

SRP Summer Stakeholder Series – Near-Term Planning: Part 2

August 23rd, 2021

Welcome

Kelly Barr

Associate General Manager Chief Strategy and Corporate Services & Sustainability Executive

Safety & Sustainability Minute

Safety/Sustainability

Smith Driving System



Kitchen waste composting



Welcome SRP Board and Council Observers



John Hoopes
SRP Vice President



Randy Miller
SRP Board Member



Anda McAfee
SRP Board Member



Jack White
SRP Board Member



Larry Rovey
SRP Board Member



Suzanne Naylor
SRP Council Member



Rocky Shelton
SRP Council Member

Agenda

Time		Topics	Presenter
10:00-10:10	10 mins	Welcome and Opening Remarks	Kelly Barr
10:10-10:15	5 mins	Agenda Overview and Participation Opportunities	Kearns & West
10:15-11:25	70 mins	SRP's Next Resource Decisions in the Near-Term "AND" Strategy with Q&A	Grant Smedley Dan Dreiling Bill McClellan & Spence Wilhelm SRP Subject Matter Experts
11:25-11:30	5 mins	Next Steps & Wrap-up	Angie Bond-Simpson



Summer Series and Meeting #4 Overview

Joan Isaacson, Facilitator
Kearns & West

ISP Summer Series Overview

Meeting #1

Since We Last Met

Update on 2017-18 IRP Strategic Resource Directions progress.

Meeting #2

Near-Term Planning

Educate on forces of change affecting the industry and near-term planning.

Collect perspectives from stakeholders.

Meeting #3

Where We Want to Go “Long-Term”

Engage stakeholders in early development of the ISP.

Meeting #4

Near-Term Planning: Part 2

Inform stakeholders about the next decisions in SRP’s near-term plan.

Guides for Productive Virtual Meetings

- Actively participate
- Be respectful of other perspectives
- Listen for understanding
- Stay concise to allow time for everyone to participate
- Enjoy the meeting

Near-Term Resource Updates & Announcements

Grant Smedley, Director

Resource Planning, Acquisition & Development (SRP)

Strong Economic Growth Ahead

Maricopa County is the #1 fastest growing county in the U.S.

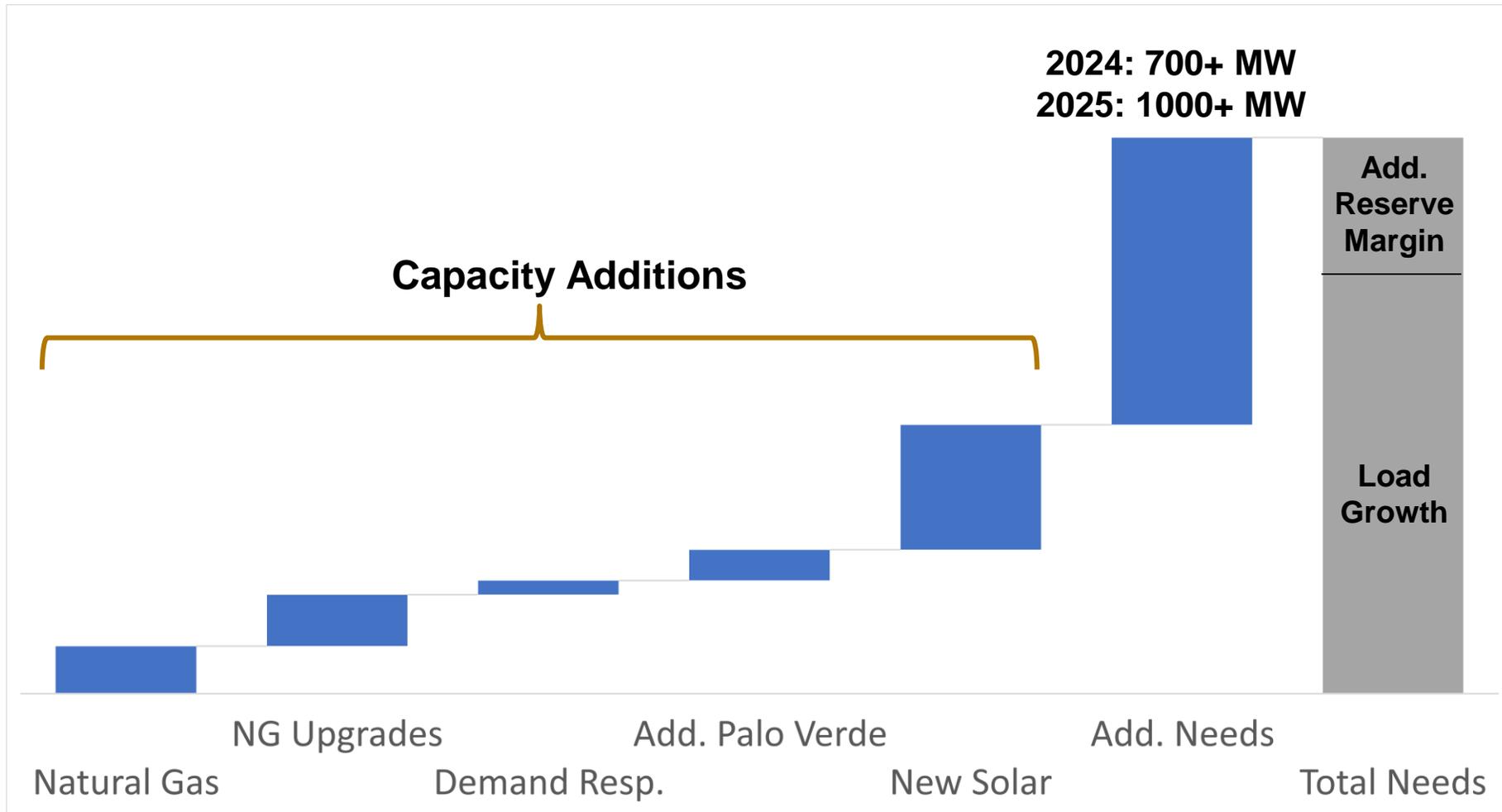
Phoenix is one of only two major cities to have recovered at least 85% of jobs lost during the pandemic.

