

Arizona Public Service - September RPAC Meeting Minutes

Date	Location	Start	Stop
09/22/2023	Virtual	9:00 a.m.	11:20 a.m.

MEETING OBJECTIVES

- Recap the August RPAC meeting and provide the status of previous action items.
- Discuss the latest updates to the ongoing 2023 All-Source RFP.
- Provide the results of the Western Market Exploratory Group - Western Day Ahead Market Production Cost Impact Study.
- Discuss the importance of new transmission for increased renewables and look at factors that impact the timing of transmission projects.
- Update RPAC members on the current IRP modeling results and explain key themes.
- Discuss next steps and future RPAC engagement opportunities.

Attendees	Organization	Title/Role
Chaunce De Roos	Arizona Corporation Commission	Policy Advisor
Luke Hutchison	Arizona Corporation Commission	Engineering Supervisor
Steve Jennings	AARP	Associate State Director
Gregory Blackie	Arizona Free Enterprise Club	Deputy Director of Policy
Jackie Solares	CalMich Produce	Director, Sales and Business Development
Nick Schlag	E3	Partner
Michelle King	Holland & Hart	Partner, Public Utilities Attorney
TJ Higgins	Griffith Energy	Carolina Power Partners Asset Manager
Lisa Hickey	Interwest Energy Alliance	Senior Regulatory Counsel
Sam Johnston	Interwest Energy Alliance	Policy Manager
Nitin Luhar	Mitsubishi Power	Director, Regional Sales & Marketing
Dugan Marieb	Pine Gate Renewables	Regulatory Associate
Jeffrey Allmon	Pinnacle West - APS	Senior Attorney
Scott Yaeger	Rockland Capital	Vice President, Power Marketing
Tyler Fitch	Rocky Mountain Institute	Manager
Patrick Woolsey	Sierra Club	Associate Attorney
Sandy Bahr	Sierra Club	Director, Grand Canyon Chapter
Caryn Potter	SWEEP	Arizona Representative
Autumn Johnson	Tierra Strategy	CEO
Kate Bowman	Vote Solar	Regulatory Director
David Millar	Wärtsilä Energy	Principal, Markets, Legislative, and Regulatory Policy

Alex Routhier	Western Resource Advocates	Senior Clean Energy Policy Analyst
Jeffrey Allmon	Pinnacle West - APS	Senior Attorney
Tara Beske	APS	Business Advisor, Resource Management
Kerri Carnes	APS	Director, Customer to Grid Solutions
Brian Cole	APS	General Manager, Western Market Affairs
Adam Constable	APS	Federal/State Regulatory Consultant
Yessica Del Rincon	APS	Communications Consultant
Michael Eugenis	APS	Manager, Resource Planning & Analysis
Jill Freret	APS	Director, Resource Integration & Fuels
Elizabeth Goodman	APS	Manager, Market Strategy, Policy and Support
Brent Goodrich	APS	Federal/State Regulatory Advisor
Todd Komaromy	APS	Director, Resource Planning
Rachael Leonard	APS	Manager, State Regulatory Strategy
Tyler Moore	APS	Manager, EIM Program
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
Matthew Lind	1898 & Co.	Director of Resource Planning
Keaton Clark	1898 & Co.	Power & Utilities Analyst

Matt Lind | 1898 & Co./Director of Resource Planning | August RPAC Recap

Slide 4 - August Meeting Recap

- No questions.

Slide 5 - Follow Up

- No questions.

Derek Seaman | APS/Director, Resource Acquisition | 2023 ASRFP Update

Slide 7 - Overview & Schedule

- Question - RPAC Member: What technologies are being bid in at the Cholla location?
 - Answer - Derek Seaman: APS is seeing a variety of projects (e.g., solar, storage) that could use the existing equipment or land.
- Question - RPAC Member: Regarding queue reform, what tariff applies to these bids?
 - Answer - Derek Seaman: APS will use the existing rules until a final determination is received from FERC.

Brian Cole | APS/General Manager, Western Market Affairs | Update on Western Markets Exploratory Group (WMEG) - Western Day Ahead Market Production Cost Impact Study Results

Slide 15 - Goals of Market Participation

- Question - RPAC Member: What is the difference between the Main Split and the Markets Plus Bookend scenarios?
 - Answer - Brian Cole: They have effectively the same footprint, with the only difference being that a WAPA- Sierra Nevada region is included in EDAM in the Main Split, and in Markets Plus in the bookend scenario.

