

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.

SRP Integrated System Plan Advisory Group Final Meeting (#14) Moving Forward Together Part 2

September 8th, 2023

Welcome

Bobby Olsen

AGM & Chief Planning, Strategy & Sustainability Executive (SRP)

Welcome SRP Board and Council Observers



John Hoopes
SRP Association Vice
President



Chris Dobson
SRP District Vice
President



Anda McAfee
SRP Board Member



Jack White
SRP Board Member



Larry Rovey
SRP Board Member



Krista O'Brien
SRP Board Member



Suzanne Naylor
SRP Council Member



Rocky Shelton
SRP Council Member



Mark Mulligan
SRP Council Member

Safety & Sustainability Minute

Safety

National Preparedness Month

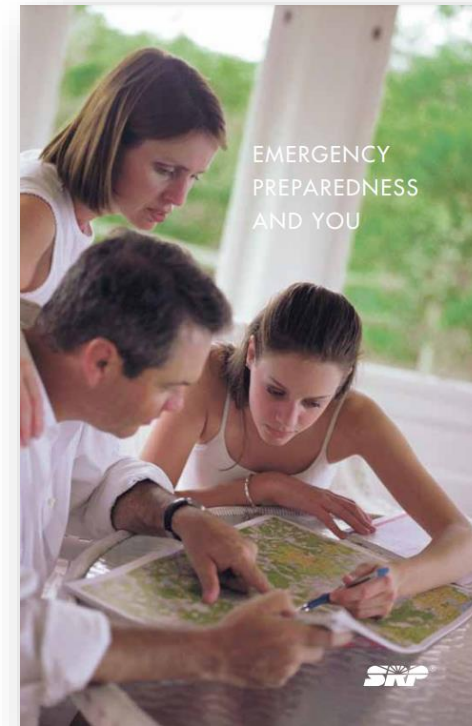
Emergency Preparedness and You

Sustainability

Environmental Awareness Month

Looking for easy ways to show your love for the planet?
We have you covered with some exclusive offers just for SRP customers.

1. Help reforest Arizona for as little as \$3 per month
2. Give the gift of renewable energy to Valley nonprofits
3. Give your home the gift of energy efficiency
4. “Green up” your monthly SRP bill



SRP Updates

Meeting Objectives:

Advisory Group Meeting #14: Moving Forward Together Part 2

- Share Final Balanced System Plan
- Share Final ISP Actions
- Request post-ISP public & customer education input
- Collect stakeholder process feedback
- **Celebrate!**

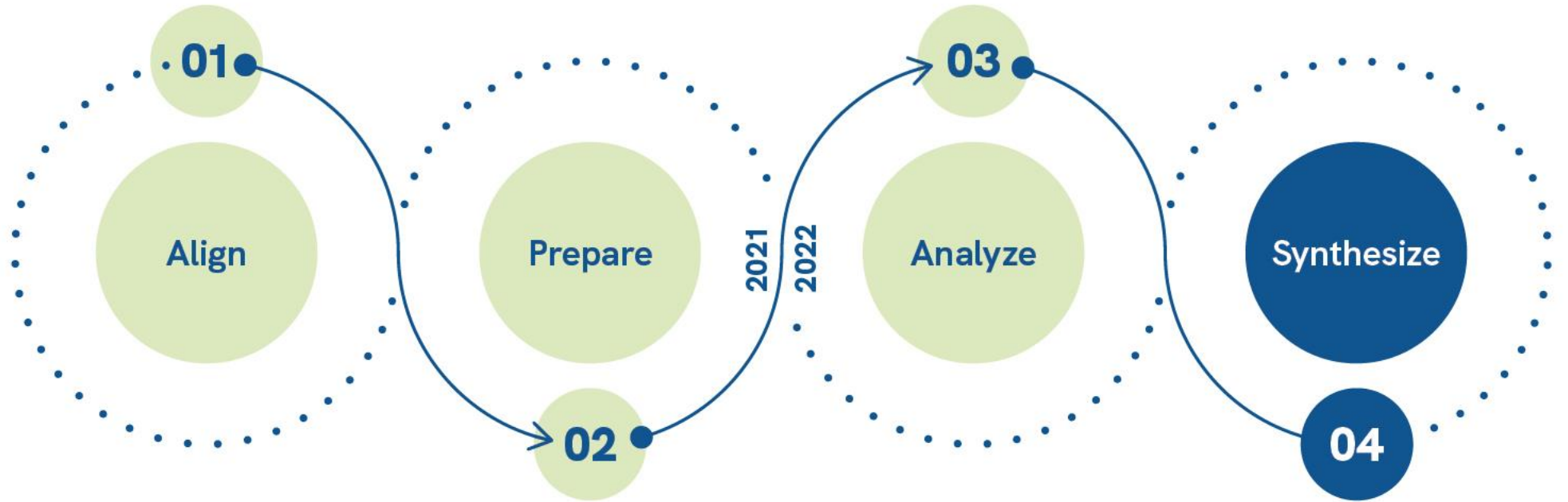
Agenda:

Advisory Group Meeting #14: Moving Forward Together Part 2

Time		Topics	Presenter
8:30-9:00	30 min	Breakfast & Networking	
9:00-9:10	10 min	Welcome & SRP Updates	Bobby Olsen (SRP)
9:10-9:15	5 min	Opening Remarks and Meeting Orientation	Angie Bond-Simpson (SRP) Joan Isaacson (K&W)
9:15-9:25	10 min	Recap of Aug 11th ISP Advisory Group Meeting	Maria Naff (SRP)
9:25-9:55	30 min	Review the Final Balanced System Plan	Angie Bond-Simpson (SRP)
9:55-10:05	10 min	Coffee Break	
10:05-10:35	30 min	Share and discuss Final ISP Actions	Angie Bond-Simpson (SRP)
10:35-11:20	45 min	Advisory Group Feedback Engagement Activities: <i>Sept. 28th and Customer/Community Education Input & Stakeholder Process Feedback Collection</i>	Angie Bond-Simpson (SRP) Joan Isaacson (K&W)
11:20-11:30	10 min	Next Steps and Wrap Up	Angie Bond-Simpson (SRP)
11:30-12:30	60 min	Appreciation Lunch/ Celebration	

Guides for Productive Meetings

- Actively participate
- Stand up name tent to indicate wanting to provide input, ask a question, etc.
- Encourage and seek multiple perspectives, including use of multiple engagement methods
- When introducing technical subjects, begin with straightforward definitions and avoid acronyms; create comfortable environment for questions and understanding
- Stay concise so that everyone has time to participate
- Maintain one representative per Advisory Group member organization in meeting discussions
- Enjoy the meeting!



