Integrated System Plan (ISP) Update: Day 2

ISP Board and Council Study Session

Angie Bond-Simpson, Sr. Director | August 30, 2023

SAFETY MINUTE: MONSOON SEASON
SRP BOARD AND COUNCIL
WORK STUDY SESSION

SARA MCCOY
DIRECTOR, RISK MANAGEMENT

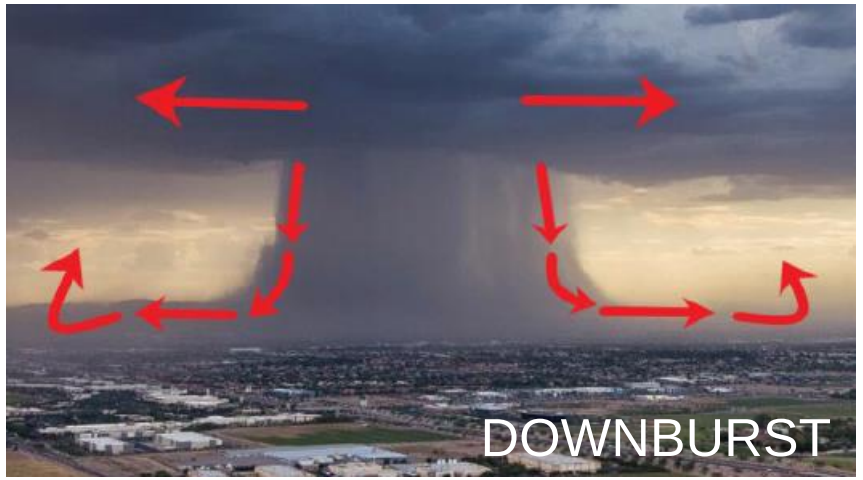
AUGUST 30, 2023

Delivering water and power™

SAFETY MINUTE: MONSOON SEASON

- Arizona: June 15 – September 30
  - Downbursts
  - Dust Storms
  - Thunderstorms
- Prepare before a storm
- Stay indoors, decide not to drive

Outages or downed lines/poles?
Call SRP 602-236-8888



Welcome

Bobby Olsen
AGM & Chief Planning, Strategy & Sustainability Executive

Meeting Objectives

Day 1

- ✓ Introduce Integrated System Planning (ISP)
- ✓ Review collaborative study plan and engagement processes

Day 2

- Present ISP recommended System Strategies based on key findings from the analysis
- Illustrate Management's ISP Implementation Steps
- Address questions with SRP Subject Matter Experts

Agenda

Time (incl. Q&A)		Topics	Presenter
DAY 2	**DAY 2**		
9:30-9:35	5 min	Welcome	Bobby Olsen
9:35- 9:45	10 min	ISP Scenario Planning Metrics	Angie Bond-Simpson
9:45-10:25	40 min	ISP Recommendation: System Strategies Including Key Findings That Support the Recommendation	Angie Bond-Simpson Nick Schlag (E3)
10:25-10:45	20 min	ISP Implementation Steps: Balanced System Plan	Angie Bond-Simpson
10:40- 11:15	35 min	ISP Implementation Steps: ISP Actions	Adam Peterson Dan Dreiling Vanessa Kisicki Grant Smedley Bryce Nielsen
11:15-12:00	45 min	Panel Q&A	All
12:00-12:05	5 min	Wrap Up & Next Steps	Angie Bond-Simpson
12:05-12:30	30 min	Lunch	

Metrics Takeaways: The Need for Balance

Affordability

A Tech Neutral strategic approach results in lowest system cost and lower bill impacts.

Sustainability

A Minimum Coal strategic approach results in greater emissions reductions and lower water use.

Reliability

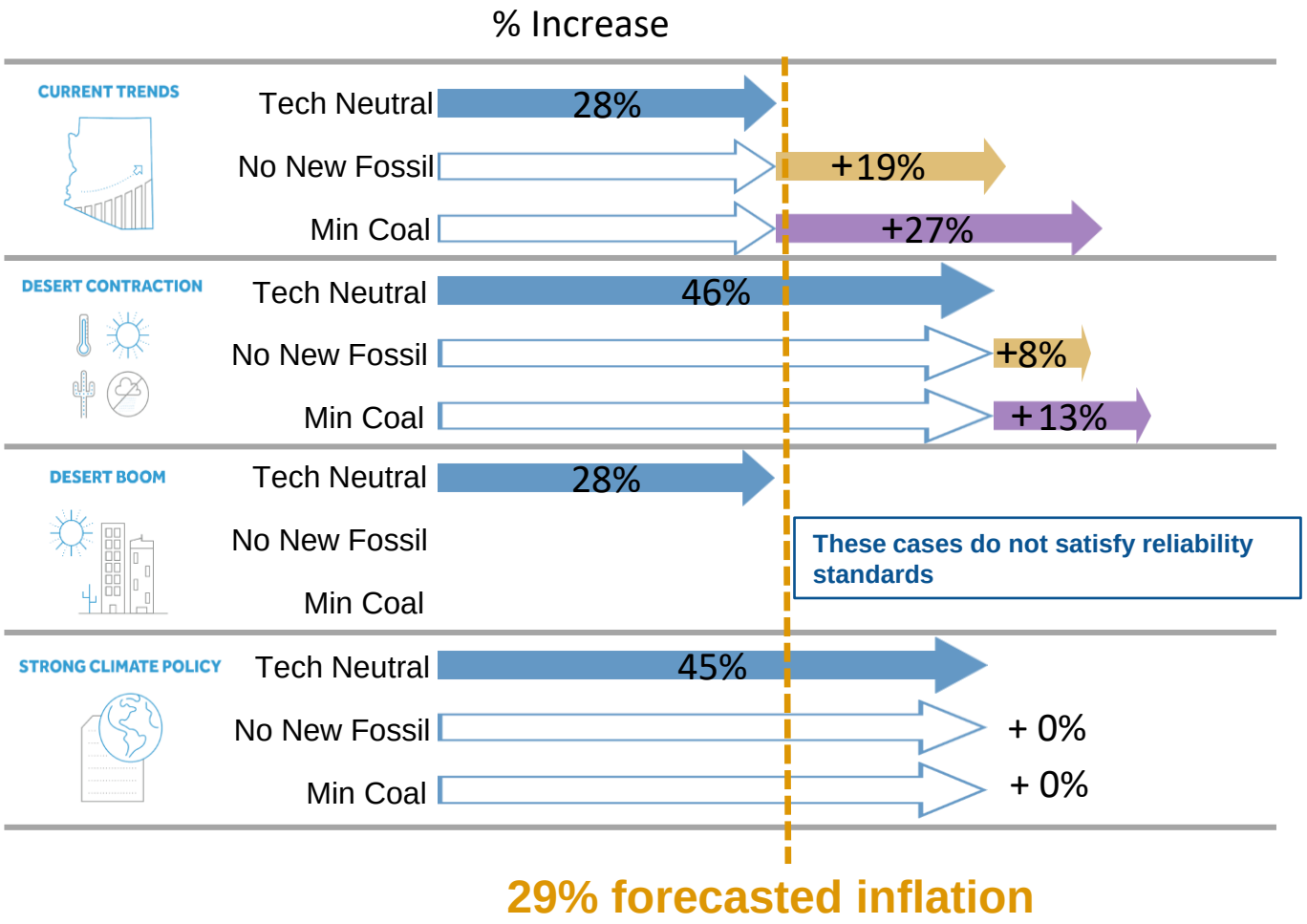
A Tech Neutral strategic approach results in paced infrastructure development and is the only approach able to meet reliability under high customer demand conditions.

Customer Focus

Residential customer are sensitive to bill impacts.

Customer programs potentially unlock greater economy wide carbon reductions.

ISP Scenario Rate Impacts

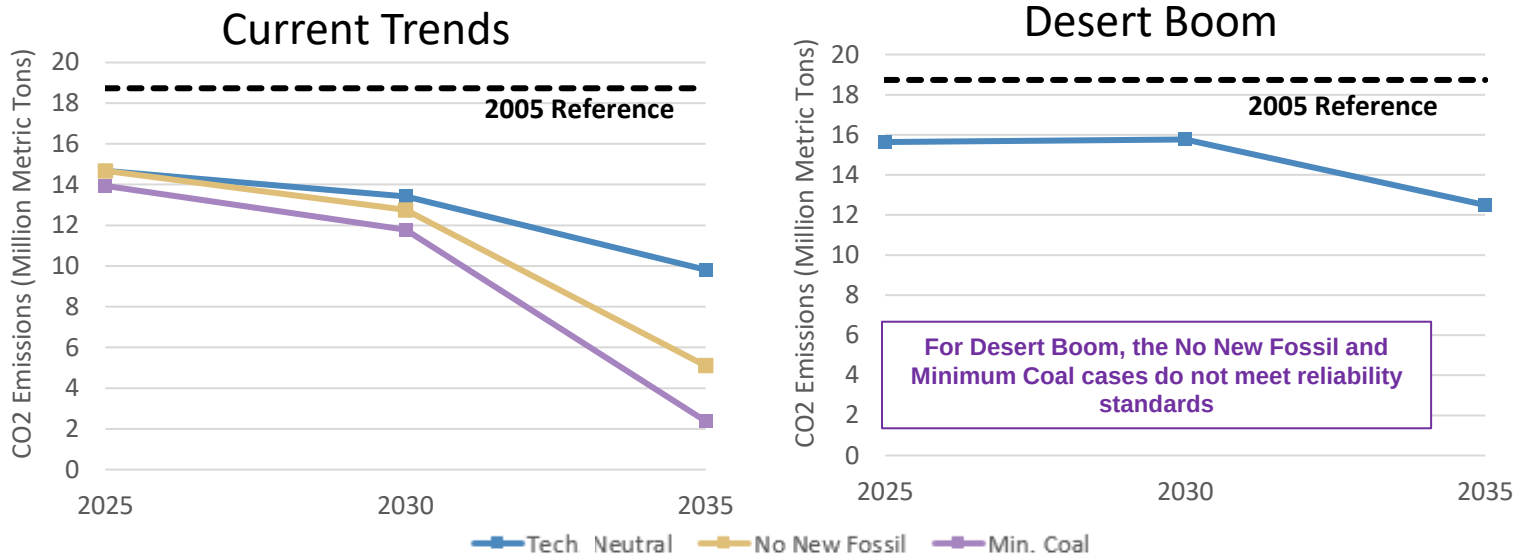


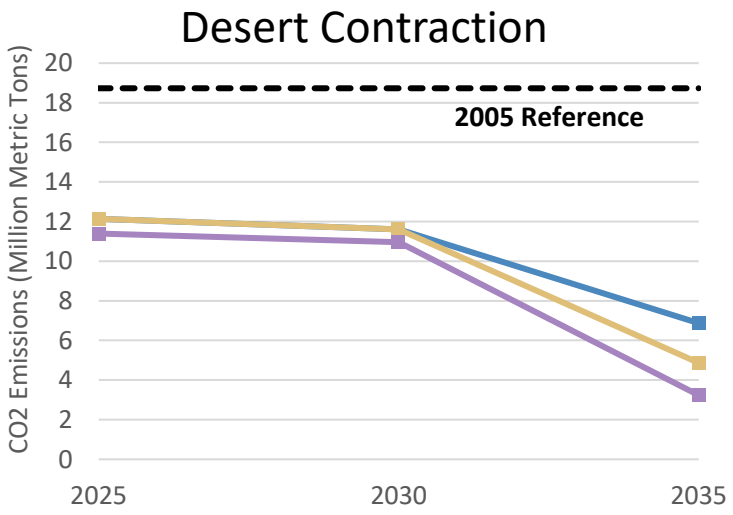
ISP Takeaway:

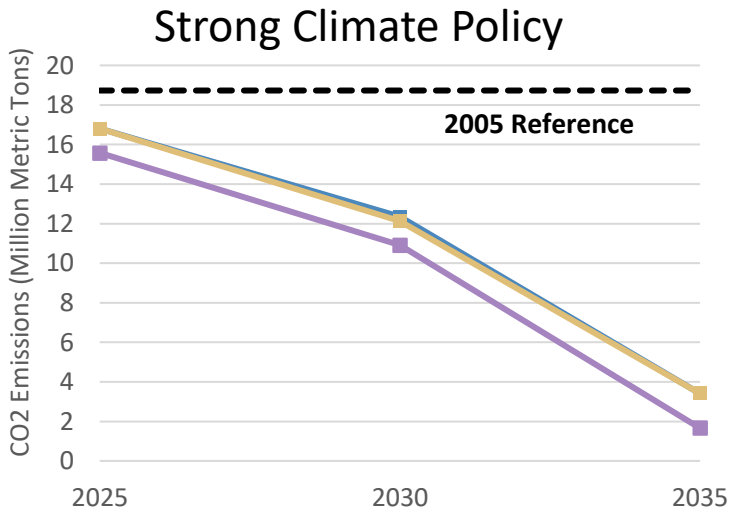
- The Technology Neutral strategic approach results in lowest impact to customer prices.

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.

