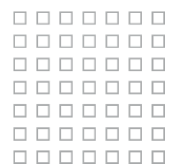


Meeting Objectives

- Recap the May RPAC meeting and provide status of previous action items.
- Provide an update on the progress of the 2023 All Source RFP.
- Review the latest regulatory changes and updates.
- Initiate an open discussion regarding the meeting outcomes and next steps.

Meeting Subject: June RPAC Meeting
 Meeting Date: 06/23/2023
 Start Time: 09:00am
 End Time: 12:00pm
 Location: Virtual

Attendees	Organization	Title/Role
Justin Joiner	APS	Vice President of Resource Management
Todd Komaromy	APS	Director, Resource Planning
Derek Seaman	APS	Director, Resource Acquisition
Michael Eugenis	APS	Manager, Resource Planning
Tara Beske	APS	Business Advisor, Resource Management
Sage Dillon	APS	Manager, Strategic Communication
Ardyn Feken	APS	State Regulatory Consultant
Elizabeth Lawrence	APS	Manager, Product Development & Strategy
David Peterson	APS	Advisor, Corporate Strategy
Timothy Rusert	APS	Director, Power Supply Services
Jason Smith	APS	Manager, Regulatory Affairs & Compliance Adm
Ann Becker	APS	Vice President, Sustainability
Jeffrey Allmon	APS	Senior Attorney, State Regulatory and Litigation
Rachael Leonard	APS	Manager, Regulatory Compliance
Nicole Rodriguez	APS	Consultant, Stakeholder Communications
Matthew Lind	1898 & Co.	Director of Resource Planning
Keaton Clark	1898 & Co.	Analyst
Chase Kilty	1898 & Co.	Consultant
Evan Lipsitz	1898 & Co.	Consultant
Steve Jennings	AARP	Associate State Director
Gary Dirks	ASU	Senior Director
Walter Clemence	Capital Power	Senior Advisor, US Regulatory
Nick Schlag	E3	Partner





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Chris Camacho	Greater Phoenix Economic Council	President & CEO
TJ Higgins	Griffith Energy	
Austin Jensen	Holland & Hart	Associate Attorney
Sam Johnston	Interwest Energy Alliance	Policy Manager
Lisa Hickey	Interwest Energy Alliance	Senior Regulatory Counsel
Nicole Hill	Nature Conservancy	AZ Thrives Program Lead
Amanda Ormond	Ormond Group LLC	Principal
Dugan Marieb	Pine Gate Renewables	Regulatory Associate
Tyler Fitch	Rocky Mountain Institute	Manager
Sandy Bahr	Sierra Club	Chapter Director
Alondra Regalado	Stratagen	Policy Analyst
Caryn Potter	SWEEP	Arizona Representative
Devi Glick	Synapse Energy Economics	Senior Principal
Autumn Johnson	Tierra Strategy	CEO
Russell Weeks	Wärtsilä Energy	Manager, Market Development
Alex Routhier	Western Resource Advocates	Senior Clean Energy Policy Analyst

Matt Lind (1898 & Co./Director of Resource Planning) – Introduction / Meeting Guidelines / May RPAC Recap

- Slide 4 – May Meeting Recap
 - APS outlined its request for an IRP filing deadline extension and provided details on the agenda of its market report workshop.
 - APS announced the approval of ongoing negotiations for potential capacity and summarized important takeaways from the 2022 ASRFP. APS outlined key features of the upcoming 2023 ASRFP.
 - E3 discussed PRM trends in the West, including the use of LOLP modeling and ELCC to evaluate resource adequacy and account for the impact of renewable energy resources.
 - APS documented the natural gas and carbon price sensitivities that will be evaluated during the 2023 IRP.

Derek Seaman (APS/ Director, Resource Acquisition) – 2022/2023 All-Source RFP Update

- Slide 7 – 2022 ASRFP – Anticipated 2025 Resources
 - In the 2022 ASRFP APS sought 1,000 MW – 1,500 MWs of resources and 600 MW – 800 MWs of renewables.
 - The expected 2025 Resources included:
 - 2,254 MWs total
 - 1,056 MWs of renewable energy & 1,136 MW of energy storage
 - 46 entities
 - 95 bids & 74 unique projects
 - The expected 2026 resources include 406 MWs (nameplate) of renewables.
 - Extension of two gas tolling agreements.
 - Question – RPAC Member: Can you clarify what you said? Does that mean that the folks that bid into the 2022 all-source RFP, but had resources coming online in 2026 are not going to be considered unless they bid into the 2023 RFP?



