Arizona Public Service - December RPAC Meeting Minutes

Date	Location	Start	Stop
12/12/2023	Virtual	9:00 a.m.	10:45 a.m.

MEETING OBJECTIVES

- Recap the October RPAC meeting and provide the status of previous action items.
- Discuss APS's ongoing 2023 All-Source RFP.
- Examine APS's 2024 DSM plan filing.
- Reflect on historic agenda topics covered with the RPAC.
- Forecast next steps and future RPAC engagement opportunities.

Attendees	Organization	Title/Role
Greg Patterson	Arizona Competitive Power Alliance	Director
Chaunce De Roos	Arizona Corporation Commission	Policy Advisor
Gregory Blackie	Arizona Free Enterprise Club	Deputy Director of Policy
Walter Clemence	Capital Power	Senior Advisor, US Regulatory
TJ Higgins	Griffith Energy	Carolina Power Partners Asset Manager
John Sherry	Holland & Hart LLP	Associate
Sam Johnston	Interwest Energy Alliance	Policy Manager
Nitin Luhar	Mitsubishi Power	Director, Regional Sales & Marketing
Nicole Hill	Nature Conservancy	AZ Climate Program Director
Dugan Marieb	Pine Gate Renewables	Regulatory Associate
Cynthia Zwick	Residential Utility Consumer Office	Director
Bentley Erdwurm	Residential Utility Consumer Office (RUCO)	Public Utilities Analyst
Scott Yaeger	Rockland Capital	Vice President, Power Marketing
Sandy Bahr	Sierra Club	Director, Grand Canyon Chapter
Alondra Regalado	Strategen	Policy Analyst
Caryn Potter	SWEEP	Arizona Representative
Devi Glick	Synapse Energy Economics	Senior Principal
Autumn Johnson	Tierra Strategy	CEO
Kate Bowman	Vote Solar	Regulatory Director
Alex Routhier	Western Resource Advocates	Senior Clean Energy Policy Analyst
Robin Shropshire	Griffith Energy	Asset Manager
Vern Braaksma	APS	Senior Account Manager



Adam Constable	APS	Federal/State Regulatory Consultant
Michael Eugenis	APS	Manager, Resource Planning & Analysis
Ashley Kelly	APS	Manager, Regulatory Compliance
Todd Komaromy	APS	Director, Resource Planning
Elizabeth Lawrence	APS	Manager, Product Development & Strategy
Rachael Leonard	APS	Manager, Regulatory Compliance
Pamela Nicola	APS	Manager, Sustainability
David Peterson	APS	Corporate Strategy Advisor
Nicole Rodriguez	APS	Consultant, Strategic Communications
Derek Seaman	APS	Director, Resource Acquisition
Jason Smith	APS	Manager, Regulatory Affairs & Compliance Adm
Jeffrey Allmon	Pinnacle West - APS	Senior Attorney
Melissa Krueger	Pinnacle West - APS	Associate General Counsel
Evan Lipsitz	1898 & Co.	Consultant
Matthew Lind	1898 & Co.	Director of Resource Planning
Madeline Suellentrop	1898 & Co.	Lead Power & Utilities Analyst
Keaton Clark	1898 & Co.	Power & Utilities Analyst
Chase Kilty	1898 & Co.	Consultant

Matt Lind | 1898 & Co./Director of Resource Planning | Welcome & Meeting Agenda Derek Seaman | APS/Director, Resource Acquisition | 2023 ASRFP Update

- Question Member: The RPAC was unaware that APS went to the Commission for approval of the additional gas units at Sundance. Is the Sundance project decision final, or is it still under consideration?
 - Response Derek Seaman: Overall, the project aligned with guidance provided in the 2023 IRP. APS still sees natural gas as a reliable solution for our portfolio. The Sundance project is not a foregone conclusion; APS wants to keep the option alive, and the ball moving with the Certificate of Environmental Compatibility (CEC) process, to ensure ample timing for portfolio acquisitions. Additionally, APS will continue to work with the RPAC to improve communication and transparency in the future.
- Question RPAC Member: Is there a difference between the "solar" section and the "PVS" section of the pie chart on slide 11?
 - Response Derek Seaman: The green shows solar paired with storage and the PVS is standalone solar.
- Question RPAC Member: To what extent is the BESS cap going to be reevaluated?
 - Response Derek Seaman: We will examine this at the end of 2027, and the 3 GW cap is intended to hold till 2027. It will be reevaluated for 2028, but we want to make sure we are not overly invested in one technology too quickly.



