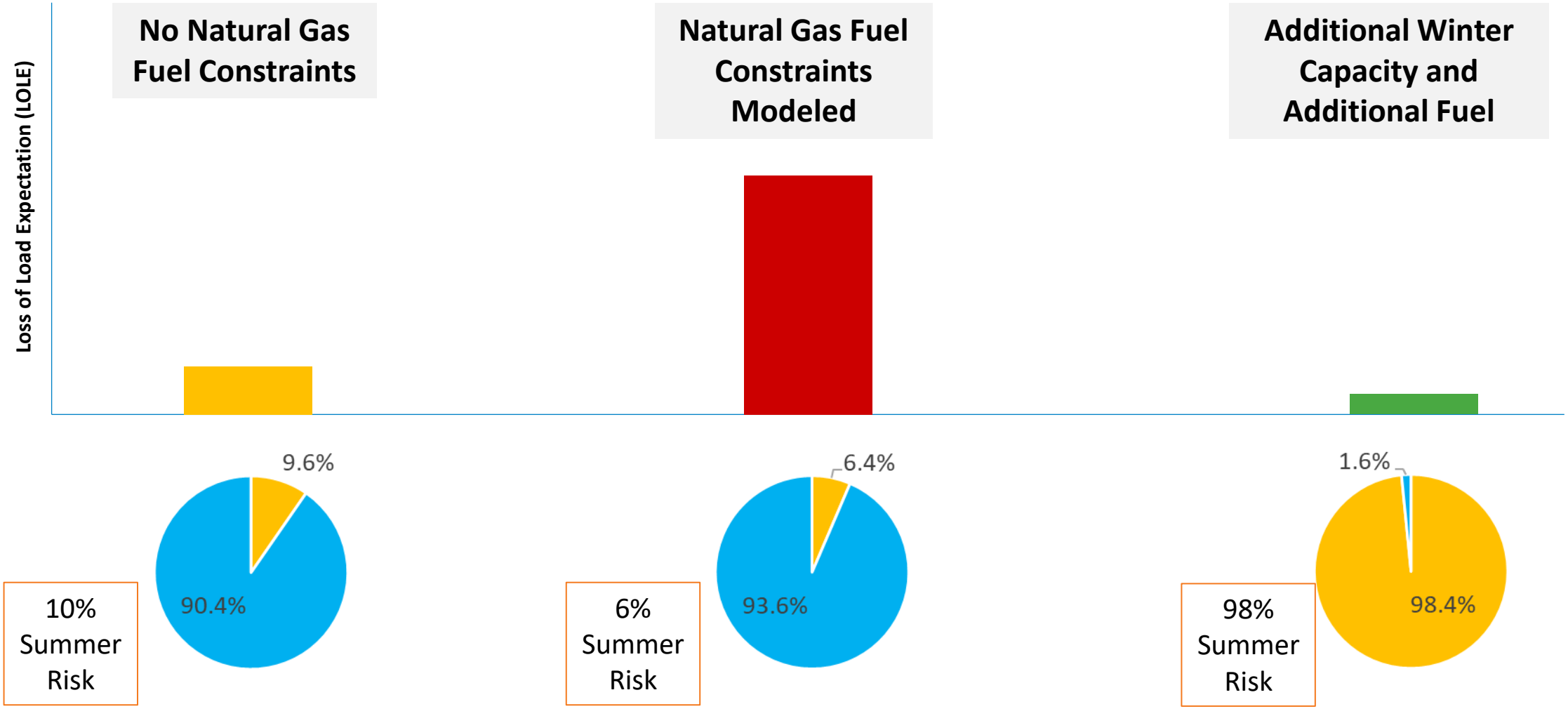
- Updated load and demand side resource forecasts
- Expanded Weather Patterns
- Updated Resource Characteristics
- Natural Gas pipelines modeled

Key Updates from 2022-2023 Study

- Notable change in load composition – significant increase of extra high load factor loads on the system
- Expanded weather patterns to better capture the variability and extreme events
- Modeling of natural gas pipeline and associated characteristics
- Significant addition of BESS resources on the system