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- Response – Derek Seaman: Once we launch the 2023 RFP, we are going to have a new mix of participants that can supply bids. Rather than trying to continue and squeeze what we can out of the 2022 ASRFP and have that overlap, we will get a refresh of bids from all potential respondents and then continue filling the 2026 needs.
- Question – RPAC Member: For the folks that did bid into 2022 all source RFP, but it was for resources to come online in 2026, they will need to rebid into the 2023 RFP, is that what you are saying?
- Response – Derek Seaman: That is correct. It also provides an opportunity for those that were not shortlisted to reengage at this point in time. The way we look at it, that will be healthy competition and hopefully translate to lower prices for all.
- Question – RPAC Member: I am curious, either from 1898 or whomever on best practices, I assume it is a significant expense to bid into an all-source RFP. Is there any concern about respondents that had to go through that process and pay the fee in 2022 but now must do that all again?
- Response – Matt Lind: The frequency of RFPs is increasing and is becoming more and more necessary to ensure that utilities have the most up to date bids to make resource decisions. We often see entities rebid similar projects into subsequent RFPs with refreshed data in their bid assumptions and we do not believe it creates any less competition. It is not uncommon to see this type of behavior with ASRFPs.
- Comment – Derek Seaman: The 1 to 1.5 GW of resources was the target of the 2022 RFP. Yes, that was for 2025 and 2026 resources, not for just 2025. We went out to RFP and then our load forecast grew substantially and there is only so much we can do to onboard resource at one time while making sure that we are negotiating fair deals for our customers. We do not want to accelerate deals or cut corners just for the sake of getting resources in. We want to do this right. We have an obligation to all our customers to make sure that we are getting the best deals possible. I would argue this too for the 2026 bids that were not selected, one of the reasons that they were not selected is their price was not competitive. We are looking at the price movement and at how the markets change. I fully believe and stand by the idea that at this point in time we should sit down where we are at with what has been negotiated. For the rest of the 2026 bids that did not get negotiated, we want to get the most recent market data and get updated pricing. We have time to make sure we are getting the best deals for our customers. It is in many ways a bandwidth issue too, trying to get ahead of what we truly needed for 2025.
- Question – RPAC Member: One thing we have heard across the country is that supply chain shocks have made speedy procurement difficult – do these results suggest to the APS folks that those constraints are loosening?
- Response – Derek Seaman: From a supply chain standpoint, I do not believe that we are seeing loosening. What we see shifting around is that something will break free and start to accelerate and move quicker and other things are still lagging. If we look at high voltage equipment for example, it is a long lead item and will remain a long lead item. It does not matter which technology you are selecting at utility scale. If you need high voltage equipment, you are getting in a long line. The other big movement is in the interconnection space. There is queue reform that is ongoing, and we have recently published our perspective on queue reform to our Oasis site which aligns in a large part with what FERC is pursuing. We had 2026 projects that had better pricing and then suddenly, we found out that there were delays in interconnection studies. This is something that is not only happening here at APS, but also across the nation. If you go to any jurisdiction, you are going to hear about the number of projects that are in queue and how that is resulting in delays and so many of these projects that had attractive pricing were telling us that their system impacts study results were not ready yet, but they were expecting them sometime in the summer. That is another prime example of why we



would not want to get ahead of ourselves signing projects now if those projects with better prices are going to have their final interconnection results for this next RFP. With the IRA, we are seeing an increase in demand for labor. We do not always talk about labor, but as we look through the labor requirements to realize IRA benefit, we know that firms are trying to quickly hire, but there are certain requirements to make sure that you do get those tax incentives. With many utilities jumping in and pursuing these types of projects, there is going to be an increased demand on labor. This might be one of the other tight areas that inform the ultimate timelines for these projects.

- Question – RPAC Member: I agree that the frequency of every year or every other year for RFPs is fine if real procurements can come out of them, which appears to be happening. APS does not just issue them and then not procure and that is something we would want to avoid. Every other year might be optimal, but every year works if it works for APS. We might want to recommend, at some point, an extended time for in-service deadlines. Maybe give us two or three years to be able to be compliant for each RFP rather than only two years. I am not being specific here because I am not sure that the timeline has been too short but that allows us to work through the interconnection process better. Do you use other metrics to decide whether our projects can be compliant within the time allowed? Is it just based on interconnection studies and our commitments to be in service by a certain date or do you use other metrics that you impose related to whether we can deliver projects?
- Response – Derek Seaman: The answer to that is yes, we do. It is in the screening matrix that we provide. Another category we would think about is site control. It would be hard to be in the interconnection queue and far along if you did not already have site control or at least a piece of land in mind. We have seen instances where the site control being proposed is not as firm as we would like to see. We will ask for redacted copies of option agreements, and we just want to make sure that whoever is proposing a project has a stake in that land and can execute to bring the project to fruition. We will look at things like transmission rights, making sure that the project is able to interconnect and deliver to the APS system. We will have a conversation around long lead items and what their procurement strategy is. We do have conversations about where they are sourcing equipment and whether there is a risk of it getting held up in port. That becomes an area where we can work around it, but it depends on what we are negotiating and the T's and Cs of the agreement. I would say more on the front end with things like site control, respondent experience, have they done this before? Are they proven in this space? Do we have faith that they can get it done? Those would be the items that I would think that go into that process.
- Comment – RPAC Member: That is highly informative and all sounds like appropriate factors. You are the experts there and it does not strike me as unfair. The fairness piece comes with putting those items in the scoring matrix. Site control gets five points if it is predictable for example. The more predictability and transparency in advance that we can have, the better because we can match what your needs are as developers. The less of that that is behind the scenes, the less it looks arbitrary. It will help so that developers do not come back to us and say things like "I just did not know they were going to grade me so badly when we knew we could get it done." The more predictability, the better.
- Comment – Justin Joiner: We do have many of those factors explicitly in the scoring criteria.
- Response – Derek Seaman: When we get to the 2023 slides, we can hit on that a little bit again and the approach we took with the smaller workshops along the way and open it up to everybody to see if there are any additional questions there.
- Question – RPAC Member: Are the 406 MWs of renewables for 2026 the only requested resources for the 2022 ASRFP for 2026?



