

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

POWER COMMITTEE
Thursday, September 21, 2023, 9:30 AM

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

Committee Members: Leslie C. Williams, Chairman; Keith Woods, Vice Chairman; and Nick Brown, Randy Miller, Krista O'Brien, Jack White Jr., and Stephen Williams

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 CHAIRMAN LESLIE C. WILLIAMS
 - Request for approval of the minutes for the meeting of August 22, 2023.

2. Integrated System Plan (ISP) Strategies ANGIE BOND-SIMPSON

Request for approval of recommended strategies to support the key findings of the 2021-2023 ISP process.

3. Report on Current Events by the General Manager and Chief Executive Officer or Designees..... JIM PRATT

4. Future Agenda Topics.....CHAIRMAN LESLIE C. WILLIAMS

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.



MINUTES
POWER COMMITTEE MEETING

DRAFT

August 22, 2023

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 Tuesday, August 22, 2023, from the 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 L.C. Williams, Chairman; K.B. Woods, Vice Chairman; and N.R. Brown, R.J. Miller, and J.M. White Jr.

Committee Members absent at roll were K.H. O'Brien and S.H. Williams.

Also present were President D. Rousseau; District Vice President C.J. Dobson; Board Members R.C. Arnett, M.J. Herrera, K.J. Johnson, A.G. McAfee, and K.L. Mohr-Almeida; Board Member L.D. Rovey of the Association; Council Chairman T.M. Francis; Council Vice Chairman J.R. Shelton; Council Liaison I.M. Rakow; Council Members N.J. Vanderwey and P.A. Van Hofwegen; Mmes. I.R. Avalos, A.N. Bond-Simpson, M.J. Burger, A.P. Chabrier, C.M. Hallows, L.F. Hobaica, M.A. Johnson, M.M. Klein, M.L. Martin, L.A. Meyers, G.A. Mingura, K.A. Munroe, J.R. Schuricht, and C.M. Sifuentes; Messrs. J.D. Coggins, J.M. Felty, K.J. Lee, B.J. McClellan, A.J. McSheffrey, M.J. O'Connor, B.A. Olsen, J.M. Pratt, J.C. Robertson, G. Saint Paul, P.B. Sigl, G.M. Smedley, and R.R. Taylor; Shannon Bragg-Sitton of Idaho National Lab; Ian Calkins of Copper State Consulting Group; Rebecca Kelly of Long Road Energy; Hunter Moore of Cazador Consulting; Sam Johnston of Interwest Energy; Amanda Stewart of MPR Associates; and Collins Thomas of Triple Oak Power.

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 Friday, August 18, 2023.

Chairman L.C. Williams called the meeting to order.

Consent Agenda

Chairman L.C. Williams requested a motion for Committee approval of the Consent Agenda, in its entirety.

On a motion duly made by Vice Chairman K.B. Woods and seconded by Board Member R.J. Miller, the Committee unanimously approved and adopted the following item on the Consent Agenda:

- Minutes of the Power Committee meeting on June 27, 2023, as presented

Corporate Secretary J.M. Felty polled the Committee Members on Vice Chairman K.B. Woods' motion to approve the Consent Agenda, in its entirety. The vote was recorded as follows:

YES:	Board Members L.C. Williams, Chairman; K.B. Woods, Vice Chairman; and N.R. Brown, R.J. Miller, and J.M. White Jr.	(5)
NO:	None	(0)
ABSTAINED:	None	(0)
ABSENT:	Board Members K.H. O'Brien and S.H. Williams	(2)

Coronado Generating Station (CGS) Repurposing and Gateway for Accelerated Innovation in Nuclear (GAIN) Studies

Using a PowerPoint presentation, Bobby A. Olsen, SRP Associate General Manager and Chief Planning, Strategy, and Sustainability Executive, stated that the purpose of the presentation was to provide information regarding the results of the CGS Repurposing Study and the GAIN Study. He introduced Kathleen A. Munroe, SRP Senior Principal Project Origination Consultant.

