

# SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT MEETING NOTICE AND AGENDA

**POWER COMMITTEE**  
Thursday, November 21, 2024, 9:30 AM

**SRP Administration Building**  
**1500 N. Mill Avenue, Tempe, AZ 85288**

Committee Members: Jack White Jr., Chair; and Leslie C. Williams, Vice Chair; and Casey Clowes, Randy Miller, Kathy Mohr-Almeida, Mark Pace, and Paul Rovey

Call to Order

Roll Call

1. **CONSENT AGENDA:** The following agenda item(s) will be considered as a group by the Committee and will be enacted with one motion. There will be no separate discussion of these item(s) unless a Committee Member requests, in which event the agenda item(s) will be removed from the Consent Agenda and considered as a separate item ..... CHAIR JACK WHITE JR.
  - Request for approval of the minutes for the meeting of October 24, 2024.
2. Generator Interconnection Procedures .....NATE TATE  
Informational presentation regarding SRP’s process of interconnecting new generating resources to the transmission system and the effect of reforms implemented in 2024.
3. Integrated System Plan (ISP) Update ..... MARY FAULK  
Informational presentation regarding the progress made over the last year on the ISP action.
4. Solar Development Request for Proposals (RFP)..... BILL McCLELLAN  
Informational presentation regarding SRP’s RFP seeking a developer with which to contract for the development of multiple solar resources to meet SRP resource needs, including an update on SRP’s efforts to evaluate the RFP responses.
5. Report on Current Events by the General Manager and Chief Executive Officer and Designees .....JIM PRATT
6. Future Agenda Topics..... CHAIR JACK WHITE JR.

The Committee may vote during the meeting to go into Executive Session, pursuant to A.R.S. §38-431.03 (A)(3), for the purpose of discussion or consultation for legal advice with legal counsel to the Committee on any of the matters listed on the agenda.

The Committee may go into Closed Session, pursuant to A.R.S. §30-805(B), for records and proceedings relating to competitive activity, including trade secrets or privileged or confidential commercial or financial information.

Visitors: The public has the option to attend in-person or observe via Zoom and may receive teleconference information by contacting the Corporate Secretary’s Office at (602) 236-4398. If attending in-person, all property in your possession, including purses, briefcases, packages, or containers, will be subject to inspection.



**THE NEXT POWER COMMITTEE MEETING**  
**IS SCHEDULED FOR TUESDAY, DECEMBER 17, 2024**

11/14/2024



MINUTES  
POWER COMMITTEE MEETING

**DRAFT**

October 24, 2024

A meeting of the Power Committee of the Salt River Project Agricultural Improvement and Power District (the District) convened at 9:30 a.m. on Thursday, October 24, 2024, from the Hoopes Board Conference Room at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona. This meeting was conducted in-person and via teleconference in compliance with open meeting law guidelines. The District and Salt River Valley Water Users' Association (the Association) are collectively known as SRP.

Committee Members present at roll call were J.M. White Jr., Chair; L.C. Williams, Vice Chair; and C. Clowes, R.J. Miller, K.L. Mohr-Almeida, M.V. Pace, and P.E. Rovey.

Also present were President D. Rousseau; Vice President C.J. Dobson; Board Members R.C. Arnett, N.R. Brown, M.J. Herrera, L.D. Rovey, and S.H. Williams; Council Chair J.R. Shelton; Council Liaison G.E. Geiger; Council Members M.L. Farmer, E.C. Gorsegner, B.E. Pacey, and W.P. Schrader III; I.R. Avalos, A.N. Bond-Simpson, B. Brimhall, M.J. Burger, A.P. Chabrier, J.D. Coggins, A.C. Davis, J.M. Felty, B. Gaarde, M.A. Johnson, R.T. Judd, K.J. Lee, L.A. Meyers, M.J. O'Connor, B.A. Olsen, A. Ortega, D.D. Patterson, J.M. Pratt, K.S. Ramaley, J.C. Robertson, J.R. Schuricht, C.M. Sifuentes, R.R. Taylor G.M. Traasdahl of SRP; Leo Bird of Night Power; Aaron Burke and Leocadie Hull of Capital Power; Catherine Cattaneo and Curtis Karmazin of Triple Oak Power; Gina Gargano-Amari of Southwest Power Pools, Inc. (SPP); Roger Halbakken of Arevia Power; Jared Necamp and Jesse Shopa of BluEarth Renewables; Matthew Pagan of Enel North America; and Kayla Teeple of Western Freedom.

In compliance with A.R.S. §38-431.02, Andrew Davis of the Corporate Secretary's Office had posted a notice and agenda of the Power Committee meeting at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona, at 9:00 a.m. on Tuesday, October 22, 2024.

Chair J.M. White Jr. called the meeting to order.

Consent Agenda

Chair J.M. White Jr. requested a motion for Committee approval of the Consent Agenda, in its entirety.

On a motion duly made by Board Member M.V. Pace and seconded by Board Member K.L. Mohr-Almeida, the Committee unanimously approved and adopted the following item on the Consent Agenda:

- Minutes of the Power Committee meeting on September 26, 2024, as presented.

Corporate Secretary J.M. Felty polled the Committee Members on Board Member M.V. Pace's motion to approve the Consent Agenda, in its entirety. The vote was recorded as follows:

YES:	Board Members J.M. White Jr., Chair; L.C. Williams, Vice Chair; and C. Clowes, R.J. Miller, K.L. Mohr-Almeida, M.V. Pace, and P.E. Rovey	(7)
NO:	None	(0)
ABSTAINED:	None	(0)
ABSENT:	None	(0)

### SPP Markets+ Development

Using a PowerPoint presentation Josh C. Robertson, SRP Director of Energy Market Strategy, stated that the purpose of the presentation was to request approval for SRP's participation in Phase 2 of SPP Markets+ development.

J.C. Robertson outlined the objectives of the presentation as follows: 1) provide an overview of the financial benefits of day-ahead market participation; 2) summarize the impact of day-ahead market participation on SRP's sustainability goals; and 3) request approval for SRP to participate in SPP's Markets+, including the SPP Phase 2 Funding Agreement. They detailed SRP's energy market principles as follows: 1) customer benefits – net benefits, load and resource diversity, maintain or enhance reliability, and a path to Regional Transmission Organization (RTO); 2) governance – independence and transparency, public power representation, local resource decision making, and utility input on grid operations; 3) transmission cost allocation – new project cost allocated based on needs and measurable benefits, and transmission costs recovered via "license plate" charge; and 4) generation resource sufficiency – maintain vertically integrated utility structure, self-scheduling of generation, and construct resource adequacy.

J.C. Robertson said that a Cost-Benefit Study (CBS) was prepared by Energy and Environmental Economics (E3) ("*Western Markets Exploratory Group (WMEG): Western Day Ahead Market Production Cost Impact Study*," June 2023) and that SRP referenced the CBS when analyzing the financial benefits of day-ahead market participation. They said that the CBS goal was to provide information on the benefits of joining either Markets+ or the Extended Day-Ahead Market (EDAM) and noted that the CBS simulates scenarios with different market footprints; focuses on variable production costs and energy market prices; and is based on expected future resource plans provided by utilities.

J.C. Robertson listed the utilities participating in the WMEG. They compared California Independent System Operator (CAISO) EDAM participants to the SPP Markets+ participants.

J.C. Robertson reviewed the results of the CBS, with the use of market footprint maps, and detailed SRP's savings in various scenarios. They emphasized the importance for Arizona's utilities to be aligned in the day-ahead market participation and the risk of not joining while other entities do; detailed the benefits of Northwest and Southwest diversity as an essential factor in the footprint selection; and noted that SRP, Arizona Public Service (APS), and Tucson Election Power (TEP) have expressed support for Markets+.

J.C. Robertson reported on the conclusions of the CBS as follows: 1) all day-ahead cases result in additional cost savings over current participation; 2) overall production cost differences between footprints are modest; 3) individual entity and regional results vary widely; and 4) impacts of not joining a day-ahead market if others do are likely reduced liquidity and higher costs. They followed up with information requested from the Committee regarding resource dispatch trends for SRP in 2026 with respect to solar, coal, and gas; clean energy, and greenhouse gas (GHG) accounting in Markets+.

J.C. Robertson broke down SPP Markets+ implementation and participation costs for SRP. They concluded by requesting approval to authorize the General Manager and Chief Executive Officer or Associate General Manager and Chief Planning, Strategy, and Sustainability Executive to execute the following: 1) all agreements necessary for SRP to participate in SPP's Markets+, including the SPP Phase 2 Funding Agreement; and 2) any subsequent amendments to such agreements that do not materially modify the terms of the agreements.

J.C. Robertson responded to questions from the Committee.

On a motion duly made by Board Member P.E. Rovey, seconded by Board Member M.V. Pace and carried, the Committee agreed to recommend Board approval, as presented.

