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

JOINT MEETING OF THE BOARD OF DIRECTORS AND COUNCIL WORK STUDY SESSION

Tuesday, September 30, 2025, 9:30 AM

PERA Training and Conference Center
1 E. Continental Drive, Tempe, AZ 85288

Roll Call
Safety Minute

1. Call to Order..... PRESIDENT DAVID ROUSSEAU

2. SRP Power System Expansion Overview
..... CRAIG LARSON, ANGIE BOND-SIMPSON, ZACK HEIM, NATE TATE, and RYAN NORLIN

   Informational presentation regarding an overview of SRP's transmission expansion plans and the Salt River Pumped Storage Project as two key initiatives enabling renewable integration and large-scale load growth.

3. Adjourn..... PRESIDENT DAVID ROUSSEAU

The Board and Council 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 Board and Council on any of the matters listed on the agenda.

The Board and Council 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.

THE NEXT JOINT MEETING OF THE BOARD OF DIRECTORS AND COUNCIL WORK STUDY SESSION IS SCHEDULDED FOR TUESDAY, OCTOBER 28, 2025

09/23/2025

SAFETY MINUTE: INTERACTION WITH DOGS
SRP BOARD AND COUNCIL WORK STUDY SESSION

SARA MCCOY
DIRECTOR, RISK MANAGEMENT

SEPTEMBER 30, 2025

Delivering water and power™

SAFETY MINUTE: INTERACTION WITH DOGS

- Be situationally aware.
- Don’t reach over fences or gates.
- Don’t assume a dog is friendly.
- Call out and give the owner and dog a chance to respond.
- Avoid direct eye contact with the dog.
- Use tools or bags as a barrier between you and the dog.
- If confronted by a dog: Stay calm, don’t run. Back away slowly without turning your back.
- If bitten by a dog: Wash the wound thoroughly and seek medical attention.

Power System Expansion Overview

SRP Board and Council Work Study Session

September 30, 2025

Agenda

Transmission Expansion Overview

- Transmission System Background – Zack Heim
- System Planning and Expansion Overview – Nate Tate
- Key Strategies – Ryan Norlin

Salt River Pumped Storage Project

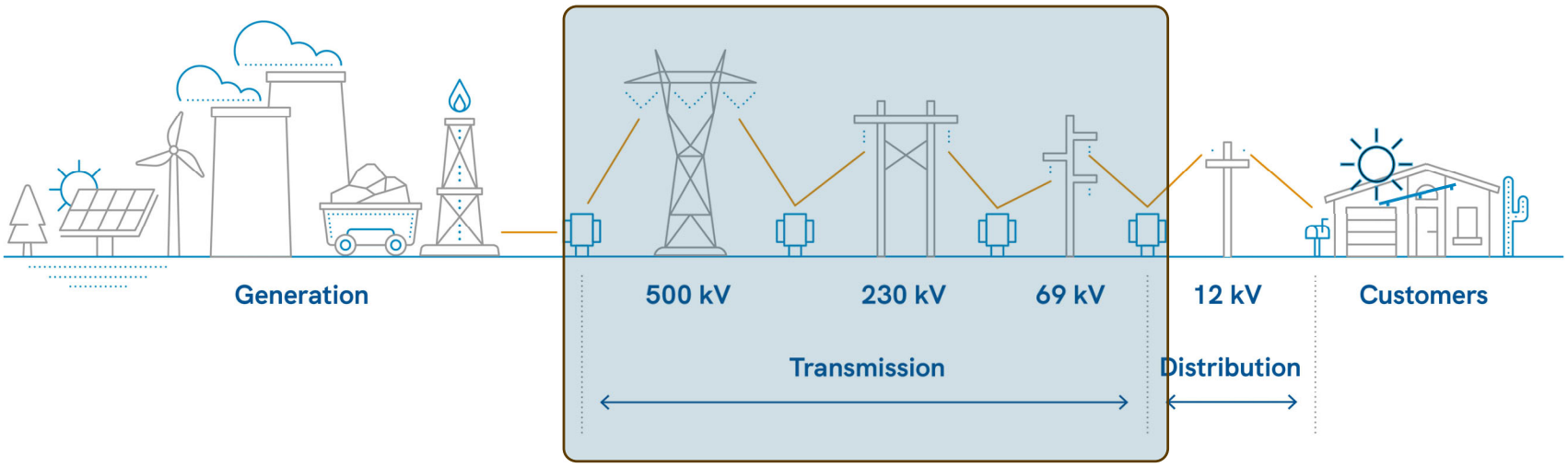
- Project Background and Status – Craig Larson
- Lifecycle Cost Analysis – Angie Bond-Simpson