Continuing, Ms. K.A. Munroe stated that SRP is conducting studies with Arizona State University (ASU) Seidman Research Institute, Kiewit, Rounds Consulting Group, and Department of Energy GAIN with respect to SRP transitioning and repurposing CGS. She introduced Shannon Bragg-Sitton of Idaho National Lab. Ms. S. Bragg-Sitton briefed the Committee on the purpose of the research being conducted by SRP and introduced Amanda Stewart of MPR Associates.

Continuing, Ms. A. Stewart focused on the GAIN study, stating that its primary objective is to assess the feasibility of transitioning from coal to nuclear and apply its research learnings to other coal units within commuting distances from CGS. She said that based on the positive findings from the initial siting evaluation, SRP may want to consider nuclear as a viable replacement technology at CGS.

Ms. A. Stewart stated that based on the results of its nuclear technology assessment and work related to siting, CGS remains a viable location to host one of several potential nuclear reactor designs. She said that SRP should continue to engage with CGS surrounding communities to assess readiness to host a nuclear power plant at CGS and listed recommended next steps.

Next, Ms. K.A. Munroe focused on the Kiewit study results, which is made up of the following two phases: Phase One – technologies feasible for deployment at CGS site by 2033 include the following: battery storage, biomass, long duration energy storage,

photovoltaic (PV) solar, and wind; Phase Two – technologies that lack the maturity, supply chain or critical infrastructure to be online by Spring 2033 include the following: advanced nuclear, hydrogen-fired power plant, long duration energy storage, and natural gas power plant. She said that the Kiewit study confirmed that several low and zero-carbon technologies are site compatible and could be considered for Spring 2033 impletion.

Ms. K.A. Munroe said that based on the study results and growing energy needs, SRP intends to develop plans to repurpose the CGS site following the cessation of coal operations. She concluded with a discussion of key takeaways, future planning considerations, and next steps.

Mmes. K.A. Munroe, S. Bragg-Sitton, and A. Stewart; and Mr. B.A. Olsen 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.

Board Members K.H. O'Brien, S.H. Williams, and K.B. Woods; Council Member R.S. Kolb; Mr. R.T. Judd; Doug Patterson of Black Forest Partners; and Julie Salinas of Bright Night Power entered the meeting during the presentation.

Western Markets Initiatives Update

Using a PowerPoint presentation, Josh C. Robertson, SRP Director of Energy Market Strategy, stated that the purpose of the presentation was to provide information regarding current activities and status of efforts related to the development of regional Western electricity markets.

Mr. J.C. Robertson said that SRP's priorities for new market of Regional Transmission Organization (RTO) participation include the following: customer benefits, governance, transmission cost allocation, and generation resource sufficiency. He compared the Day-Ahead Market opportunities for California Independent System Operator (CAISO) Extended Day-Ahead Market (EDAM) and SPP Markets+ Phase One.

Mr. J.C. Robertson reviewed the timelines for CAISO EDAM and SPP Markets+, as well as the structure of Markets+ working groups and task forces. He said that the Western Market Exploratory Group (WMEG) Cost Benefit Study (CBS) goal was to provide information on the benefits of joining either Markets+ or EDAM; it simulates scenarios with different market footprints; it focuses on variable production costs and energy market prices; and it is based on expected future resource plans provided by utilities.

Mr. J.C. Robertson provided a list of WMEG's participants, an example of market footprints considered for WMEG core CBS, and results of WMEG CBS market footprints analysis. He concluded with a discussion of key takeaways and next steps.

Mr. J.C. Robertson 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.

Ms. K.A. Munroe; Shannon Bragg-Sitton of Idaho National Lab; and Amanda Stewart of MPR Associates left the meeting during the presentation.

All-Source Request for Proposals Update

Using a PowerPoint presentation, Grant M. Smedley, SRP Director of Resource Planning, Acquisition, and Development, stated that the purpose of the presentation was to provide an update on the All-Source Request for Proposals (RFPs) process that was initiated in February 2023, seeking proposals for resources to meet peak capacity needs and provide carbon-free energy.