Corporate Secretary J.M. Felty polled the Committee Members on Board Member P.E. Rovey's motion to recommend Board approval. The vote was recorded as follows:

YES:	Board Members J.M. White Jr., Chair; L.C. Williams, Vice Chair; and C. Clowes, K.L. Mohr-Almeida, M.V. Pace, and P.E. Rovey	(6)
NO:	Board Member R.J. Miller	(1)
ABSTAINED:	None	(0)
ABSENT:	None	(0)

Copies of the handouts distributed and the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

A.P. Chabrier, M.A. Johnson, D.D. Patterson, and J.C. Robertson of SRP; Gina Gargano-Amari of SPP; and Kayla Teeple of Western Freedom left the meeting. Board

Members S.D. Kennedy and K.H. O'Brien; Council Members M.A. Freeman, J.W. Lines, and J.L. Miller; M.B. Faulk, W.C. Fielder, K.C. Heckel, B.J. Koch, G.A. Mingura, P.B. Sigl, and G.M. Smedley of SRP; Ian Calkins of Copper State Consulting Group; and John Deese of Origis Energy entered the meeting during the presentation.

#### 2024 All-Source Request for Proposals (RFP) Update

Using a PowerPoint presentation, Will C. Fielder, SRP Resource Acquisition Lead, stated that the purpose of the presentation was to provide information regarding an update on the issuance of 2024 All-Source RFP, which was issued for resources to meet peak capacity and carbon-free energy needs in the late 2020's. They reviewed the updates regarding the procurement targets established to meet peak capacity needs as follows: 1) resources that provide capacity during summer months – at least 700 megawatts (MW) by December 2028 and at least an additional 500 MW for a total of 1,200 MW by December 2029; 2) planned carbon-free resource additions – up to 2,500 MW of carbon-free energy by December 2029; and 3) long-development projects with commercial operation dates after 2030. W.C. Fielder stated that SRP has retained Wood Mackenzie to administer RFP and support the evaluation process.

W.C. Fielder said that the All-Source RFP responses were due May 3, 2024, 58 interested parties proposed project bids, and 92 main proposals with more than 300 project configurations were received. They said that 8 of the main proposals were long-development projects or had long-development configurations with varying online dates, technologies, capacities, and pricing configurations.

W.C. Fielder broke down the evaluation criteria for summer capacity and carbon-free energy projects, based on executability, operating characteristics, affordability, and sustainability. They concluded with a timeline of presentations to the Power Committee regarding the 2024 All-Resource RFP process from February 2024 to-date and a discussion of next steps.

W.C. Fielder responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

A. Ortega and J.R. Schuricht of SRP; Leo Bird of Night Power; Aaron Burke of Capital Power; Caterina Cattaneo of Triple Oak Power; Roger Halbakken of Arevia Power; Matthew Pagan of Enel North America; and Jesse Shopa of BluEarth Renewables left the meeting.

#### Distribution-Connected Solar and Storage Update

Using a PowerPoint presentation, Mary B. Faulk, SRP Director of Integrated System Planning and Support, stated that the purpose of the presentation was provide information regarding an overview of the Request for Information (RFI) that SRP issued

to explore solar and/or storage projects that will connect directly to SRP's 12 kilovolt (kV) distribution system. They provided a configuration of the current solar and storage distribution, and a configuration of potential solar and storage resources connected at the distribution level.

M.B. Faulk said that from May 31, 2024 through August 5, 2024, SRP issued an RFI to over 200 vendors, together with a press release and a public posting. They explained that the project parameters included the following requirements: 1) connect directly to SRP's 12 kV distribution system (in front of customer meter); 2) provide 1 to 10 MW of solar and/or storage capacity; and 3) integrate with SRP's Advanced Distribution Management System (ADMS).

M.B. Faulk said that SRP received 18 different technology configurations (6 storage, 4 solar, 4 solar and storage, and 4 other types of resources); 37 projects were recommended, ranging from generic solar program development to specific projects with locations identified. They explained that the evaluation process was based on the following categories: size, timeline, costs, space, recruitment, compensation, aggregation, and communication.

M.B. Faulk indicated that the majority of the responses are for larger scale projects, in comparison to the average project size from the 2024 All-Source RFP, with a wide range of proposed timelines and varying indicative costs. They concluded with a discussion of key takeaways and next steps.

M.B. Faulk responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

John Deese of Origis Energy left the meeting during the presentation.

#### Report on Current Events by the General Manager and Chief Executive Officer or Designees

There was no report on current events by Jim M. Pratt, SRP General Manager and Chief Executive Officer.

#### Future Agenda Topics

Chair J.M. White Jr. asked the Committee if there were any future agenda topics. None were requested.

There being no further business to come before the Power Committee, the meeting adjourned at 11:07 a.m.

John M. Felty  
Corporate Secretary





# Generator Interconnection Process

Nate Tate, Director  
Transmission Planning, Strategy and Development

Power Committee  
November 21, 2024

# Agenda

- Overview of Generator Interconnection Process
- Recent changes
- Current interconnection status

# Generator Interconnection Process

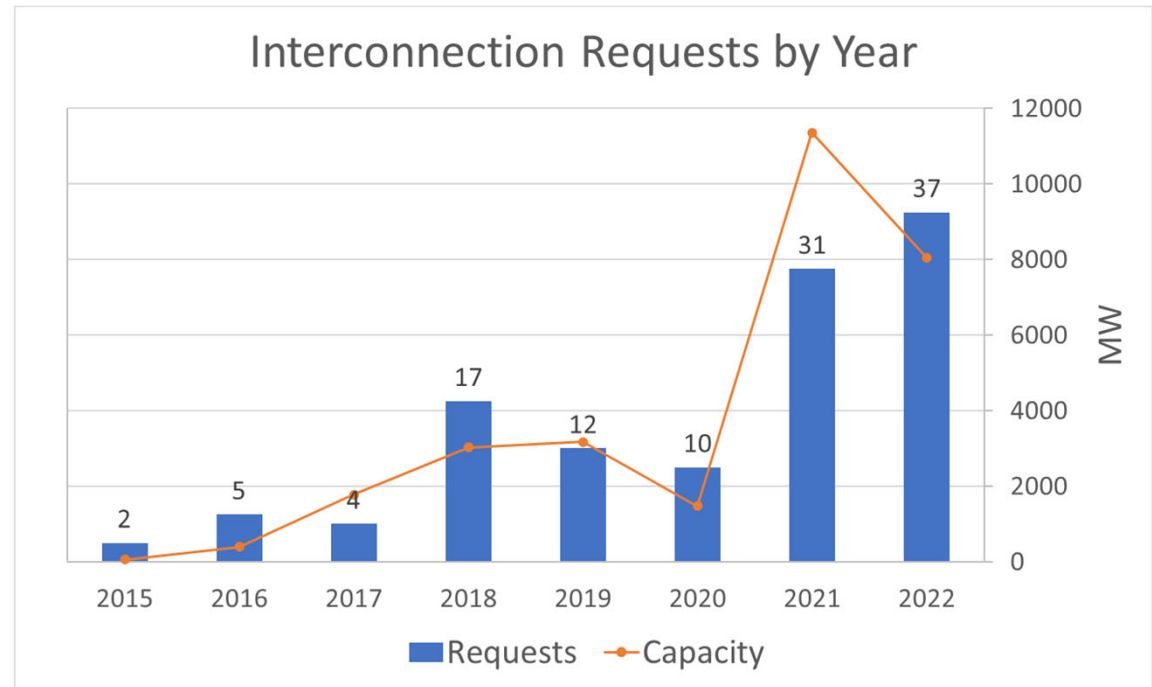
- Modeled after the FERC pro forma established by FERC Orders 2003 & 2023
  - Standardization of Generator Interconnection agreements and procedures
  - Promote competition, enhance reliability, facilitate new generation resources on the transmission system
- Major Features
  - Transparency and non-discrimination
  - Queue management
  - Cost allocation

