



MEETING AGENDA



Welcome & Meeting Agenda Matt Lind 1898 & Co.



Western Markets Update Kent Walter APS



ASRFP Update

Derek Seaman

APS



2026 IRP Workplan Mike Eugenis APS



Southwest Resource Adequacy Study Nick Schlag E3



Next Steps & Closing Remarks
Matt Lind
1898 & Co.



Break



Meeting Guidelines



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.



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



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.



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





November Meeting Recap

- APS discussed the ACC's acknowledgement of the 2023 Integrated Resource Plan (IRP), thanking members for their participation in the IRP stakeholder process.
- APS provided an overview on the total capacity procured from its 2023 ASRFP.
- APS informed members of its decision to join SPP's Markets Plus Day Ahead Market, following up on the Western Markets Update shared during the September RPAC Meeting.



Following Up

Action Items from Previous Meetings:

Western Markets Follow-ups

- Ongoing Commitments:
 - Distribute meeting materials in a timely fashion
 - Transparency and dialogue







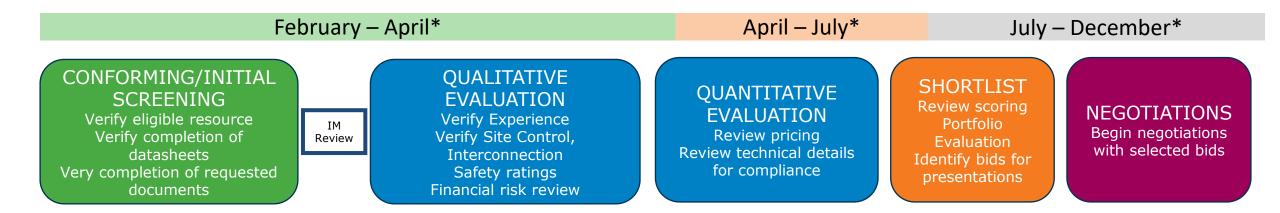
Overview & Schedule

- RFP publicly available at aps.com/rfp
- Proposals received February 5th
- Weekly calls ongoing between APS and Independent Monitor.
- Results are still being finalized

Event	Important Dates
RFP Release	November 20, 2024
Bidder's Conference	December 18, 2024
Proposal(s) & Proposal Fee(s) DUE	February 5, 2025
Shortlist Respondents Notified	April – July 2025
Anticipated Contract Execution	June – December 2025



Remaining Steps



- Bids will be screened in batches, with earlier in-service dates screened first
- Currently monitoring tariff implications, AD/CVD investigations and any other implications for bids
 - Major changes may require bids to be refreshed which will be solely determined by APS
 - APS will prioritize agreements that insulate customers from future tariff risk

^{*}Timelines are estimates and will adjust to balance customer reliability and affordability

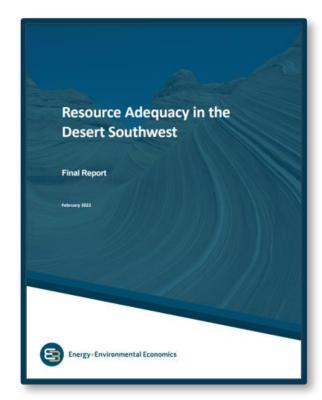


Southwest Resource Adequacy Study
Nick Schlag, E3

Key Findings: Resource Adequacy in the Desert Southwest (2021)

In 2021, six utilities in Arizona and New Mexico funded an E3 study to conduct a ten-year outlook on regional resource adequacy informed by utility plans. The analysis informed a number of significant conclusions:

- 1. Load growth & resource retirements are creating an urgent need for new resources in the Southwest
- 2. Utilities' current resource plans have identified sufficient capacity additions to maintain reliability
- 3. A significant share of the region's long-term needs are expected to be met by solar and storage resources
- 4. Even as solar and storage grow, the region's remaining firm resources – including nuclear and natural gas – will be needed for reliability
- 5. Substantial reliability risks remain as the region's electricity resource portfolio transitions