Transmission System Background

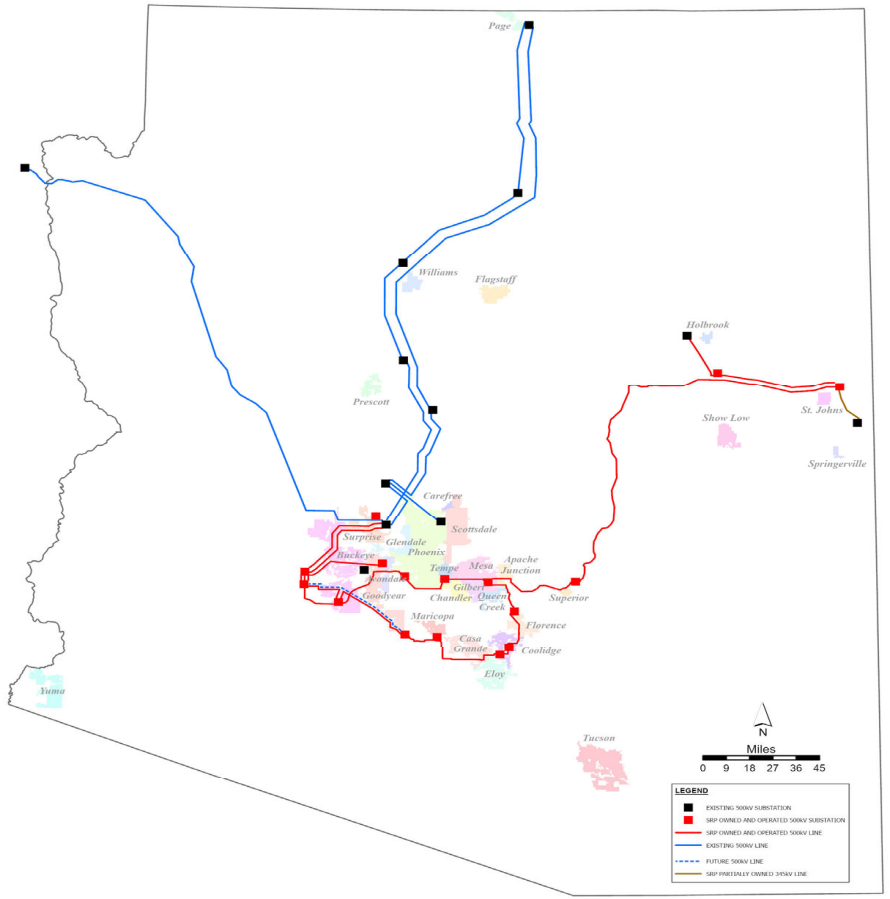
SRP Board and Council Work Study Session