SRP ISP ROADMAP

Stakeholder Engagement and Public Outreach

Align on Objectives of the first ISP

Collaboratively develop Study Plan:
Scenarios & Sensitivities
Strategic Approaches
Metrics

Gather input data

Perform system analysis

Validate and share results

Recommend new SRP system strategies

Recommend near term actions

Recap of Aug 11th ISP Advisory Group Meeting

Maria Naff

Manager, Integrated Planning (SRP)

Aug 11th Advisory Group Discussion Themes

- Reviewed and discussed the results of the Phase 3 Residential Customer Research
- Reviewed ISP metrics including average residential bill impacts
- Reviewed System Strategies to be recommended to the SRP Board
- Shared draft Balanced System Plan (resource buildout)
- Shared and discussed draft ISP Actions



[Final] Balanced System Plan

Angie Bond-Simpson
Sr. Director, Resource Management

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

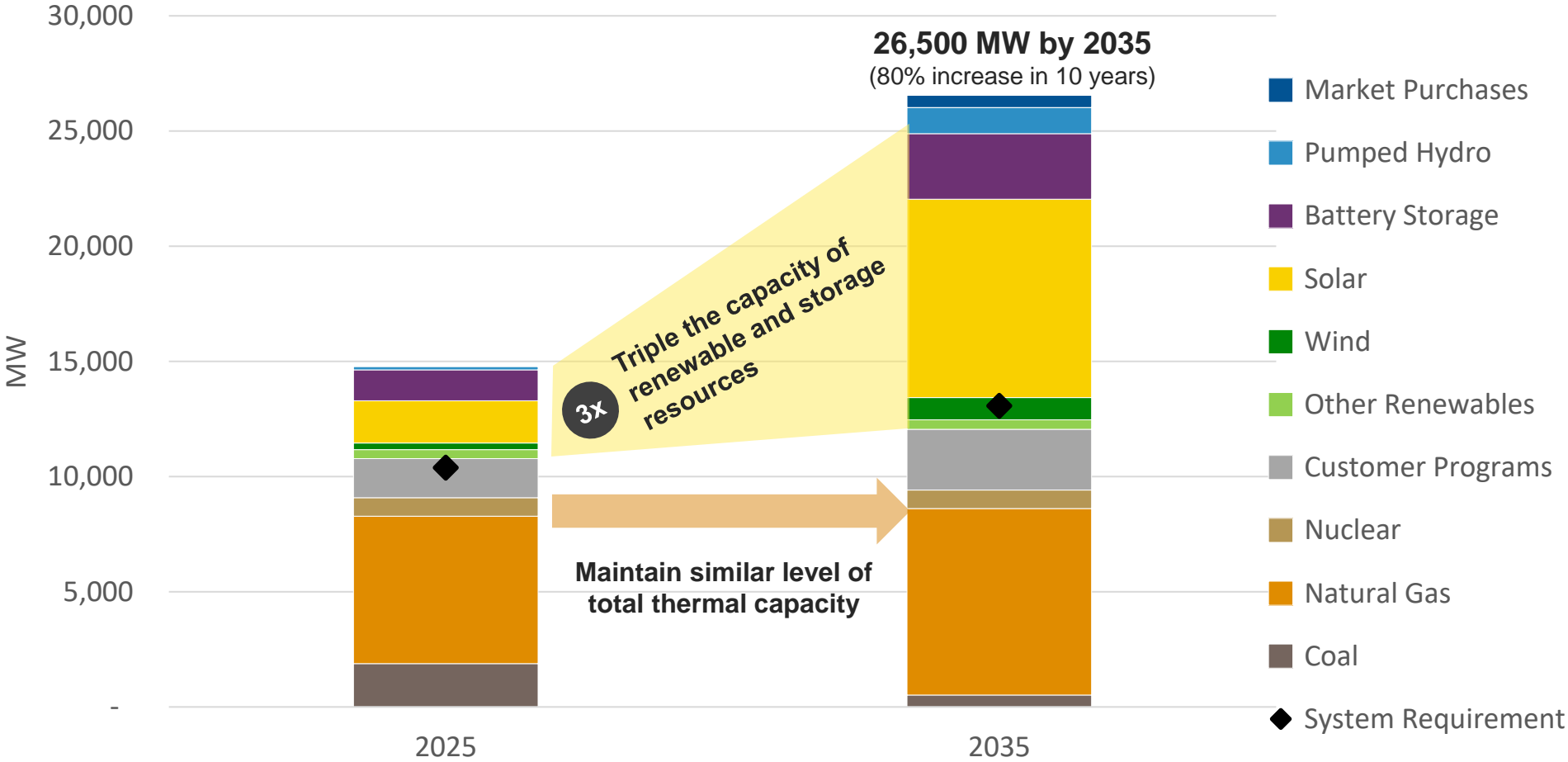
Explore partnerships, supply chain and development solutions that manage cost and availability to meet the pace of transformation.

Balanced System Plan Objectives

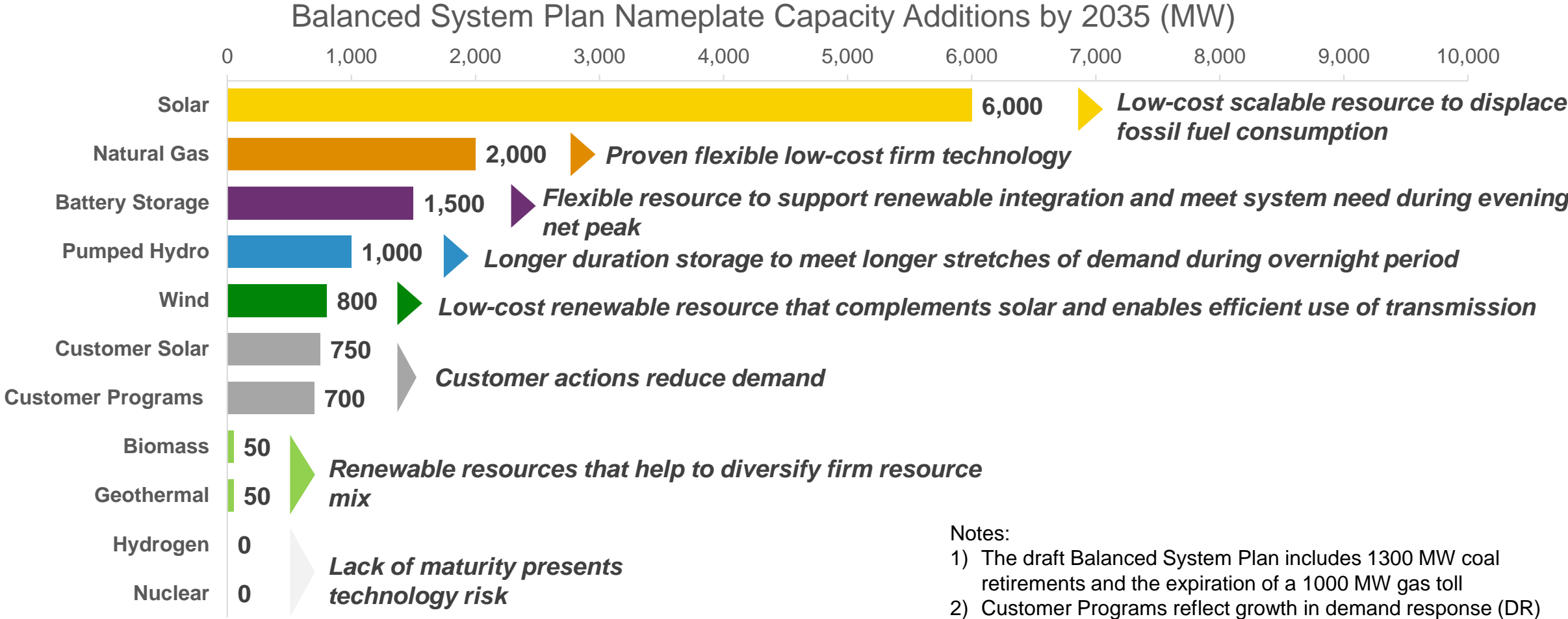
The Balanced System Plan serves as an *illustrative path* for SRP's system that is consistent with the ISP System Strategies.