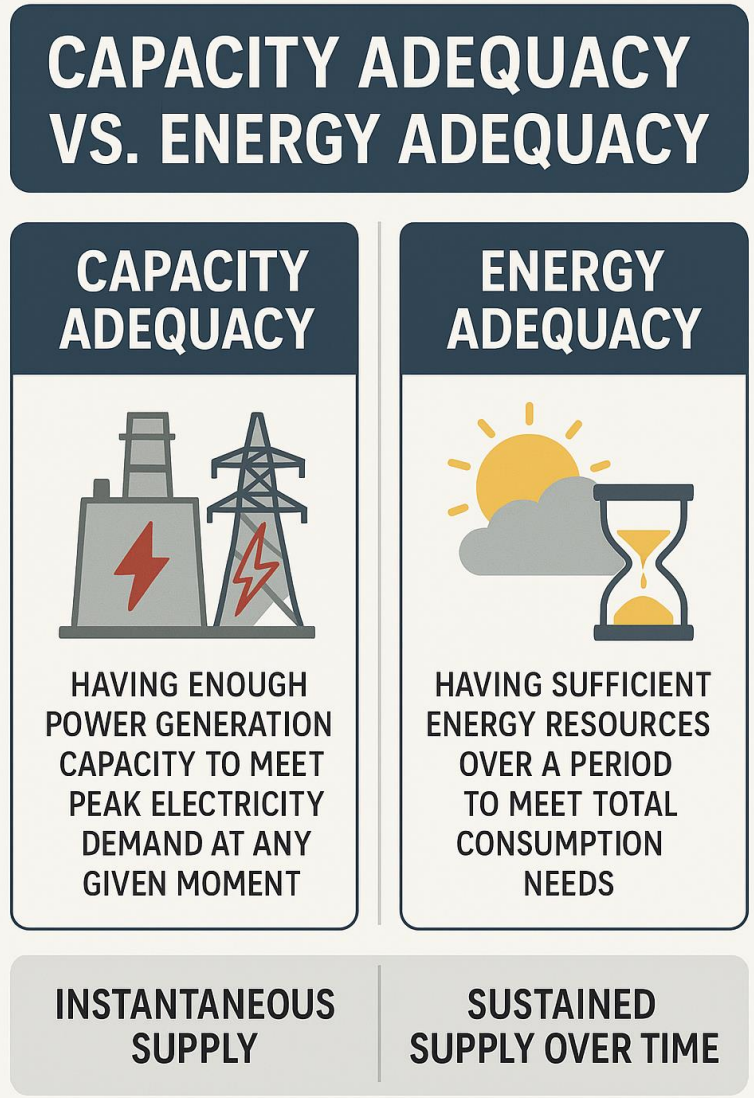
Changing Adequacy Paradigm



Key Takeaways

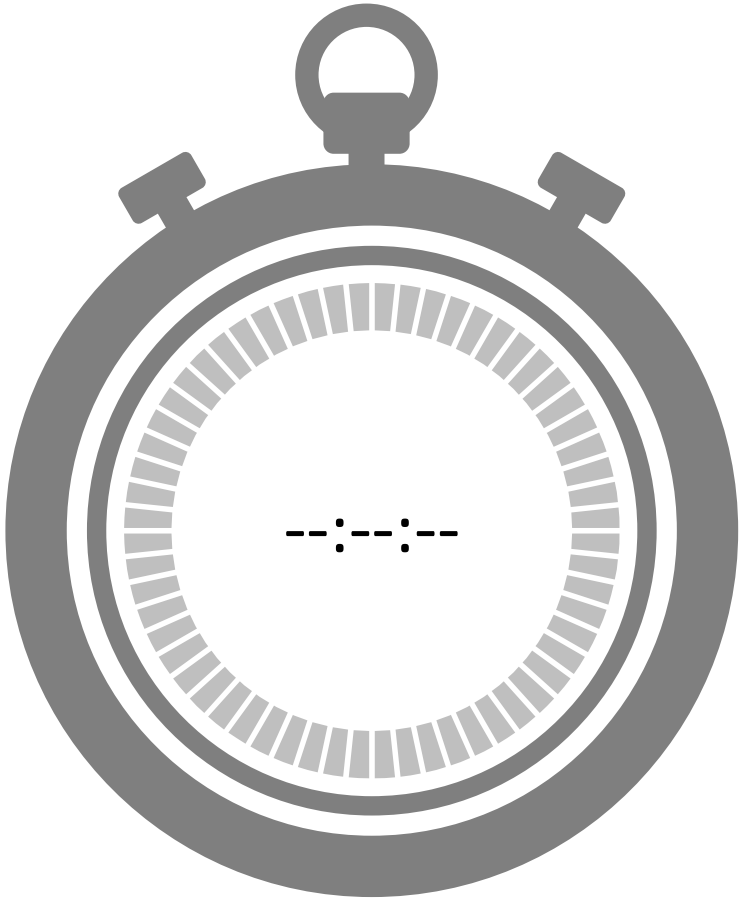
- APS's Resource Adequacy landscape changing from a summer peaking capacity adequacy need to both summer peaking capacity as well as energy resource needs

- Modeling Natural Gas Fuel Constraints exposes significant need for additional natural gas fuel to maintain reliability target by 2030




aps
Break

Time for a Break



Break Duration 5 min.