# Recent Changes

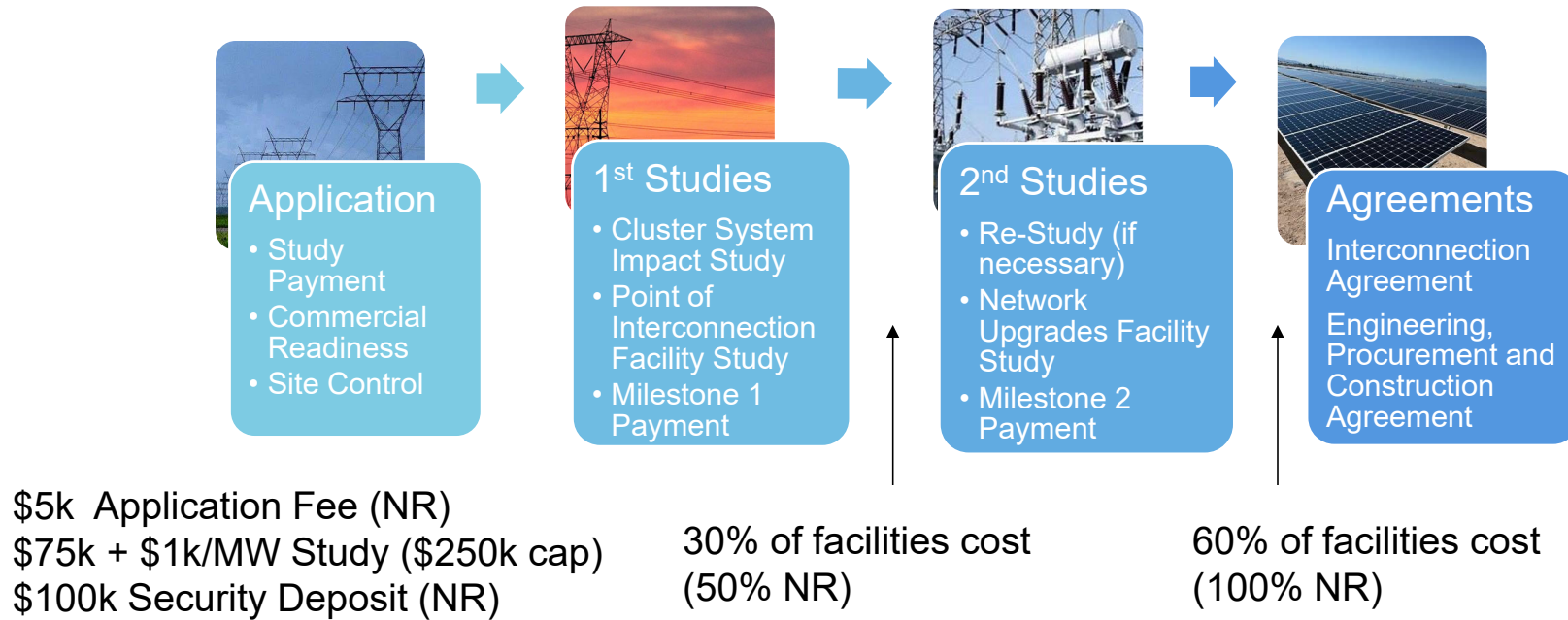
- Transitioned from first-come, first-served to first-ready, first served
  - Improved timeline
- Implemented new requirements
  - Commercial readiness
  - Site control
- Cluster study process
  - Milestone payments

# Old Process

- First-come, first-served
- Serial study process
- Backlog
  - 100+ projects
  - 30,000+ MW
- Almost two years to do System Impact Study
- Over three years to sign agreements
- SRP projects also subject to this process



# New Process



NR = Non-Refundable

Will be used for Interconnectors harmed by the withdrawal

# New process status

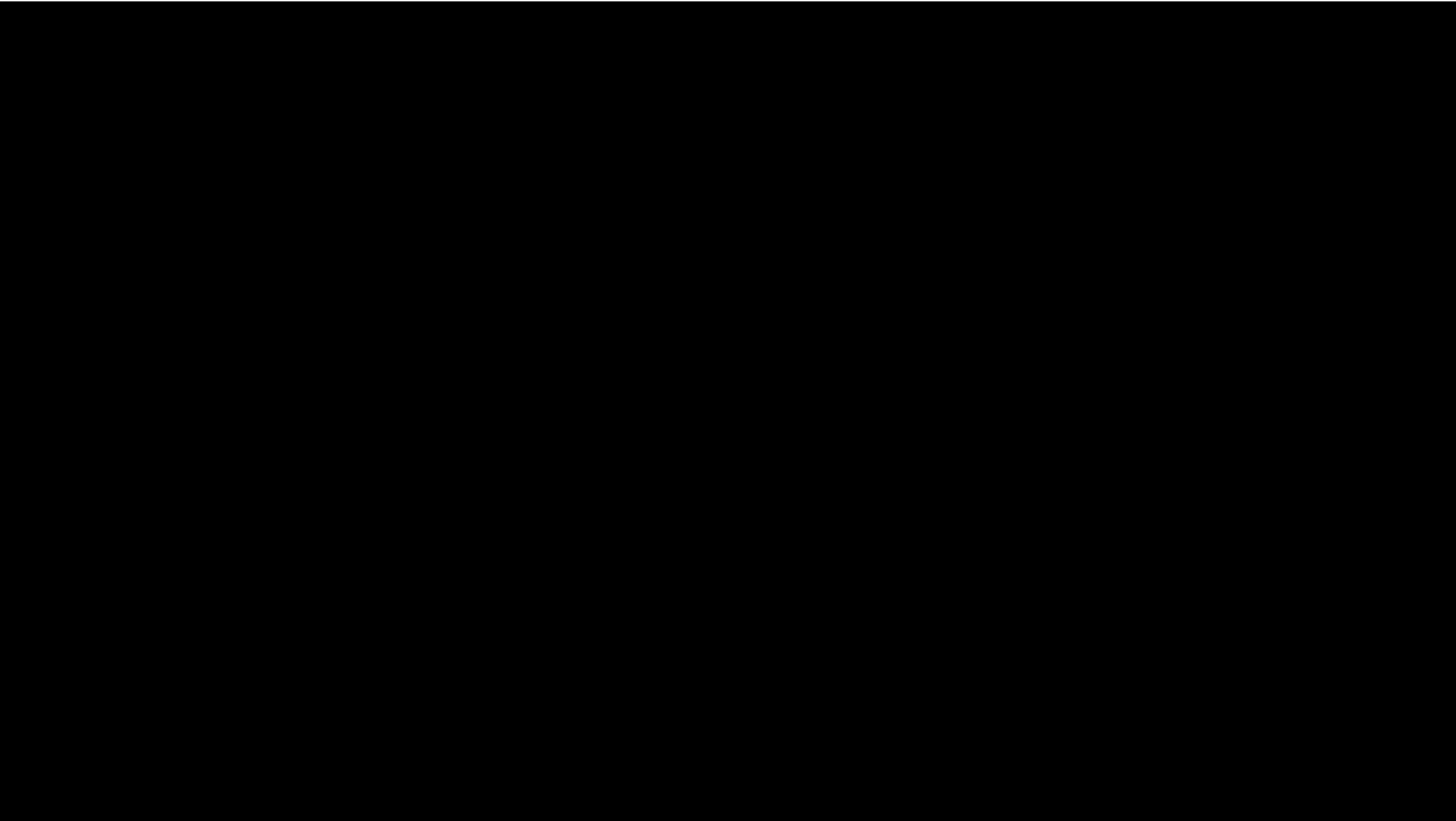
- 112 projects in queue prior to reforms
- 74 projects withdrawn
- 38 projects were grandfathered under the old process
- 17 projects were queued in the new cluster study process
- 7 projects withdrew at first milestone payment
- 10 projects continue in the cluster



# Next Steps

- Complete re-study
- M2 payment project decision point
- Construction and interconnection agreements
- Construction, testing & commissioning
- Commercial operation

**thank you!**



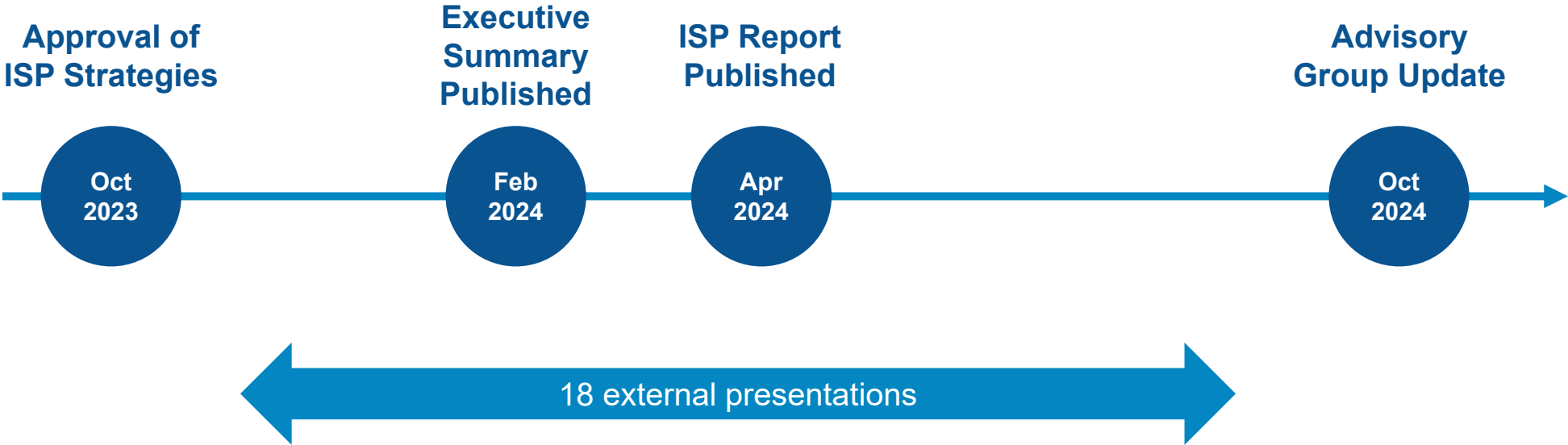
An aerial photograph of a large dam situated in a deep, rugged canyon. The canyon walls are composed of layered, reddish-brown rock. The water behind the dam is a deep blue. The sky is a clear, pale blue. The text is overlaid on the center of the image.

# Integrated System Plan Update

Power Committee

Mary Faulk | November 21, 2024

# ISP Events Timeline



# Integrated System Plan: System Strategies

## Energy Investments

Invest in renewable resources and storage to manage fuel consumption, and drive carbon and water reductions.

## Capacity Investments

Invest in firm generation, including natural gas, to support reliability and manage affordability, while also supporting advancement of emerging firm technologies.

