



INTEGRATED SYSTEM PLAN: ISP ACTIONS PROGRESS REPORT

INTRODUCTION

This Integrated System Plan (ISP) Action Progress Report provides a comprehensive overview of the progress made on the 10 ISP Actions. These actions are designed to support the implementation of the System Strategies and SRP's long-term goals through 2035 and beyond. The ISP Actions encompass a wide range of areas which focus on both customers and the energy grid, including:

- Time-of-use pricing
- Customer programs
- Electrification
- Electric vehicle management
- Distribution enablement
- Resource selection
- Coal transition
- Proactive siting
- And regional transmission

Each section of this report details the specific activities, the progress made, and any potential future steps planned to ensure the successful implementation of these actions.

This report highlights significant milestones, such as the launch of the SRP Daytime Saver™ Pilot for residential time-of-use pricing, advancements in customer programs and energy efficiency, and the development of a comprehensive roadmap for electric vehicle management. Additionally, it covers the progress in deploying an advanced distribution management system, issuing all-source requests for proposals to expand resource capacity, and collaborating on regional transmission projects. By continuing to advance these 10 actions, SRP remains committed to adapting to evolving customer needs, achieving our 2035 Goals and maintaining a reliable power system.

SYSTEM STRATEGIES

SRP developed seven interdependent System Strategies that represent 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 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 put 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, 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 pricing 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 undertaking a pricing process informed by the ISP as to how time-of-use plans need to evolve and developing a communication plan for all customer types and segments to educate them about any new time-of-use price plans.

Update:

The [SRP Daytime Saver™ Pilot](#), which was launched in May 2023, 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 informing the long-term system planning and pricing processes.

The peak period in the SRP Daytime Saver Pilot is set from 6–9 p.m., while the super off-peak period runs from 9 a.m.–3 p.m. 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 kilowatts (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 economy-wide emissions. Assess options for expanding E-Tech program offerings related to residential and commercial electrification.

Update:

Customer Programs continue to track toward 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 megawatt-hours (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 SRP 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-family and multifamily 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.
- Learn more about each of our programs and key statistics from 2024 in the [2024 Customer Programs Report](#).

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 toward 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 toward 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 12 kV 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.

SRP's overarching Distribution Enablement Strategy is a holistic plan and program to help ensure SRP's distribution system meets future customer needs. Read the full [Distribution Enablement Strategy](#) report to learn more.

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 carbon-related 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 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:

SRP continues to focus on finding strategies to repurpose coal plant sites and minimize emissions while maintaining reliability. These updates highlight SRP's dedication to advancing low-carbon energy solutions while proactively balancing the integration of new technologies with the necessary infrastructure investments associated with retiring coal capacity:

- **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 CGS and SGS 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.
- Identified several locations within the state that are suitable to host solar resources using this initial screening tool.

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. SRP is also 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 efforts, Transmission Planning is also evaluating:

- Transmission projects that could deliver power to, or near, Arizona. SRP consulted with Energy and Environmental Economics (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 end users.
- 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 to best benefit the grid.

CONCLUSION

The progress made on the ISP Actions reflects our commitment to achieving SRP's 2035 Goals and adapting to the evolving needs of our customers and the energy grid. We will continue to pursue these ISP Actions, ensuring that each step taken brings us closer to a more sustainable and reliable power system, while maintaining affordability for our customers. We look forward to providing another comprehensive progress update next year, detailing further advancements and milestones achieved in our ongoing efforts.