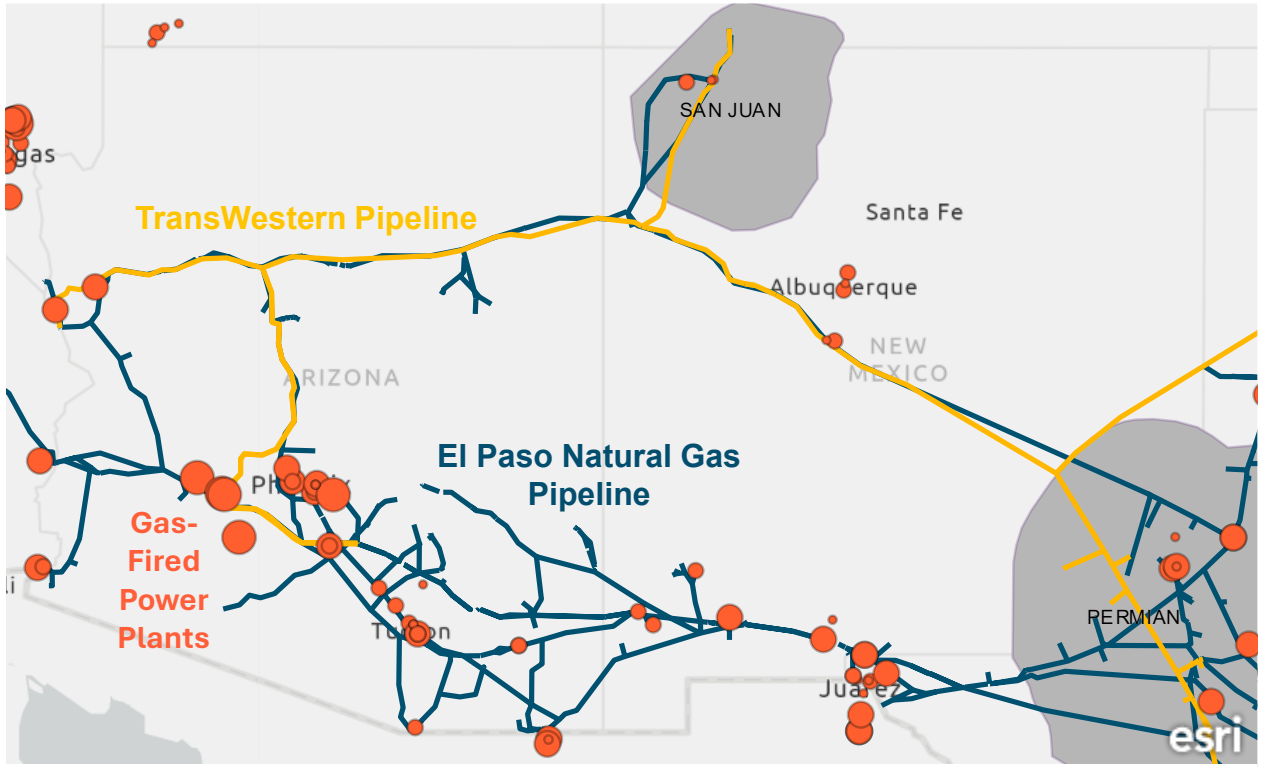
Meeting will resume at hh:mm

Natural Gas Pipeline Expansion Update

Jill Freret & Mike Eugenis, APS

Profile of Natural Gas Infrastructure in Arizona

From 9/25/2024 RPAC Presentation



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Third largest demand for natural gas among western states

- Behind California (1) and Colorado (2)
- Electricity generation accounts for ~80% of demand

Natural gas supplied from Permian & San Juan basins

- No in-state production or reserves

Two interstate pipelines serving Arizona and downstream demands in California

- Pipelines most constrained in **winter**
- Arizona gas demand highest in **summer**