- Achieves SRP's reliability requirements
- Achieves SRP's 2035 Sustainability Goals
- Informed by the breadth of analysis in the Integrated System Plan
- Balances risks, including financial, development, and operational
- Considers customer preferences and stakeholder input

Balanced System Plan: 2025 and 2035 Total Capacity

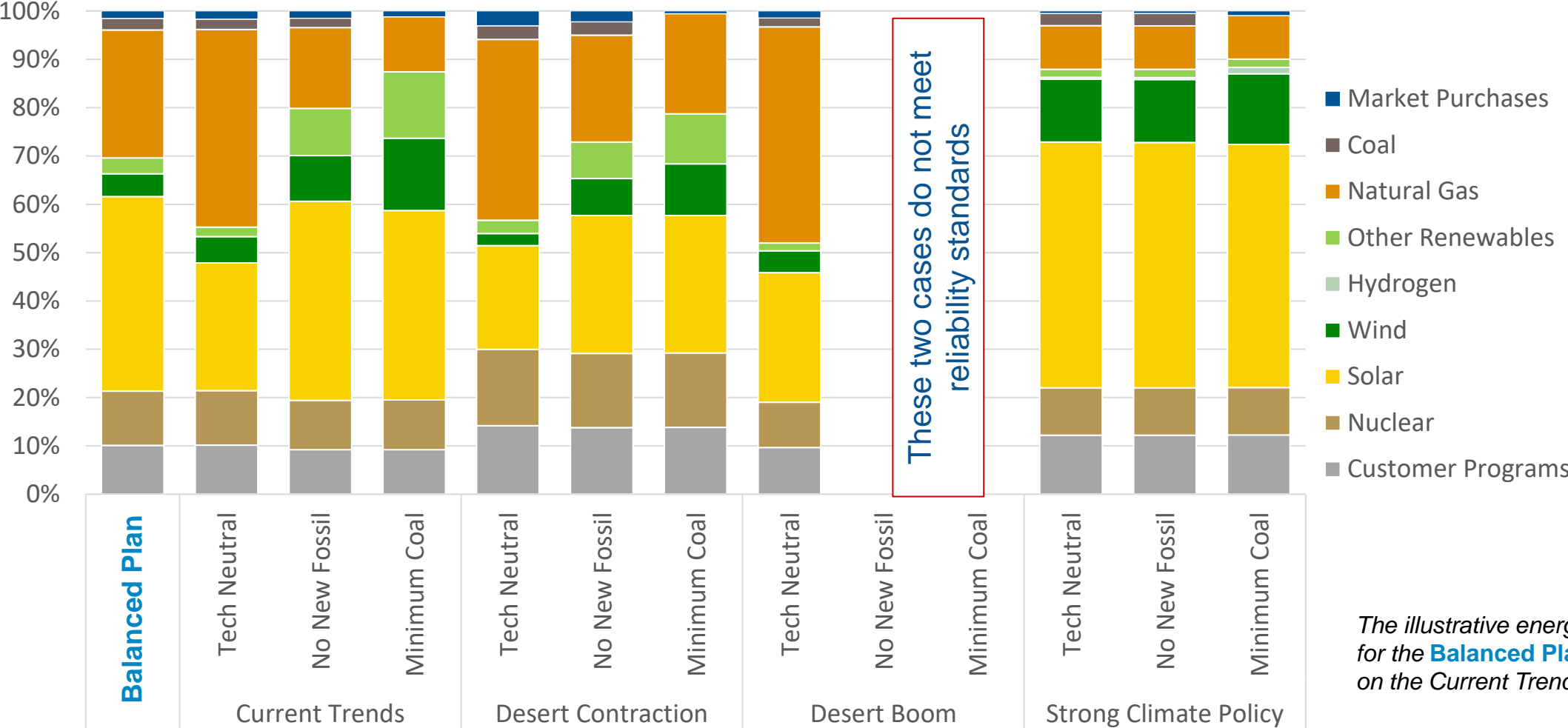


Balanced System Plan: Diversified Resource Additions



- Notes:
- 1) The draft Balanced System Plan includes 1300 MW coal retirements and the expiration of a 1000 MW gas toll
 - 2) Customer Programs reflect growth in demand response (DR) and estimated peak reductions from additional energy efficiency (EE). Customer Solar includes forecasted adoption of customer solar and storage