Zack Heim | September 30, 2025

Voltage Levels



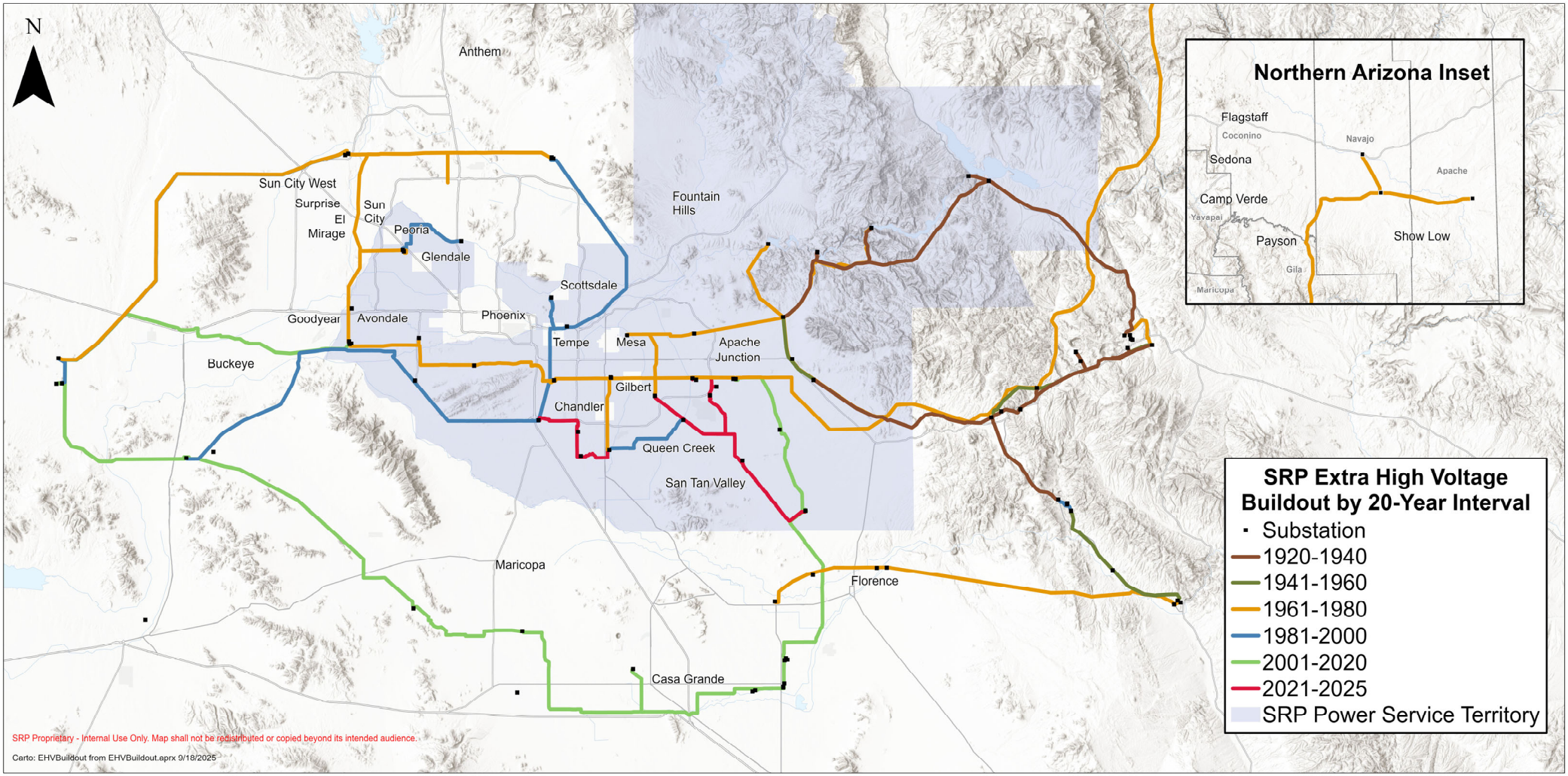
Statewide Transmission



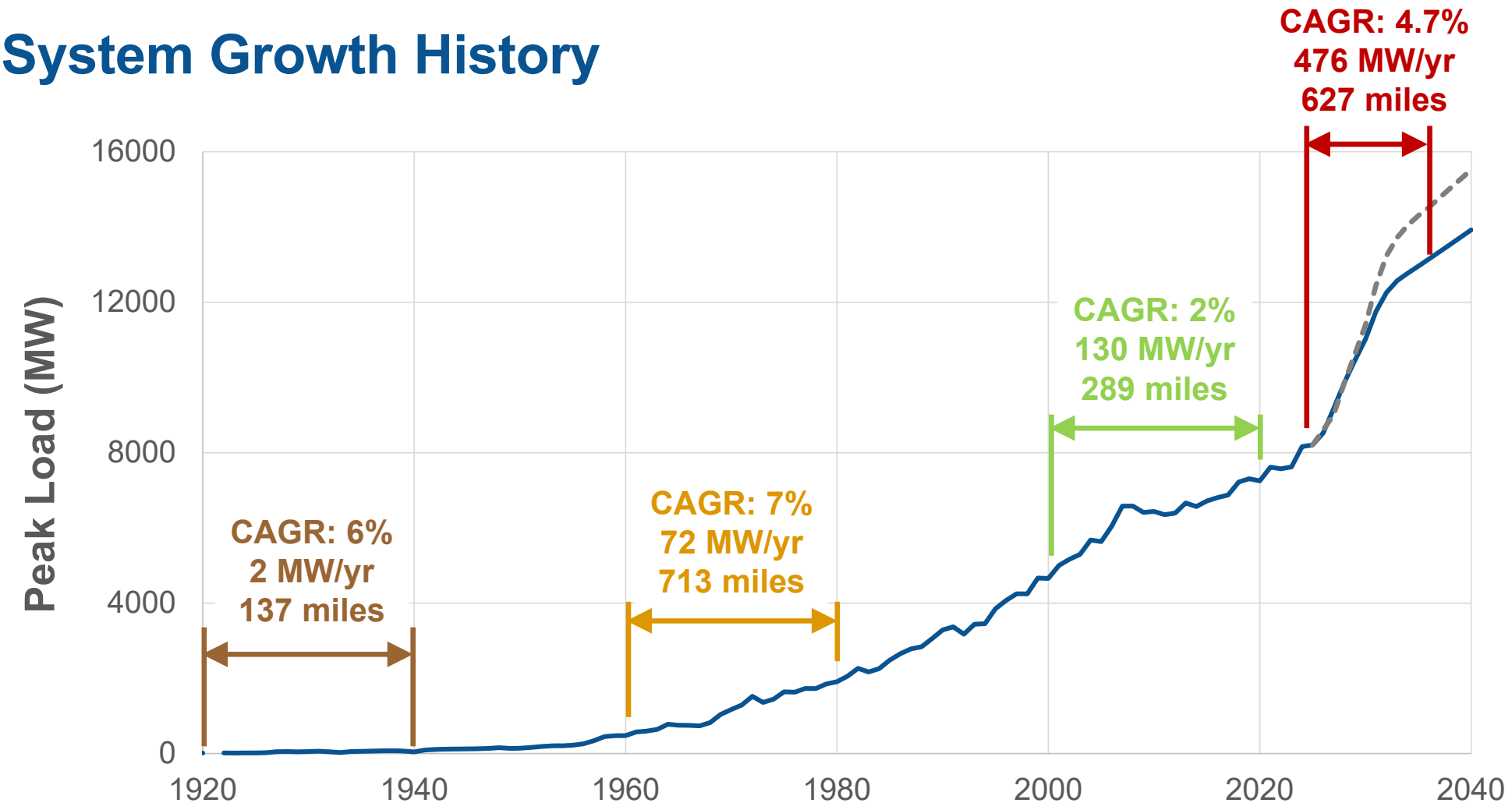
SRP's Transmission Network

1,492 Miles

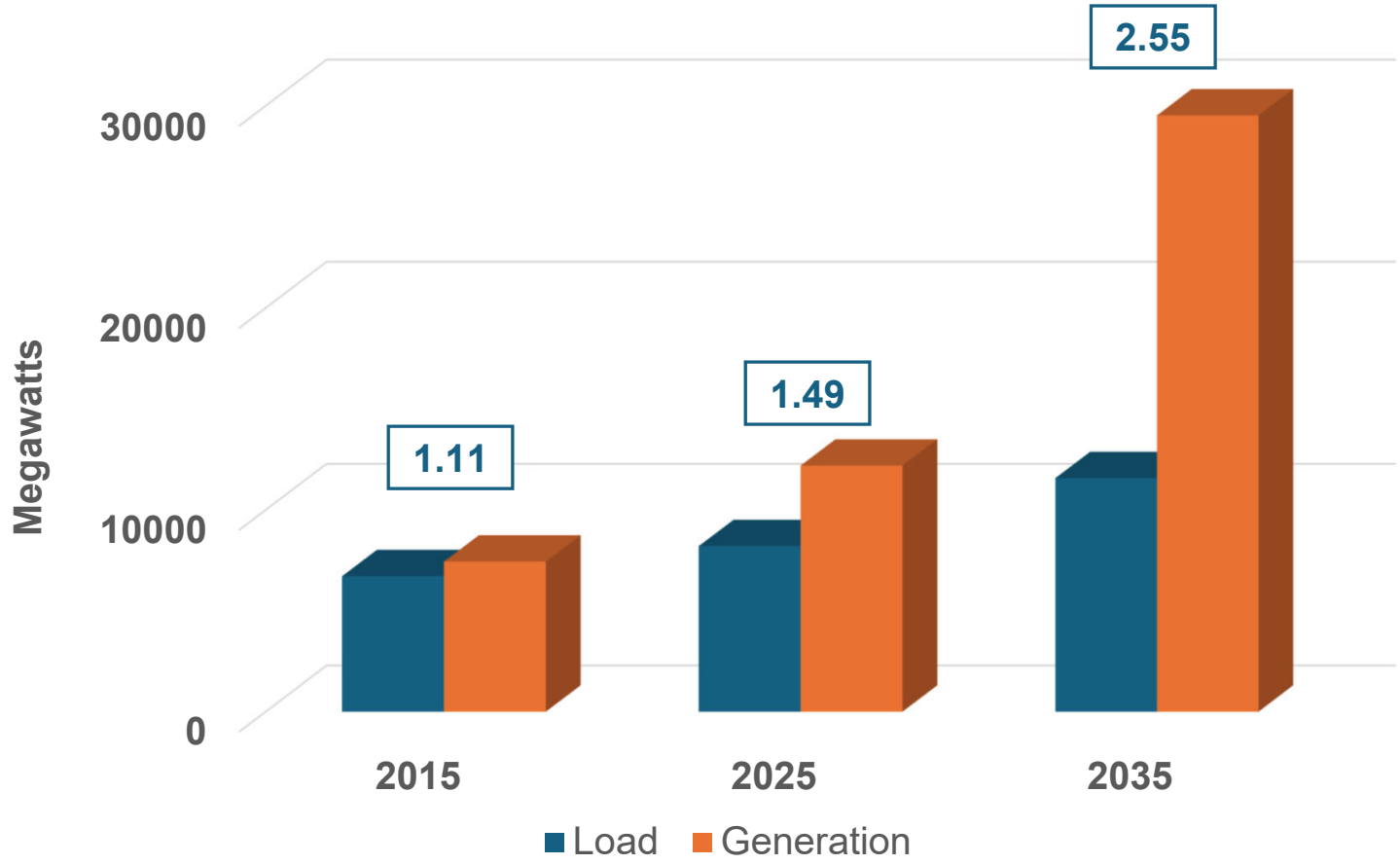
287 Substations


N
Anthem
Sun City West
Surprise
El Mirage
Sun City
Peoria
Glendale
Fountain Hills
Scottsdale
Goodyear
Avondale
Phoenix
Tempe
Mesa
Apache Junction
Buckeye
Gilbert
Chandler
Queen Creek
San Tan Valley
Maricopa
Florence
Casa Grande
Northern Arizona Inset
Flagstaff
Coconino
Navajo
Sedona
Apache
Camp Verde
Yavapai
Payson
Show Low
Gila
Maricopa
SRP Extra High Voltage Buildout by 20-Year Interval
Substation
1920-1940
1941-1960
1961-1980
1981-2000
2001-2020
2021-2025
SRP Power Service Territory
SRP Proprietary - Internal Use Only. Map shall not be redistributed or copied beyond its intended audience.
Carto: EHVBuildout from EHVBuildout.aprx 9/18/2025