No existing underground storage capacity

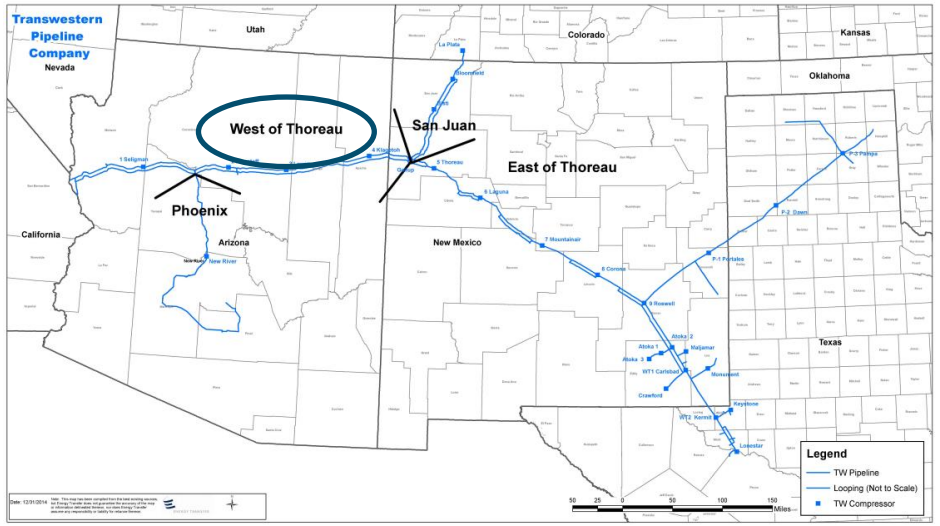
- Potential for development of storage in natural salt caverns – but highly site-specific

US Department of Energy, State of Arizona Energy Sector Risk Profile. March 2021. Arizona Profile (eia.gov)

E3 Summary and Implications

From 9/25/2024 RPAC Presentation

- **Constraints on existing gas infrastructure are becoming increasingly apparent, with limited signs of relief:**
  - Major interstate pipelines fully subscribed for firm capacity
  - Limited near-term reductions in California natural gas demand
  - Lingering uncertainties regarding the future role of existing natural gas storage in California
  - Increases in regional demand in power sector to meet rapid increases in electric demand
  - Potential for additional demand for LNG exports
- **In this environment, planning for fuel transportation is an increasingly crucial aspect of resource planning**

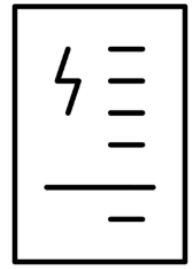


Loc Name	Zone Name	Loc Purp Desc	Loc/QTI	Unsub Cap[09/2028]	Unsub Cap[10/2028]	Unsub Cap[11/2028]	Unsub Cap[12/2028]	Unsub Cap[01/2029]
WEST TEXAS WEST THROUGH WT-1		M2	RPQ	0	0	0	0	860
WT-2 C/S WEST TO WT-1 C/S		M2						00
WEST TEXAS TO STATION 9		M2						00
SOUTH THRU BLOOMFIELD COMPRESSOR		M2						05
SJ LAT SOUTH TO THOREAU		M2	RPQ	606,275	640,015	526,965	347,925	331,105
THOREAU WEST		MQ	DPQ	0	0	0	0	0

TransWestern's Electronic Bulletin Board reports no capacity available West of Thoreau through 2028, indicating pipeline is fully subscribed

APS has studied natural gas needs over the last year, with sensitivities associated with two distinct worldviews:

Continued Federal Policy Support for Renewable/Clean Technologies

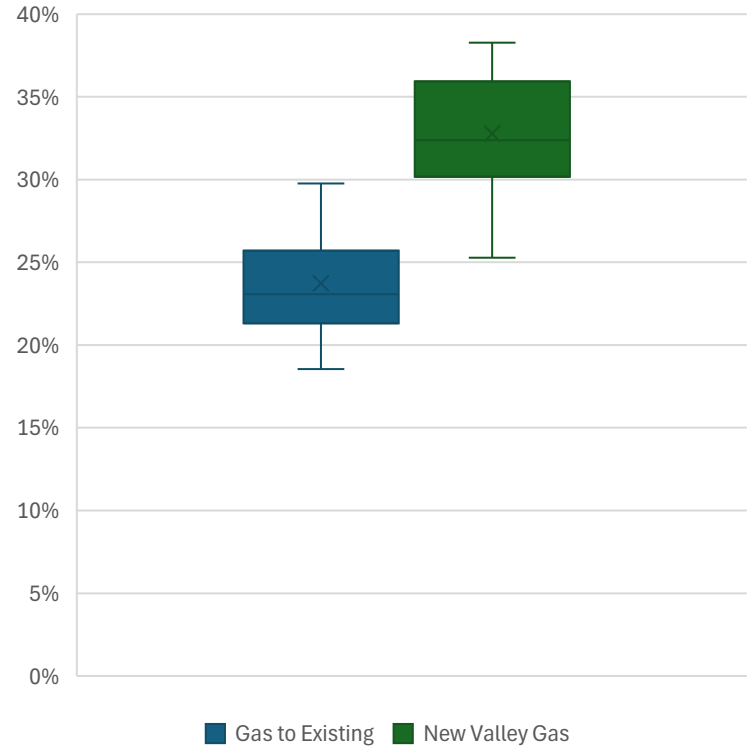


Removal of Federal Subsidies for Clean/Renewables

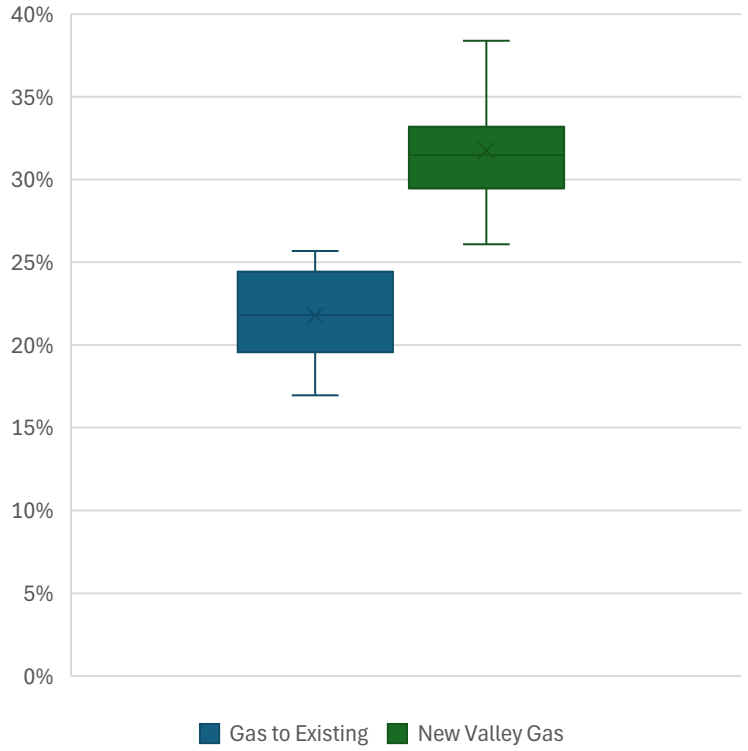
Additional natural gas was identified as part of the most economic portfolio for every case where it was an option

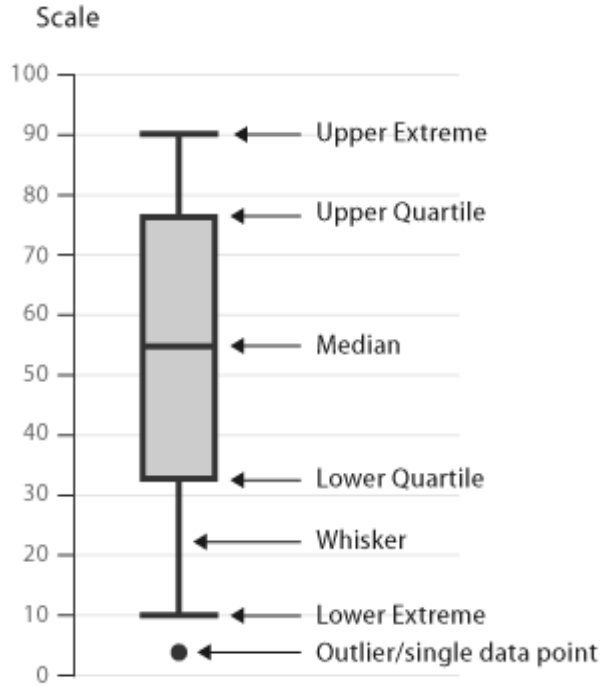
Proportion of Natural Gas in the Overall Energy Supplied Across All Portfolios