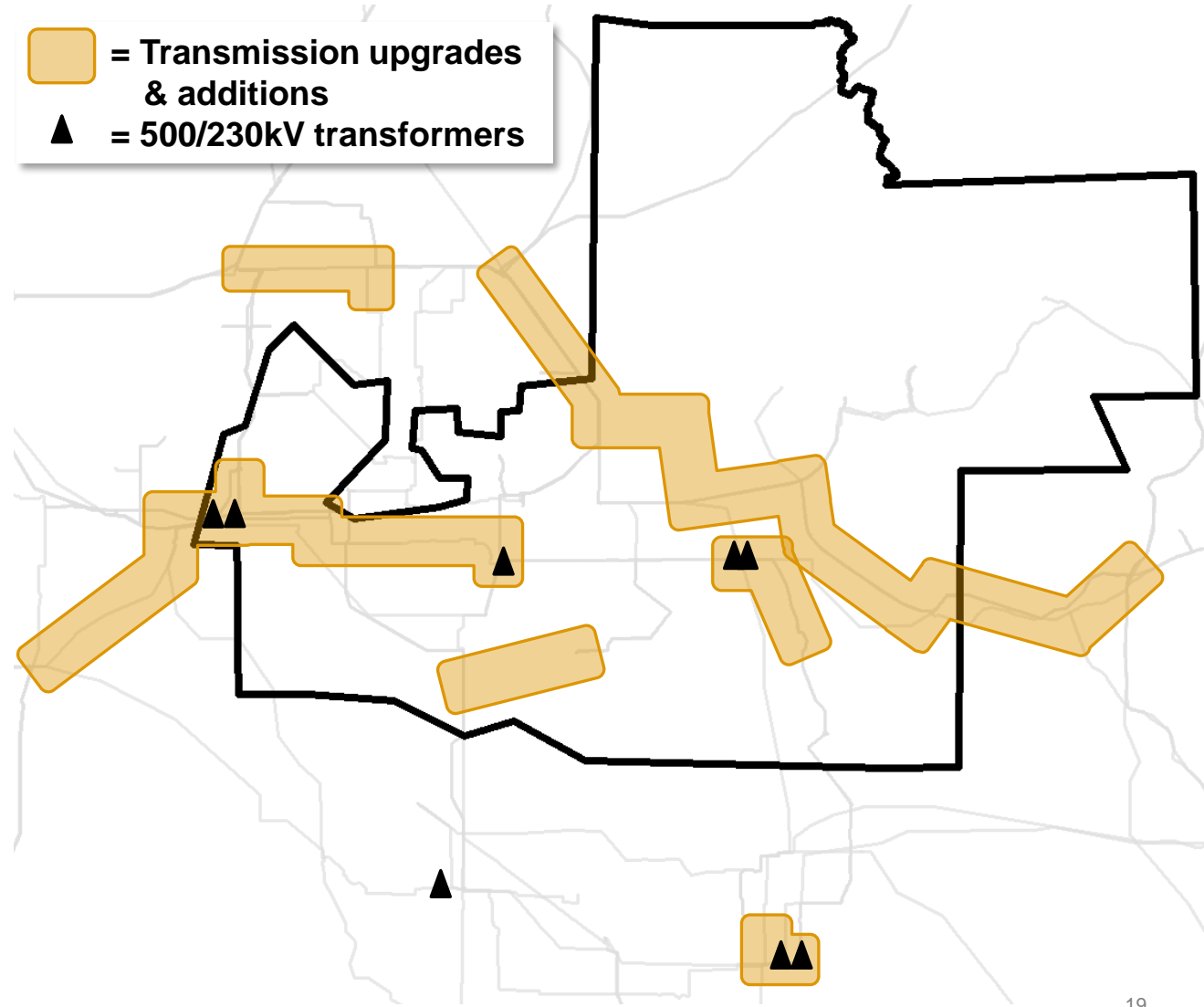
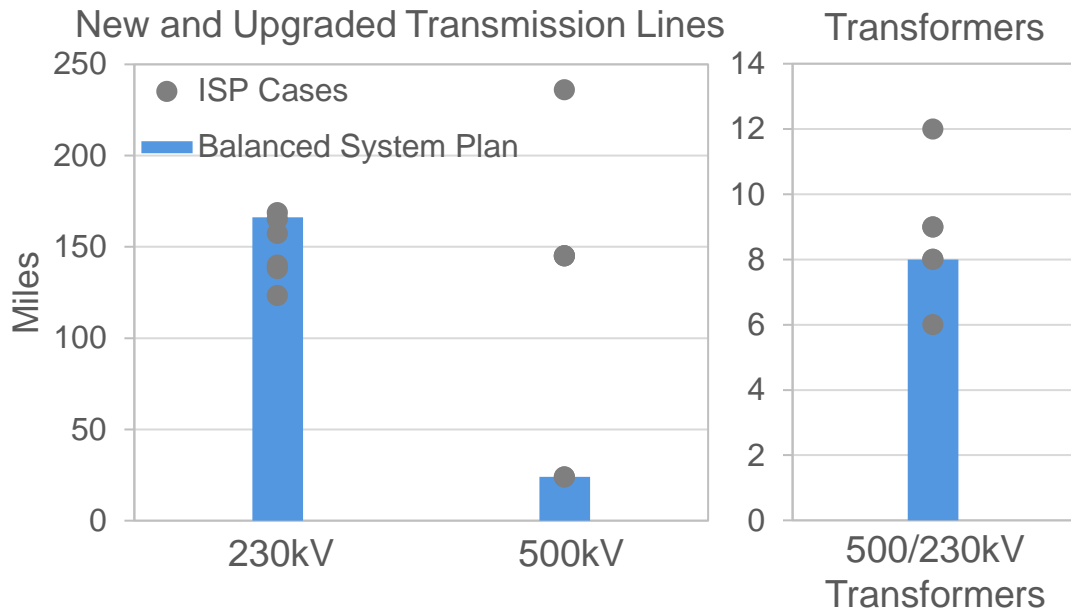
Balanced System Plan: 2035 Energy Mix



*The illustrative energy mix shown for the **Balanced Plan** is based on the Current Trends scenario.*

Balanced System Plan: Transmission Additions by 2035

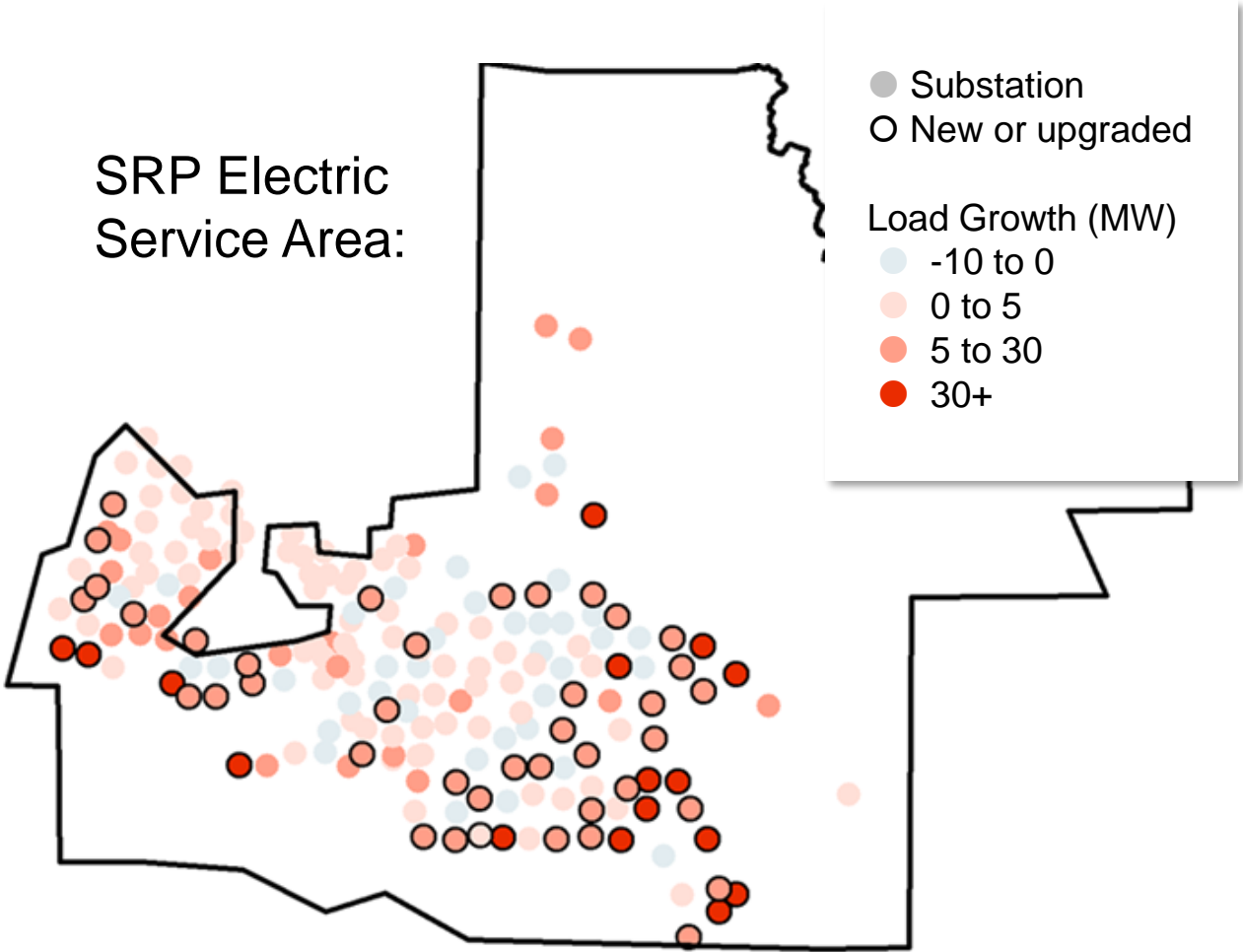
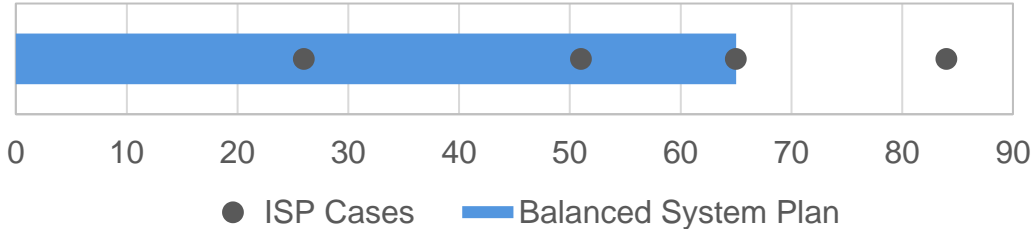
The Balanced System Plan includes transmission infrastructure needed to meet load and generation growth, balancing a hub and pro-rata resource location strategy