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- Response – Derek Seaman: We did not specify year over year. We just said 1 GW to 1.5 GW of resources and 600 to 800 MW of renewable. We tried to cast a wide net in this instance, I guess we did not go wide enough, and I am not blaming us, I do not think that is a fault there. It was just this unprecedented load growth in large corporate customers that are looking to come to Arizona. We do not have a specific target, we do have internal targets year over year that we use and we know that those move, and we try to adapt. When we had launched that RFP, the 406 MW would have been more than enough at the time to meet the needs of 2026 and we are still refining and looking at how 2026 is changing and adapting. Leaving some amount of room for 2026 is important because we want to make sure we get those numbers right and get the procurement targets right.
- Question – RPAC Member: It sounds like what you are saying is in 2026, you are foreseeing upwards of needing an additional 406 MW, but you will assess as the market changes and what your needs are.
- Response – Derek Seaman: If those projects that are in flight were to fall through the cracks and we must pick them up in the 2023 RFP, then yes, I would expect you are going to see something similar, if not larger for 2026 in the renewable space.
- Question – RPAC Member: Could you remind us of what the 62 MW of thermal is?
- Response – Derek Seaman: The 62 MWs is tied to an agreement with South Point, it is a gas tolling facility in Northern Arizona, and they have thermal upgrades that they can perform at the plant. They can essentially get more capacity for using the same amount of gas. It has been something that they have been eyeing and looking at. APS takes the facility for a portion of the year and the other portion of the year they participate in the market. In the non-summer portion of the year, they are in the marketplace. They see this as an all-around advantage that was added in, and it was a relatively inexpensive opportunity for APS to get some incremental capacity from that unit. That is where the 62 MWs are coming from.
- **Slide 9 – 2023 All Source RFP Timeline**
 - The next big milestone for the 2023 ASRFP is the release of the RFP document. This is scheduled for June 30th.
- **Slide 10 – Technical Requirements – Site Specific**
 - Agave:
 - 150 – 400 MW ESS
 - 4-hr Duration
 - Must meet APS Safety Standards
 - COD: 2025/2027
 - Ironwood:
 - 168 MW Solar + 168 MWs ESS
 - Selected through Green Power Partners
 - COD: 2026/2027
 - CCT:
 - At least 250 MW
 - Competitive renewable generation located on Navajo Nation
 - Third party owned (PPA)
 - COD: May 2027 or 2028
 - Cholla:



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- Up to 115 MW
- New generation on existing site of Cholla Generating Station
- APS-owned or third party-owned (PPA)
- COD: ASAP following Cholla retirement in 2025.
- Incremental Gas Generation:
 - Redhawk: Approx. 300MW third party-owned (PPA) or APS- owned (COD March 2027)
 - Sundance: Approx. 100MW APS-owned (COD March 2026)
- Question – RPAC Member: What power sources are you seeking for Cholla?
- Response – Derek Seaman: Cholla is an opportunity with land and interconnection. APS is trying to flag it as an opportunity to use existing infrastructure, but it is an all-source so whatever someone is able to submit, we will evaluate.
- Question – RPAC Member: There was a lot of back and forth with hydrogen and carbon accounting in the previous breakout session. Can you let us know to what extent that will be included in the 2023 ASRFP? The RFP is going to be issued in a week so can we expect to see an update surrounding those topics?
- Response – Derek Seaman: Let us see about having a communication back to the breakout session attendees as a follow up rather than addressing that here, is that okay?
- Question – RPAC Member: What kind of conversations you have had with the Navajo Nation about the 250 MW and who have you been talking to? The NTUA has built its capacity, but my experience is they are not moving right now on much in the renewable space. I am simply curious who you have talked to and what they have said.
- Response – Ann Becker: We have been engaged with the Navajo Nation. We made a commitment to solicit 250 MW of clean resources to the Navajo Nation. We were directed to collaborate with attorneys at the Department of Justice (DOJ) and we have been sharing information back and forth and listening to their input and incorporating their inputs. We have had those discussions and they are very aware of the RFP and the opportunities that it presents.
- Question – RPAC Member: I figured this would be a topic for the smaller RFP group as well, but I just wanted to elevate again the discussion that we had around assessing the cost benefit analysis and what type of cost effectiveness tests that are going to be included as a part of the scoring for bids that come through this all-source RFP. I am really interested in that topic and how you are using that in supply side resources.
- Response – Derek Seaman: I am jotting that down here, I know others are taking these notes too, but we are we will get the cost test discussion added to the reach out.
- **Slide 11 - Illustrative Schedule**
 - Confidentiality Agreement Submittal due 2 weeks from RFP issuance (July 14th)
 - Bidder's Conference July 26th, 2023.
 - Respondent proposal and RFP proposal fee due 9 weeks from RFP issuance (September 1st)
 - Shortlisted respondents notified 5 weeks from proposal receipt.
 - Final selections 10 weeks from proposal receipt (end of October)
 - Contract executions November – February 2024.