## Proactive Transmission

Proactively plan to expand transmission infrastructure to enable generator interconnections and load growth.

## Distribution Innovation

Ensure distribution grid readiness to maintain reliability and enable customer innovations to drive carbon reductions.



## Strategic Investment & Reinforcement of Existing Assets

Reinforce and maximize value of existing infrastructure with strategic investments to manage affordability, and ensure future performance, grid security and resilience.

## Evolution of Customer Programs & Pricing

Evolve pricing and customer programs to improve economy-wide carbon reductions and pace infrastructure development, while recognizing customers' diverse needs.

## Partnerships & Suppliers

Explore partnerships, supply chain and development solutions that manage cost and availability to meet the pace of transformation.

# ISP Actions

## Customer Grid Focused Actions

1. Residential Time-of-Use Pilot
2. Time-of-Use Evolution
3. Customer Programs
4. EV Managed Charging Roadmap
5. Electrification
6. Distribution Enablement Roadmap

## Bulk Grid Focused Actions

7. Resource Request for Proposals/Information
8. Coal Transition Plan
9. Proactive Siting
10. Regional Transmission

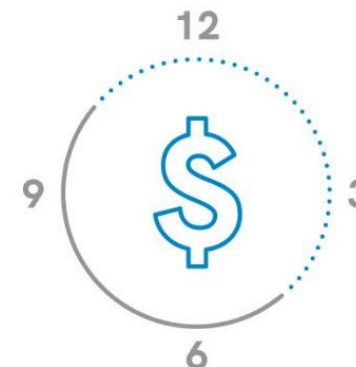


# Residential Time-of-Use (TOU) Pilot & Time-of-Use Evolution



## Update

- Launched Daytime Saver pilot
- Preliminary summer findings:
  - Customers **reduced peak usage** by **24%**
  - Customers **increased super off-peak usage** by **18%**
  - EV customers **increased super off-peak usage** by **47%**



## Next Steps

- Continue monitoring and analyzing Daytime Saver pilot performance
- Use findings from pilot to inform future price process and develop customer education materials

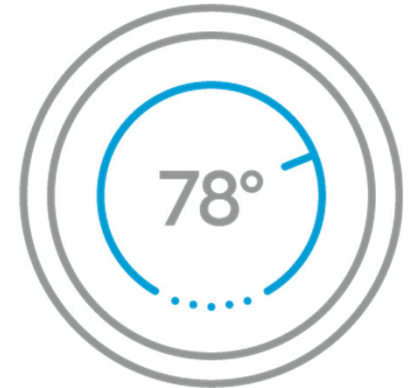


# Customer Programs and Electrification



## Update

- Existing energy efficiency, demand response, and electrification programs
  - Projected to meet FY25 objectives
  - On track to meet 2035 Sustainability Goals
- Launched new programs
  - Residential rebates, commercial incentives, virtual commissioning for small and midsize business customers



## Next Steps

- Continue to evaluate performance of customer programs and refresh plans to drive participation to achieve updated 2035 Sustainability Goals

# Evolving Customer Programs

## New Programs

- Cool Roof & Window Replacement residential rebates
- HVAC Tune-up program for businesses & multifamily
- Virtual Commissioning program for businesses
- Residential Heat Pump Water Heater rebate
- Enhanced focus on heat pumps

## Developing

- Working with ASU-led EPIX team (Electrified Processes for Industry without Carbon) to identify industrial electrification projects
- Develop DR solution for large industrial customers

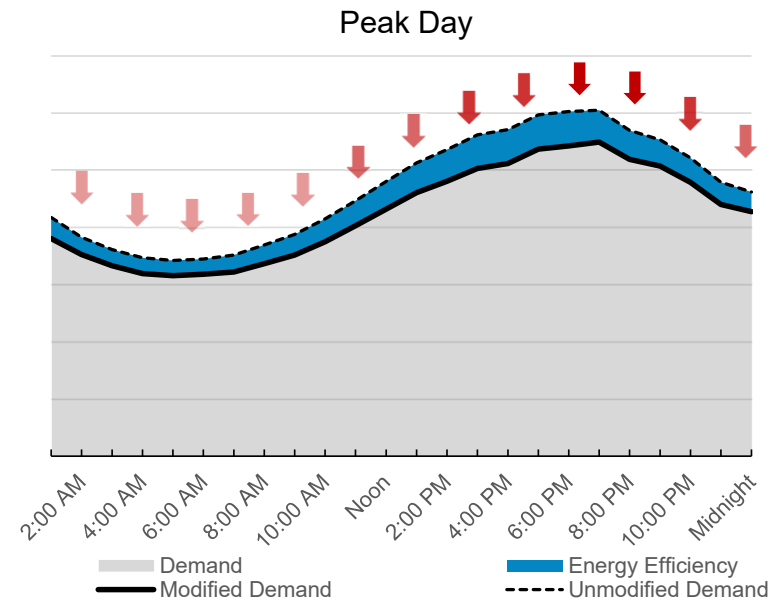
# Customer Programs – Energy Efficiency (EE)

## Update

- Delivered 626,000 MWh of incremental EE savings in FY24
- Updated 2035 Sustainability Goal:
  - Increased to 4 million MWh of annual aggregate energy savings

## Next Steps

- Target 636,000 MWh of annual incremental EE savings in FY25
- Launch ENERGY STAR Multifamily New Construction program
- Coordinate with Governor's Office of Resiliency to support and align with IRA-funded HOMES program



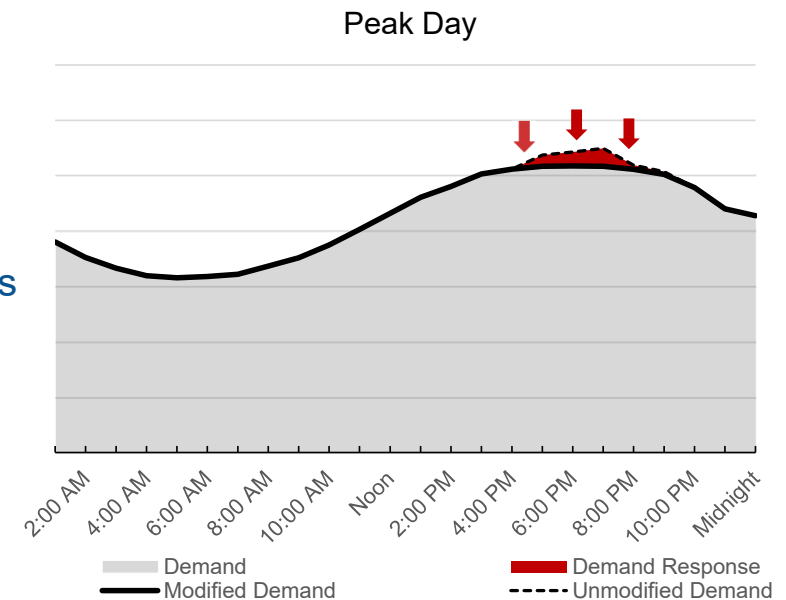
# Customer Programs – Demand Response (DR)

## Update

- 165 MW of cumulative dispatchable capacity at end of FY24
- Secured custom 25 MW DR agreement with CMC Steel
- Recruited new participants to grow capacity of Bring Your Own Thermostat (BYOT) and Business Demand Response programs
  - 96,000+ enrolled residential smart thermostats
  - 740+ enrolled business customer facilities

## Next Steps

- Continue to grow residential BYOT program
- Refine retention practices to mitigate natural program attrition



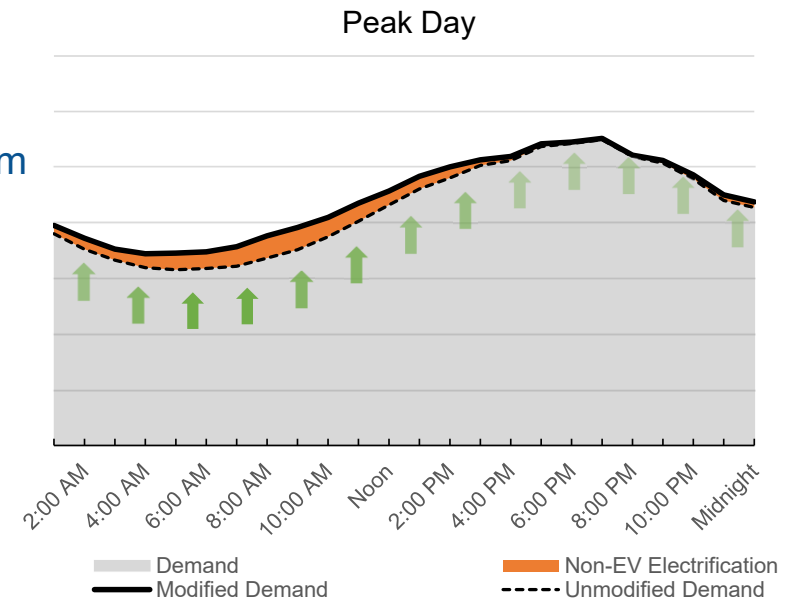
# Customer Programs – Electrification

## Update

- Delivered 19,000 MWh of incremental energy impact in FY24
- Enhancing outreach and engineering capabilities of the program team
- Refining energy and carbon impact analyses
- Updated 2035 Sustainability Goal:
  - Increased to 320,000 MWh of annual aggregate energy impact