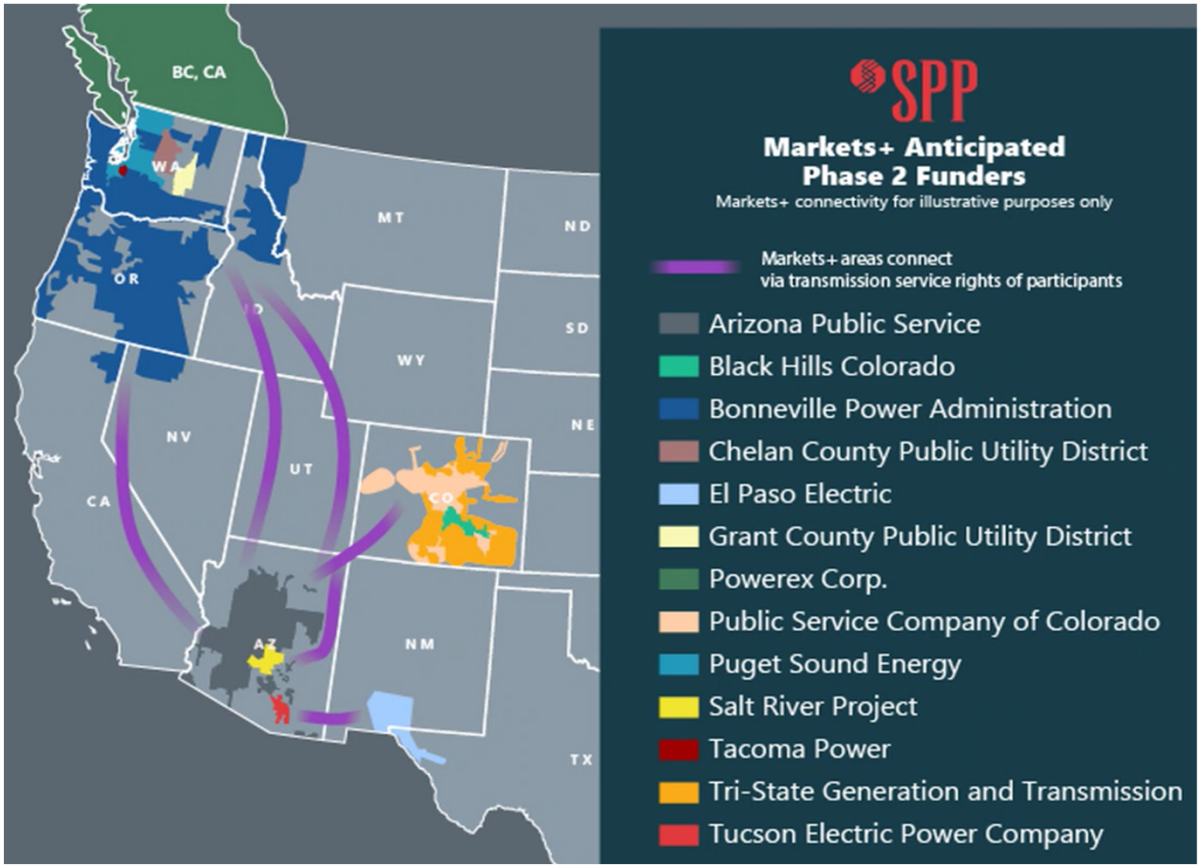
System Growth History



Generation to Load Ratio



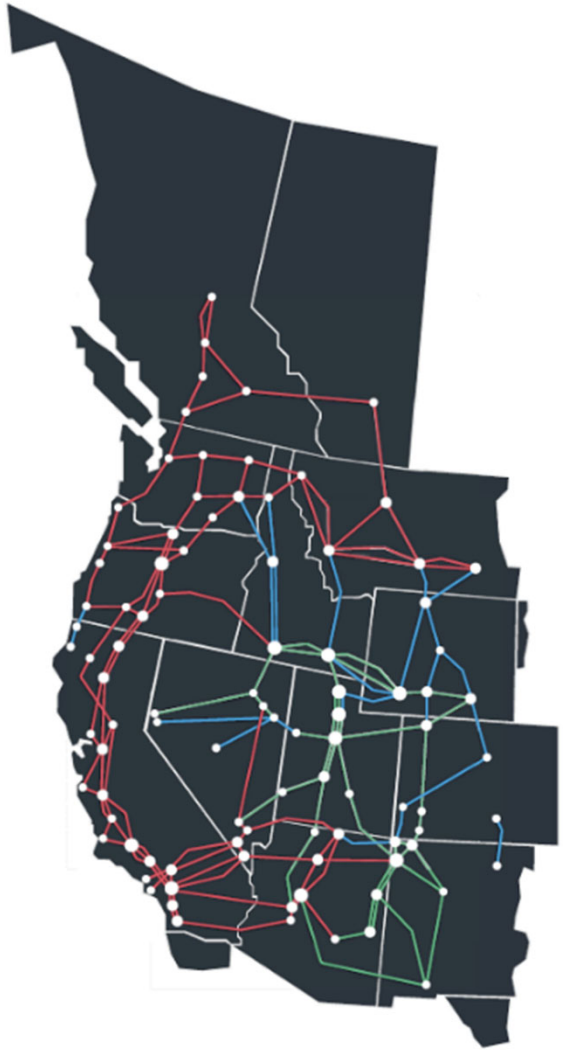
Shifting Energy Markets



Regional Planning

- Added focus on generation access
- Multiple planning consortiums
- New forms of partnering opportunity