- Question - RPAC Member: These results are for 2026. How will those change over time?
Answer - Brian Cole: In the main report, there was additional work done for 2030 and 2035. As you add resources and market functions, the results change slightly, but effectively, the overall results do not change substantially and are directionally the same.
- Question - RPAC Member: Is there no scenario where APS joins the Extended Day-Ahead Market (EDAM) unless the entire West joins the EDAM?
○ Answer - Brian Cole: In Alt Split 1, APS is in EDAM, while the Northwest is not. The areas and groupings were chosen intentionally to understand the potential costs and benefits of differing footprints.
- Question - RPAC Member: Are the technical details of the study publicly available?
○ Answer - Brian Cole: The data is confidential, but APS will share the main report, including assumptions, methods, and outline. The full WMEG Western Day-Ahead Market Production Cost Impact Study, filed with the ACC on 9/28/23, can be found at the following link: [E000031018.pdf \(azcc.gov\)](#).
- Question - RPAC Member: Are the loss of savings from leaving the Western Energy Imbalance Market (WEIM) captured in the study?
○ Answer - Yes, the EIM savings are currently being captured in the Business As Usual (BAU) case. All alternative cases assume inclusion in the market identified (both real time and day ahead) - so the results effectively include either being in or being out of the WEIM. The results include the net effect of whichever market the entity is included in and would, therefore, take the inclusion or non-inclusion of being in WEIM into account.
- Question - RPAC Member: Is there any consideration about losing access to low California solar prices?
○ Answer - Brian Cole: Arizona is now creating its own overbuild of solar along with building more batteries. Therefore, Arizona is likely to look more like California moving into the future.
- Question - RPAC Member: What are some cost drivers leading in this direction?
○ Answer - Brian Cole: Early in the process, all members of WMEG updated their information, including transmission, resource plans, and more. Trying to pin down a single cost driver is not feasible, but one takeaway is that joining a large footprint is better if you share the benefits amongst all parties and in APS's case, being in the same market as the Northwest has better results likely due to the increased load and resource diversity.
- Question - RPAC Member: Is PacifiCorp (PAC) soaking up some of the benefits from APS?
○ Answer - Brian Cole: It is unclear, but it is possible that APS could have seen better results if PAC was included with the rest of the West.
- Question - RPAC Member: If California energy prices are higher, it is an assumption that Arizona plants will be called on more often to transmit power into California. How would this impact revenue for APS? Does it increase costs for Arizona customers?
○ Answer - Brian Cole: The costs are net, so they are effectively savings. Based on the study results, California will see an increase in cost when it is not included with the rest of the West in the same market. Even when in separate markets, Arizona and other entities will still have sales to California.

Nick Schlag | E3/Partner | Transmission Timelines

Slide 31 - Multiple Studies Point to the Importance of Transmission to Enable Access to High-Quality Renewable Resources

- Question - RPAC Member: Are utilities doing anything to get a jump on transmission projects and help facilitate the connection of solar resources?
○ Answer - Todd Komaromy: The IRP documents identify the best plan to serve the load, including the expertise of APS's transmission planners.
- Question - RPAC Member: Is APS planning transmission based on the new projects in the queue and where they are sited?
○ Answer - Todd Komaromy: APS is actively working on their processes, including interconnection reform, and working with their neighboring utilities to be as efficient as possible.

Mike Eugenis | APS/Manager, Resource Planning & Analysis | IRP Key Themes

Slide 40 - Key Themes & Development Strategy

- Question - RPAC Member: Why is 2032 the year of the second pie chart?

- Answer - Mike Eugenis: 2032 was selected because it is after the exit of Four Corners in all scenarios.
- Question - RPAC Member: Are you assuming no additional nuclear by 2032?
 - Answer - Mike Eugenis: Yes, the generation we receive from Palo Verde is fixed. The model has new nuclear as an option but has not selected it.
- Question - RPAC Member: How many total portfolios are you running? Do you have a preferred portfolio?
 - Answer - Mike Eugenis: There are about 16 portfolios, and there is no preferred portfolio selected yet.
- Question - RPAC Member: How do you consider including microgrids as part of Demand Response (DR)?
 - Answer - Mike Eugenis: Both Microgrids and Demand Response products provide dispatchable capacity to the system. They can provide resource adequacy by controlling and responding to system fluctuations at any time. This is why they were grouped together on slide 42.
- Question - RPAC Member: Why will stakeholders not see the final results until two weeks before the filing?
 - Answer - Mike Eugenis: The timeline has been impacted by APS's intentionality and tremendous work put into the modeling. APS has engaged with industry leading consultants in the development of our planning reserve margin and resource accreditation. This is also the first time APS has leveraged the Long-Term Capacity Expansion portion of the Aurora tool for an IRP, which has taken a significant amount of research and troubleshooting as we have run cases.
- Question - RPAC Member: How will the Clean Energy Commitment (CEC) impact the preferred portfolio selection?
 - Answer - Mike Eugenis: The CEC is included in the cases, and the result will reveal the impact on the preferred portfolio.
- Question - RPAC Member: Can APS select a portfolio that does not support the CEC?
 - Answer - Mike Eugenis: That is not anticipated, but the portfolio will be selected based on reliability and affordability.
- Question - RPAC Member: What information will be shared before the filing?
 - Answer - Mike Eugenis: If you have a list of outstanding questions, please send them to APS at RPAC@aps.com.

Matt Lind | 1898 & Co./Director of Resource Planning | Next Steps

Slide 45 - Next Steps

- Question - RPAC Member: Will you send out information before the RPAC meeting on October 25th? What will we be doing that day?
 - Answer - Todd Komaromy: APS plans to report results and allow others from the RPAC to present. Before the RPAC meeting, we will provide the necessary information as soon as it is complete.