ISP Scenario CO_2 Reductions (Mass)







ISP Takeaways

- Coal retirements, coupled with renewable and storage additions, drive significant carbon mass reductions in all cases
- No New Fossil and Minimum Coal lead to greater carbon reductions
- Carbon emissions are generally correlated with load growth (lower in Desert Contraction, higher in Desert Boom)

All cases achieve SRP's 2035 Sustainability goal of a 65% carbon intensity reduction.

ISP Recommendation: System Strategies

Angie Bond-Simpson
Sr. Director, Resource Management

Nick Schlag
Partner (E3)

ISP System Strategies

The System Strategies are long-term strategies for planning and operating the power system to achieve SRP's 2035 goals.

Objectives:

- Provide **guidance and priority** for how to plan and operate the system in the future.
- Provide **transparency** to customers and other stakeholders of what strategies SRP plans to employ to evolve its system.
- Serve as **the starting point** for building an illustrative Balanced System Plan and ISP actions designed to implement the System Strategies

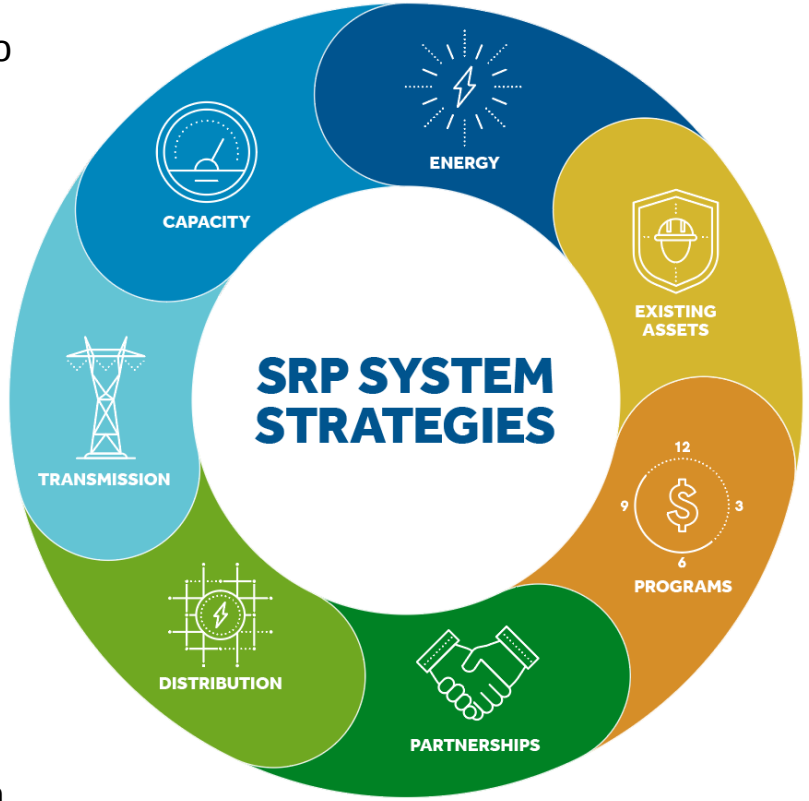
Integrated System Plan: System Strategies

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.

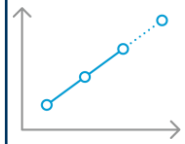
Partnerships & Suppliers
Explore partnerships, supply chain and development solutions that manage cost and availability to meet the pace of transformation.

ISP Project Team

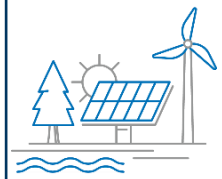
Key Contributing Departments

Integrated System Planning & Support

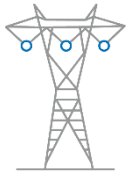
Forecasting & Load Research



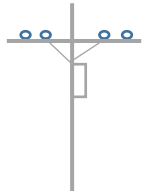
Resource Planning & Development



Transmission Planning, Strategy & Develop



Distribution Planning & Strategy



Customer Programs

Financial Planning & Analysis

Pricing

Strategic Research & Insights

Coordination, Leadership Guidance, Analysis & Support

Leadership Guidance & Analysis Teams

Customer Research Team

Consultants:

Energy+Environmental Economics

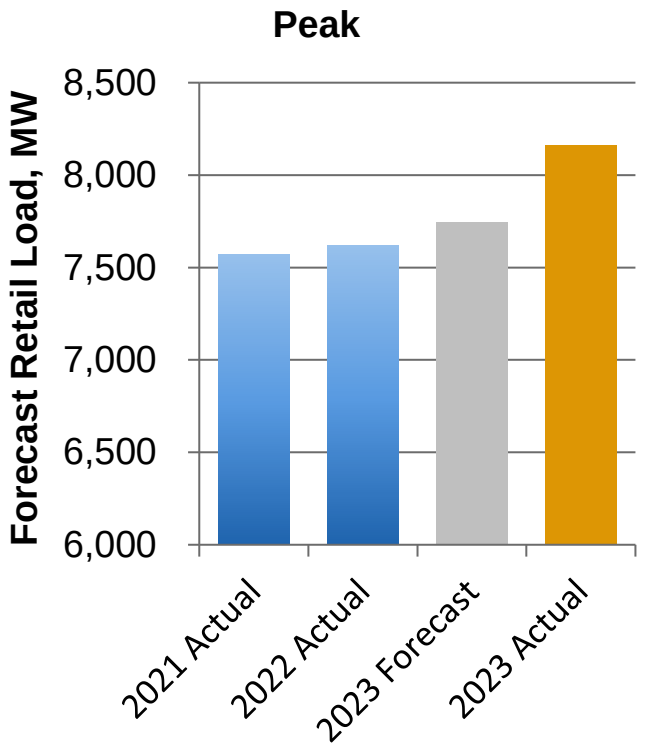
KEARNS WEST

Consultant:

bellomy

Major Trends Impacting Planning

Energy demand continues to grow rapidly in Arizona



The SRP system reached a new peak load of 8,163 MW on 7/18/23.

The Inflation Reduction Act (IRA) provides significant funding for clean energy

$350 billion

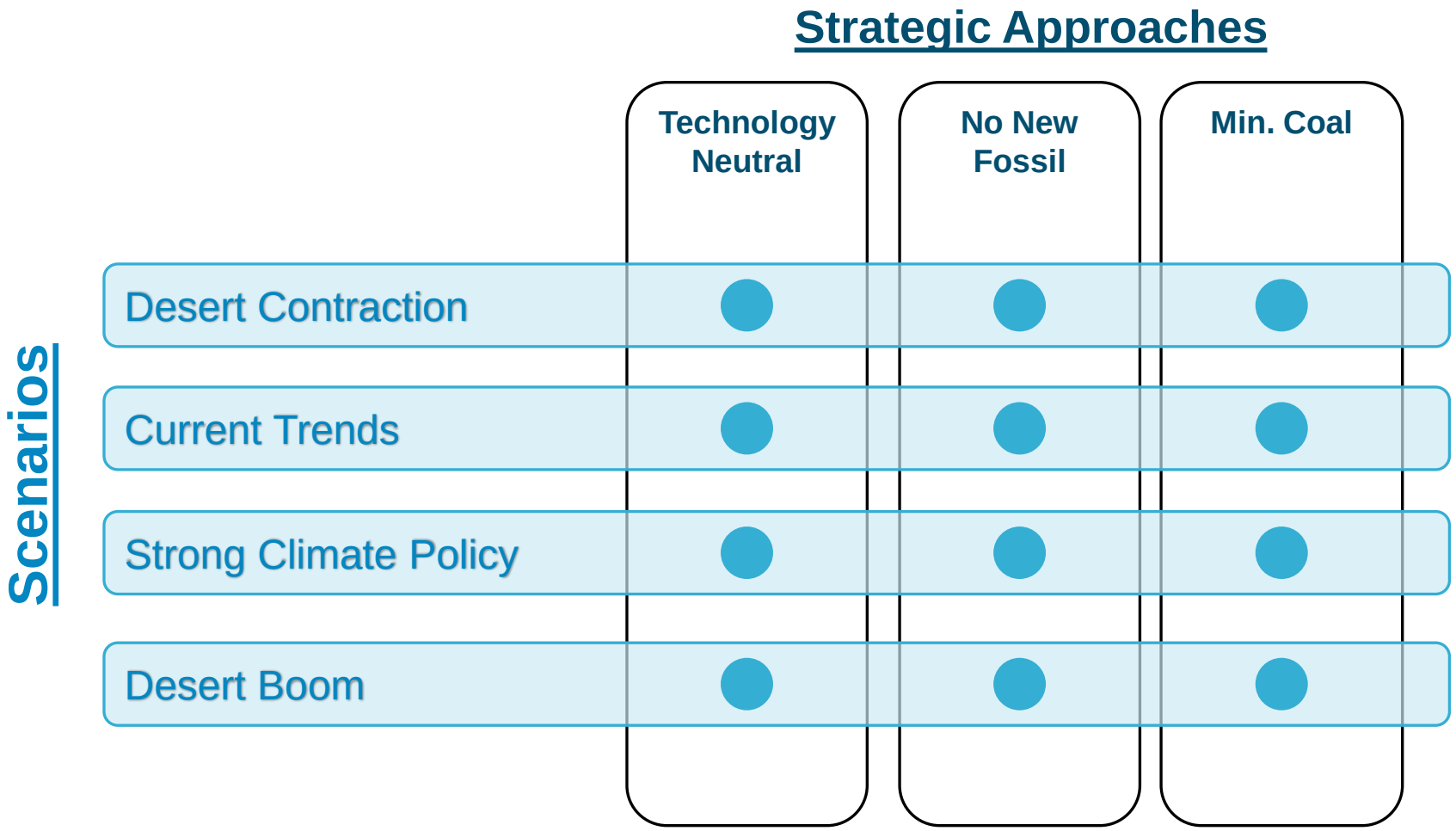
new funding for a wide range of clean energy technologies and programs

As part of the ISP, SRP held a Technical Working Session on the IRA and the analysis factors in IRA incentives.

NERC: North America faces increased reliability risks

Source: North American Electric Reliability Corporation (NERC) 2023 Summer Reliability Assessment