Mr. G.M. Smedley reminded the Committee of the initial procurement targets for 2023 as follows: resources that provide summer peak capacity of at least 200 Megawatt (MW) by May 2026 and at least an additional 300 MW for a total of 500 MW by May 2027; and continue to accelerate planned carbon-free energy resource additions of up to 500 MW by May 2027. He provided a graph depicting the forecasted remaining peak capacity needs through 2035, with the Coolidge Expansion Project included, based on the latest load forecast.

Mr. G.M. Smedley concluded with a discussion of next steps regarding the peak capacity and carbon-free components; drivers for earlier procurement of carbon-free resources; and proposals and evaluation criteria used for carbon-free energy resources.

Mr. G.M. Smedley 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.

Mmes. M.A. Johnson and M.L. Martin; and Messrs. B.M. McClellan and J.C. Robertson left the meeting during the presentation.

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

Jim M. Pratt, SRP General Manager and Chief Executive Officer, reported on a variety of federal, state, and local topics of interest to the Committee.

Mr. G.M. Smedley left the meeting.

Future Agenda Topics

Chairman L.C. Williams asked the Committee if there were any future agenda topics. Board Member R.J. Miller requested information regarding water and transmission needs with respect to the CGS Repurposing Study and the GAIN Study.

There being no further business to come before the Power Committee, the meeting adjourned at 11:24 a.m.

John M. Felty
Corporate Secretary

An aerial photograph of a large dam and reservoir situated in a deep, rugged canyon. The canyon walls are composed of layered, reddish-brown rock. The reservoir is a deep blue color, and the dam is a long, curved structure across the middle of the canyon. The sky is a clear, pale blue.

Approval of the Integrated System Strategies

Power Committee

Angie Bond-Simpson, Sr. Director | September 21, 2023

SRP's Integrated System Plan

An Integrated System Plan is the holistic **roadmap** for the **power system of the future** which considers **evolving customer needs** for **reliability, affordability, and sustainability** and achieves our 2035 goals.

Objectives for SRP's First Integrated System Plan

Vision: Planning a future system (2025-2035) that will enable us to achieve or exceed our 2035 goals with the highest customer value.

- Viable strategies for achieving SRP's 2035 Corporate Goals
- Costs, risks and tradeoffs of different strategies to building the future power system
- System solutions that are valuable across different future scenarios
- New capabilities and tools needed to plan as the system evolves