The Southwest is becoming America's advanced manufacturing hub.

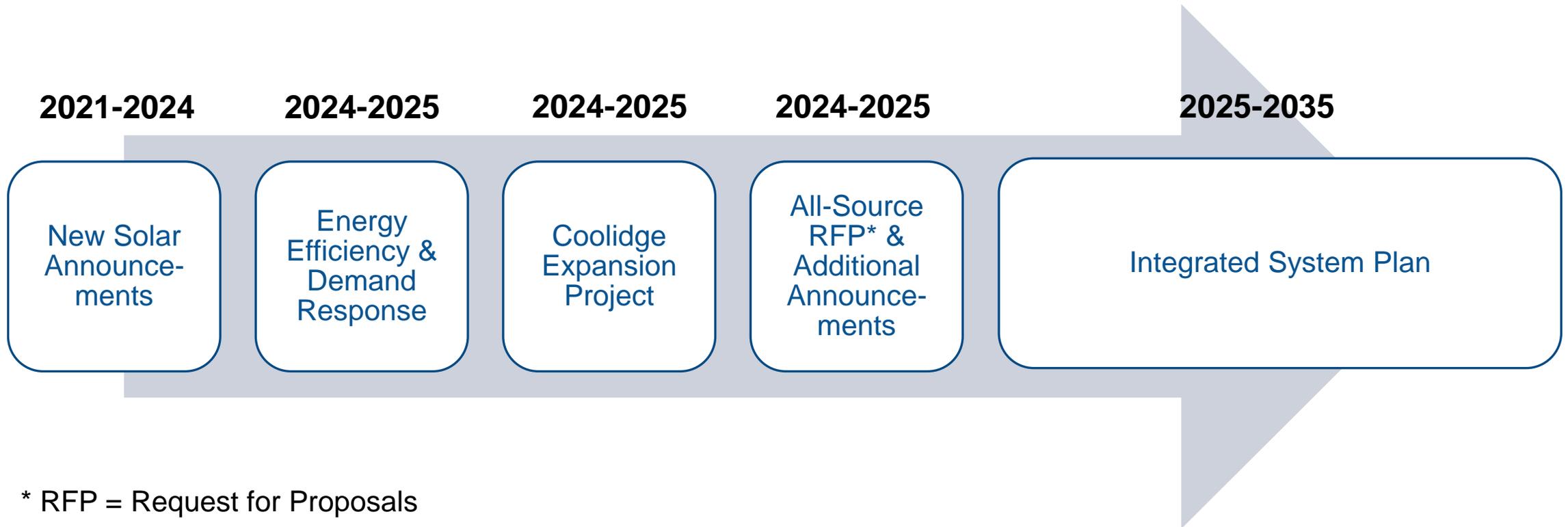
Housing permits are at the highest since mid-2000's: >100/day.