Policy Support Worldview

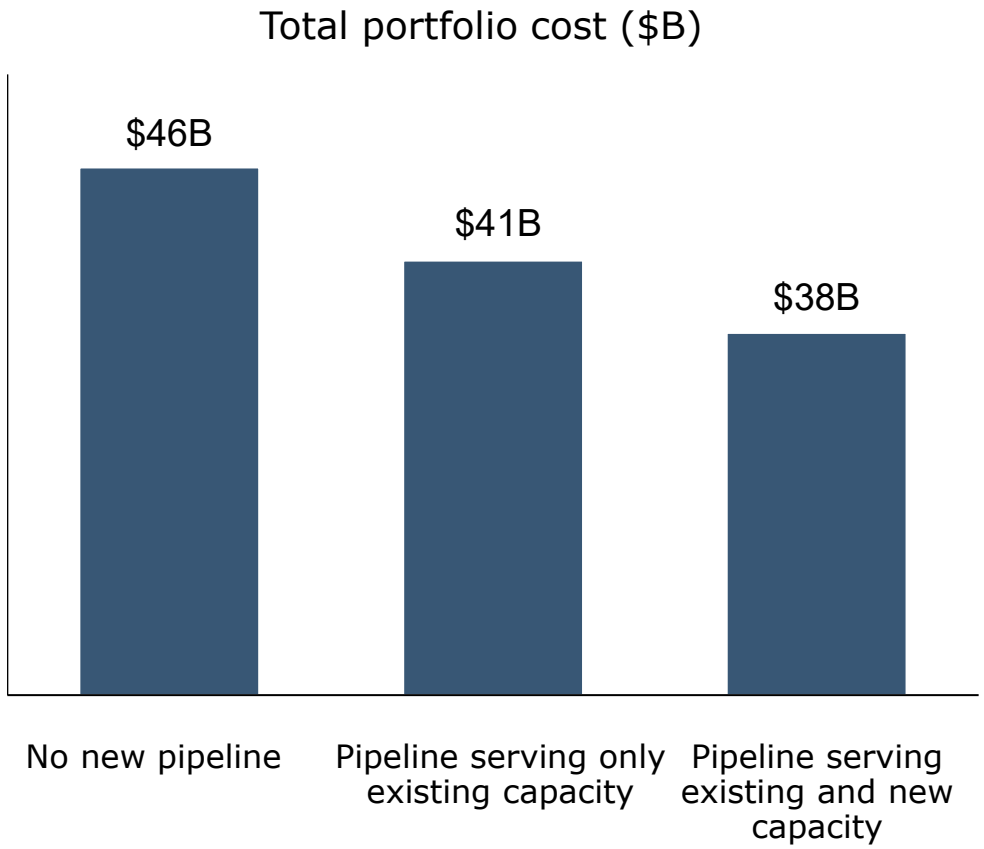


Removal of Federal Subsidies





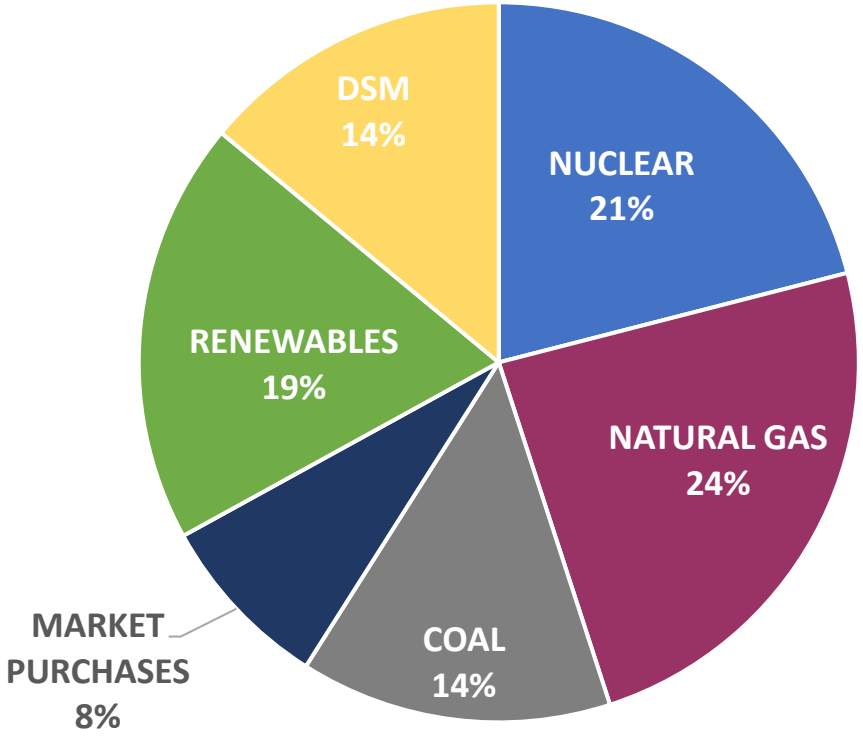
Access to additional natural gas transport maintains reliability for customers at lower cost, regardless of whether additional plants are built



Gas Resources		
	Pipeline serves existing capacity	Pipeline serves new capacity
No New Pipeline		
Pipeline serving only existing Capacity	✓	
Pipeline serving existing and new capacity	✓	✓