System-Wide Analysis



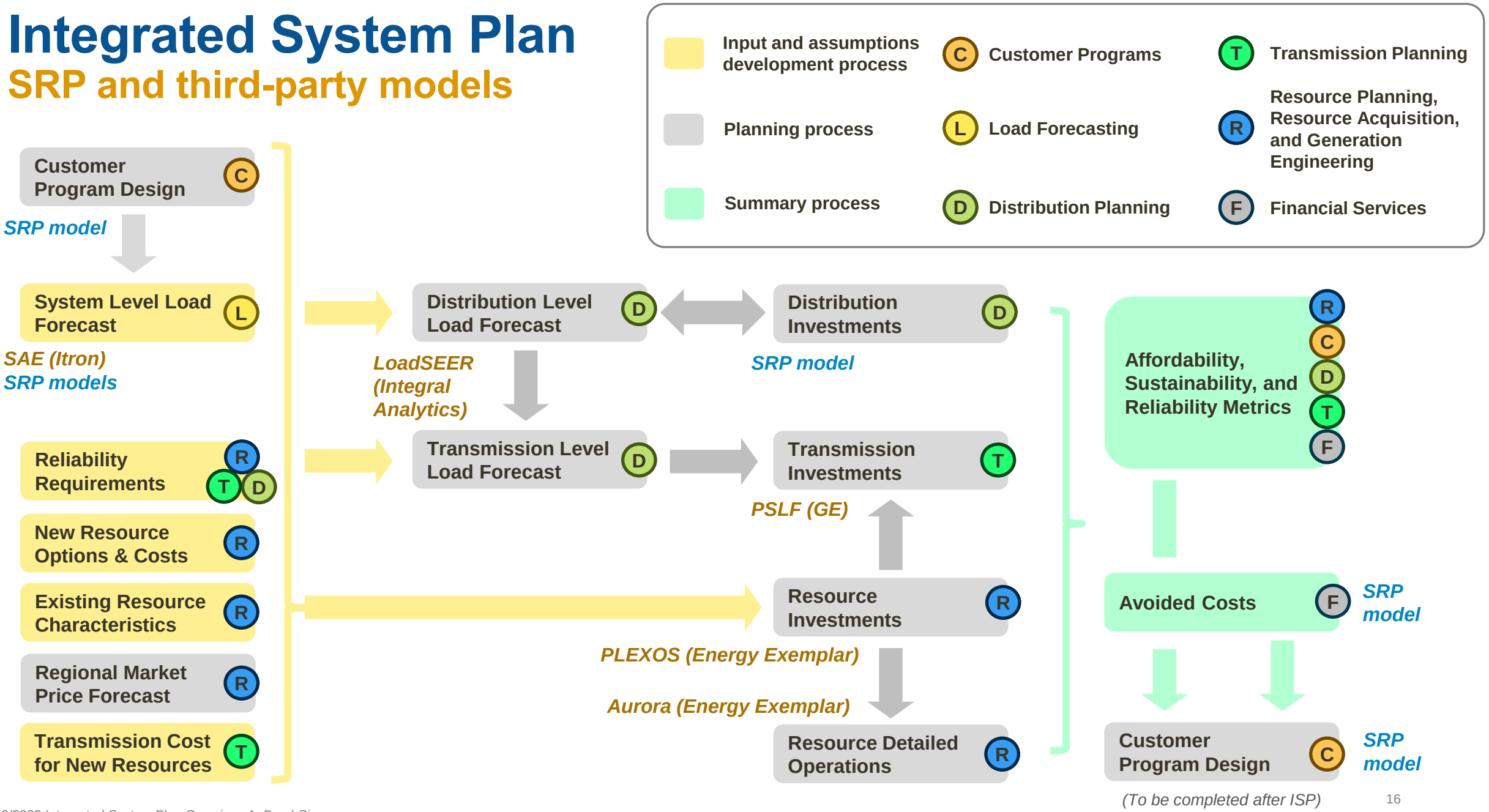
12 Scenario-Based System Plans

+

30 Sensitivity Cases

Integrated System Plan

SRP and third-party models



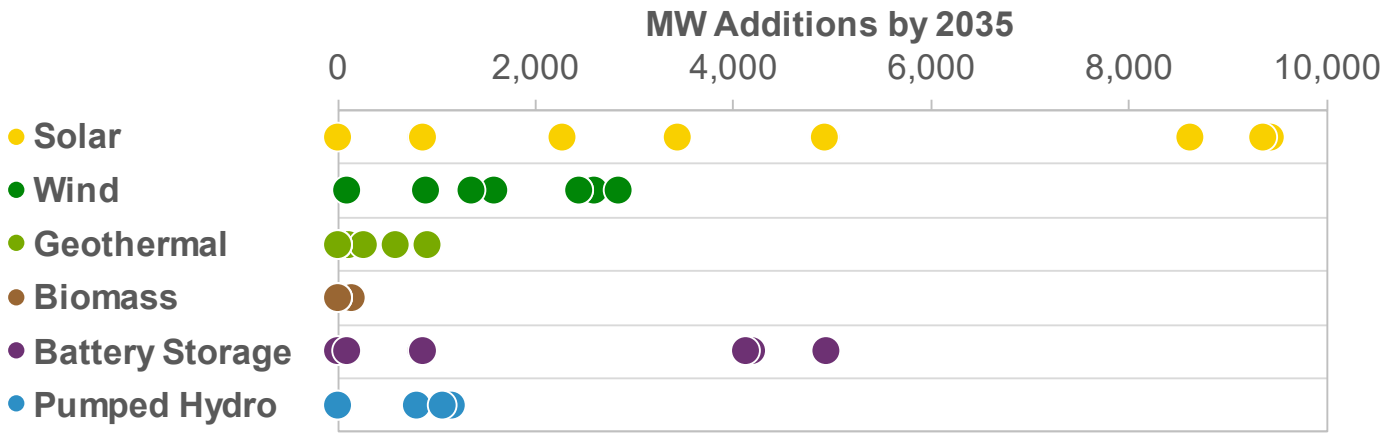
Integrated System Plan: System Strategies

Energy Investments

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

Renewable and Storage Resources Reduce Fuel Costs and Contribute to Improved Sustainability

The ISP analysis identified a range of renewable and storage additions that vary depending on future planning conditions.



Different amounts of renewable and storage additions lead to different sustainability outcomes:

Reduced Carbon Intensity

74 to 96%

vs. 2005 baseline (SRP goal of 65%)

Reduced Water Usage Intensity

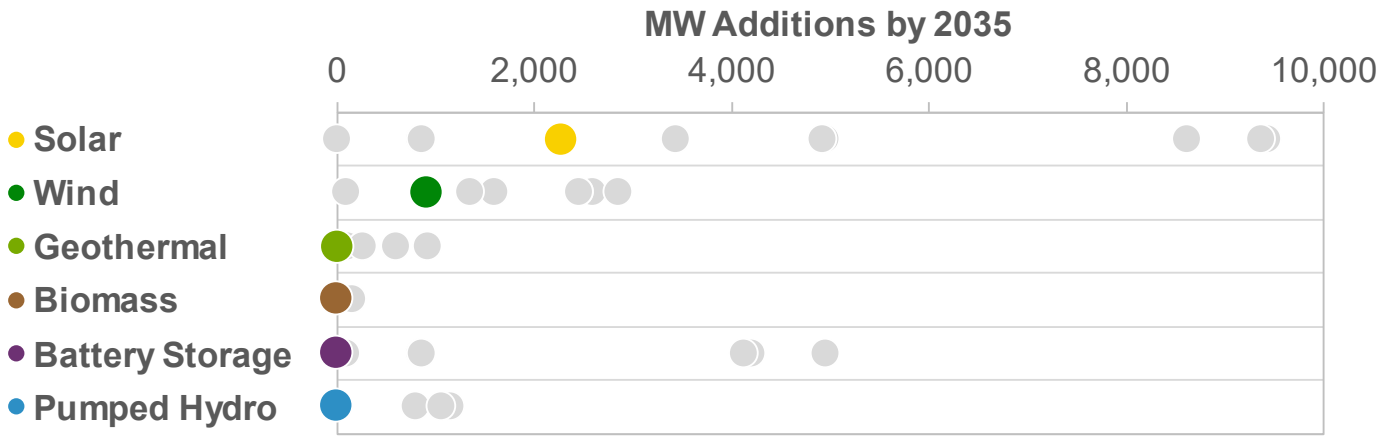
31 to 71%

vs. 2005 baseline (SRP goal of 20%)

Renewable and Storage Resources Reduce Fuel Costs and Contribute to Improved Sustainability

Lower renewable & storage additions are associated with smaller reductions in carbon and water usage intensity

Tech Neutral, Current Trends case:



Renewable & storage additions under a mid case planning scenario:

+3,150 MW

(second lowest among cases)

Reduced Carbon Intensity

75%

vs. 2005 baseline (third smallest reduction)

Reduced Water Usage Intensity

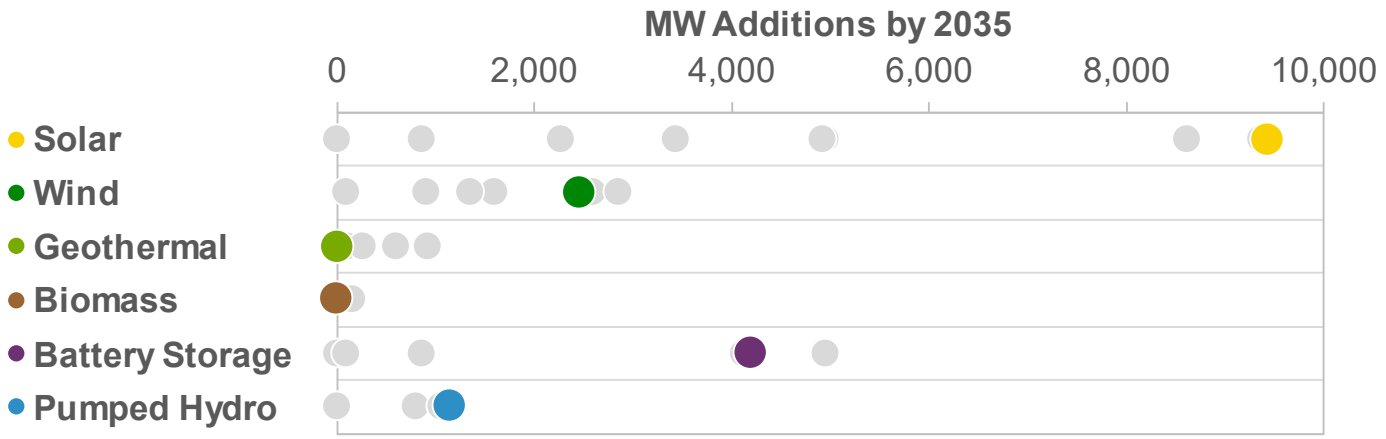
37%

vs. 2005 baseline (second smallest reduction)

Renewable and Storage Resources Reduce Fuel Costs and Contribute to Improved Sustainability

Higher renewable & storage additions are associated with larger reductions in carbon and water usage intensity

Tech Neutral, Strong Climate Policy case:



Renewable & storage additions under an aggressive federal clean energy requirement scenario:

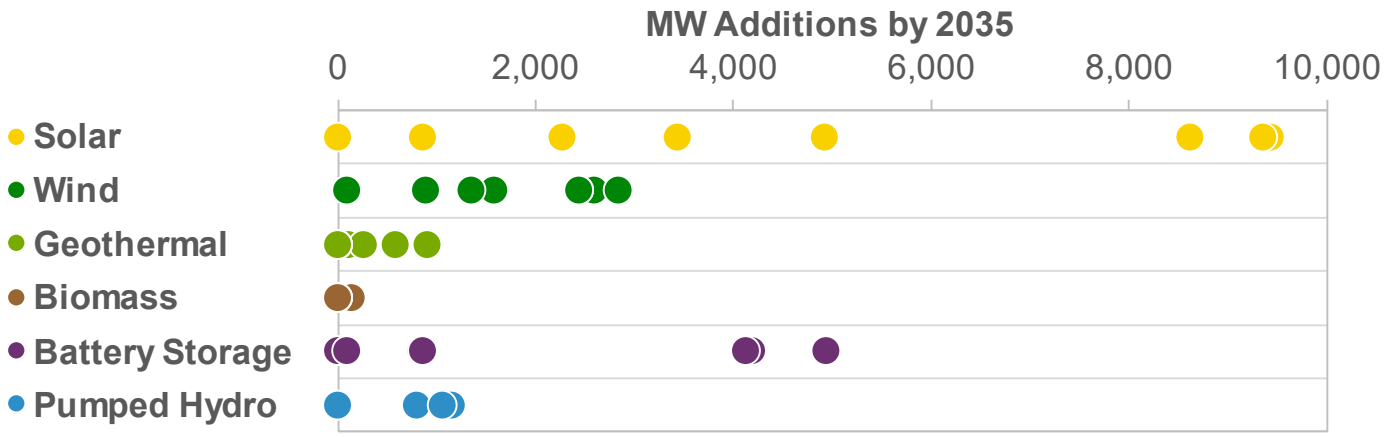
+17,200 MW

(highest among cases)

Reduced Carbon Intensity	Reduced Water Usage Intensity
91%	**67%**
vs. 2005 baseline (third largest reduction)	*vs. 2005 baseline (third largest reduction)*

This outcome could be driven by factors outside of SRP's control, including an aggressive federal clean energy requirement

Renewable and Storage Resources Reduce Fuel Costs and Contribute to Improved Sustainability



Significant quantities of new renewables & storage resources across cases point to their role in improving sustainability and managing fuel consumption

A focus on adaptivity and flexibility will position SRP to adjust its portfolio to meet customer needs at lowest costs

Integrated System Plan: System Strategies

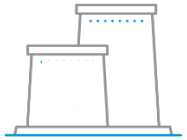
Energy Investments

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.

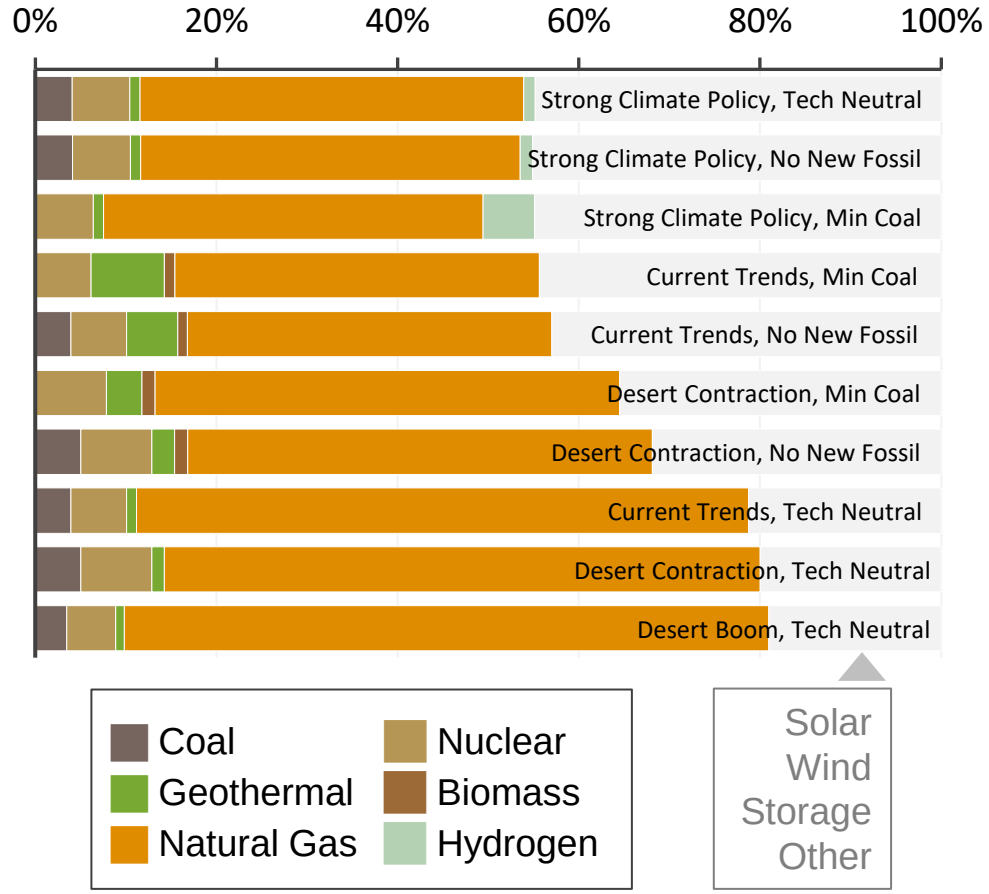
New Firm Resources Are Needed



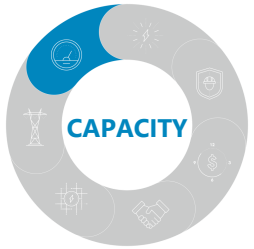
Firm resources are key to maintaining reliability