Near-Term Resource Additions and Needs



Addressing Near-Term Needs – “AND” Strategy



Solar PPA Updates: 500 MW of New Solar PPAs

2020

2024



2020
East Line 100MW



2020
Saint 100MW



2021
Central Line
100MW



2023
Sonoran 260MW &
Storey 88MW Solar +
Storage



2022
West Line
100MW



2023
Valley Farms
200MW



2023
Randolph
200MW



2023-2024
Additional Projects
877MW

Project: West Line Solar

Developer: AES

Size: 100 MW

Status: PPA Executed

Commercial Operation Date (COD): October 2022

Location: Eloy, AZ

Project: Valley Farms Solar

Developer: NextEra Energy Resources

Size: 200 MW

Status: PPA Executed

Commercial Operation Date (COD): December 2023

Location: Coolidge, AZ

Project: Randolph Solar

Developer: EDP Renewables North America

Size: 200 MW

Status: PPA Executed

Commercial Operation Date (COD): June 2023

Location: Coolidge, AZ

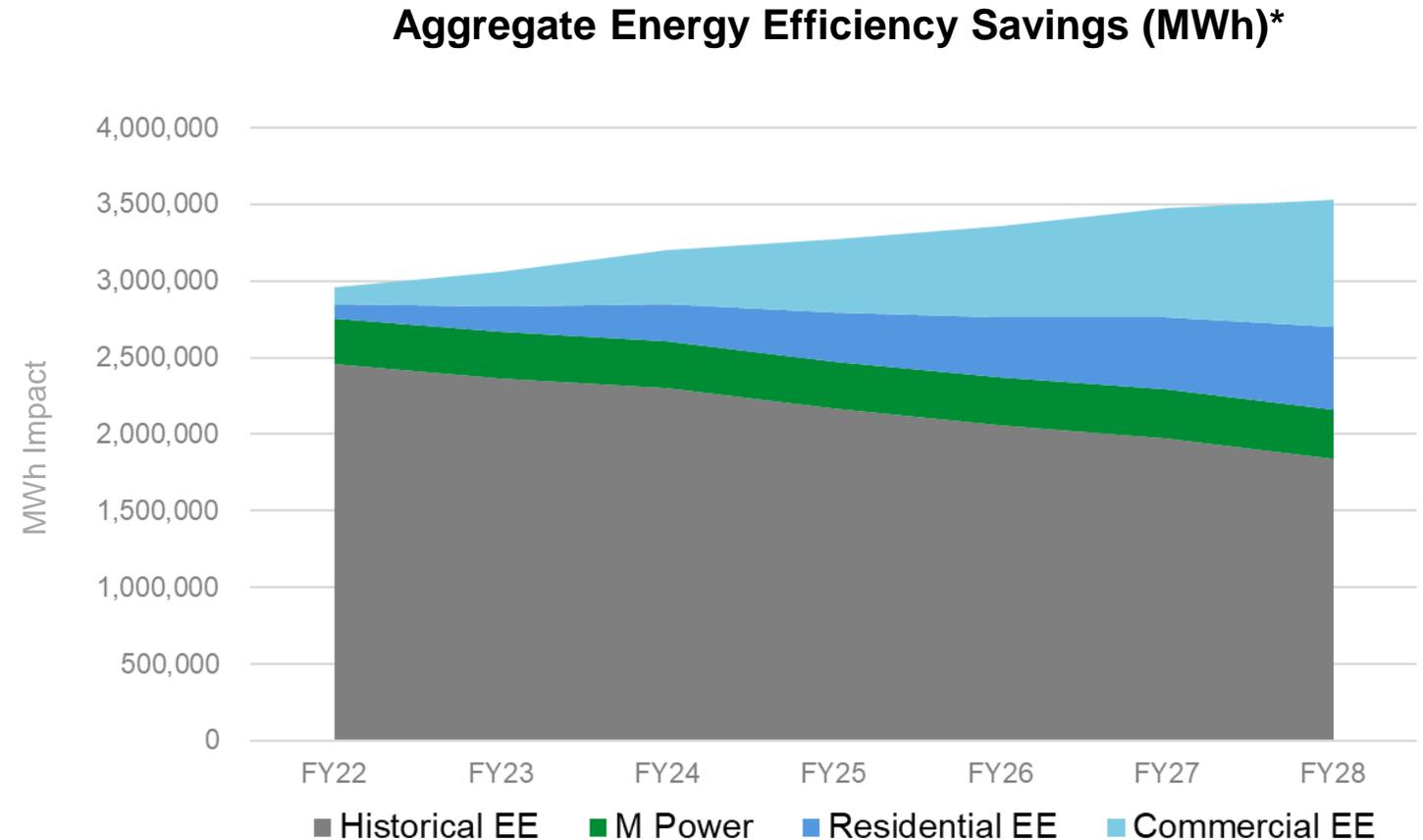


Customer Program Progress

Dan Dreiling, Director
Customer Programs (SRP)

Energy Efficiency Update: Increasing MWh Savings

- Portfolio energy savings will grow as committed to in 2035 Sustainability goals
- Focus on A/C related measures, business programs, underserved market segments and smart thermostats
- Aggregate energy savings impact on load forecast



* Represents historic program performance from 2000 to present and future portfolio plans utilized for load forecasting purposes

Demand Response Update: Growing to 150 MW

- Grow DR portfolio capacity to deliver 150 MW by summer of CY22
- Accelerate program growth by two years through aggressive marketing and recruitment efforts
- Evaluate new interruptible offers and additional program growth

Demand Response Capacity Plan

	CY20	CY21	CY22
FP21 Plan (MW)	67	95	120
Incremental Bring Your Own Thermostat		+5	+15
Incremental Business Demand Response		+10	+15
FP22 Plan (MW)	67	110	150

Q&A

Coolidge Expansion Project

Bill McClellan, Manager

Spence Wilhelm, Manager

Coolidge Expansion Project (SRP)