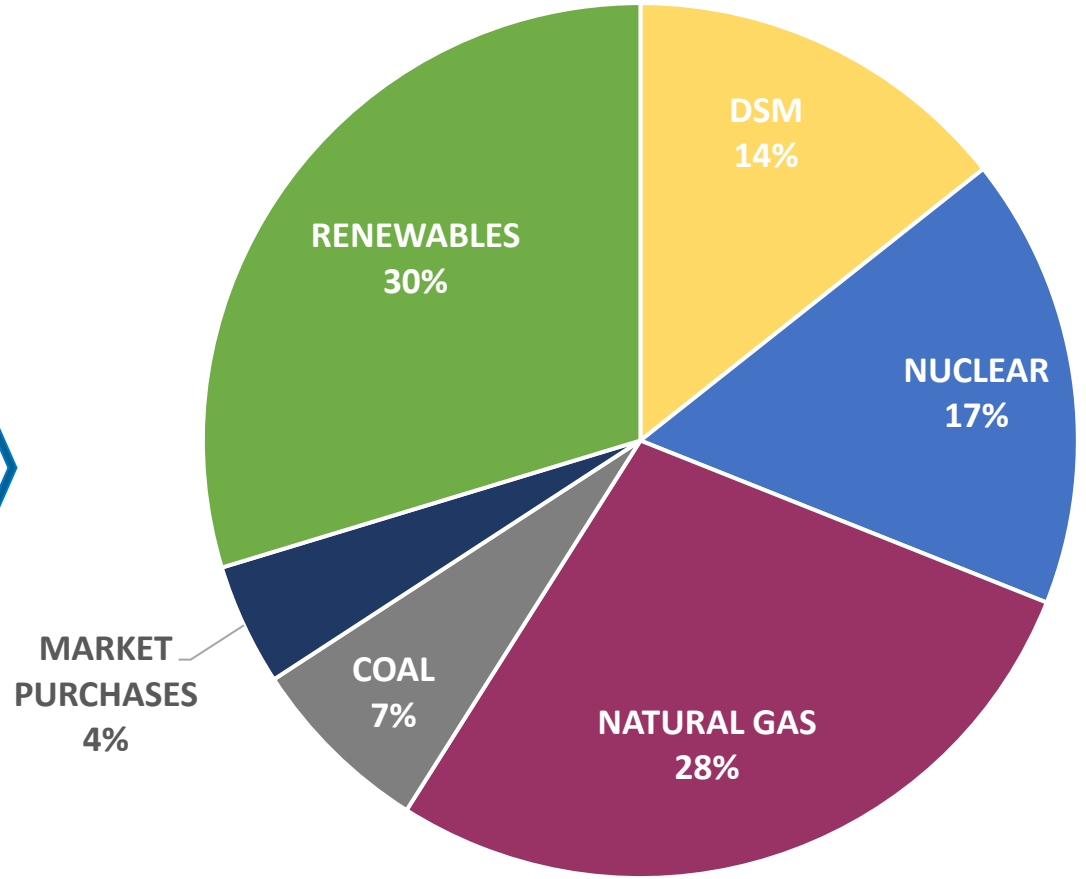
Part of a Balanced Energy Mix

2024 Actuals



38,256 GWh
Total Sales

2031 Forecast

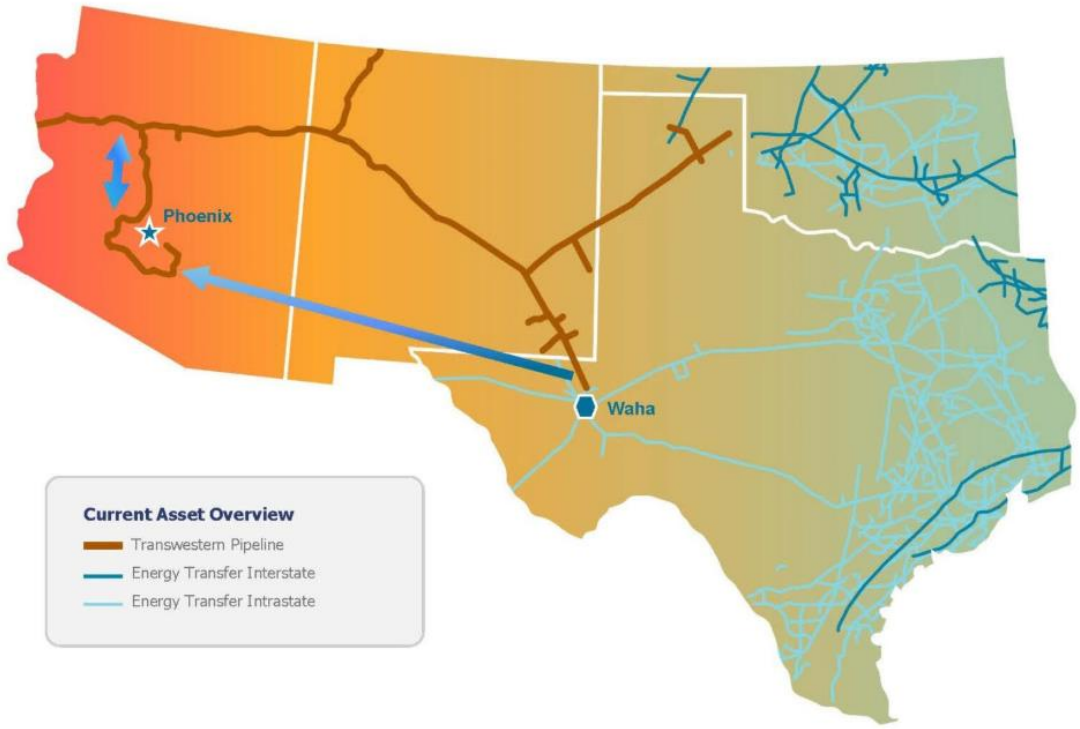


55,662 GWh
Total Sales

Desert Southwest Expansion Project

Pipeline Details:

- Permian Basin in West Texas to Phoenix, Arizona
- 516 Miles of 42-inch pipeline
- 1.5 Billion cubic feet per day (Bcf/d)
- $7.3B commitment from APS over 25 years
- Expected in late 2029



Pipeline Negotiations

APS evaluated & negotiated multiple proposals to ensure the greatest economic and overall benefit for customers

Key Considerations:

- Favorable fixed transportation pricing
- Lateral costs
- Sufficient volume with flexibility
- Allocation of cost risk
- Anchor shipper rights
- Project development milestones
- Partnership in stakeholder outreach

ACC Natural Gas Workshop Recap

ACC Natural Gas Docket

- On February 10, 2025, Vice Chairman Myers filed a letter to the docket.
- Arizona Public Service, TEP/UNS Electric/UNS Gas, and AEPCO filed comments to the docket.