ISP Project Team

Key Contributing Departments



Coordination, Leadership Guidance, Analysis & Support

Leadership Guidance & Analysis Teams

Customer Research Team

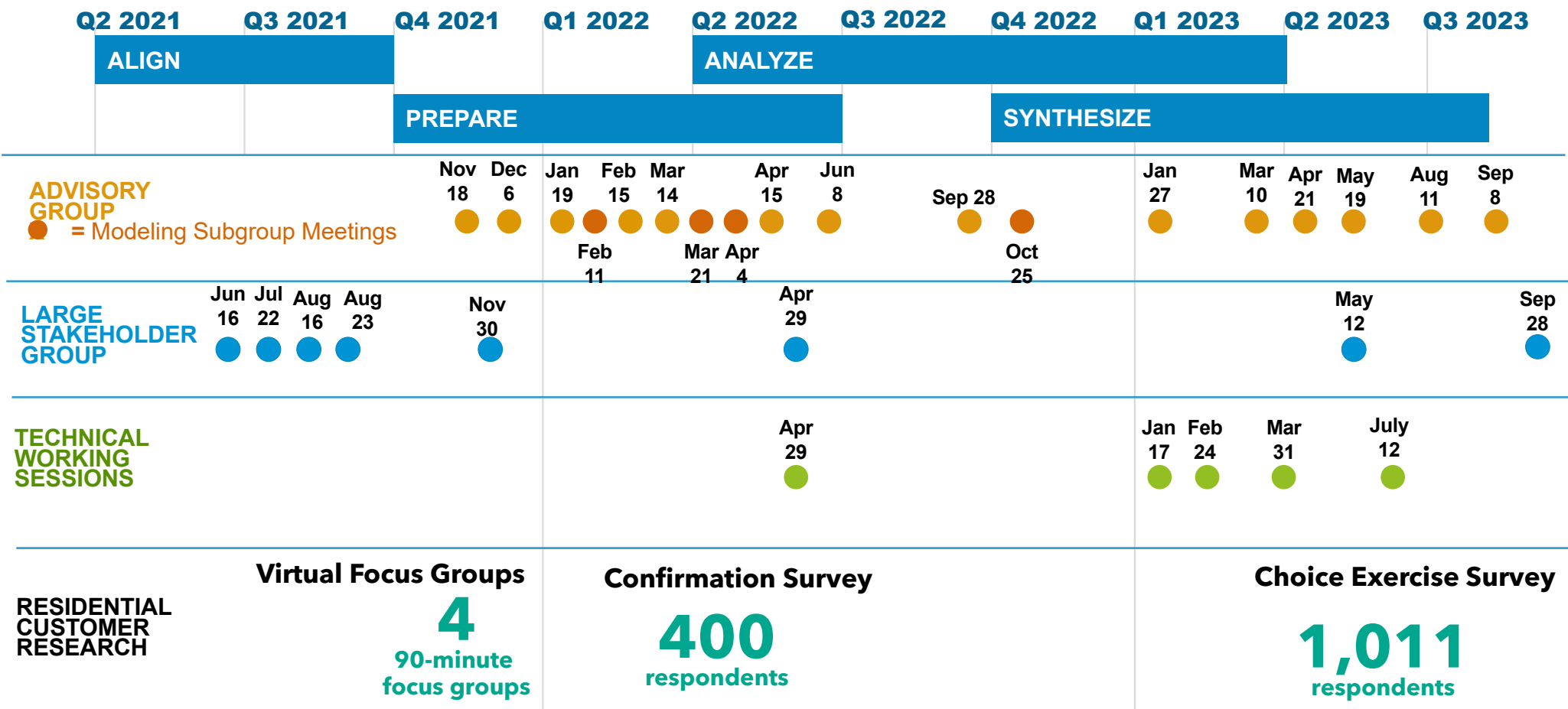
Consultants:



ISP Stakeholder and Customer Engagement



ISP Timeline



EXTERNAL

ISP PLANNING PROCESS FAST FACTS

INTERNAL

**NUMBER OF ADVISORY
GROUP MEMBERS:**



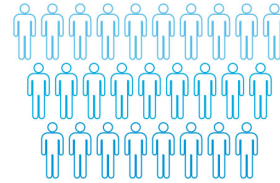
32

community representatives



from **23** organizations

**NUMBER OF LARGE
STAKEHOLDER
GROUP MEMBERS:**



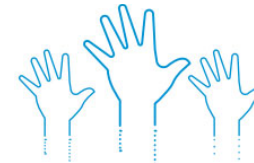
200+

community representatives from

140+
organizations

**STAKEHOLDER
QUESTIONS
ANSWERED**

550+

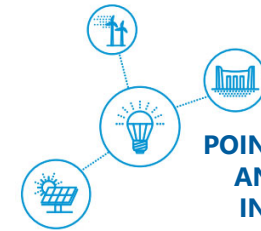


Over
270

**STAKEHOLDER
COMMENTS RECORDED**



29 STAKEHOLDER MEETINGS
TOTALING TO OVER **50** HOURS



559

**POINTS OF FEEDBACK COLLECTED
AND INTEGRATED INTO THE
INTEGRATED SYSTEM PLAN**



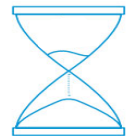
Hundreds of
Gigabytes
OF MODELING SIMULATIONS
OVER 2+ YEARS