Considerations for Near-Term Capacity Additions

Maintaining Reliability

Technology maturity
Timely development
Available when needed



Sustainability Commitments

Carbon
Water

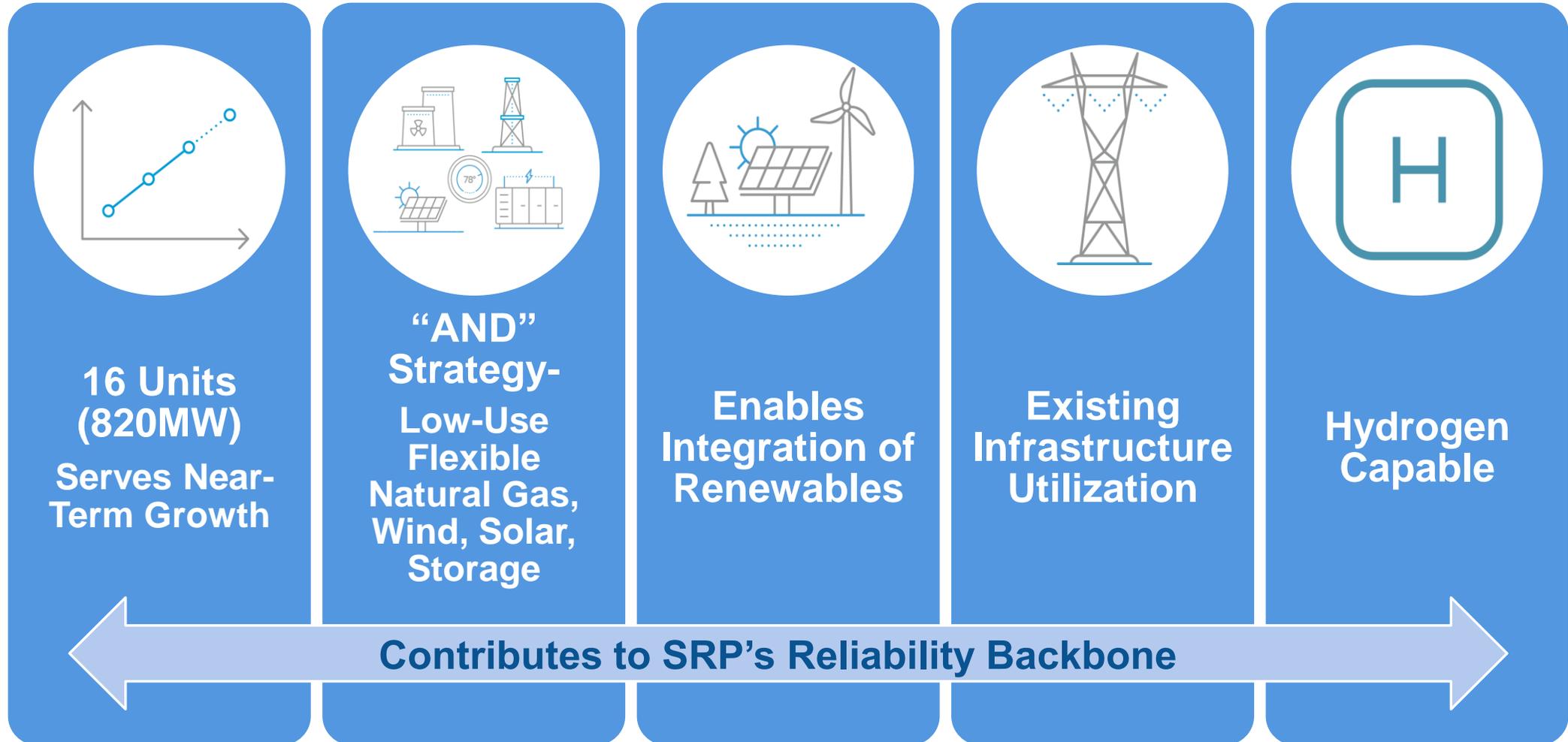


Affordability

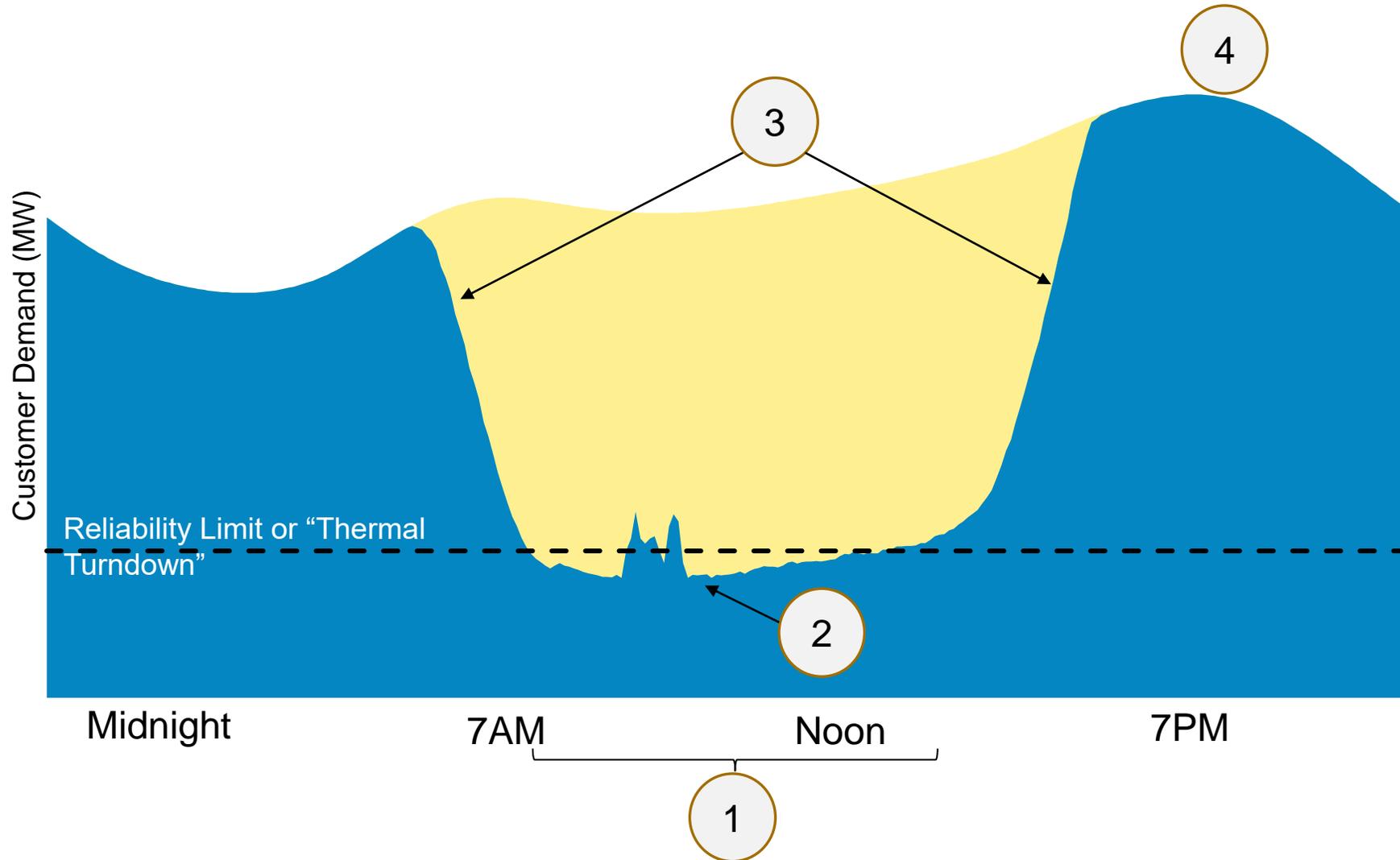
Cost stability
Investment longevity
Lowest quartile prices regionally