## Next Steps

- Deliver 18,000 MWh of incremental energy impact in FY25
- Build a strong pipeline of custom industrial electrification projects
- Coordinate with Governor's Office of Resiliency to support and align with IRA-funded HEAR program



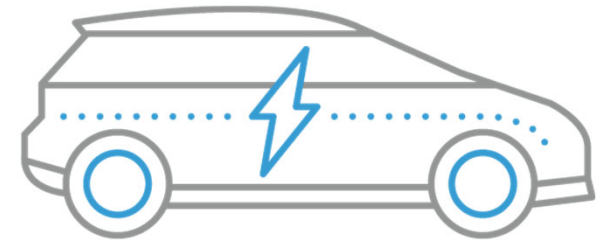
# EV Managed Charging Roadmap

## Update

- Developed EV Managed Charging Roadmap
- Key Outputs
  - Near, medium, and long-term recommendations
  - Updated 2035 Sustainability Goal increasing Electric Vehicle goal
- Alignment of corporate programs and initiatives to the roadmap

## Next Steps

- Expand existing managed charging pilots consistent with roadmap
- Support evolution of TOU rates that prioritize daytime charging
- Enhance customer educational and outreach efforts around managed charging
- Continue to monitor EV industry growth/developments and adapt accordingly



# Managed Charging Roadmap (Near- to Medium-term Actions)



1

## PRICE PLANS

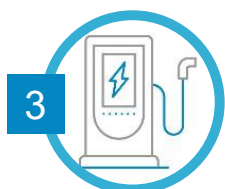
- Influence daytime charging behavior through TOU rates
- Offer TOU/demand charge options for fleets and commercial charging



2

## CUSTOMER PROGRAMS

- Expand passive and active control pilots that more dynamically shift EV charging based on bulk and localized grid conditions
- Prepare for and begin to pilot Vehicle to Home (V2H) followed by Vehicle to Building (V2B) and Vehicle to Grid (V2G) applications



3

## PROACTIVE ENGAGEMENT

- Serve as a strategic partner and advisor to influence beneficial charging behavior (workplace charging, fleet electrification, etc.)
- Gain early awareness of and input into future charging load by supporting local planning and state/federal funding initiatives

# Distribution Enablement Roadmap



## Update

- Issued distribution-connected solar and storage Request for Information
- Constructed Distribution Enablement research lab
- Implemented new automated interconnection application screening process
- Upgraded controllers for distribution line capacitors

## Next Step

- Advanced Distribution Management System (ADMS) goes live December 2024





# Resource Selection



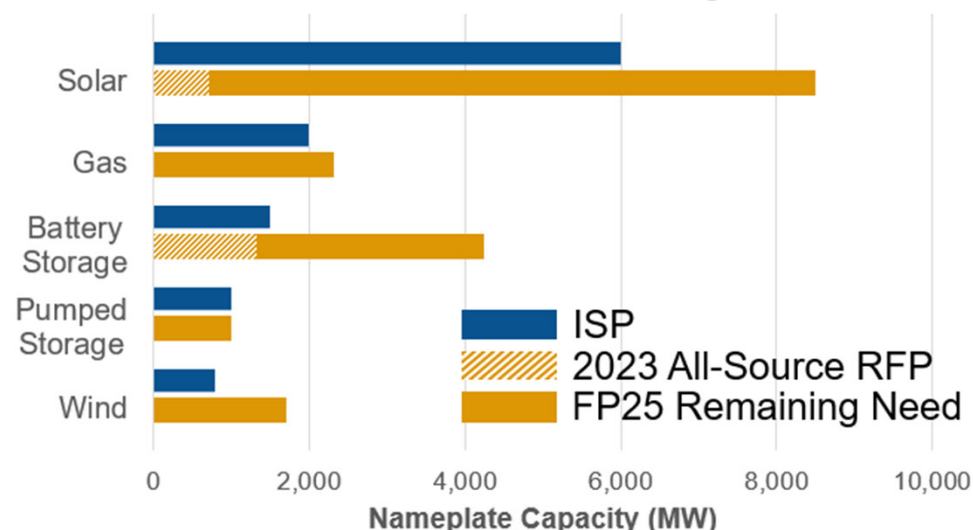
## Update

- Finalizing agreements for projects selected from the 2023 All-Source RFP
- Issued an all-source RFP in February 2024
- Evaluating proposals for Solar Development Partners for 3,000MW of solar through 2035

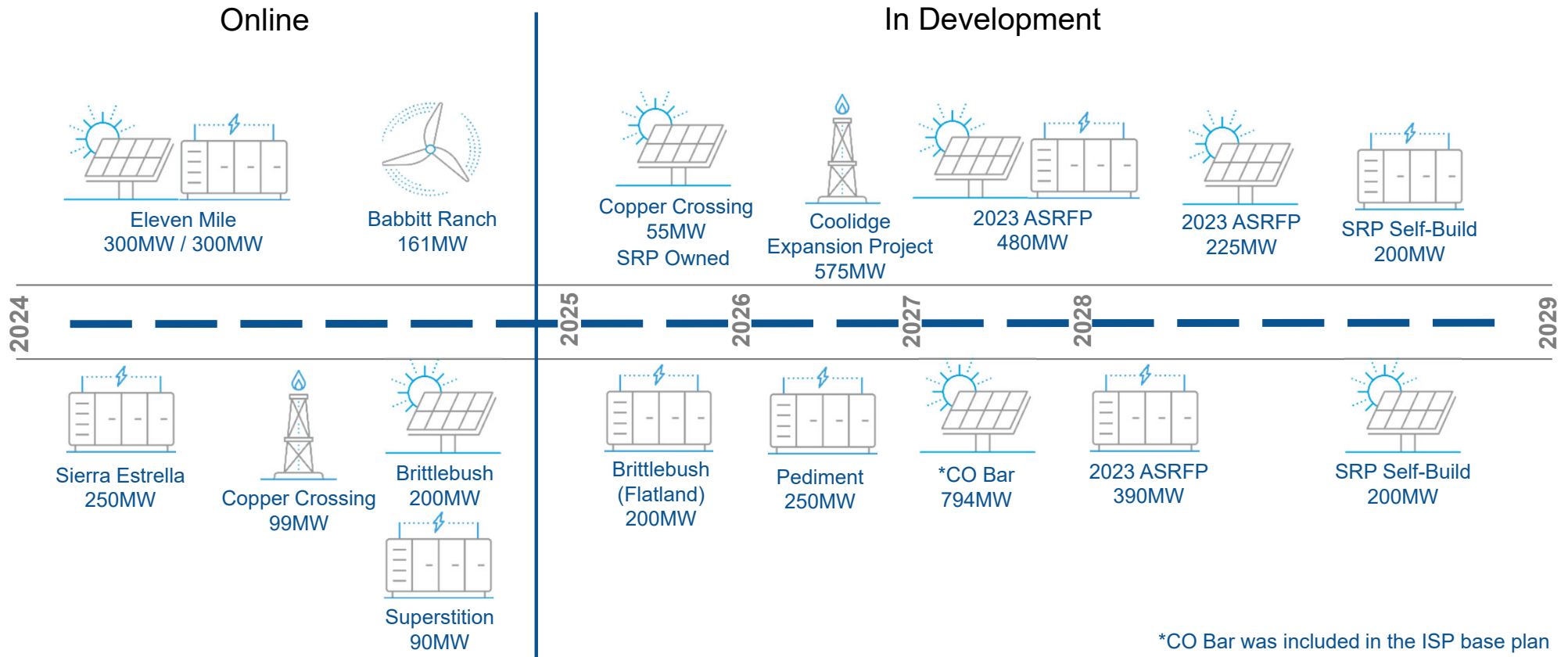
## Next Steps

- Analyze projects to identify most economic resources for meeting SRP needs
- Project awards expected in January 2025

### Resource Additions by 2035



# New Resource Procurement and Development



\*CO Bar was included in the ISP base plan

# Coal Transition Action Plan



## Update

- Participating in Coal Community Transition effort
- Completed Coronado Generating Station (CGS) Repurposing Study
- Coordinating with TEP and Tri-State concerning Springerville Generating Station (SGS)
- Evaluating options for EPA rule compliance for CGS and SGS with a focus on reducing emissions while preserving reliability

## Next Steps

- Finalize analysis for CGS and SGS and develop recommendations
- Include repurposing plans for CGS and SGS in SRP's FP2026 Resource Plan