- Across all plans, firm resources meet at least **55%** of reliability needs in 2035
- Without new firm resources, reliability is compromised by **2028** under a high load growth scenario

Share of Adequacy Reliability Requirement Met by Firm Resources Across Cases



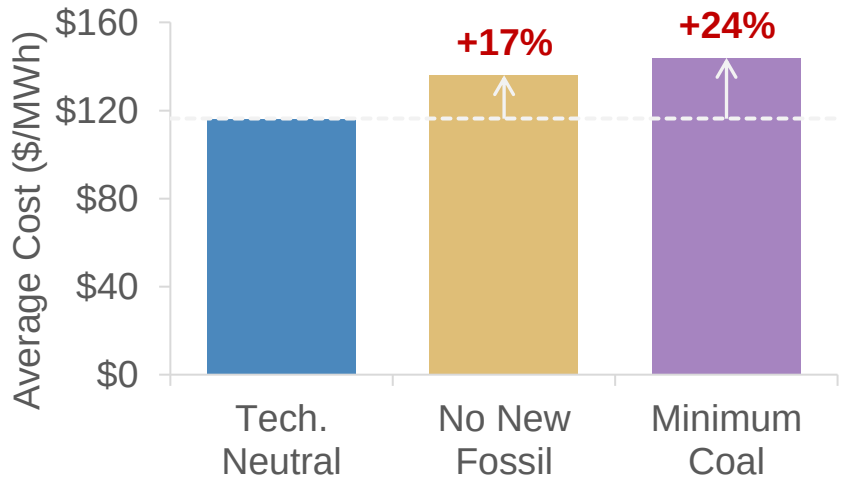
New Firm Resources Are Needed



New natural gas is part of a least-cost portfolio

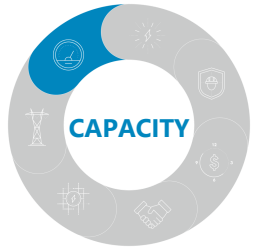
- On average, a least-cost plan adds **>2,000 MW** by 2035
- Without new natural gas, costs are **17-24%** higher in 2035 in the Current Trends scenario

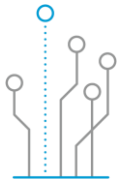
Average System Cost in 2035 Under the Current Trends Scenario



In the Desert Contraction scenario, the cost increase is 7-11%. The Desert Boom cases do not meet the reliability requirements but would have even greater cost increases.

New Firm Resources Are Needed





Emerging technology may help to meet a portion of firm resource needs

- Hydrogen is selected in cases that accelerate hydrogen availability and include an aggressive federal carbon target

Green hydrogen capacity additions in Strong Climate Policy scenario cases:

Approach	Hydrogen Capacity
Tech Neutral	178 MW
No New Fossil	195 MW
Minimum Coal	790 MW

Any green hydrogen capacity additions would require the development of supply, storage, and transportation infrastructure, which would require further advancements in the industry.

The ISP also evaluated nuclear small modular reactors (SMR) and gas with carbon capture and sequestration (CCS), but these resources were not selected by 2035 in any cases.

Integrated System Plan: System Strategies

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

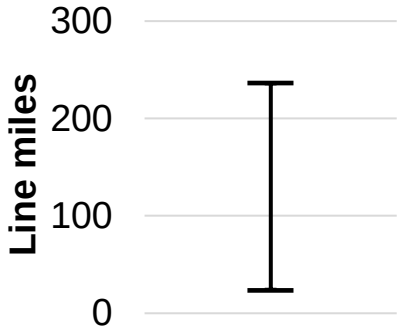
Capacity Investments
Invest in firm generation, including natural gas, to support reliability and manage affordability, while also supporting advancement of emerging firm technologies.

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

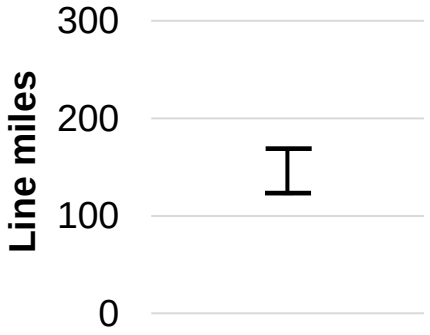
Proactive Transmission Planning Enables Load Growth and Addition of Generating Resources

A significant amount of transmission infrastructure is needed by 2035:

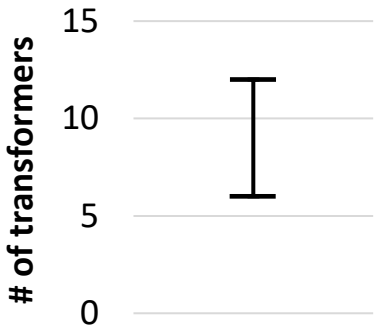
New
500 kV lines



New and upgraded
230 kV lines



New
500/230 kV transformers



Long lead times for infrastructure necessitate a proactive approach.

500 kV lines
5-9+ years

230 kV lines
3-7 years

500/230 kV transformers
3-5 years

Integrated System Plan: System Strategies

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

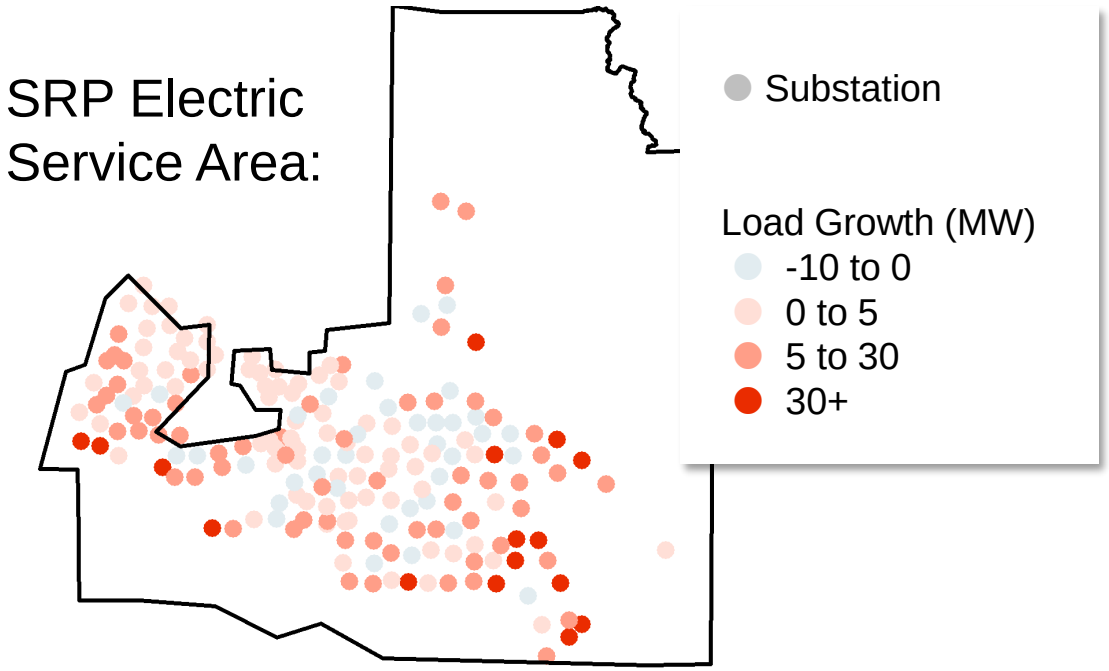
Capacity Investments
Invest in firm generation, including natural gas, to support reliability and manage affordability, while also supporting advancement of emerging firm technologies.

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.

Distribution Readiness for Growth and Evolving Customer Needs

Load growth will drive additional infrastructure needs for the distribution system…



…while changes in *how* our customers use energy will require innovation and flexibility

500,000
electric vehicles

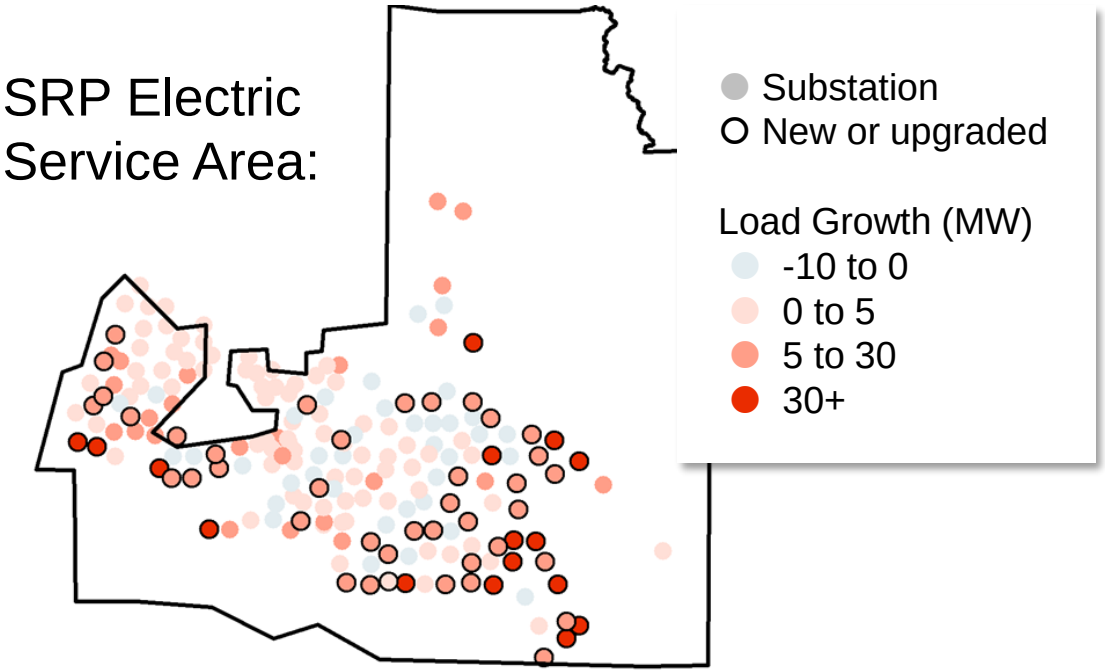
1,300 MW
distributed solar

300 MW
demand response

Distribution Readiness for Growth and Evolving Customer Needs

Load growth will drive additional infrastructure needs for the distribution system…

SRP Electric Service Area:



…while changes in *how* our customers use energy will require innovation and flexibility

500,000
electric vehicles

1,300 MW
distributed solar

300 MW
demand response

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.

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

Partnership and Supplier Solutions Can Help SRP Meet the Pace of Transformation through 2035

2,200-18,000 MW
new nameplate capacity

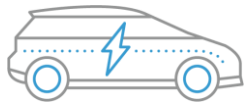
160-380 miles
new 230+ kV transmission lines

6-12
new 500/230kV transformers

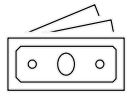
26-84
new distribution substation bays

3,800 GWh
total energy efficiency savings

300 MW
total demand response



500,000
total electric vehicles



Up to 10% IRA bonus
domestic content provisions*
**Public power must satisfy domestic content, or entire credit at risk*

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.