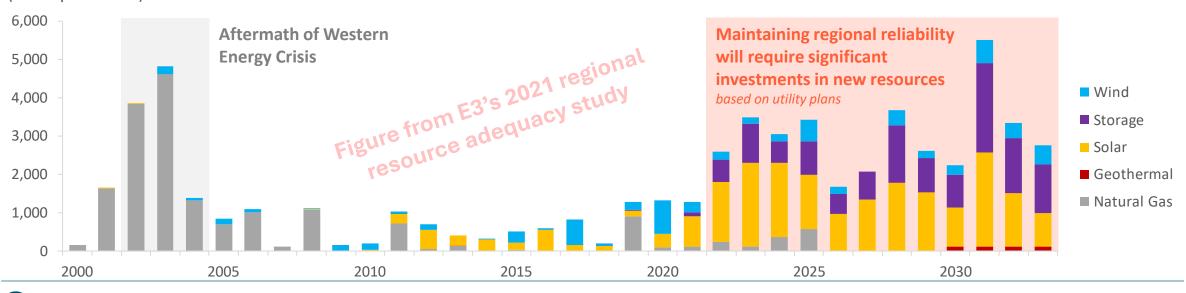
Resource Adequacy in the Desert Southwest

Maintaining reliability will require immediate and sustained action over the next decade

- The rate of new resource additions required in the next ten years is nearly unprecedented in the history of the Southwest
- With project development timelines measured in years and near-term supply chain risks looming, advance planning and prompt action by utilities are needed to avoid falling behind in the transition

New Installed Capacity Additions by Year (Southwest Region) (Nameplate MW)

- + Utilities, regulators, developers and stakeholders will share responsibility for working cooperatively to ensure new resources are in place as needed
 - Plans for new resource additions should account for reasonable risks of project delays and cancellations
 - Failure to develop new resources in a timely manner will either result in (1) a degradation of reliability or (2) the need to retain existing plants with scheduled retirements



Since E3's 2021 study, several developments have occurred that present additional challenges



Industrial and electrified load growth

New industrial and data center loads and consumer adoption of electric vehicles have accelerated, increasing utilities' future load expectations



Supply Chain Tightness

Utilities' planned investments have been hamstrung by global supply chain dynamics, leading to slower than expected additions of solar and battery storage projects.



Climate change impacts on extreme weather

Increased frequency and intensity of extreme heat events results in more frequent extreme peak demand



Leading to delays in retirement across the western Interconnection and delaying regional resource adequacy programs like WRAP

Other Factors:

- Hydro availability due to droughts
- + Continued and increased reliance on variable and energy-limited resources
- + Natural gas generator performance



An updated examination of resource adequacy to inform dialog within the region

In light of these developments, the same group of utilities is currently sponsoring an updated regional resource adequacy study to refresh analysis and delve deeper into future reliability risks

Phase 1: Near- and Mid-Term Resource Adequacy Evaluations

- Incorporate updated load and resource projections for the next decade into loss-ofload-probability modeling
- + Identify specific extreme conditions likely to lead to greatest grid stress (e.g. extreme heat exacerbated by climate change, sustained renewable droughts)
- + Conduct additional stress-tests on examine events to assess resilience of electric system

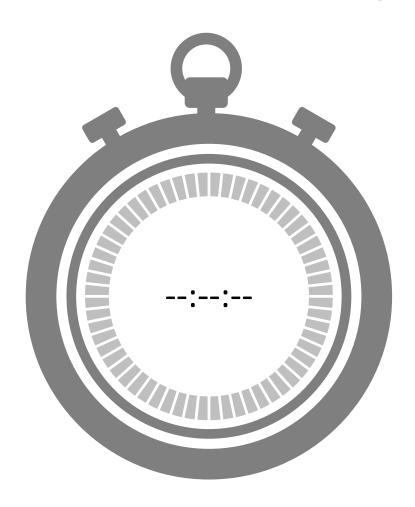
Phase 2: Assessment of Long-Term Regional Resource Needs

- + Use long-term capacity expansion modeling to identify a range of potential portfolios to meet region's long term (2050) resource needs
- + Characterize roles and contributions of different types of resources based on common themes across portfolios
- + Examine how new and emerging technologies may affect region's long-term outlook





Time for a Break



Break Duration 10 min.