1,172

**SLIDES
DEVELOPED**

500+



**HOURS OF INTERNAL
ALIGNMENT MEETINGS**



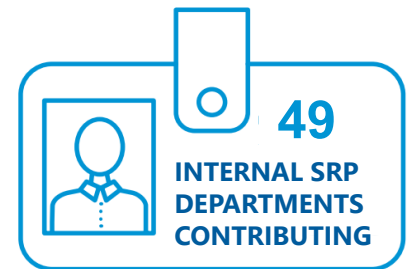
40

**INDIVIDUAL
SUBJECT
MATTER
EXPERT
PRESENTERS**



100+

**INDIVIDUAL SRP
EMPLOYEE
CONTRIBUTORS**



49

**INTERNAL SRP
DEPARTMENTS
CONTRIBUTING**

ISP Results: System Investments Needed at a Rapid Pace

- New renewables **combined with** firm capacity are part of a least-cost portfolio, even under a wide range of gas price and technology cost sensitivities.

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- SRP will need to **double** if not **triple** resource capacity in the **next decade** to serve customers while achieving reliability and sustainability goals. This is an unprecedented pace.

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- **Without new firm generation capacity, the system cannot satisfy reliability requirements under a high load growth scenario.**

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- SRP will need to **double** if not **triple** resource capacity in the **next decade** to serve customers while achieving reliability and sustainability goals. This is an unprecedented pace.
- Without **new firm generation capacity**, the system cannot satisfy reliability requirements under a high load growth scenario.
- **Hundreds of miles** of new or upgraded transmission lines and nearly double the number of 500/230 kV transformers could be needed relative to today. Location matters.

ISP Results: System Investments Needed at a Rapid Pace

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- SRP will need to **double** if not **triple** resource capacity in the **next decade** to serve customers while achieving reliability and sustainability goals. This is an unprecedented pace.
- Without **new firm generation capacity**, the system cannot satisfy reliability requirements under a high load growth scenario.
- **Hundreds of miles** of new or upgraded transmission lines and nearly double the number of 500/230 kV transformers could be needed relative to today. Location matters.
- SRP will need to **evolve programs and price plans** to shift consumer behavior, and further educate customers on when to consume and when to conserve energy.

ISP Results: Residential Customer Research

66%

Rated
Positively

Most customers reacted positively to SRP's proposed path forward, and a quarter felt it was excellent. A majority agreed the plan should be prioritized by SRP



Top factors: affordability & bill impacts

- In each quantitative phase of research, **affordability surpassed reliability slightly in importance.**
- Those with **limited incomes put greater emphasis on affordability.**
- When choosing a future energy system customer selections revealed **monthly bill impact as the top driver of preference.**



Customer understanding and openness to change

- Customers recognized that **challenges are interrelated** and pose **risks to sustainability, the economy, and overall quality of life.**
- In general, **lower-cost plans were more preferred.**
- Customers recognized the need for and expressed interest in SRP's investment in sustainable energy, but they **do not want to bear the cost of that investment.**

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.

Balanced System Plan (2035)

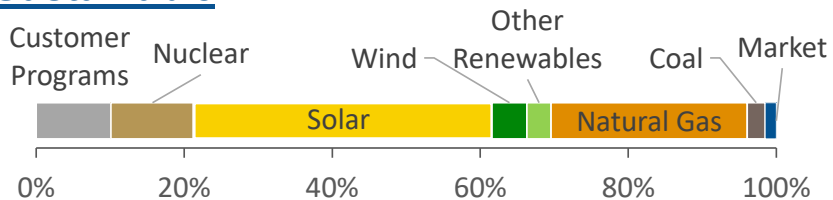
Affordable



3% annual growth rate in total system cost

0.3% annual growth rate in average system cost (\$/MWh)

Sustainable



1,300 MW
coal plants
retired



7,000 MW
new wind & solar
capacity



82% CO2 intensity reduction (lb./MWh)
61% CO2 emission reduction (MMT)
relative to 2005 levels



56% water use reduction (gal/MWh)
relative to 2005 levels

Reliable



16% planning reserve margin

satisfied by an increasingly diverse portfolio of resources



2,000 MW

new firm natural gas capacity



1,000 MW

new long-duration energy storage capacity (pumped hydro)