Michael Eugenis (APS/ Manager, Resource Planning) – Regulatory Update / Open Meeting Response

- **Slide 14 – Regulatory Update**



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- IRP due date moved to November 1st, 2023. There are a few meetings that will be rescheduled to reflect some of the timing updates for items related to the 2023 IRP.
- The second public stakeholder meeting was pushed to Q3 of 2023. APS is aiming for mid to late September. Ideally after the September RPAC meeting so that the RPAC group has enough of the information that will be presented in the broader public stakeholder session.
- Energy Exemplar confirmed that everyone who has requested a license has gone through the NDA process. There are several NDA's that have been needed. Energy Exemplar has said that all the different NDAs are sorted out and there should be access to both the tool and the training materials associated with the tool.
 - There will be a meeting on June 29th to walk through how to utilize the tool. The meeting will be hosted by Energy Exemplar and is planned to be a technical discussion and training course.
- APS is going to have the first release of modeling data on Monday, June 26th.
- There are a lot of things that are going on such as the rate case hearing taking place in August. There is a potential conflict for participants due to the rate case since there are members who are involved. The proposed date for the August RPAC is Friday the 18th.
- APS wanted to seek feedback from the group on the proposed meeting date and see if there are any potential conflicts.
- Question – RPAC Member: What meeting are you trying to schedule? Is it your public stakeholder meeting that is being pushed to Q3 or it is the regular RPAC meeting?
- Response – Michael Eugenis: This is the August RPAC meeting.
- Comment – RPAC Member: For the people on the call that are active in the rate case, the schedule of witnesses has not been released yet so the witnesses do not know what day they are going to be testifying.
- Response – Michael Eugenis: What we may want to do is tentatively schedule the RPAC meeting for August 18th and then as we get closer and we have a better idea of when witnesses are going to be scheduled for the rate case hearing itself, we may make some adjustments to that date.
- Comment – RPAC Member: It will still be APS witnesses because the case does not start until the 10th, which will be the public comment and then opening comments. You all will mostly go that full first week of August. It will likely still be APS witnesses would be my guess, but it makes it more problematic for the attorneys to miss, but less so for the folks in the group that are witnesses, but not attorneys.
- Question – RPAC Member: I have a general timeline question. I am curious when the folks that are doing the modeling, and providing these additional scenarios, when is the appropriate time for those folks to share some of their findings with the broader RPAC group? I am curious how that fits in this schedule?
- Response – Michael Eugenis: We want to be able to consider those findings and I anticipate having some time in our RPAC session later, while we do not have that firmly scheduled yet, Todd and I will take that back because we do want to be able to have the folks that have been doing the modeling be able to present out on those results and be able to include aspects of that in the IRP as well.
- Comment – Todd Komaromy: If you have thoughts on when it would work out best, you have our tentative timeline. Please suggest when you think will be available to do things and that will help us be able to plan accordingly.
- Response – RPAC Member: We can take that back and think through when the best time would be to do that.

Matt Lind (1898 & Co./Director of Resource Planning) – Next Steps & Open Discussion

- Slide 17 – IRP Timeline



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- Seeking feedback on engagement opportunities and schedule adjustments
- Follow-ups to be done regarding all-source RFP, hydrogen-related questions, cost effectiveness evaluations, and interconnection queue deliverability study.

Action Items:

- APS to provide communication to ASRFP Breakout Session group on how hydrogen ready testing, carbon emissions accounting, and cost effectiveness testing of demand side resources will be handled in the 2023 ASRFP document.
- APS to provide tentative dates for RPAC members to present analyses completed on the APS IRP data.