Recommendation – Coolidge Expansion

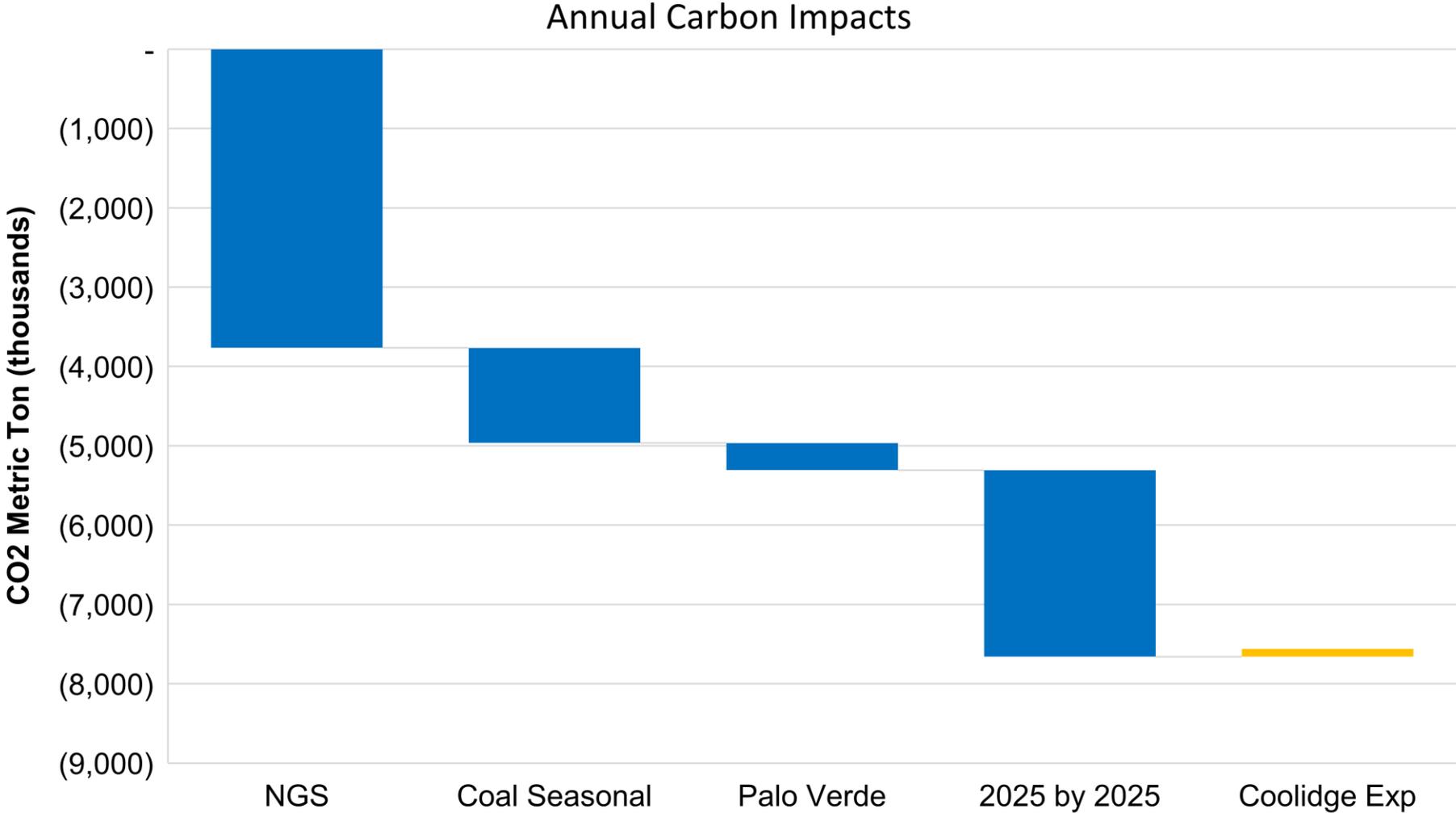


Integration of Renewables



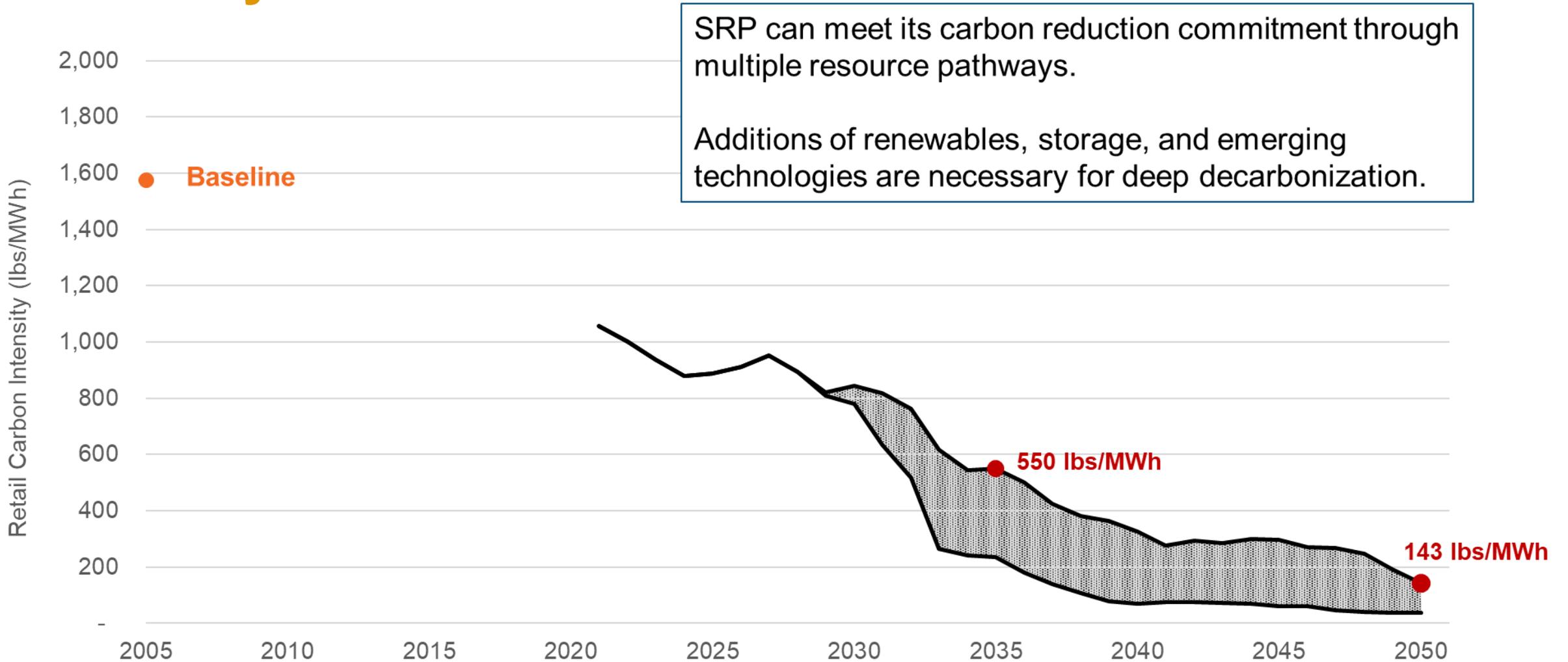
1. Times of potential excess generation
"Overgeneration"
2. Cloud cover
"Intermittency"
3. Sunrise and sunset
"Ramping"
4. Peak demand
5. Stability (not shown)
6. What ifs (not shown)