Balanced System Plan: Distribution Additions by 2035

The Balanced System Plan adds distribution infrastructure needed to meet growing load, including that from electric vehicles, while preparing the grid for future customer innovation.

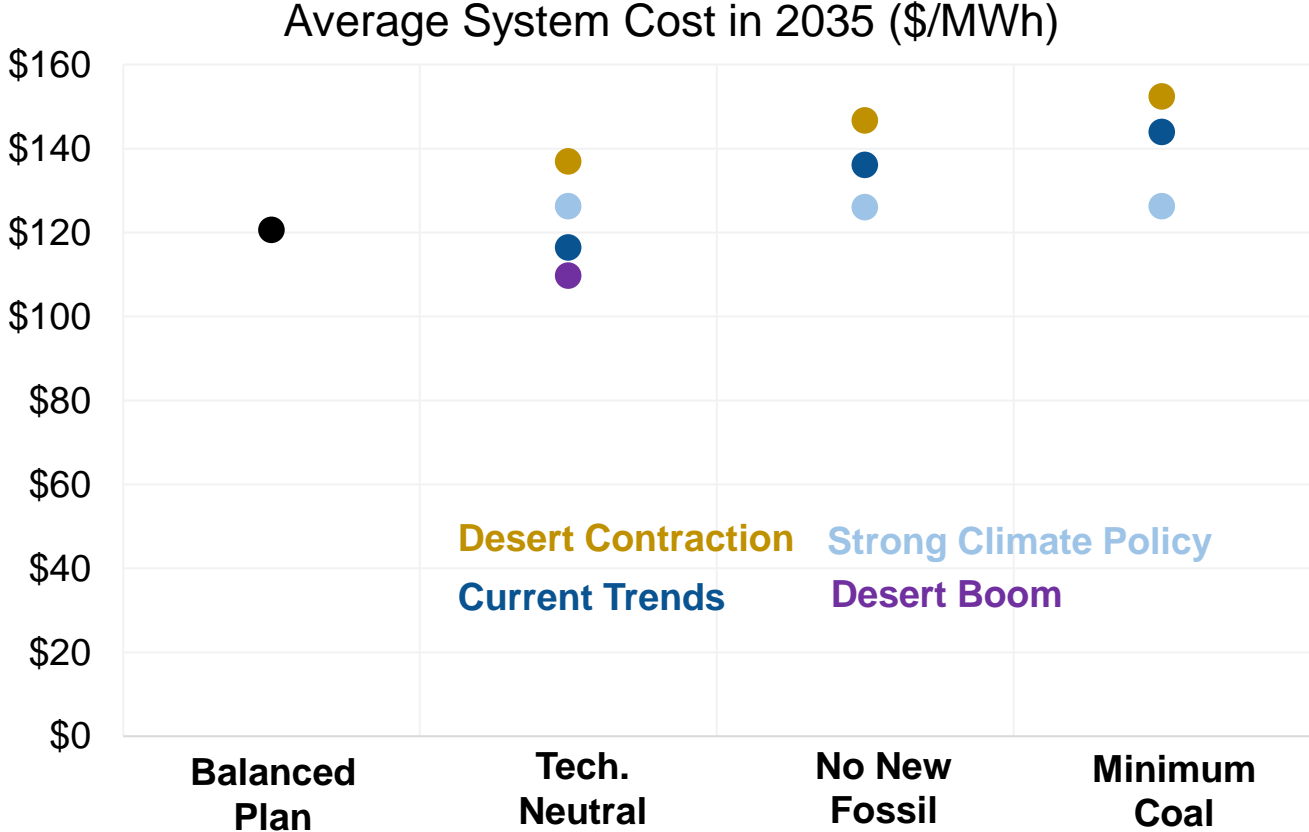
Distribution Substation Bay Additions



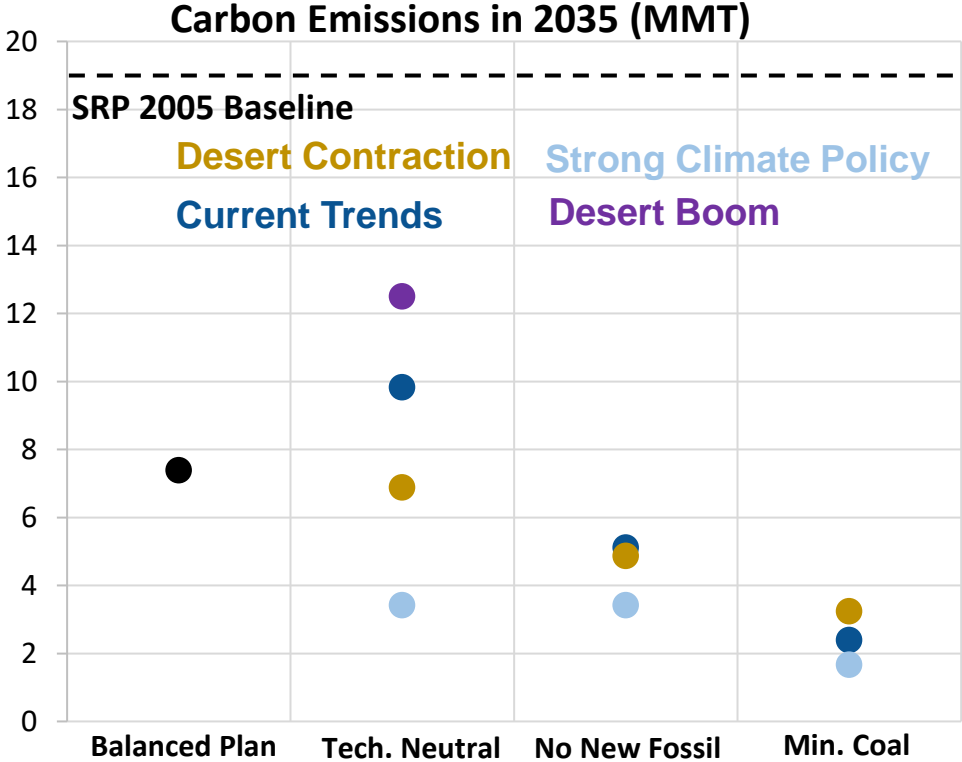
Balanced System Plan Affordability Comparison

Balanced Plan: \$121/MWh in 2035

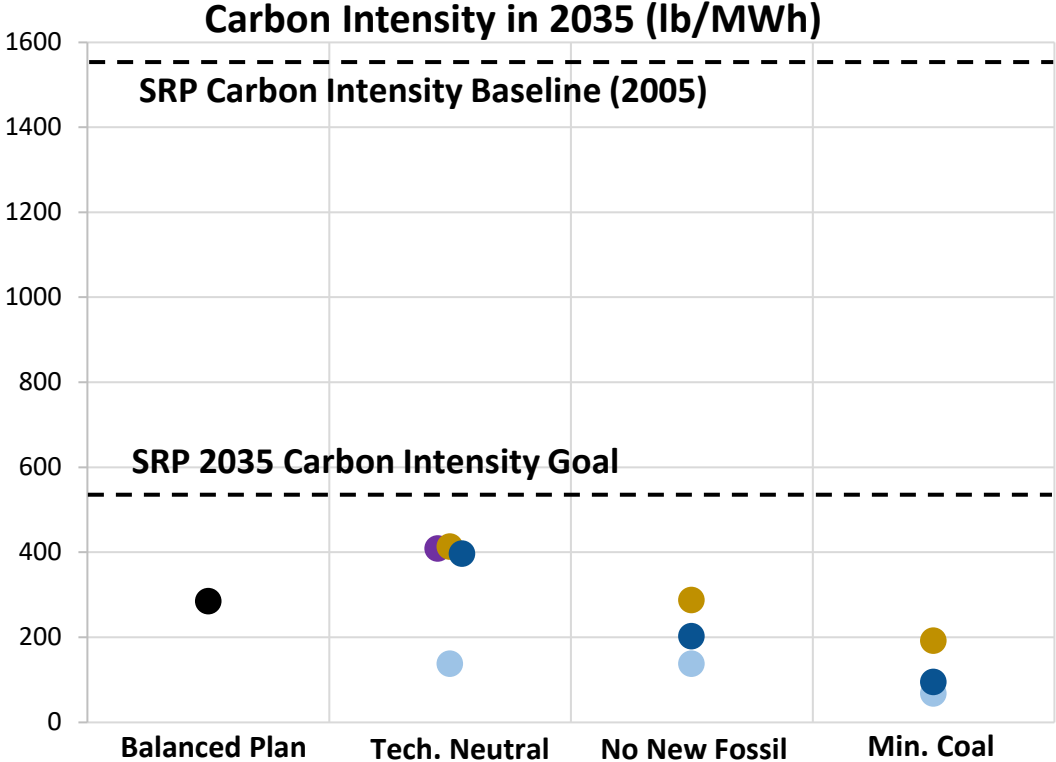
Reference: \$117/MWh in 2025



Balanced Plan Carbon Emission Comparison



Balanced Plan: 7.4MMT, 61% reduction from 2005



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

Balanced System Plan (2035)

Affordable

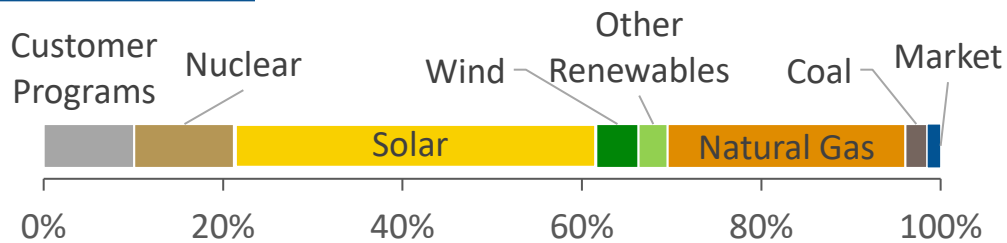


3% annual growth rate in Total System Cost



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

Sustainable



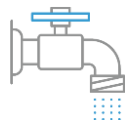
1,300 MW
coal plants
retired



7,000 MW
new wind & solar
capacity



82% CO2 intensity reduction (lb./MWh)
61% CO2 emission reduction (lbs.)
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



Affordability

Utilizes an all-of-the-above approach to diversify and pace investments



Sustainability

Triples renewable and storage development to drive emissions reductions and reduce water consumption from power generation



Reliability

Maintains firm generation capacity and expands grid needs, while preparing for emerging grid technologies



Customer Focus

Focuses on managing costs, advancing sustainability and customer programs without sacrificing reliability

[Final] ISP Actions

Angie Bond-Simpson
Sr. Director, Resource Management

ISP Actions

ISP Actions are a set of near-term actions that SRP will complete following the publication of the Integrated System Plan (ISP).

Objectives:

- Kick start implementation of the System Strategies and make progress toward the 2035 Goals.
- Serve as SRP's commitment to pursue these actions and to provide annual progress updates.

What We Heard:

Ideas Shared by Advisory Group

Incorporated into Final ISP Actions

- Targeted outreach
- Focus on customer savings
- Customer access for all
- Proactive actions towards regional access
- Identifying more benefits for ISP Actions
 - Example deferring infrastructure and capacity investments

Other suggestions for further exploration in ISP #2

- Program segments and locations
- Technology advancements



ISP Action #1: Residential Time-of-Use Pilot

Execute a residential time-of-use price plan pilot and perform customer research to evaluate customer’s 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.

ISP System Strategies Alignment



Evolution of Customer Programs & Pricing



Partnerships & Suppliers



Energy Investments

Potential to defer



Capacity Investments

ISP Action #2: 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 and develop a roadmap for implementing new time-of-use periods.