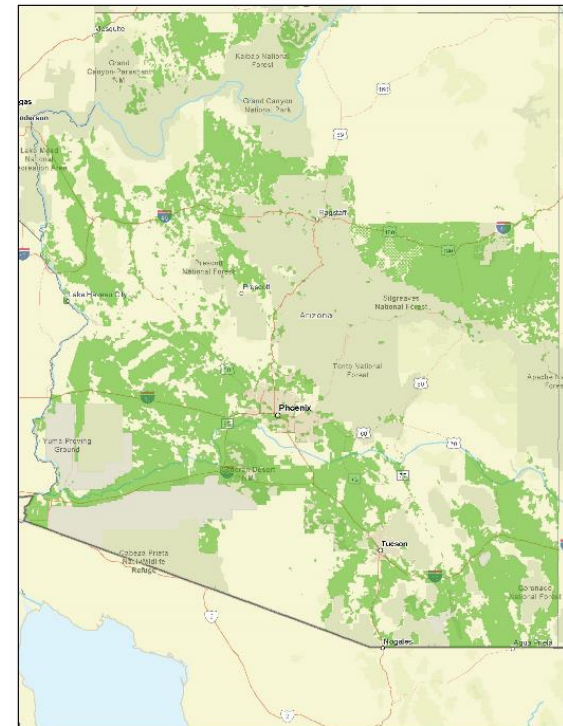
# Proactive Siting

## Update

- Developed GIS tool to identify potential generation sites
- Screened sites using key criteria for solar resources
- Identified priority regions in Arizona to evaluate

## Next Steps

- Complete transmission expansion study to identify requirements and options for connecting resources
- Develop community outreach plans in prioritized regions



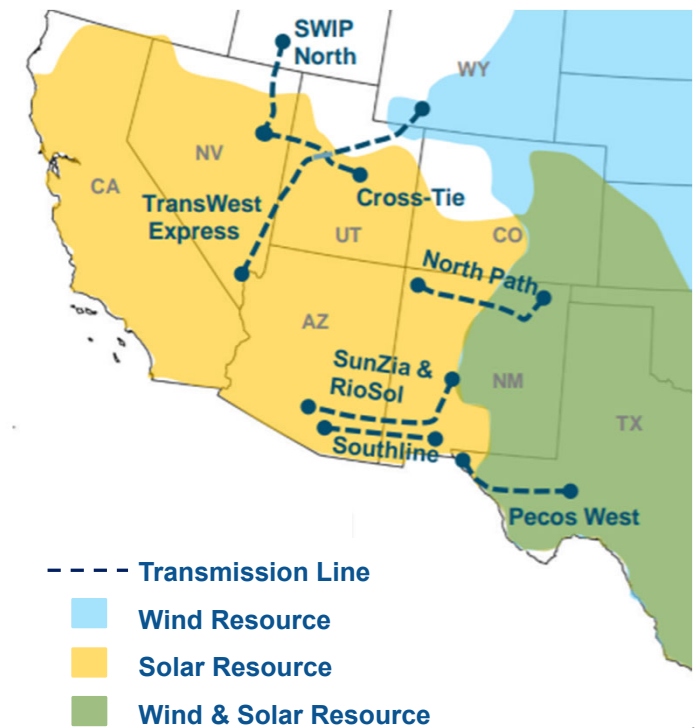
# Regional Transmission

## Update

- Researched landscape of regional transmission projects that could deliver renewable energy into Arizona
- Met with transmission developers to understand options for transmission capacity
- Currently conducting transmission analysis

## Next Steps

- Finalize transmission analysis
- Continue conversations with transmission developers



# Integrated System Plan: System Strategies

## Energy Investments

Invest in renewable resources and storage to manage fuel consumption, and drive carbon and water reductions.

## Capacity Investments

Invest in firm generation, including natural gas, to support reliability and manage affordability, while also supporting advancement of emerging firm technologies.

## Proactive Transmission

Proactively plan to expand transmission infrastructure to enable generator interconnections and load growth.

## Distribution Innovation

Ensure distribution grid readiness to maintain reliability and enable customer innovations to drive carbon reductions.



## Strategic Investment & Reinforcement of Existing Assets

Reinforce and maximize value of existing infrastructure with strategic investments to manage affordability, and ensure future performance, grid security and resilience.

## Evolution of Customer Programs & Pricing

Evolve pricing and customer programs to improve economy-wide carbon reductions and pace infrastructure development, while recognizing customers' diverse needs.

## Partnerships & Suppliers

Explore partnerships, supply chain and development solutions that manage cost and availability to meet the pace of transformation.





Delivering water and power™

# **Integrated System Plan: System Strategies, ISP Actions Overview and Updates**



## System Strategies

SRP developed seven interdependent System Strategies, representing long-term strategies for planning and operating all parts of the SRP power system, including customer programs, distribution, transmission, generating resources, pricing and system operations. The strategies were approved by SRP's Board on Oct. 2, 2023 to guide planning through 2035 and beyond and will be periodically updated through future ISPs to reflect new developments. Each strategy is anchored to key findings from the ISP and relies on the other strategies also being in place to ensure success and achievability. To develop these strategies, we synthesized a range of metrics and outputs across scenarios, sensitivities and strategic approaches. We also incorporated feedback from the ISP Advisory Group before finalizing and receiving Board approval.

Each strategy requires that we take action today. Some will take longer than others to implement, but the execution of all strategies together will enable us to meet evolving customer needs, achieve our 2035 goals and beyond, manage costs for customers, achieve a balanced and reliable power system, and adapt toward a more sustainable future. The System Strategies are summarized below.

### Energy Investments

Invest in renewable resources and storage to manage fuel consumption and drive carbon and water reductions.

### Capacity Investments

Invest in firm generation, including natural gas, to support reliability and manage affordability, while also supporting advancement of emerging firm technologies.

### Proactive Transmission

Proactively plan to expand transmission infrastructure to enable generator interconnections and load growth.

### Distribution Innovation

Ensure distribution grid readiness to maintain reliability and enable customer innovations to drive carbon reductions.

### Partnerships & Suppliers

Explore partnerships and supply chain and development solutions that manage cost and availability to meet the pace of transformation.

### Evolution of Customer Programs & Pricing

Evolve pricing and customer programs to improve economy-wide carbon reductions and pace infrastructure development, while recognizing customers' diverse needs.

### Strategic Investment & Reinforcement of Existing Assets

Reinforce and maximize value of existing infrastructure with strategic investments to manage affordability and ensure future performance, grid security and resilience.



## ISP Actions Overview and Updates

Our planning processes have not stopped with the ISP. The conclusion of the first ISP represents new beginnings as our teams have begun executing the System Strategies. As a first step, SRP defined 10 ISP Actions, which we have already started to implement. The ISP Actions will also help enhance our planning capabilities, establish a roadmap to implement the System Strategies and further our progress toward meeting our 2035 goals. The ISP Actions and recent progress updates are summarized below.

### ISP Actions – Time of Use:

**Residential Time-of-Use Pilot:** Execute a residential time-of-use price plan pilot and perform customer research to evaluate customer response to new time-of-use peak periods and a super off-peak period in the middle of the day, which will inform SRP’s load forecast for long-term system planning and SRP’s price process.

**Time-of-Use Evolution:** Engage commercial, small business, large industrial and residential customers and stakeholders to inform them of how the evolving grid will impact time-of-use periods. Develop a roadmap for implementing new time-of-use periods, including the following elements: undertake a pricing process informed by the ISP as to how time-of-use plans need to evolve and develop a communication plan for all customer types and segments to educate them about any new time-of-use price plans.

### Update:

SRP launched the Daytime Saver Pilot in May 2023 which involves 1,000 participants. The primary goal is to test a new residential time-of-use price plan and gather customer feedback on different peak and super off-peak periods. This feedback is crucial for long-term system planning and pricing processes.

The peak period in the Daytime Saver Pilot is set from 6-9 PM, while the super off-peak period runs from 9 AM-3 PM. Early data from the first summer of the pilot has shown promising results:

- During the on-peak period, customers reduced their demand by 0.8 kW, a 24% decrease compared to control customers.
- During the super off-peak period, customers increased their demand by 0.5 kW, an 18% rise compared to control customers.
- Electric vehicle (EV) customers increased their demand during the super off-peak period by an average of 1.1 kW, a 47% increase compared to control customers.

### ISP Actions – Customer Programs and Electrification

**Customer Programs:** Continuously refresh program plans and drive participation in customer programs at levels consistent with those planned for in the ISP, representing a meaningful increase from SRP’s initial 2035 Sustainability Goal for energy efficiency.

**Electrification:** Analyze the benefits and costs of non-EV electrification within SRP’s service area, including effects on SRP operations and economywide emissions. Assess options for expanding E-Tech program offerings related to residential and commercial electrification.

**Update:**

Customer Programs continue to track towards the 2035 Sustainability goals and are on track to either meet or exceed the near-term milestone targets for FY25.

- Energy Efficiency programs have delivered 319,000 MWh of incremental savings in the first five months of FY25 (May-September), reaching 50% of the annual FY25 target of 636,000 MWh.
- The Demand Response portfolio surpassed the FY25 target of 165 MW with 197 MW of enrolled capacity, including 123 MW from the residential Bring Your Own Thermostat program and 74 MW from the Business program.
- Through September, the E-Tech program reached 33% of the FY25 goal with 5,900 MWh of reported energy impact, and developed a robust pipeline expected to deliver the energy needed to achieve the 18,000 MWh target by year-end.

SRP continues to evaluate the customer program offerings, and has introduced several new programs, such as rebates for residential customers installing cool roofs and ENERGY STAR qualified windows, a virtual commissioning program for small and midsize business customers, and incentives for commercial customers tuning up their HVAC systems. These measures not only reduce summer peak loads but also qualify customers for federal tax credits under the Inflation Reduction Act.