Meeting will resume at

hh:mm





Stakeholder Engagement

December 2022

September 2023

April 2024

September November 2024

February 2025

- Overview of goals for WME Effort
- Next steps for evaluation
- WMFG production cost study results
- Continue strategy to pursue development of Markets+
- Shared Markets+ leaning and comparison of markets
- Affirmed continued leaning and decision timing
- Decision to join Markets+ and review rationale

2024

 Update on Markets+ Tariff **Update & Phase** 2 Funding

ACC Docket on Western Markets

WMEG Study

Leaning Letter

FERC Comments for EDAM and Markets+ Tariffs

Pathways Initiative Comments

Issue Alert Comparisons of Day-ahead Markets



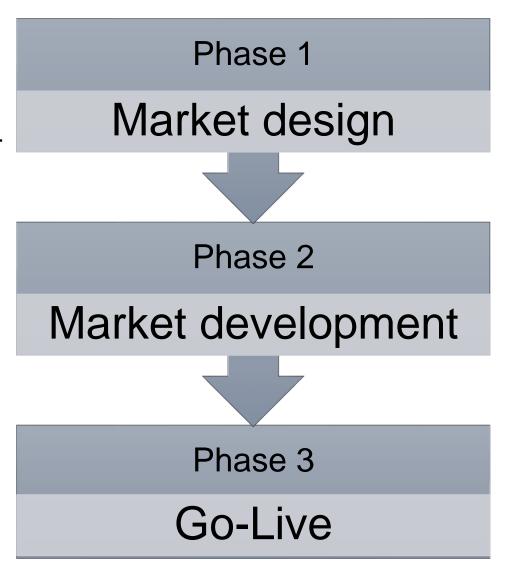
Follow-up from Nov meeting

Request	Response
Access to non-public study data	 Public study results are filed in the ACC markets docket and provided to RPAC in the pre-read materials
	 APS does not have visibility to non-public data
Third party capacity study for market decision	 Markets+ is only day-head market design that could support capacity reductions
	 APS will further explore capacity impacts from markets in 2026 IRP
Customer meetings for market decision	 APS materials for market decisions are publicly available and are filed at the ACC for interested customers
 Compare and share why other entities may have arrived at a different outcome 	 APS will not speak for other utilities decisions and the balance of their priorities



Markets+ Updates Since Nov RPAC

- Jointly announced APS, SRP, and TEP joining Markets+
- FERC conditionally accepts Markets+ Tariff
 - SPP to file compliance filing within 30 days
 - Joint informational filings
- Phase II funding agreement update
- Kicking off implementation efforts
- Market Go Live targeting Q2 2027







2026 IRP RPAC Touchpoints







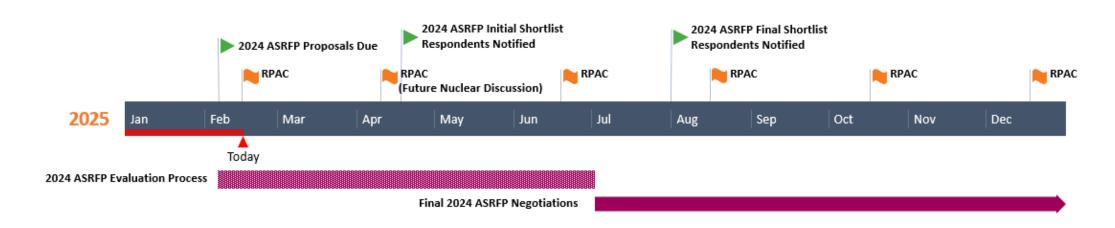


Near-Term Topics		Future Topics			
	RP Schedule quirements	ASRFP UpdatesSWRA Study Results	Load ForecastIRP Input UpdatesRegulatory Updates	Base CaseIRP PortfoliosPreliminary Results	





Forward Plans and Meetings



*Disclaimer: This timeline is an estimate and is subject to change depending on the quantity and complexity of bids received

Key Milestones

April RPAC Meeting: 4/9/2025

Time: 9:00am

2024 ASRFP Shortlist Respondents Notified: Expected prior to the end of Q3