- Undertake a Pricing Process informed by the ISP as to how time-of-use plans need to evolve. Propose new time-of-use hours including a super off-peak period when the cost to serve customers' needs is lowest and on-peak hours updated for the modern grid.
- Develop communication plan for **all customer types and segments** to educate on any new time-of-use price plans **with a focus on promoting affordability as well as potential sustainability benefits**.

ISP System Strategies Alignment

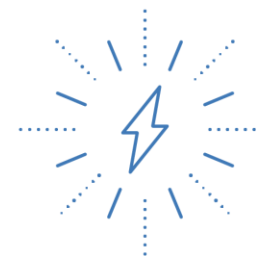
Potential to defer



Partnerships & Suppliers



Evolution of Customer Programs & Pricing



Energy Investments



Capacity Investments

ISP Action #3: 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.

- Evaluate the cost-effectiveness and emissions impacts of different customer program measures using the avoided costs and emissions impacts results from the ISP. Determine whether any changes to the customer programs portfolio are warranted based on this information, considering that these results must be weighed against other important factors such as customer access, equity, cost and satisfaction.

ISP System Strategies Alignment



Partnerships & Suppliers



Evolution of Customer Programs & Pricing



Energy Investments



Distribution Innovation

Potential to defer



Capacity Investments

ISP Action #4: EV Management

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

ISP System Strategies Alignment



Energy Investments



Strategic Investment & Reinforcement of Existing Assets



Evolution of Customer Programs & Pricing



Partnerships & Suppliers



Distribution Innovation

ISP Action #5: 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.

ISP System Strategies Alignment



Energy Investments



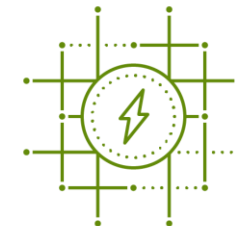
Strategic Investment & Reinforcement of Existing Assets



Evolution of Customer Programs & Pricing



Partnerships & Suppliers



Distribution Innovation

ISP Action #6: Distribution Enablement Roadmap

Continue implementing SRP's Distribution Enablement (DE) Roadmap, which includes:

- Deploying Advanced Distribution Management System (ADMS) and Distributed Energy Resources Management System (DERMS)
- Continue implementing advanced planning tools
- Advancing the distribution interconnection process
- Executing the DE Research & Development (R&D) plan

ISP System Strategies Alignment



**Distribution
Innovation**



**Partnerships &
Suppliers**



**Strategic Investment
& Reinforcement
of Existing Assets**

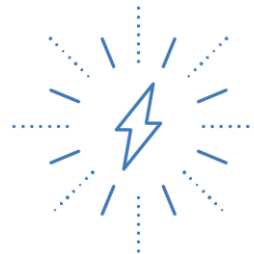
ISP Action #7: Resource Selection

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.

ISP System Strategies Alignment



**Capacity
Investments**



**Energy
Investments**



**Partnerships &
Suppliers**

ISP Action #8: Coal Transition Action Plan

- Coordinate with co-owners to develop a path forward for the Springerville Generating Station
- Prepare plans for repurposing the Coronado Generating Station site
- Develop solutions that preserve transmission following the retirement of coal plants
- Test strategies for minimizing coal plant emissions while leveraging their capacity to maintain reliability

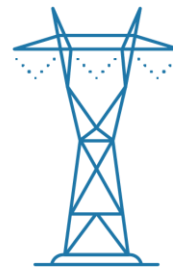
ISP System Strategies Alignment



**Capacity
Investments**



**Strategic Investment
& Reinforcement
of Existing Assets**



**Proactive
Transmission**



**Partnerships &
Suppliers**

ISP Action #9: Proactive Siting

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

ISP System Strategies Alignment



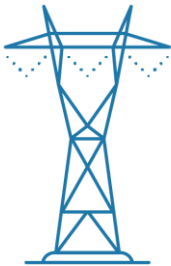
Partnerships & Suppliers



Capacity Investments



Energy Investments



Proactive Transmission



Distribution Innovation

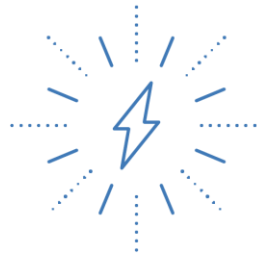
ISP Action #10: Regional Transmission

Pursue monitor 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.

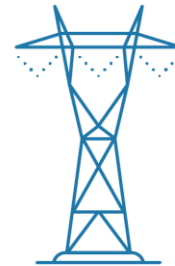
ISP System Strategies Alignment



**Capacity
Investments**



**Energy
Investments**



**Proactive
Transmission**



**Partnerships &
Suppliers**

Advisory Group Feedback Engagement Activities :

Sept. 28th and Customer/Community
Education Input &
Stakeholder Process Feedback Collection

Angie Bond-Simpson
Sr. Director, Resource Management

Joan Isaacson
Lead Facilitator, Kearns & West

EXTERNAL

ISP PLANNING PROCESS FAST FACTS

INTERNAL

NUMBER OF ADVISORY
GROUP MEMBERS:



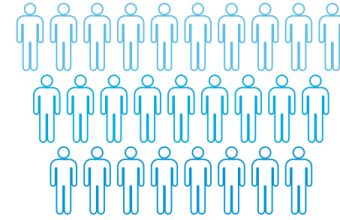
32

community representatives



from **23** organizations

NUMBER OF LARGE
STAKEHOLDER
GROUP MEMBERS:



200+

community representatives from

140+
organizations

STAKEHOLDER
QUESTIONS
ANSWERED

550+



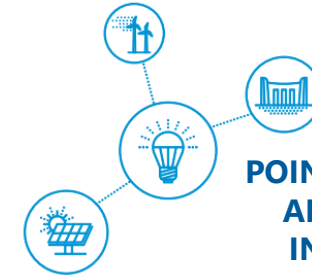
Over
270

STAKEHOLDER
COMMENTS RECORDED



29 STAKEHOLDER MEETINGS

TOTALING TO OVER **50** HOURS

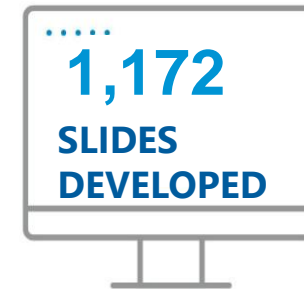


559

POINTS OF FEEDBACK COLLECTED
AND INTEGRATED INTO THE
INTEGRATED SYSTEM PLAN



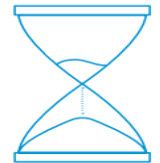
Hundreds of
Gigabytes
OF MODELING SIMULATIONS
OVER 2+ YEARS



1,172

SLIDES
DEVELOPED

500+



HOURS OF INTERNAL
ALIGNMENT MEETINGS



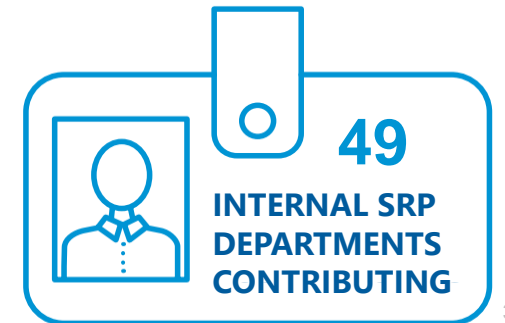
40

INDIVIDUAL
SUBJECT
MATTER
EXPERT
PRESENTERS



100+

INDIVIDUAL SRP
EMPLOYEE
CONTRIBUTORS



49

INTERNAL SRP
DEPARTMENTS
CONTRIBUTING

Large Stakeholder Group Past & Future Meetings

September 28th, 2023 9:00 a.m.- 1:00 p.m.