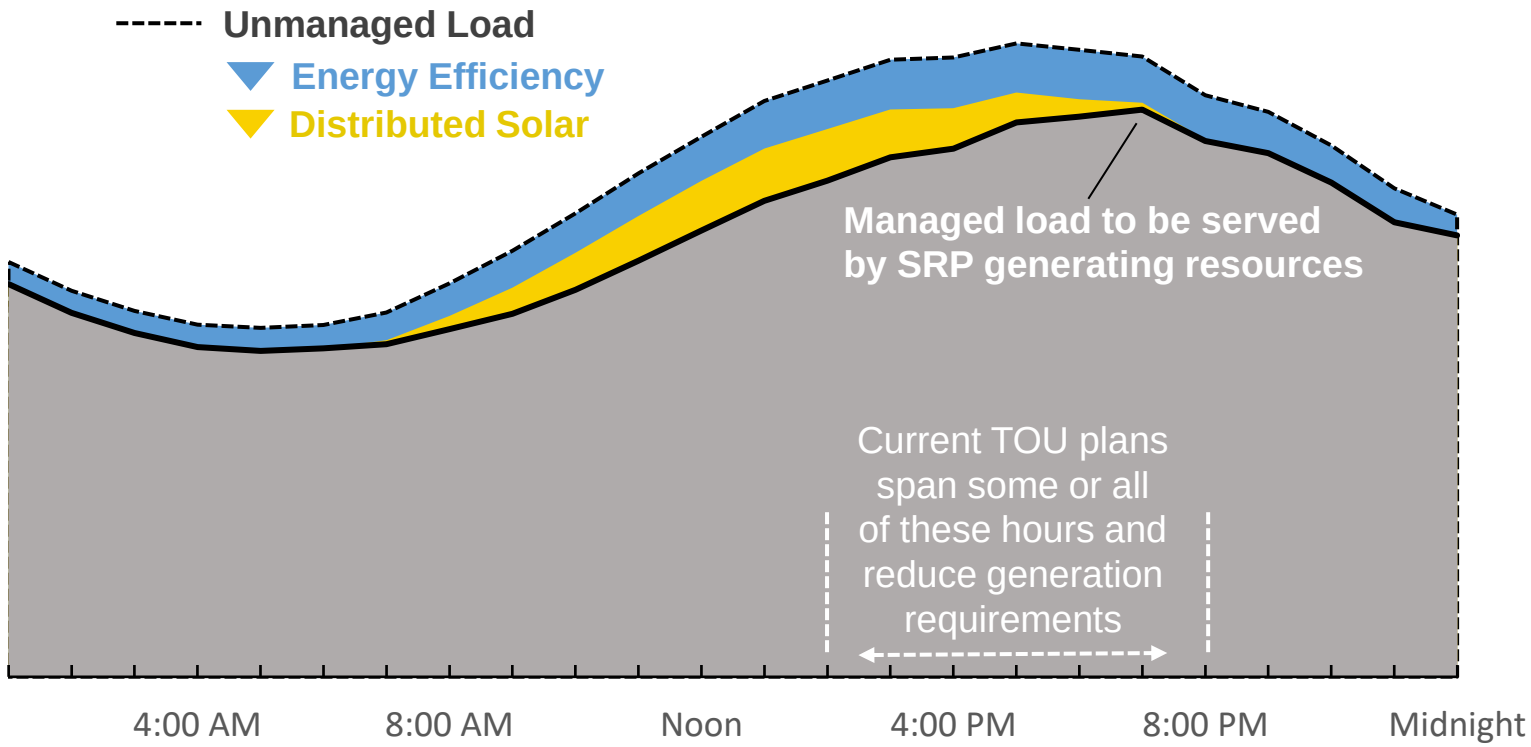
Evolution of Customer Programs & Pricing
Evolve pricing and customer programs to improve economy-wide carbon reductions and pace infrastructure development, while recognizing customers' diverse needs.

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

Customer Programs & Price Plans Help SRP Manage Peak Energy Demand

Existing customer programs and price plans are effective at managing peak energy demand today.

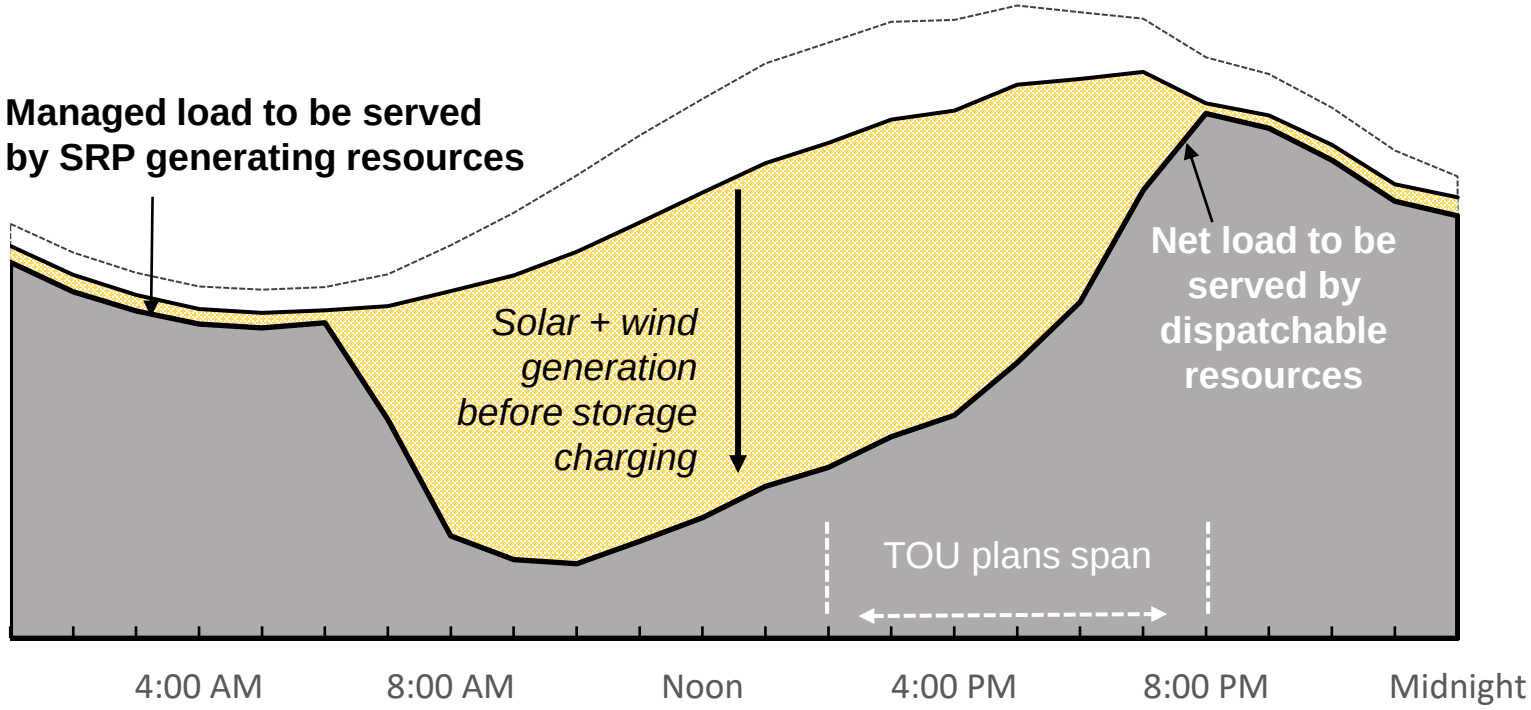
2035 Peak Day Projection



Customer Programs & Pricing Can Help SRP Meet New System Needs

As large amounts of solar and wind are added to the system, the "net load" must be served with dispatchable resources

2035 Peak Day Projection

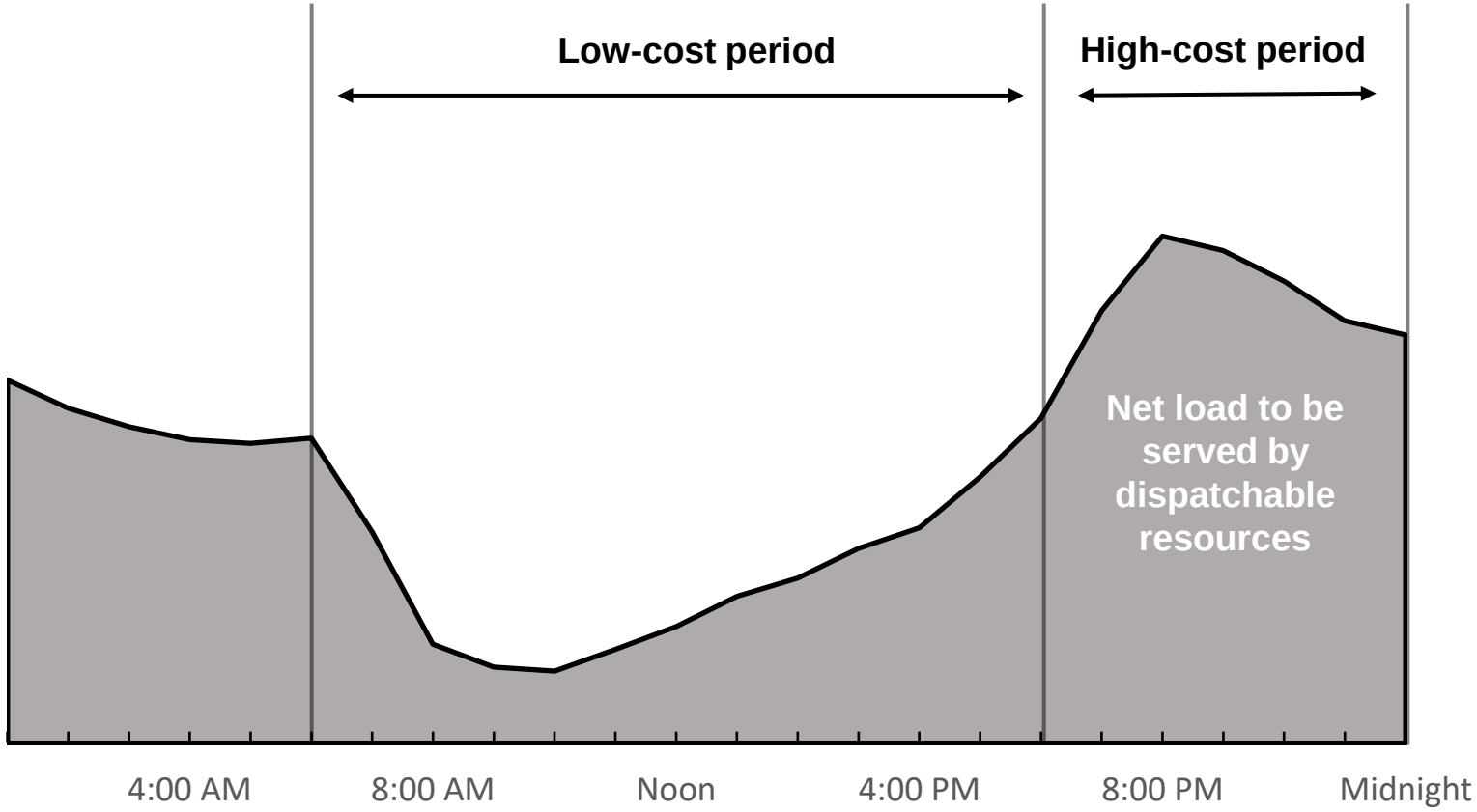


Customer Programs & Pricing Can Help SRP Meet New System Needs

As the system transforms, net load is the new target for pricing and programs.

- Late evening and overnight load reduction becomes more important
- Opportunity to shift load to mid-day, low-cost periods and build load during these periods

2035 Peak Day Projection



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.

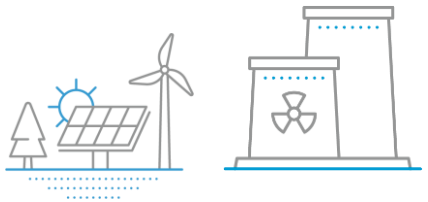
Strategic Investment & Reinforcement of Existing Assets
Reinforce and maximize value of existing infrastructure with strategic investments to manage affordability, and ensure future performance, grid security and resilience.

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.

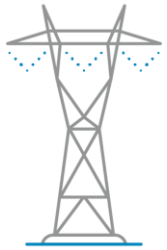
Partnerships & Suppliers
Explore partnerships, supply chain and development solutions that manage cost and availability to meet the pace of transformation

Existing Assets Are the Foundation for the Future System

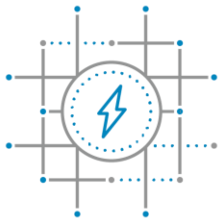
Any future planning scenario requires maintaining the existing system.



In 2035, SRP's existing and contracted generating assets make up an estimated **50%** of nameplate capacity, **70%** of reliability needs, and **45%** of carbon-free energy



In 2035, SRP's existing transmission lines make up an estimated **90%** of the total number of 230+ kV line miles



In 2035, SRP's existing distribution substation bays make up an estimated **85%** of the total number of substation bays

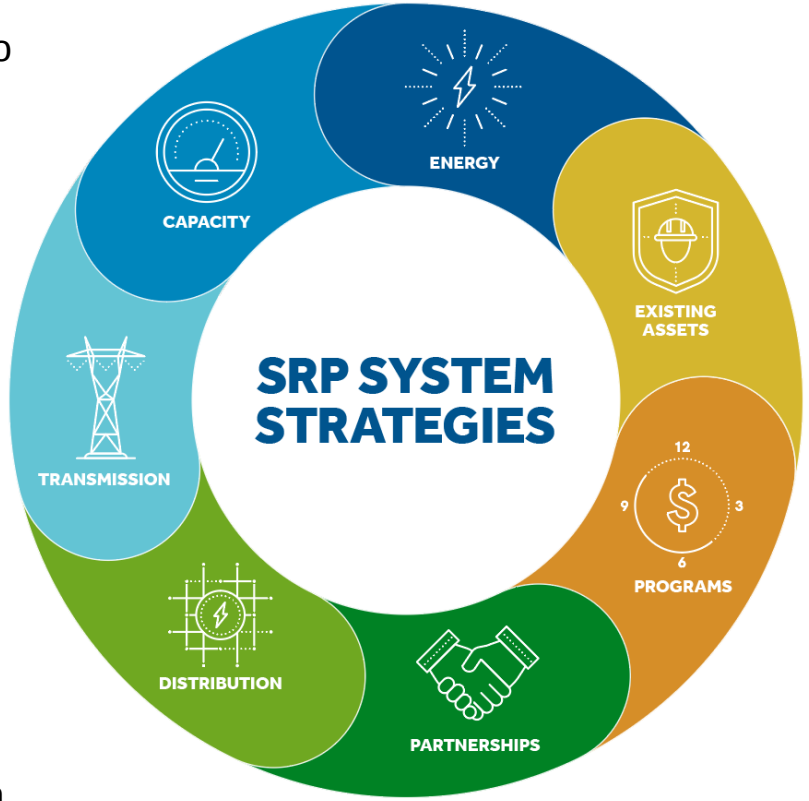
Integrated System Plan: System Strategies

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.