190 miles of new or upgraded transmission lines



8 new transmission 500/230kV transformers



65 new distribution substation bays

Customer-Focused



3,800 GWh energy efficiency savings



300 MW total demand response



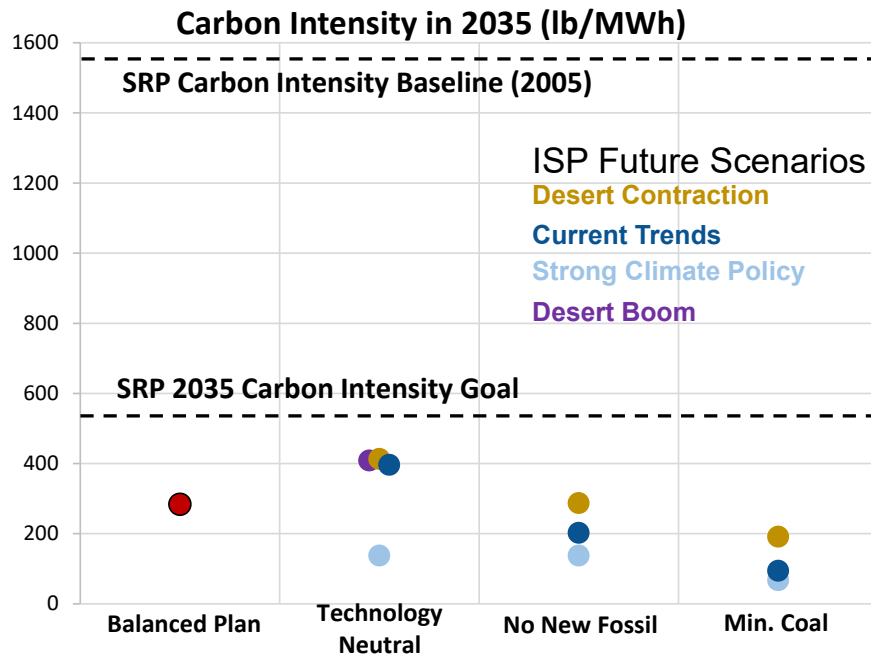
500k electric vehicles



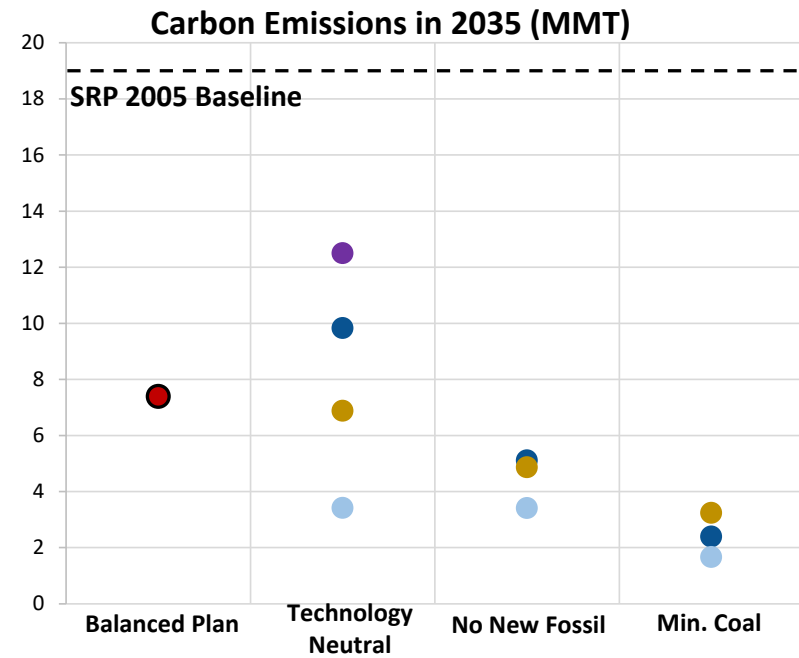
Responsive to ISP Residential Customer Research