CO₂ Emission Comparison



SRP Carbon Commitment

Intensity Based



Alternatives – Why not add more Battery Storage?

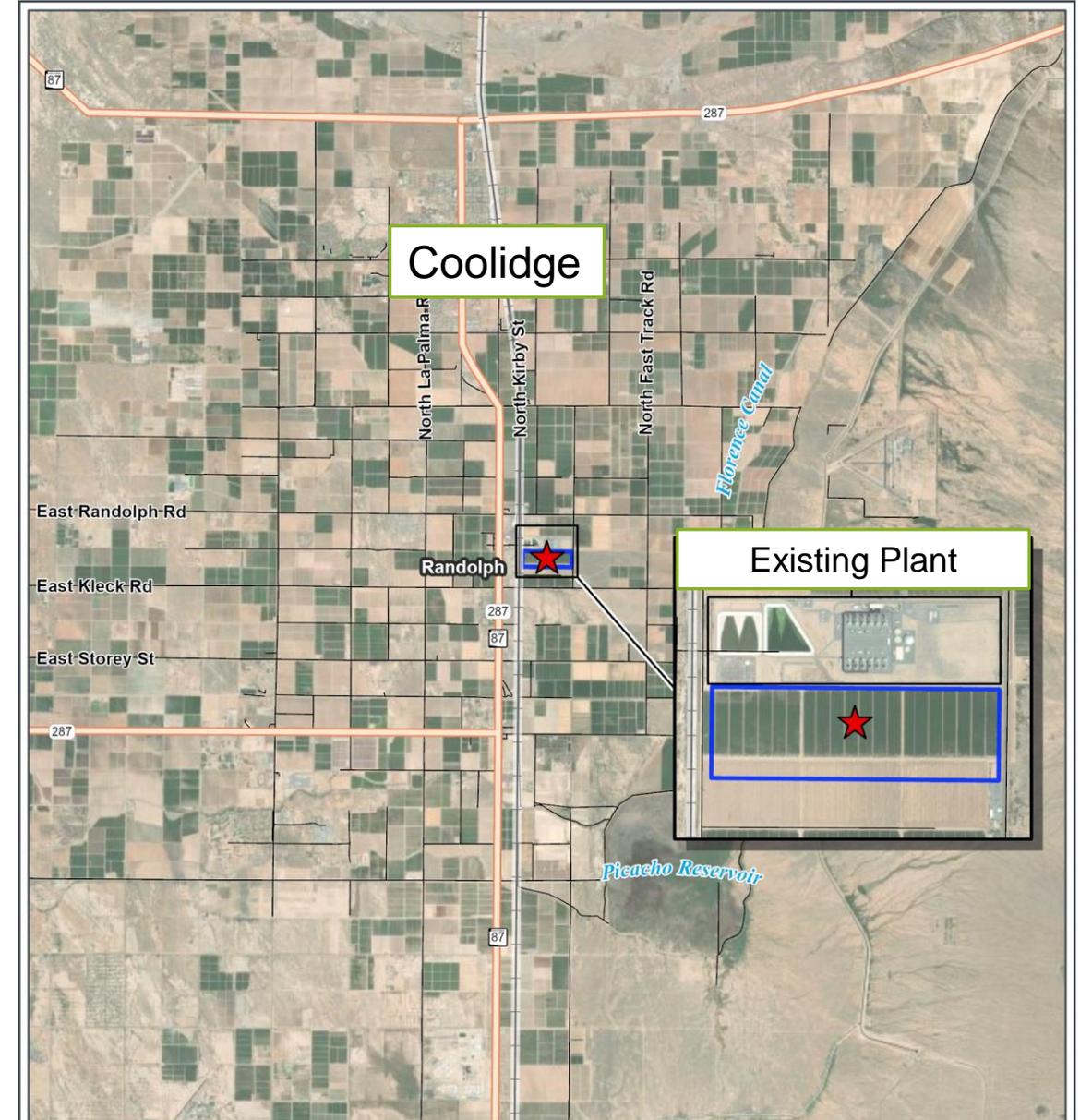
- Adding ~400 MW by 2023
- Limited discharge duration
- No long-term performance data
- Lack of operational experience
- Supply chain risks (2024 need)