Draft Balanced System Plan

Angie Bond-Simpson
Sr. Director, Resource Management

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

The System Strategies Inform the Draft Balanced System Plan

Energy Investments
The draft Balanced System Plan adds mostly renewable and storage resources to manage fuel consumption, drive carbon and water reductions.

Capacity Investments
The draft Balanced System Plan includes new natural gas capacity to support reliability and manage affordability.

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

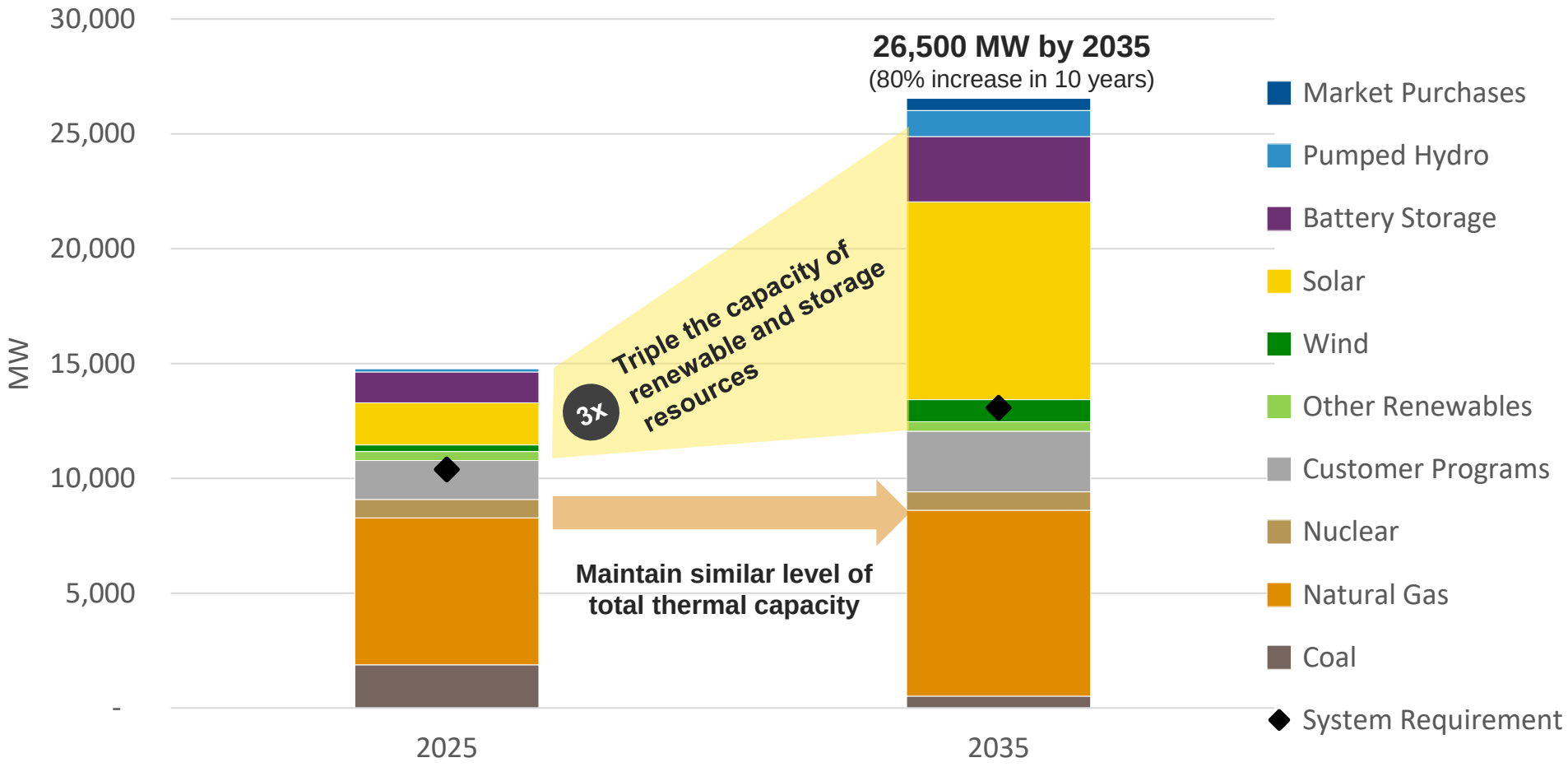
Distribution Innovation
The draft Balanced System Plan adds distribution infrastructure needed to meet growing load, including that from electric vehicles, while preparing the grid for future customer innovation

Strategic Investment & Reinforcement of Existing Assets
The draft Balanced System Plan maintains existing system infrastructure, barring resources with planned retirement dates.

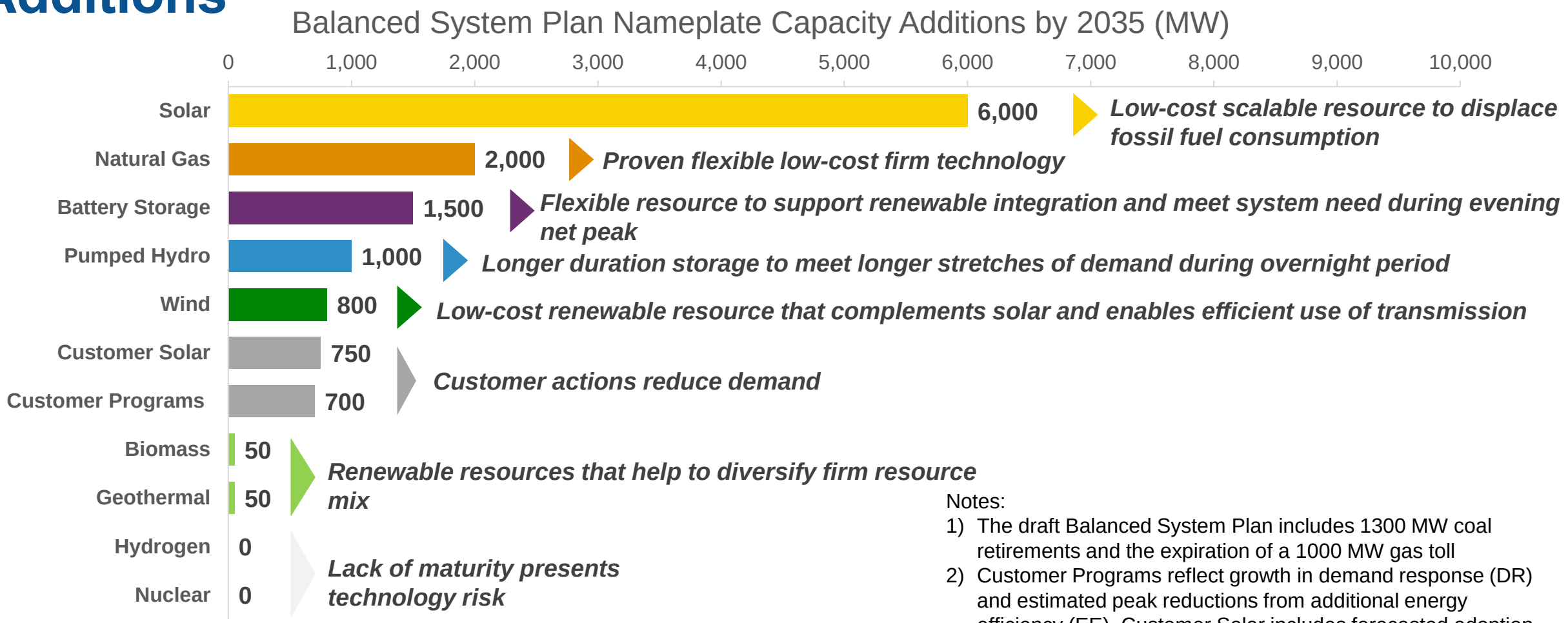
Evolution of Customer Programs & Pricing
The draft Balanced System Plan grows customer programs through 2035. The draft Balanced System Plan doesn't include the impacts of changes to pricing, but SRP anticipates that could mitigate some system needs.

Partnerships & Suppliers
The draft Balanced System Plan will seek partners for emerging technology research and domestic suppliers for renewable and storage self-build options.

Draft Balanced System Plan: 2025 and 2035 Total Capacity



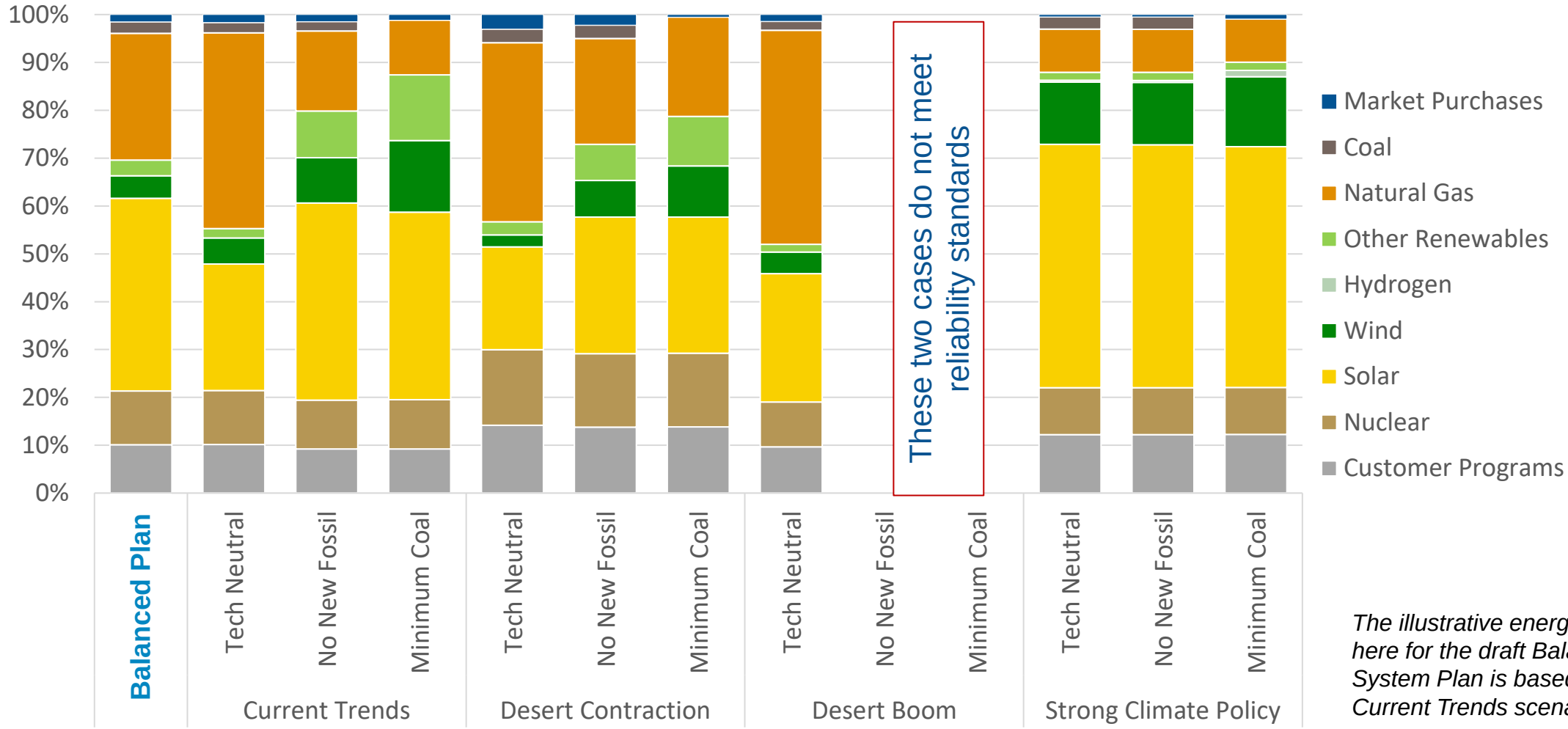
Draft Balanced System Plan: Diversified Resource Additions