Manages cost, while maintaining reliability and transitioning to more sustainable energy system

Balanced System Plan Carbon Emissions Compared to ISP Strategic Approaches



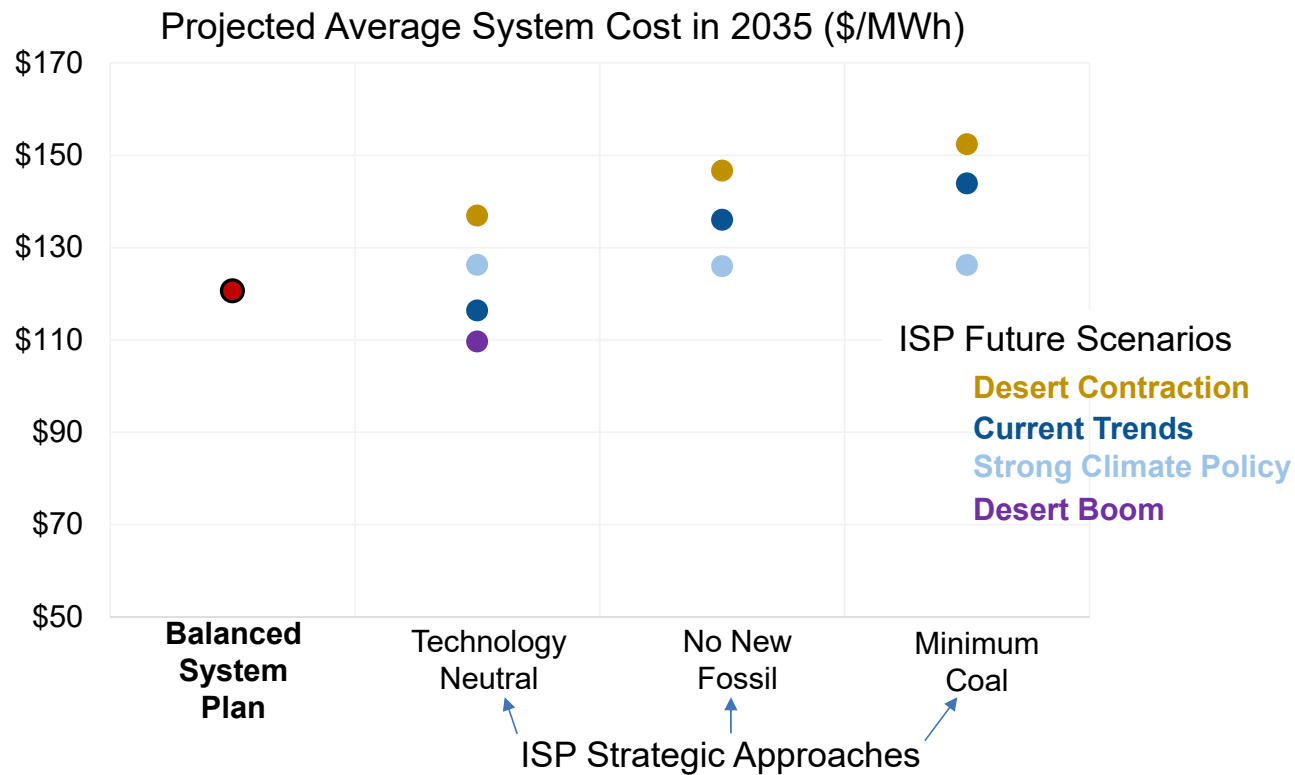
Balanced Plan: 284 lb/MWh, 82% reduction from 2005



Balanced Plan: 7.4MMT, 61% reduction from 2005

Balanced System Plan Cost Compared to ISP Strategic Approaches (2035)

- Projected 2035 Average System Cost for the Balanced Plan (\$121/MWh) is below the median outcomes for ISP strategic approaches