Meeting Objectives:

- Share the results of the Phase 3 Residential Customer Research.
- Inform and discuss ISP System Strategies, Balanced System Plan and Actions.
- Inform on next steps for implementing the Integrated System Plan.

Seeking Advisory Group Member Input:



What information about the ISP should be prioritized for sharing at the Sept. 28th Large Stakeholder Group meeting?



What information about the ISP is most important to convey to customers and other community members?



What would be helpful for Advisory Group Members to share information about the ISP process and recommendations?

Advisory Group: Sept 28th Large Stakeholder Group Meeting Input

Roundtable Discussion:

What information about the ISP should be prioritized for sharing at the Sept. 28th Large Stakeholder Group meeting?

- What level of detail for the ISP System Strategies, Balanced System Plan, and Actions is recommended for this audience?
- What ISP topics will be of greatest interest to the Large Stakeholder Group?



Advisory Group: Customers and Community Member Education Input

Roundtable Discussion:

What information about the ISP is most important to convey to customers and other community members?

- What suggestions do you have for communications and customer education after the ISP?
- What other groups would be interested in learning about the ISP and its implementation?



Advisory Group: Advisory Group Constituents

Educational Materials Input

Roundtable Discussion:

What materials would be helpful for Advisory Group Members to share information about the ISP process and recommendations?

- Have you seen effective communication and educational materials for other projects that the ISP team could review and consider?



Integrated System Plan: Advisory Group

Mission Statement:

The charge of the Advisory Group is to contribute wide-ranging expertise and perspectives to the Integrated System Plan, resulting in an end product that integrates the diverse interests and values of the customers and communities that SRP serves.

Objectives:

- Create a dialogue around the Integrated System Plan.
- Include diverse perspectives as input, guidance and review for the Integrated System Plan.
- Provide a forum for deep and technical discussion of the tradeoffs in energy system planning and the various perspectives to build support around the strategic directions and resource, transmission, distribution and customer program action plans.



Advisory Group Check-Ins: June 2022

Themes of Feedback:

- Productive, meaningful, open, and informative process
- Opportunities for mid-process adjustments
- Interests in topics spans the range of stakeholders



Advisory Group Check-Ins

Ideas for More Collaboration: June 2022



Balance technical and policy-level discussions

- Provide pre-meeting glossaries and pre-meeting orientation
- Avoid acronyms, clarify use of terms
- Updated guides for productive meetings

Use multiple methods to foster greater comfort in sharing varying viewpoints

- Generally increasing expectations for full meeting participation and active contributions
- Ask to hear each other's perspectives
- In-person meetings

Round Robin Partners: Stakeholder Engagement Process



- What did SRP do well or could have done differently to create a dialogue that includes diverse perspectives around the Integrated System Plan?
- What were the most interesting, valuable, or exciting things you learned about the future system planning and the ISP?
- What suggestions do you have for the timing and cadence of the next ISP cycle?

Report Out Roundtable



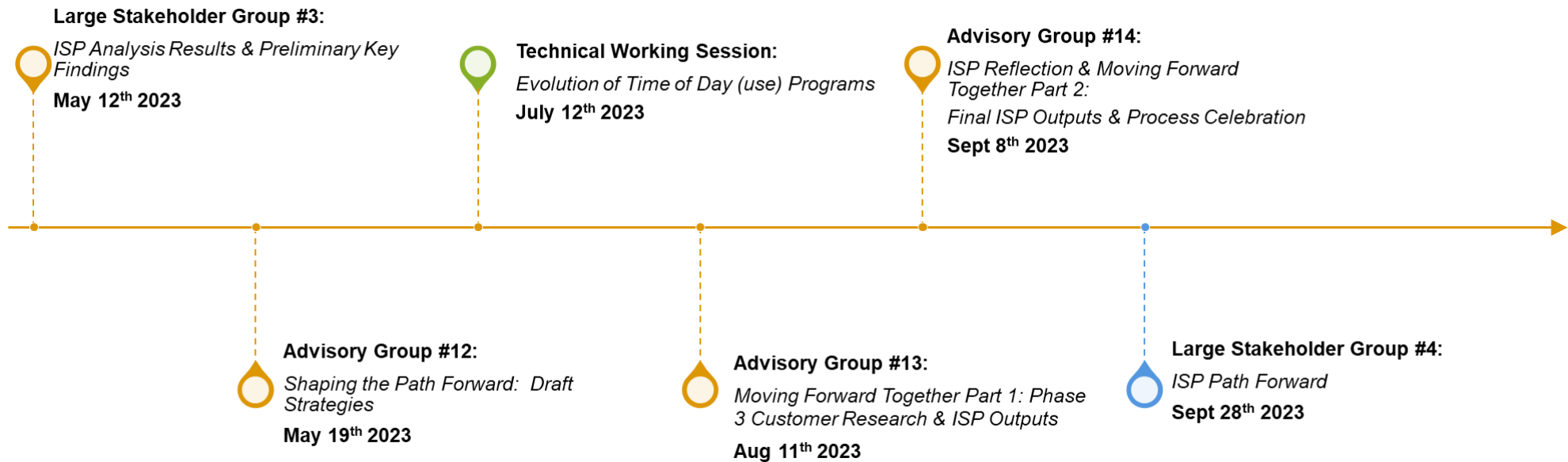
Report Out

Wrap Up and Next Steps

Angie Bond-Simpson
Sr. Director, Resource Management

Next Steps

- Remaining Stakeholder Group Meetings (September)
 - **Sept 28th Large Stakeholder Group Meeting:** Review all ISP metrics; inform stakeholders of SRP's Balanced System Plan, System Strategies and Actions; and inform on what's upcoming at SRP



Next Steps

SRP Team

- Share ISP System Strategies, Balanced System plan and Actions with Large Stakeholder Group
- Seek Board approval for System Strategies
- Initiate public education process
- Continue ISP Actions implementation process!

Stakeholder Communication Email:
IntSysPlan@srpnet.com



Integrated System Plan: Informational Portal
<https://srpnet.com/about/integrated-system-plan.aspx>

thank you!



LET'S CELEBRATE!

WE DID IT!!

**Thank You Dedicated ISP
Advisory Group Members !**