WestTEC
POWERED BY WPP
WESTERN TRANSMISSION EXPANSION COALITION

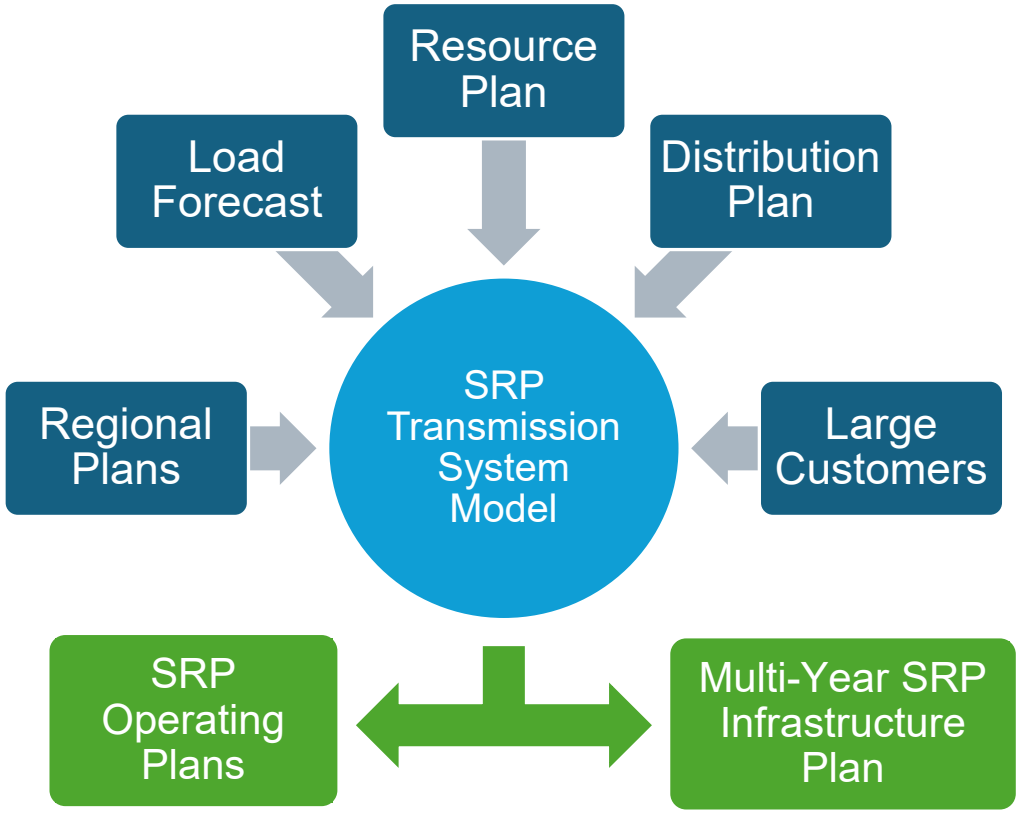


System Planning and Expansion Overview

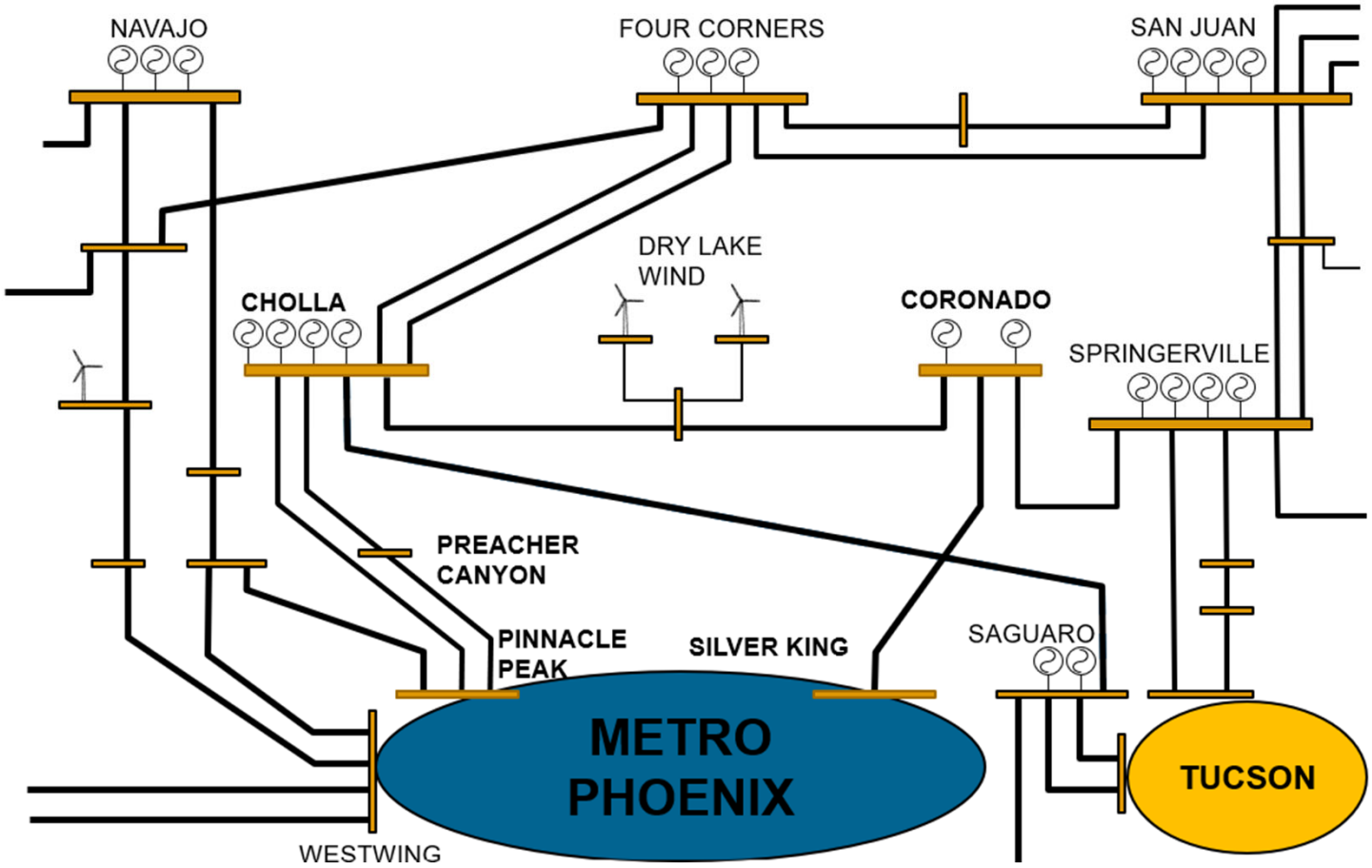
SRP Board and Council Work Study Session