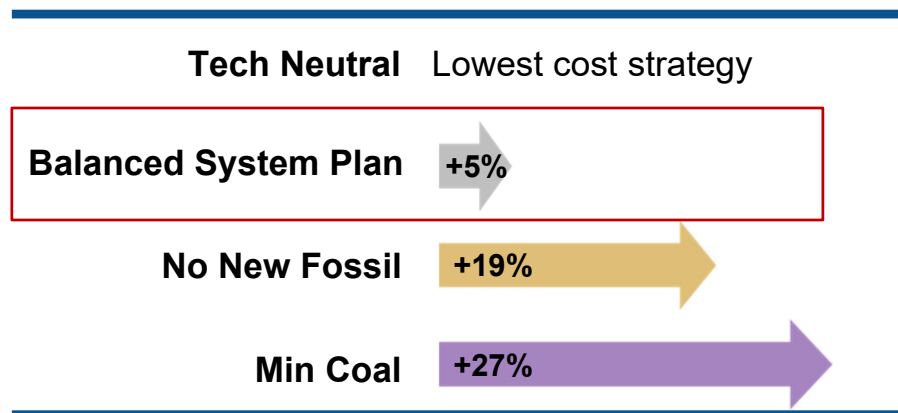


ISP Scenario Bill Impact Comparison

These are representative results based on ISP analysis modeling, not projections of SRP's future prices, and are not inclusive of factors beyond the scope of ISP analysis.

- **Technology Neutral is the lowest cost strategic approach, resulting in bill increases just below projected inflation.**
- **The Balanced System Plan bill impact is under the 10% premium threshold identified by residential customer research and well below bill impacts of no new fossil and minimum coal strategic approaches**

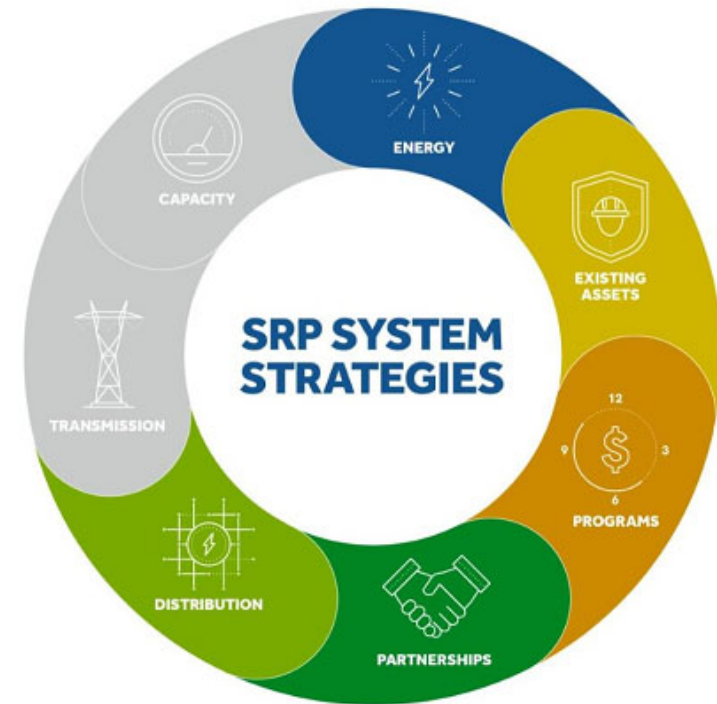
Price Increase Relative to Tech Neutral Under Current Trends Scenario (%)



ISP Strategies in Action

Customer Grid Focus

- Residential Time-of-Use Pilot
- Time-of-Use Evolution
- Customer Program Refresh
- EV Managed Charging Roadmap
- Electrification
- Distribution Enablement Roadmap



ISP Strategies in Action

Bulk Grid Focus

- Resource Request for Proposals/Information
- Coal Transition Plan
- Proactive Siting
- Regional Transmission



Integrated System Plan: System Strategies

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Partnerships & Suppliers

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

Management's Request for Approval

Management requests that the Power Committee recommend that the Board approve the Integrated System Plan System Strategies and any non-material changes to the Strategies that may be necessary from time to time.

thank you!