Existing Coolidge Facility

Natural Gas Fired – Simple Cycle

- 12 aeroderivative gas turbines (GE LM6000)
- 615 MW nameplate capacity
- Built in 2008 by TransCanada
- Purchased by SRP in 2019
- Best available emission controls



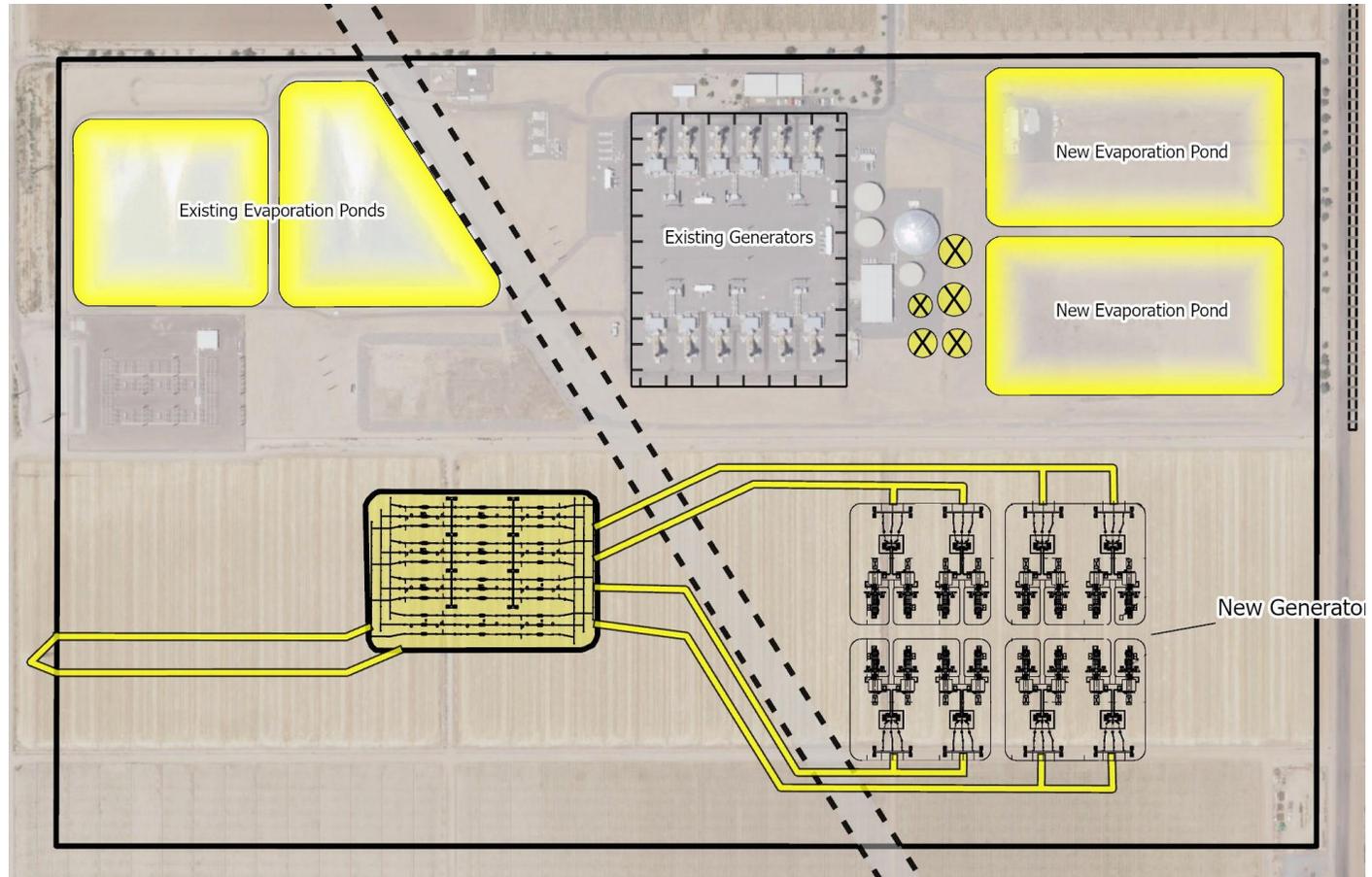
Coolidge Expansion

Expansion Scope

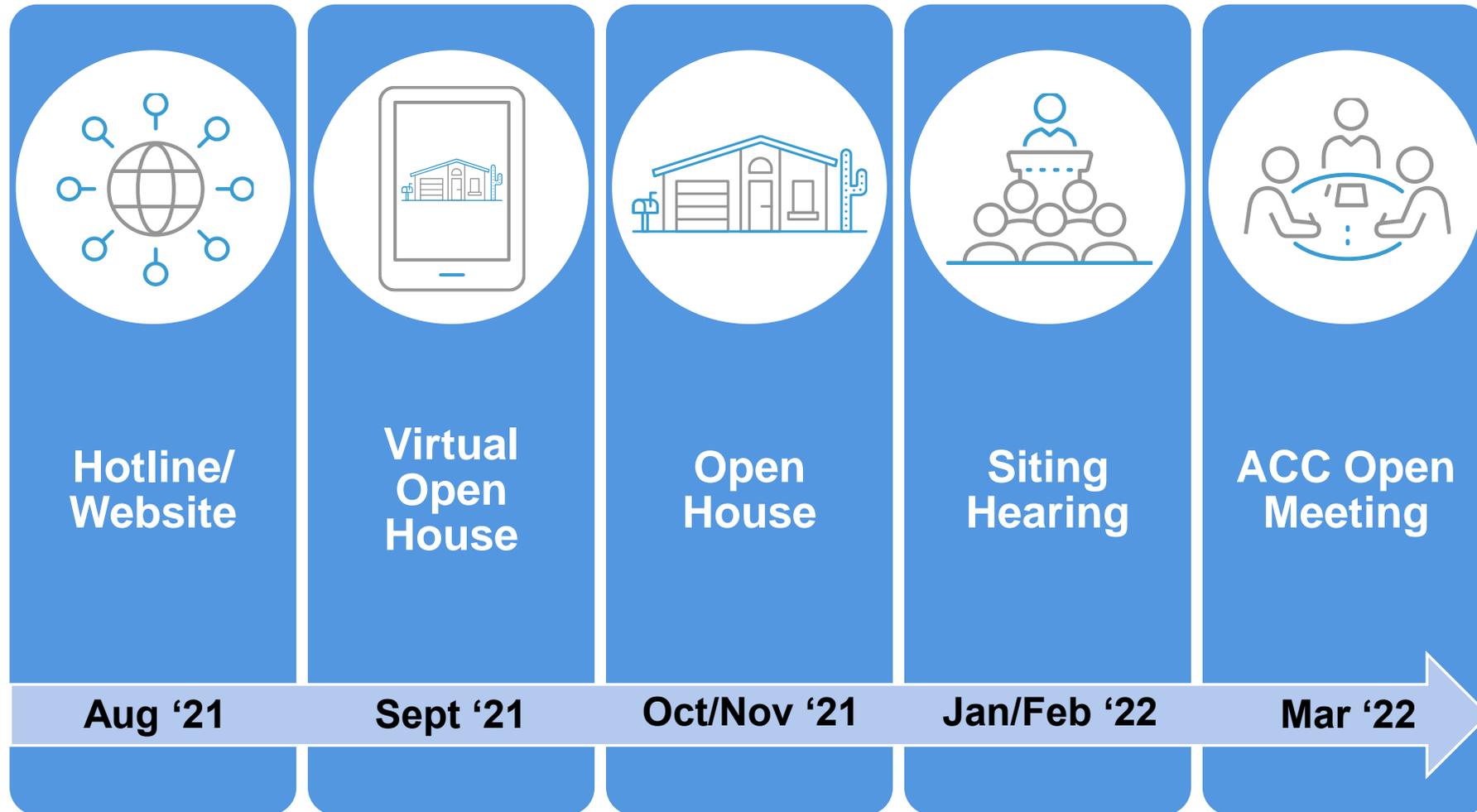
- 16 additional aero. gas turbines
- 8 in 2024, 8 in 2025
- 820 MW nameplate capacity
- Best available emission controls
- 500 kV switchyard

Leverage Existing Infrastructure

- Two natural gas pipelines
- Sufficient water supply
- 500 kV and 230 kV transmission



Opportunities for Public Involvement



Q&A

ISP Next Steps & Wrap-up

Angie Bond-Simpson, Director
Integrated System Planning & Support (SRP)

Community Stakeholder Engagement Focus by Topic

Near-Term Actions

- SRP to inform stakeholders on recommended actions to meet near term system needs
- Focused on 2021-2025 timeframe

Integrated System Plan (2025-2035)

- SRP to consult with stakeholders to provide input on pathways for ISP analysis
- Stakeholders to discuss preferences on affordability, sustainability, and reliability metrics
- SRP to share inputs, assumptions, and results with stakeholders

2035 Sustainability Advisory Group

- Stakeholders advise on development and 5-year updates to SRP's sustainability goals
- SRP to share annual progress toward 2035 targets
- SRP and stakeholders to discuss opportunities for collaborative sustainability partnerships



SRP ISP ROADMAP

Stakeholder Engagement and Public Outreach