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

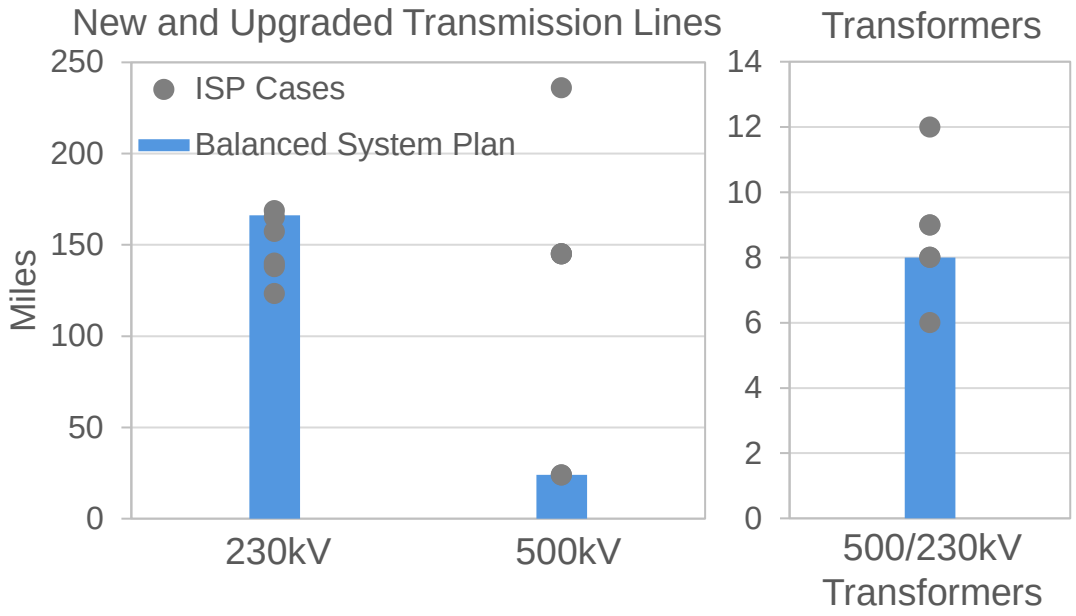
Draft Balanced System Plan: 2035 Energy Mix

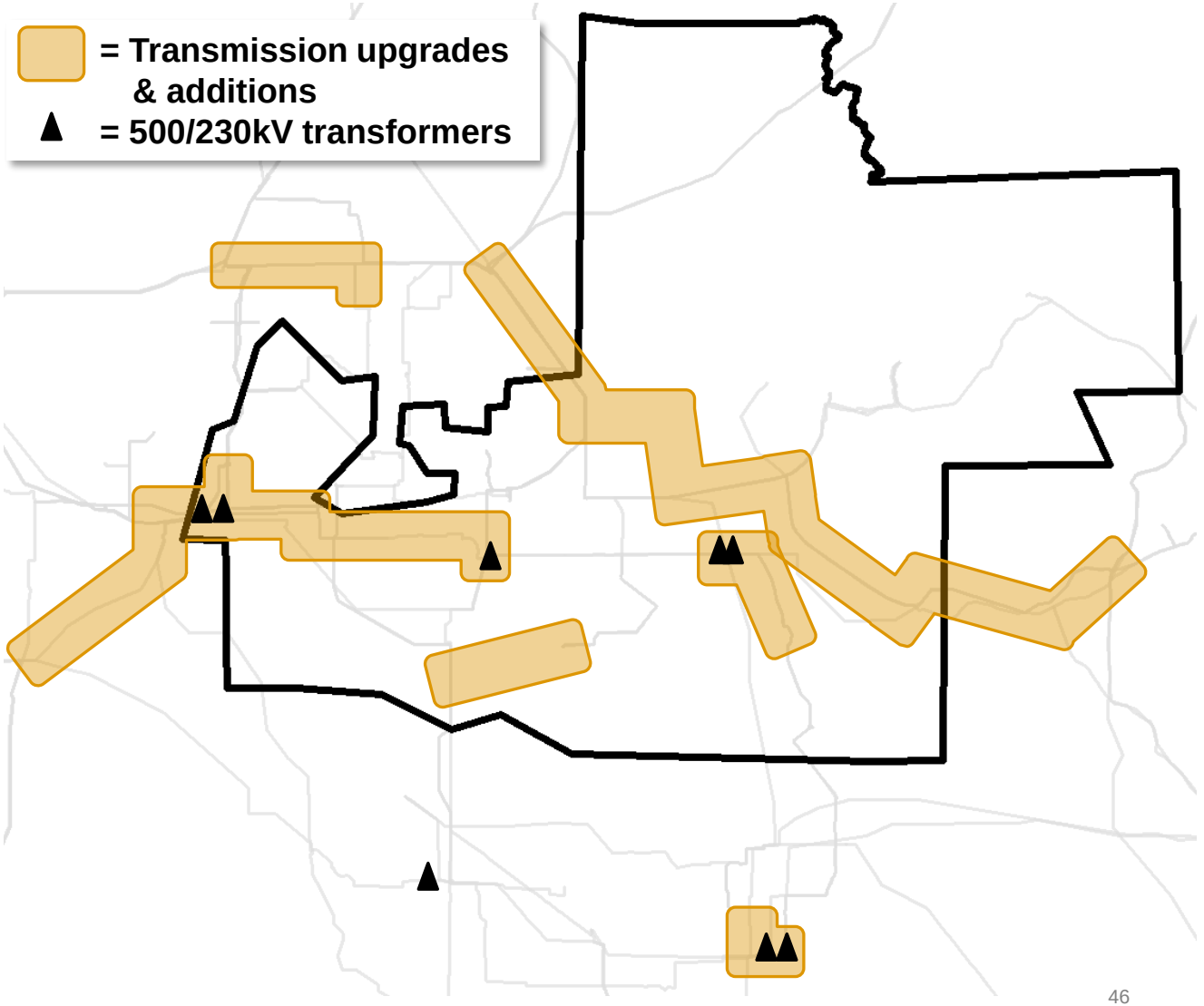


The illustrative energy mix shown here for the draft Balanced System Plan is based on the Current Trends scenario.

Draft Balanced System Plan: Transmission Additions by 2035

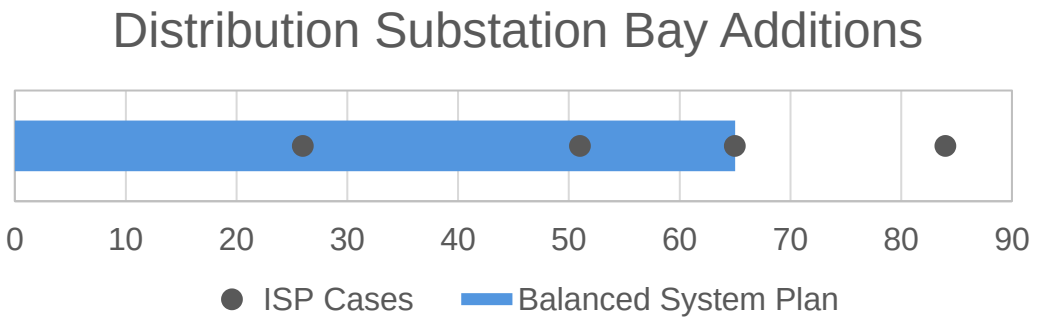
The Balanced System Plan includes transmission infrastructure needed to meet load and generation growth, balancing a hub and pro-rata resource location strategy

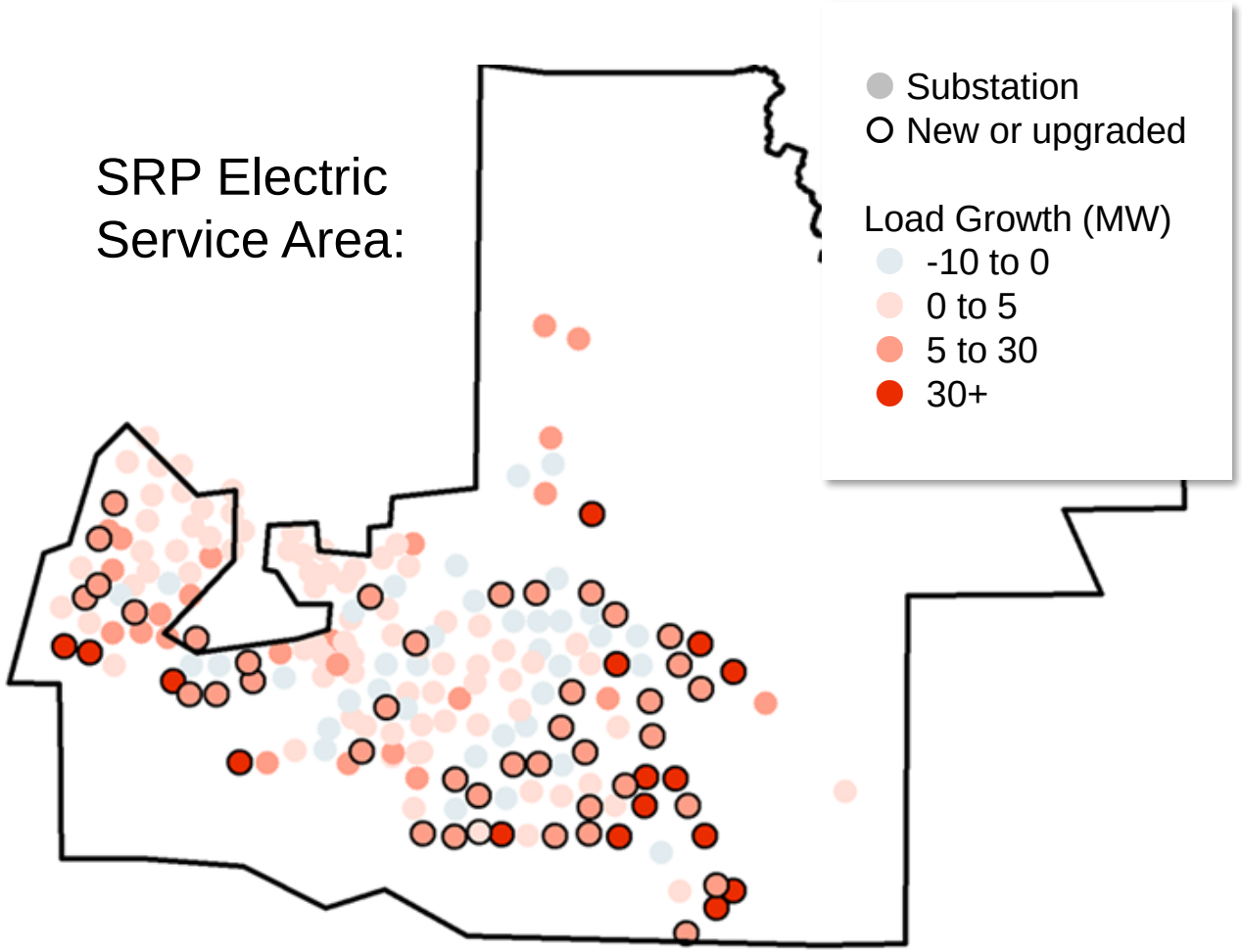




Draft Balanced System Plan: Distribution Additions by 2035

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.