- The Measurement & Evaluation team, along with Guidehouse, a third-party consultant, is finalizing the FY24 E-Tech program evaluation. The prioritized findings will be implemented to further refine E-Tech program offerings in alignment with SRP system and customer needs.
- Over the past year, several programs promoted rebates to encourage efficient electrification and decarbonization during the winter months and off-peak hours. These offerings included continued promotion of electric heat pumps in residential new construction and retrofit applications for both single and multi-family housing settings.
- The team is also coordinating with the Arizona Governor's Office of Resiliency on federal funding opportunities available through the Inflation Reduction Act and other legislation and working with partners to promote these funding opportunities to customers.

**ISP Action- EV Management:**

Develop a roadmap by evaluating customer needs and system impacts and assessing viable pathways for managing EV charging through price plans, customer programs and educational efforts to align with time periods that are lower-cost and minimize additional infrastructure needs.

**Update:**

Progress to date includes a comprehensive effort by the EV Strategy team, in conjunction with Guidehouse consulting, which aimed to equip SRP with a thorough understanding of feasible

managed charging approaches to achieve desired EV load shapes and support SRP's 2035 Sustainability Goals, as well as create implementation options to help guide SRP's direction.

The evaluation of EV adoption data indicated that EV growth occurred at a faster pace than anticipated, prompting an increase in SRP's EV-related 2035 Sustainability Goal to support the adoption of 1 million EVs (up from 500,000), with 90% under managed charging. As of August 2024, 58,308 electric vehicles are operating within SRP's service area.

The implementation options developed by SRP provided a list of high-level potential actions to pursue to manage EV load more effectively. This included:

- Increased adoption of Time-of-Use (TOU) rates for residential and commercial customers.
- Expansion of active EV managed charging pilots in the near-term.

The EV industry expects to undergo many changes over the next decade, and SRP plans to remain flexible and adapt to these changes to ensure EV charging is managed in a way that maintains reliability and affordability for all customers. This initiative prioritizes flexibility by offering helpful directional guidance around potential next paths to pursue related to managed charging.

#### ISP Action- Distribution Enablement Roadmap:

Continue implementing SRP's Distribution Enablement (DE) Roadmap, including the following elements: deploy the Advanced Distribution Management System (ADMS) and Distributed Energy Resources Management System (DERMS) in 2024; continue implementing advanced locational planning tools; advance the interconnection process; execute the Distribution Enablement Research & Development plan; and share the Distribution Enablement Strategy with external stakeholders.

#### Update:

Distribution Enablement has made progress towards the mission to seamlessly interconnect utility- and customer-owned resources as we build an intelligent, flexible and sustainable energy distribution system that adapts to evolving needs while maintaining affordability and reliability. Some key accomplishments towards this end include:

- Laid the groundwork for transitioning to a dynamic ADMS system and created an ADMS sandbox for research and development.
- Built R&D Distribution Enablement Lab designed to simulate the grid to test advanced capabilities (microgrid, DER control, VPP, etc.).
- Upgraded 100% Distribution Line Capacitor Controllers (over 3,000) to enhance power quality control.
- Implemented new automated Interconnection Application Screening Process to ensure grid integrity and streamline the customer experience.
- Issued Distribution Connected Solar and Storage Request for Information to determine utility-controlled 12kV renewable opportunities.

- Conducted a Value of Customer-Sited Solar and Storage Study to update assumptions on DER value.
- Established the Grid Performance Center which provides strategic Transmission and Distribution services including data monitoring and curation as well as model validation.
- Defined 39 scenarios for customer-sited and bulk-scale solar and storage in study year 2026.

#### ISP Action- Resource Selection:

Issue all-source requests for proposals (RFPs) or requests for information (RFIs) at least once every two years to compare with self-build options and ensure that SRP can agnostically select resource technologies that minimize total system costs while meeting SRP's reliability and 2035 Sustainability Goals.

#### Update:

One of the key findings from the ISP was that we will need to at least double our resource capacity by 2035. To achieve this, there has been continued progress to leverage the All Source Request for Proposal (RFP) process to identify more resources that can be brought online. The most recent update on the progress to date includes:

- Finalizing the agreements for projects that were selected from the 2023 All Source RFP (1,300 MW of battery storage and 700 MW of solar).
- Issued a 2024 All Source RFP in February seeking 1,200 MW of peak capacity and 2,500 MW of carbon-free energy resources by 2029. SRP received more than 90 proposals with over 300 project configurations from 58 entities.
- Issued an RFP for a solar development partnership to determine the feasibility of this approach for up to 3,000 MW of solar through 2035 to supplement our regular all-source procurement processes.

#### ISP Action- Coal Transition Action Plan:

Develop a coal repurposing action plan, including the following elements: coordinate with co-owners to develop a path forward for the Springerville Generating Station (SGS); prepare a plan or plans for repurposing the Coronado Generating Station (CGS) site; develop solutions that preserve transmission following the retirement of coal plants; and test strategies for minimizing emissions from coal power plants.

#### Update:

- Springerville Generating Station: Coordinating with Tucson Electric Power (TEP) and Tri-State Generation and Transmission to determine the path forward for the SGS site.
- Coronado Generating Station: Completed the CGS repurposing study, which identified resource technologies that are well suited for deployment at the CGS site. Announced intent to repurpose the site in two phases to accommodate technology development timeframes.

- Emissions Minimization: Evaluating options for EPA rule compliance for Coronado and Springerville generating stations with a focus on reducing emissions while preserving reliability.

#### ISP Action- Proactive Siting:

Develop and initiate collaborative community engagement, land, resources and transmission siting research to proactively identify, prepare and preserve options for feasible future system infrastructure sites.

#### Update:

With the additional solar resources and the associated amount of land needed, SRP worked to identify potential sites for future solar, although the process could be repeated for different types of resources. The key accomplishments related to this effort include:

- Developed a GIS tool to identify potential locations for new generation resources based on criteria such as proximity to transmission, land use, and topography.
- Initial screening using this tool identified several locations within the state that are suitable to host solar resources.

This fiscal year, SRP is performing analysis to assess available transmission capacity for each of the identified locations.

#### ISP Action- Regional Transmission:

Pursue transmission projects that would enable SRP to access diverse renewable resource options beyond solar, such as wind and geothermal, and engage with project developers as appropriate.

#### Update:

SRP is looking at several options to understand the potential for partnering on transmission projects, including meeting with developers to explore options for increasing transmission capacity to delivery points on the SRP system, and actively engaging in discussions with other utilities to review potential partnerships and regional projects through forums like the Western Transmission Expansion Coalition (WestTEC) and develop actionable transmission studies to support the needs of the future energy grid.

In addition to these effort, Transmission Planning is also evaluating:

- Transmission projects that could deliver power into or near Arizona. SRP consulted with E3 to conduct initial research into regional transmission projects to evaluate capacity, tie-in/delivery points, development stages, timelines for commercial operation dates (COD), and potential off takers.
- Upgrades needed to SRP's system for receiving power at designated delivery points under several scenarios. The assessment is targeted for completion by April 2025.
- Wind projects bid into SRP's most recent All-Source RFP to understand where potential generation may be located.



# Solar Development Request for Proposals

Power Committee Meeting

Bill McClellan | November 21, 2024



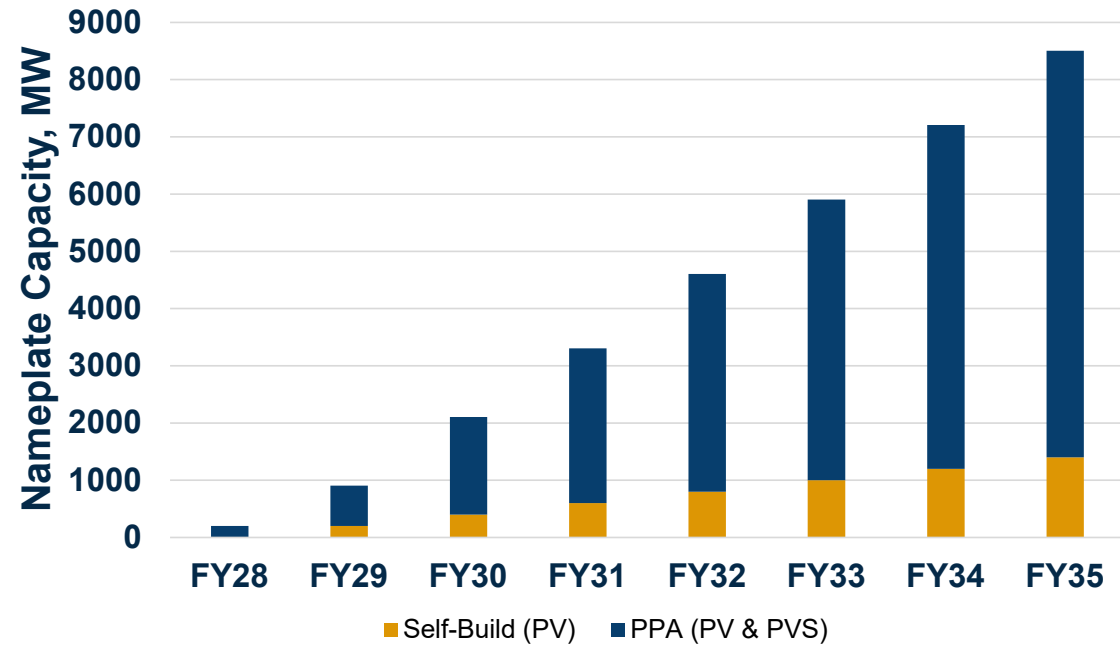
# Overview

- Solar Development Need
- Proposal Objectives
- Timeline
- Request for Proposals
- Next Steps and Key Takeaways