- All three utilities support the Commission's inquiry into this topic.

ACC Natural Gas Infrastructure Workshop

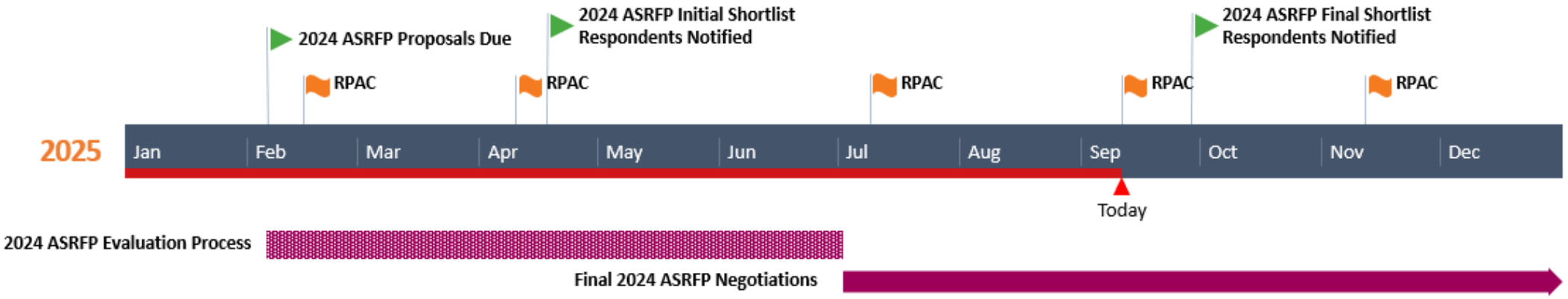
- On August 26, 2025, the ACC held a public workshop focused on Natural Gas Infrastructure and Storage.
- The American Gas Association (AGA), Federal Energy Regulatory Commission (FERC), National Energy Dominance Council, utilities, pipelines, Western Resource Advocates (WRA), and others shared presentations.
- Commissioners expressed continued interest in local (AZ) gas storage to support balanced, reliable utility resource portfolios

More information on the ACC Natural Gas Infrastructure and Storage Workshop information available here.

Next Steps & Closing Remarks

Adam Constable, APS

Forward Plans and Meetings



Key Milestones

November RPAC Meeting: 11/19/2025
Time: 10:00 am
Future Topics: Load Forecast, 2026 IRP Timeline, RA Study ELCCs, DER Forecast Update

2024 ASRFP Final Shortlist Respondents Notified: Expected prior to the end of Q3
Future ASRFP Release: TBD