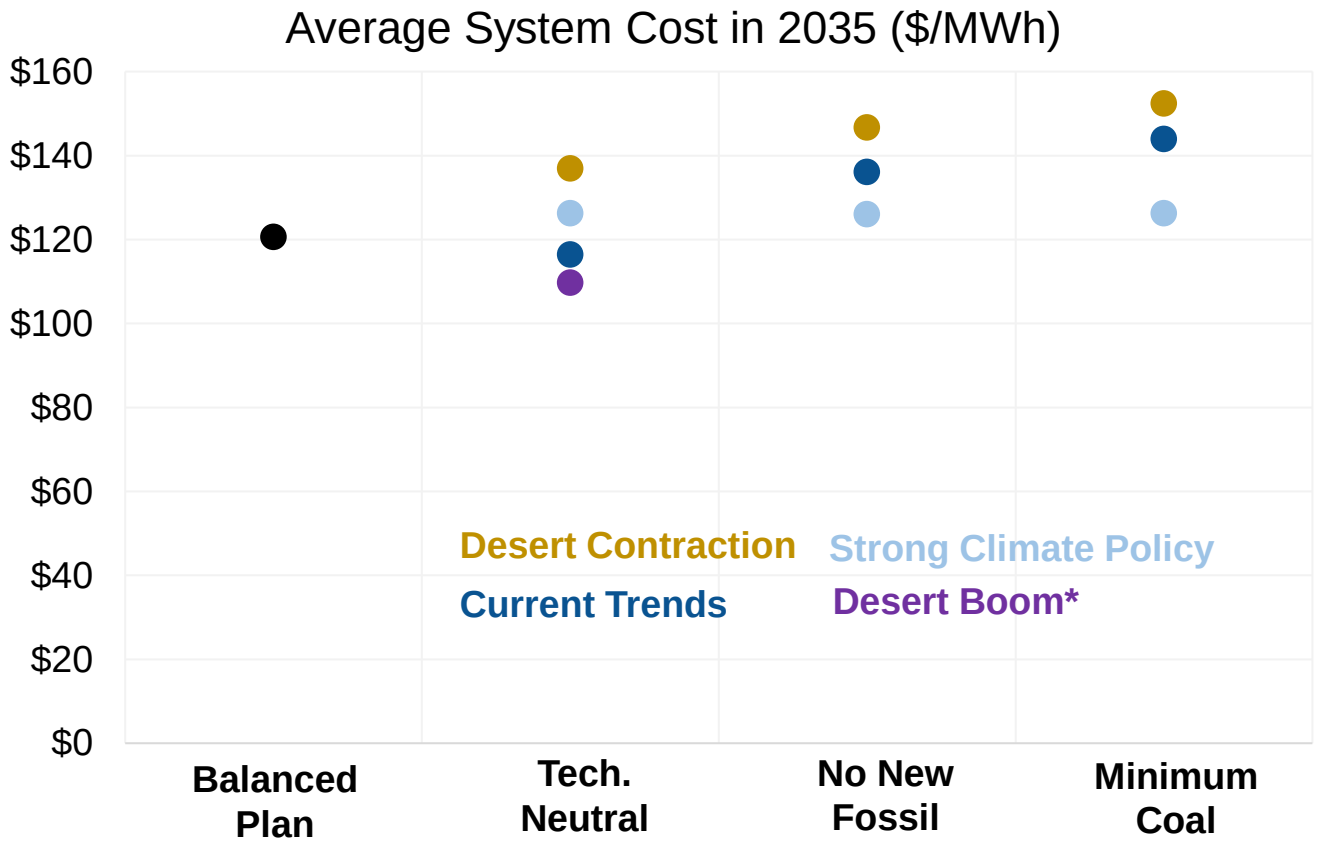




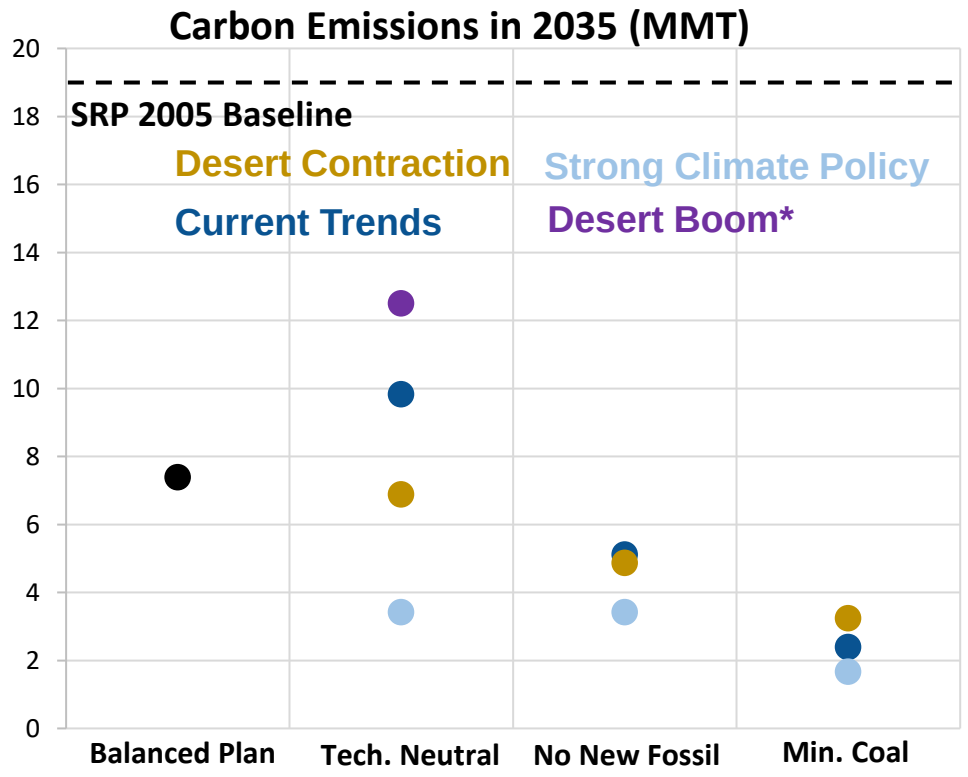
Proposed Balanced System Plan Affordability

Balanced Plan: $121/MWh in 2035

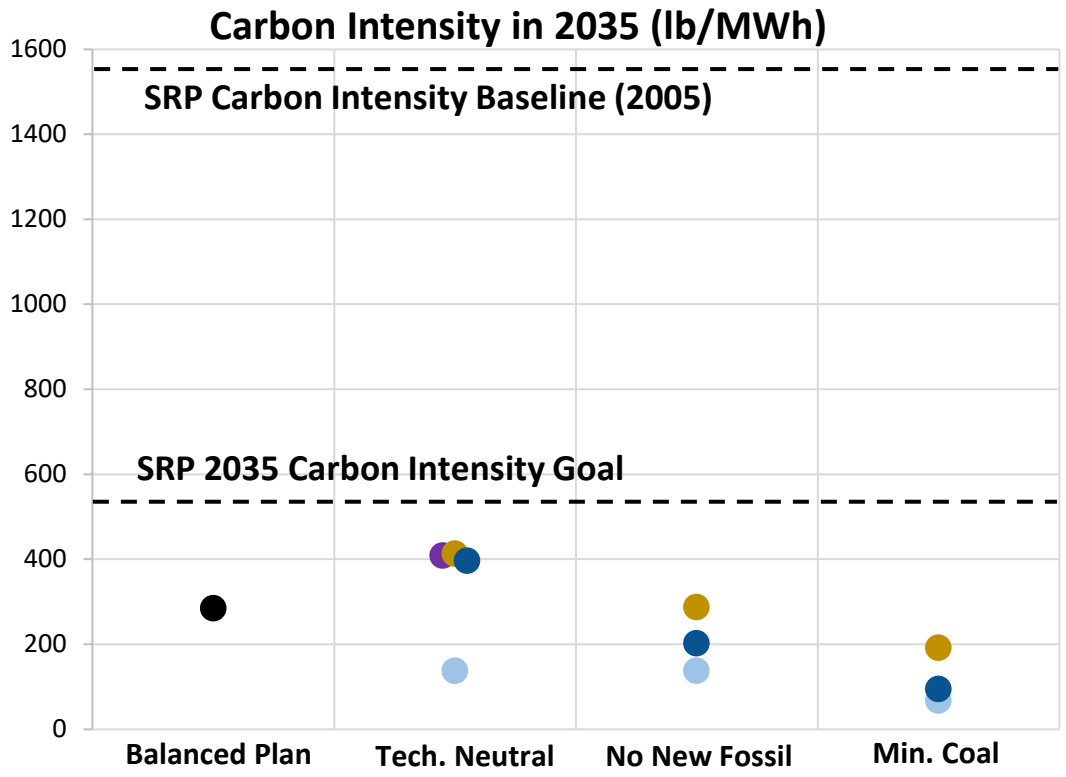
Reference: $117/MWh in 2025



Balanced Plan Carbon Emission Comparison



Balanced Plan: 7.4MMT, 61% reduction from 2005



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

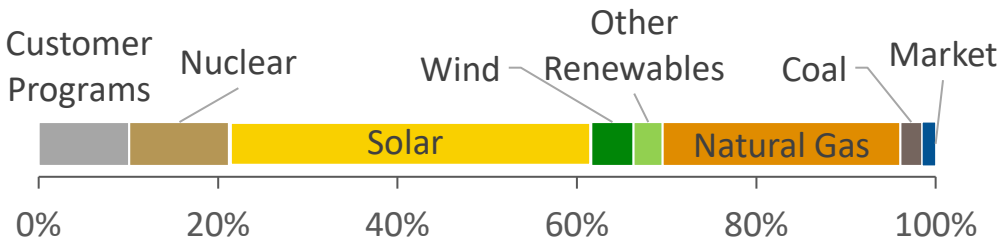
Balanced System Plan (2035)

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

Draft 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

Intended Use of the Balanced System Plan

- The Balanced System Plan maps out an illustrative path through 2035. It provides a tangible, unified vision that reflects the ISP System Strategies.
- The Balanced System Plan will provide a common starting point for future planning efforts, and serve as a basis for various external reporting and communication activities
- SRP will continue to monitor factors impacting system planning, including but not limited to factors listed below, and may deviate from this illustrative path as necessary to adapt to change.
    - Population and economic growth
    - Climate change
    - Evolving customer needs
    - Technological advancements
    - Fuel costs
    - Supply chain risk
    - IRA implementation progress
    - Regulatory changes

ISP Actions

Adam Peterson
Director, Corporate Pricing

Dan Dreiling
Director, Customer Programs

Vanessa Kisicki
Director, Distribution Strategy

Grant Smedley
Director, Resource Planning, Acquisition & Development

Bryce Nielsen
Director, Transmission Planning & Development

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.

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

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, 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

Partnerships & Suppliers

Evolution of Customer Programs & Pricing

Energy Investments

Potential to defer

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

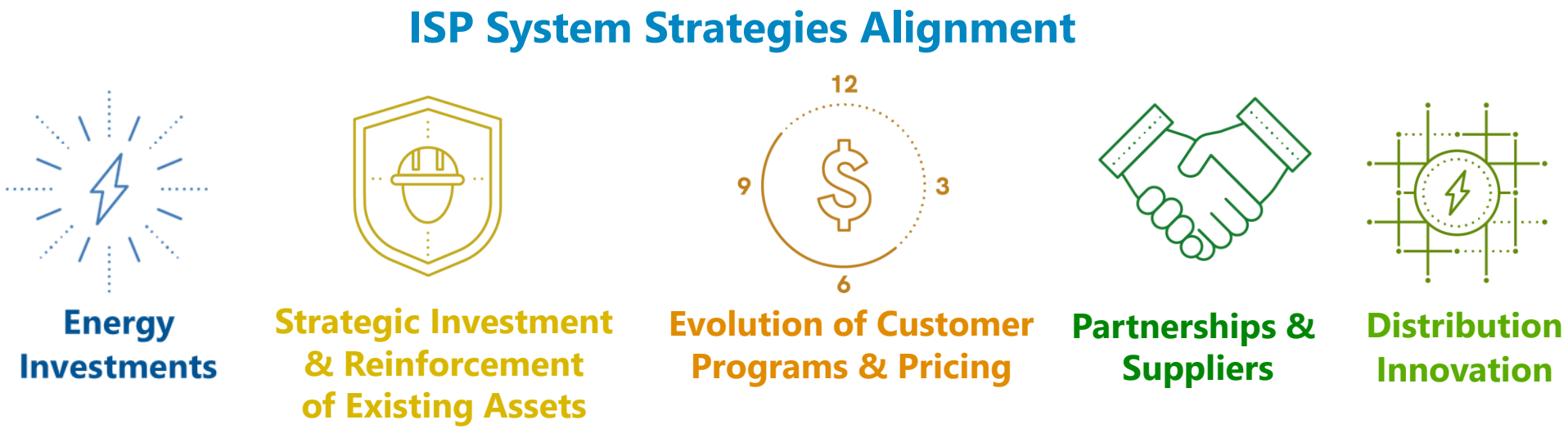
Distribution Innovation

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 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

Compare with self-build options and ensure that SRP can select resource technologies that meet SRP's reliability and sustainability goals while minimizing total system cost

ISP System Strategies Alignment

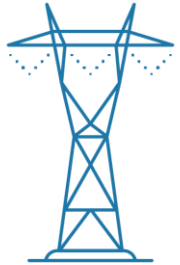
ISP Action #8: Coal Transition Action Plan

- Coordinate with co-owners to develop a path forward for the Springerville Generating Station
- Prepare plans for repurposing the Coronado Generation 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



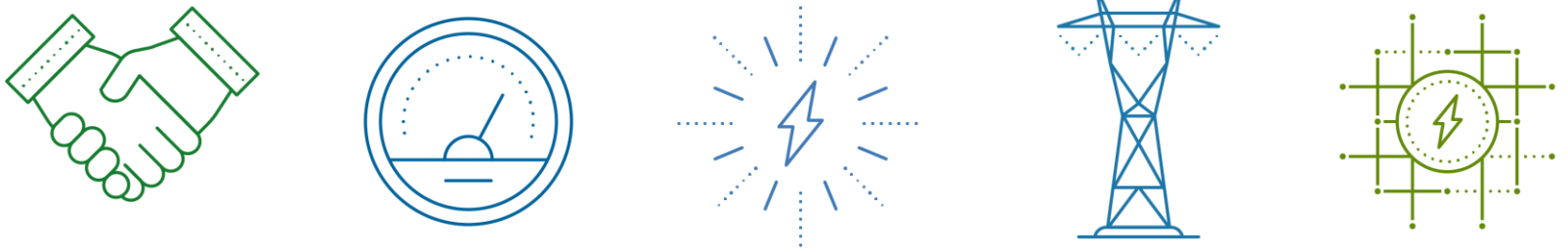
Proactive Transmission

Partnerships & Suppliers

ISP Action #9: Proactive Siting

Develop and initiate siting research that considers collaborative community engagement, land, resources, and transmission and distribution 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

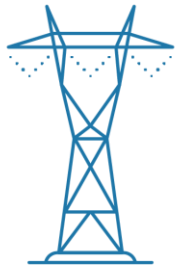
ISP Action #10: Regional Transmission

Pursue 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

Panel Q&A

Bobby Olsen
AGM & Chief Planning, Strategy & Sustainability Executive

Angie Bond-Simpson
Sr. Director, Resource Management

Adam Peterson
Director, Corporate Pricing

Dan Dreiling
Director, Customer Programs

Bryce Nielsen
Director, Transmission Planning & Development

Vanessa Kisicki
Director, Distribution Strategy

Grant Smedley
Director, Resource Planning, Acquisition & Development

Nick Schlag
Partner (E3)

Wrap Up and Next Steps

Angie Bond-Simpson
Sr. Director, Resource Management

thank you!

Lunch