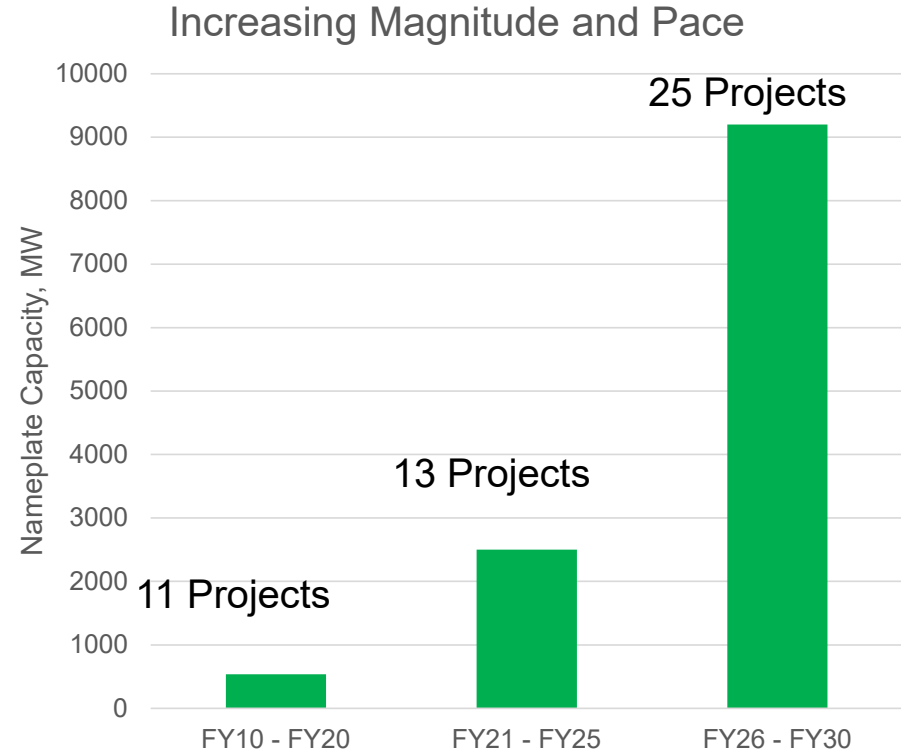
# Strategic Partnership

- Collaboration with developer to add generation
- Evaluating multiple procurement options
- Determining best structure to create value for customers

# Solar Development Need FP25



**8,500MW of solar by 2035**



# Resource Action Plan Summary

Under Contract and Actively Developing

Planned

Procurement Method	Resource Type	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	TOTAL
Previous RFPs	Wind	161											161
	Solar	500		400	394	705							1,999
	4hr Storage	640		455		890							1,985
2024 All-Source RFP	Solar						600	500					1,100
	4hr Storage						900	600					1,500
	8hr Storage						200	50					250
Future All-Source RFPs	Wind									200	300		500
	Solar								600	600	600	600	2,400
	4hr Storage												0
	8hr Storage								750			50	800
	Natural Gas									975			975
Strategic Partnership	Solar						500	500	500	500	500	500	3,000
	4hr Storage												0
	8hr Storage												0
SRP Self-Build	Solar			55		200	200	200	200	200	200	200	1,455
	4hr Storage					200							200
	8hr Storage									200			200
	Natural Gas	99		288	287			225		225			1,124
	Pumped Storage										1,000		1,000
<b>TOTAL</b>		<b>1,400</b>	<b>0</b>	<b>1,198</b>	<b>681</b>	<b>1,995</b>	<b>2,400</b>	<b>2,075</b>	<b>2,050</b>	<b>2,900</b>	<b>2,600</b>	<b>1,350</b>	<b>18,649</b>

# Solar Development Proposal Objectives

## Development Challenges

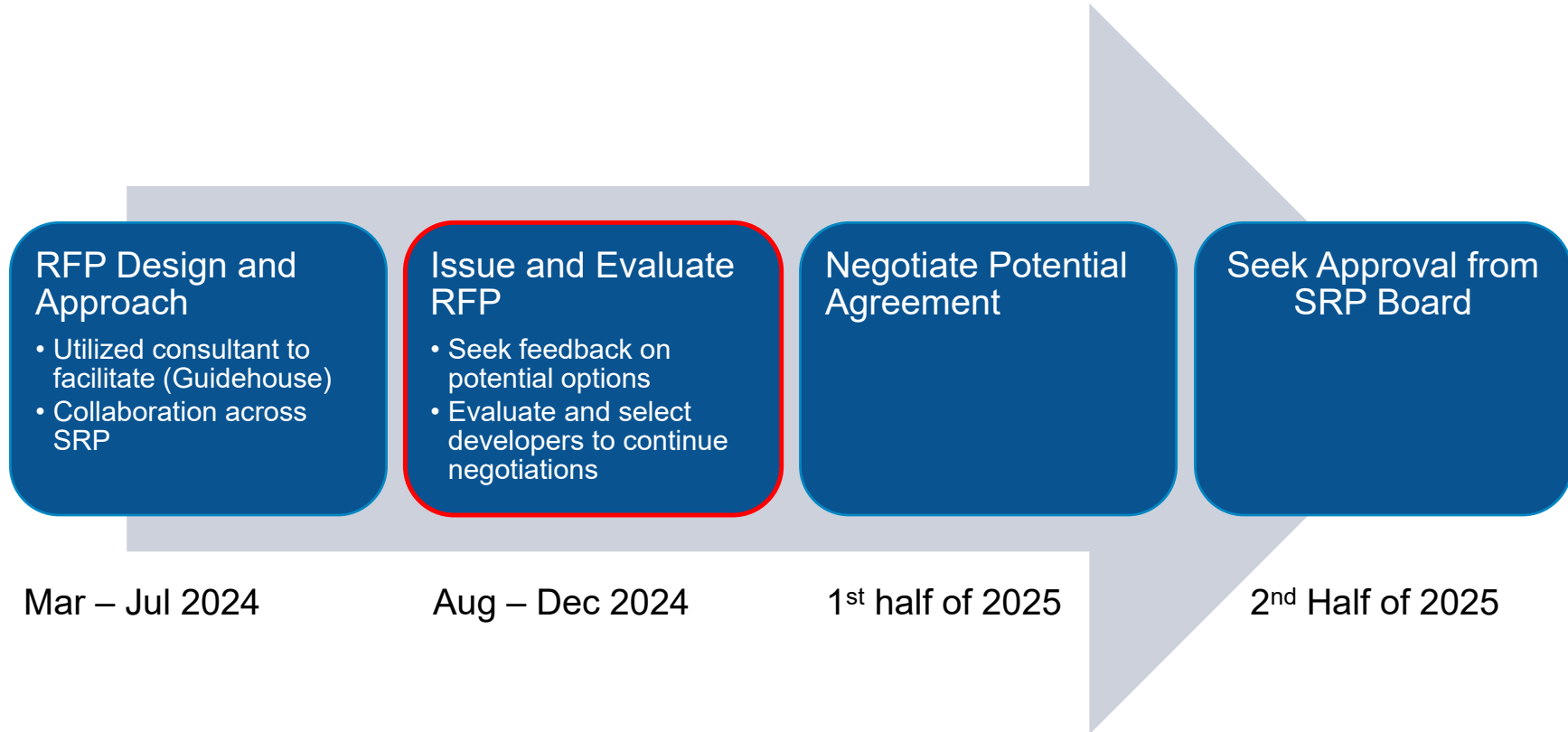
- Magnitude and pace
- Supply chain
- Cost management
- Infrastructure
- Community support

## Potential benefits

- Capability to develop at scale
- Development experience and resources
- Supplier relationships
- Financial transparency
- Supports planning certainty
- Improve community engagement
- Operations relationship



# Solar Development Proposal Process



# Solar Development Request for Proposals

- Guidehouse facilitated developer review and construction of proposal
- Developer Selection Considerations
  - Demonstrated ability to bring projects online
  - Experience in Arizona
  - Ability to develop at scale
- Request for Proposals – Topic Areas
  - Project Development
  - Project Execution
  - Culture Alignment
  - Contracting Structure

## Next Steps

- Complete follow-up interviews
- Additional evaluation and selection
- Provide updates to SRP Board following evaluation
- Negotiate agreements and seek approval from SRP Board

## Key Takeaways

- Utility scale solar development will continue to be a key strategic focus toward achieving 2035 goals
- Diversifies procurement/development methods
- Compliments the All-Source Request for Proposal process
- Agreement with established developer offers potential benefits
- Utilizing robust process to evaluate best options

**thank you!**