ISP Summer Series Meeting 1 "Since We Last Met":

Review 2017-18 IRP process and the actions taken since.

ISP Summer Series Meeting 2 "Near-Term Planning":

Discuss IRP to ISP transition and current planning environment.

ISP Summer Series Meeting 3 "Where We Want to Go":

Engage stakeholders in early development of the ISP.

ISP Summer Series Meeting 4 "Near-term Planning: Part 2":

Inform stakeholders about the next decision in SRP's near-term plan.

ISP Goals:

Discuss objectives for the ISP.

Routine SRP Elected Officials and Leadership Updates:

Share updates on progress to date.

ISP Metrics & Scenario Workshops:

Determine measures of success and what to test.

Routine SRP Elected Officials and Leadership Updates:

Share updates on progress to date.

ISP Analytical Framework Overview:

Review approach to the ISP analysis and share inputs and assumptions.

ISP Analysis Update(s):

Share updates on progress to date.

ISP Draft Results:

Preview the ISP before it's finalized.

Routine SRP Elected Officials and Leadership Updates:

Share updates on progress to date and align on final ISP.

ISP Final Results & Recommendations:

Share finalized ISP and next steps.

ISP Next Steps



Integrated System Plan (ISP)

- Feedback survey on ISP Summer Stakeholder Series
- 1:1 phone call to discuss ISP Goals
 - Follow up with your ISP liaison if you are interested.
- Watch for announcements about the upcoming ISP engagement opportunities.

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

thank you!