- Question RPAC Member: Can you speak about the interconnection backlog given the recent FERC order?
 - Response Derek Seaman: FERC Order 2023 was brought forward to help clean up the interconnection queue backlog and create more requirements to enter the queue. The transitional cluster was used to phase in projects to the new requirements. There was a large drop in applicants due to the change, which was the Order's intent. Projects totaling a little more than 36,000 MW were withdrawn from the queue as a result.
- Question RPAC Member: What is the total 2026 capacity additions from the shortlist in the 2023 All-Source RFP?
 - Response Derek Seaman: For 2026, the numbers were left off the graphic on slide 11, because APS does not disclose where individual bidder projects stand given we are still in the bidding review stage. APS will be willing to share this information once it is further along in the negotiation process.
- Question RPAC Member: Is it APS's view that FERC Order 2023 will improve the backlog?
 - Response Derek Seaman: The APS transmission and distribution team believes that this will
 cut back on the issues related to the queue backlog.
- Question RPAC Member: Do you think the shortlist for 2027 projects in the current 2023 All-Source RFP will proceed?
 - Response Derek Seaman: In the 2022 All-Source RFP, APS was constrained on time. APS was able to get ahead with some of the 2026 projects. The 2023 All-Source RFP could secure APS's new resources for the 2026/2027 period.
- Question RPAC Member: What types of bids are you receiving for Cholla?
 - Response Derek Seaman: Mostly solar, traditional lithium-ion storage options, and other long-duration battery storage options.
- Question RPAC Member: To what extent are the resource and capacity needs related to the load forecast?
 - Response Derek Seaman: APS's resource acquisition team works closely with APS's resource
 planning team to make sure that the resources selected meet demand projections in quarterly
 load forecast updates.
- Question RPAC Member: Of the 2027 projects being evaluated against Redhawk, will the lowest cost be the driving factor against other gas projects? How will future paths of decarbonization be valued for those projects/resources?
 - Response Derek Seaman: We not only look at the lowest cost, but also the best fit. We are going to look at what the model supports as well as other factors, such as reliability, load factor impacts, flexibility, etc. The lowest cost is a significant item but not the only deciding factor.

Izzy Lawrence | Manager/Product Development & Strategy | 2024 DSM Plan Filing

- Question RPAC Member: How are you expanding the Advanced Rooftop Controls (ARC) program and what customers will the program be expanded to?
 - Response Elizabeth Lawrence: It would expand to all eligible Commercial and Industrial (C&I) customers. For example, it would not be applicable for a small company, such as a coffee shop, but could be applicable for a distribution or fulfillment center. This will be suitable for any C&I customer that has the technology to adopt it.
- Question RPAC Member: What brought upon this expansion? Are C&I customers interested and pushing for more adoption?
 - Response Elizabeth Lawrence: This was initially proposed by a Commissioner and we have seen benefits for customers in locations where it has been adopted. We have interested customers beyond the approved segments.
- Question RPAC Member: Can you provide an update on DDSR and the expansion of the residential battery pilot?
 - Response Elizabeth Lawrence: Due to the dissolution of the DDSR pilot, APS requested adding additional batteries to the Residential Battery Pilot to evaluate the services outlined in



- the DDSR decisions. The capacity additions are the easiest to evaluate, but APS will be working to value other ancillary services with the additional batteries as well.
- Question RPAC Member: Will APS be looking at the Virtual Power Plants (VPP) more significantly in the next Integrated Resource Plan?
 - Response Todd Komaromy: APS is looking at this now. APS is taking an "all of the above approach" and VPP is part of that. The IRP team is looking at best practices and how to consider some of the nuances.
- Question RPAC Member: Most of the EVs will be in the residential class of customers and, because of the setup, APS can help avoid charging during the on-peak periods and help to fill in the off-peak valleys. It seems like with those two items combined there will be an increase in residential load factor relative to other things held constant, and the load factor is one of the things that affects cost to serve. Can APS comment on their consideration of the load factor?
 - Response Elizabeth Lawrence: APS will continue to advocate for these customer programs
 and the APS Customer to Grid Solutions Team will continue to work closely with the APS Rates
 Team. If the load factor causes an impact, it will be seen in the cost-to-serve studies and
 those results can be used to guide APS on the next steps.

Matt Lind | 1898 & Co./Director of Resource Planning | RPAC Agenda Topic Reflection

- Comment RPAC Member: A point of improvement could be kicking off the IRP modeling sooner. I encourage APS to release access to models by January of the filing year. More time should be focused on the evolution of the 60% increase in demand and 40% increase in peak. Attention to metrics like this is important and whether the values remain true.
 - Response Todd Komaromy: More time is always beneficial for everyone. As far as the
 modeling is concerned, we have not seen all the work products from the RPAC member
 modeling teams yet. I agree. Collaboration is always better for modeling and we want to
 continue having that collaboration.
- Comment RPAC Member: Regarding the agenda topic around capacity planning, it was very helpful to have the extra level of technical depth even if it was beyond the comfort level of some RPAC members. Stepping into the shoes of the engineers helps members understand what APS is up against and facing.
- Comment RPAC Member: We would like APS to talk more about how Energy Efficiency (EE) and Demand Side Management (DSM) can be used to hedge against higher gas prices or energy prices on a wholesale market.
- Comment RPAC Member: We would like to hear more about hydrogen and the state of the pipeline infrastructure, as well as the results from the EPRI work on the Climate Change Scenario Analysis.
- Comment RPAC Member: Revisiting the APS commitments regarding the Western Resource Adequacy Program (WRAP) and how they will affect planning efforts would be helpful.
- Comment Todd Komaromy: I really appreciate the feedback, and these are all great suggestions. Please email us if you have additional thoughts.

Slide 26 - Forward Plans and Meetings

- Question RPAC Member: What is the optional RPAC working session in January?
 - Response Todd Komaromy: It is an opportunity for those planning to file comments about the IRP with the Arizona Corporation Commission to ask us questions and provide feedback in a one-on-one setting.