Nate Tate | September 30, 2025

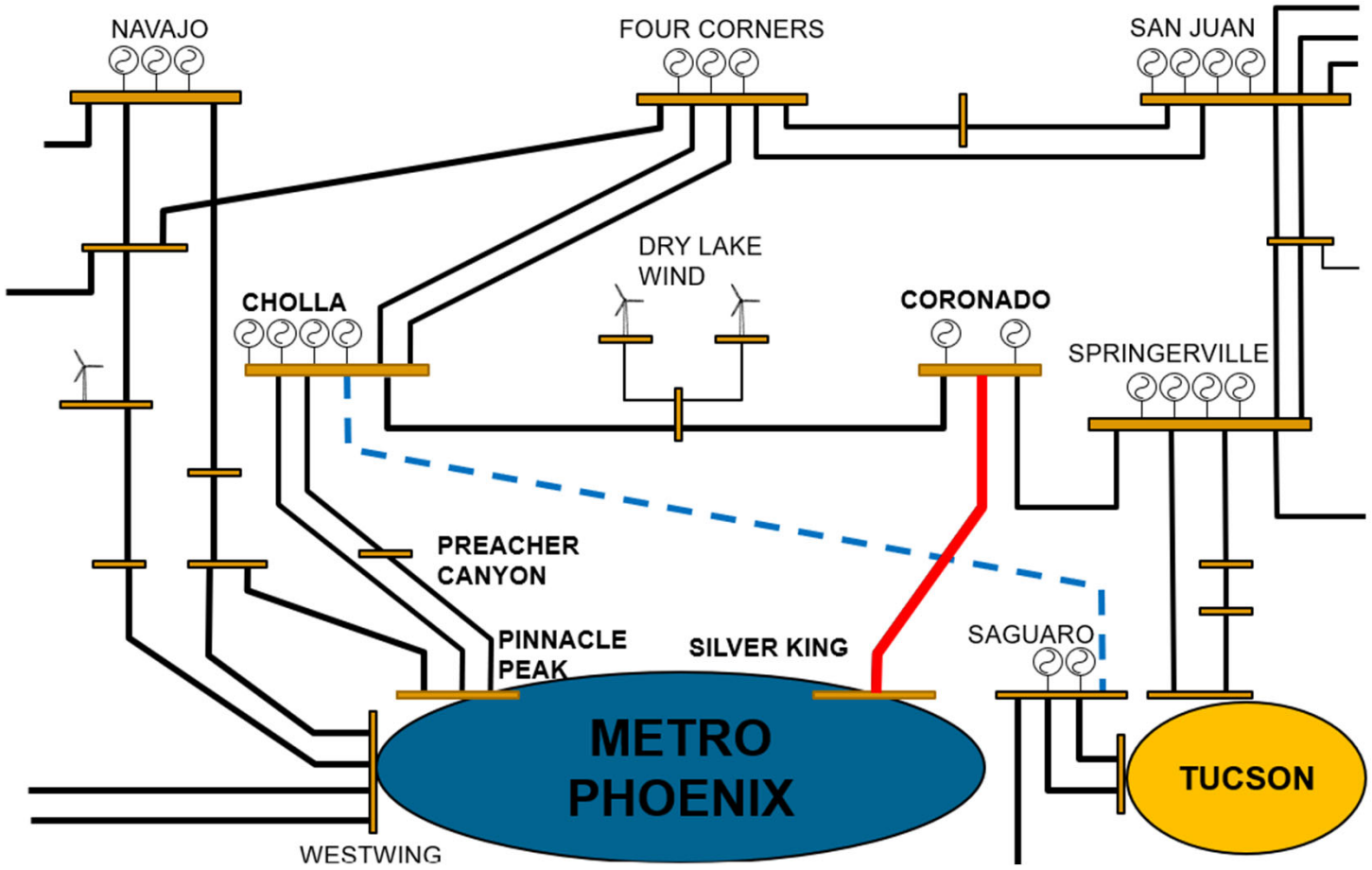
Planning Inputs and Outputs



Planning Network

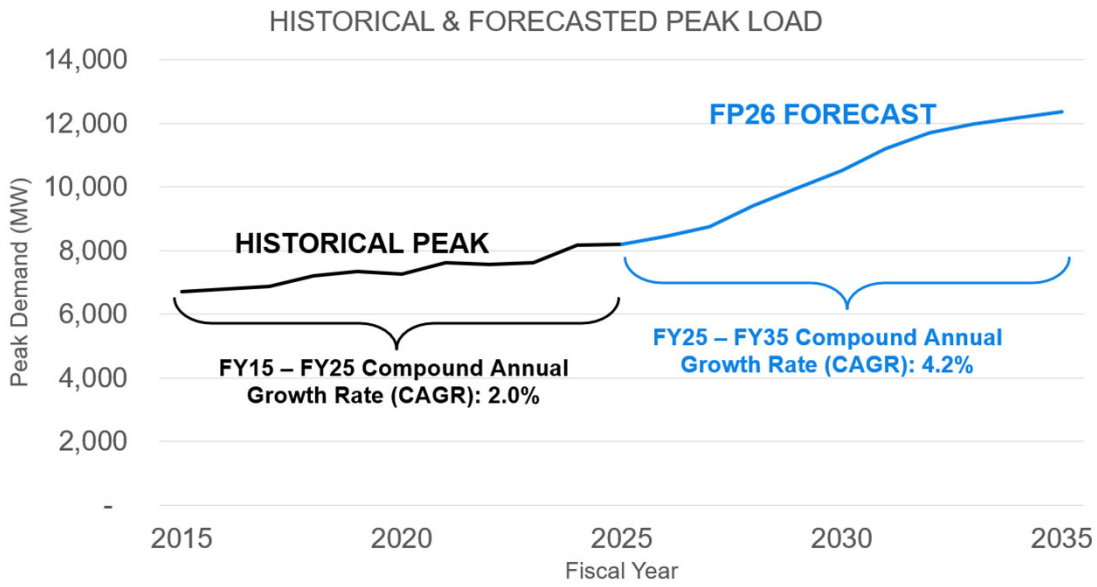


Planning Network

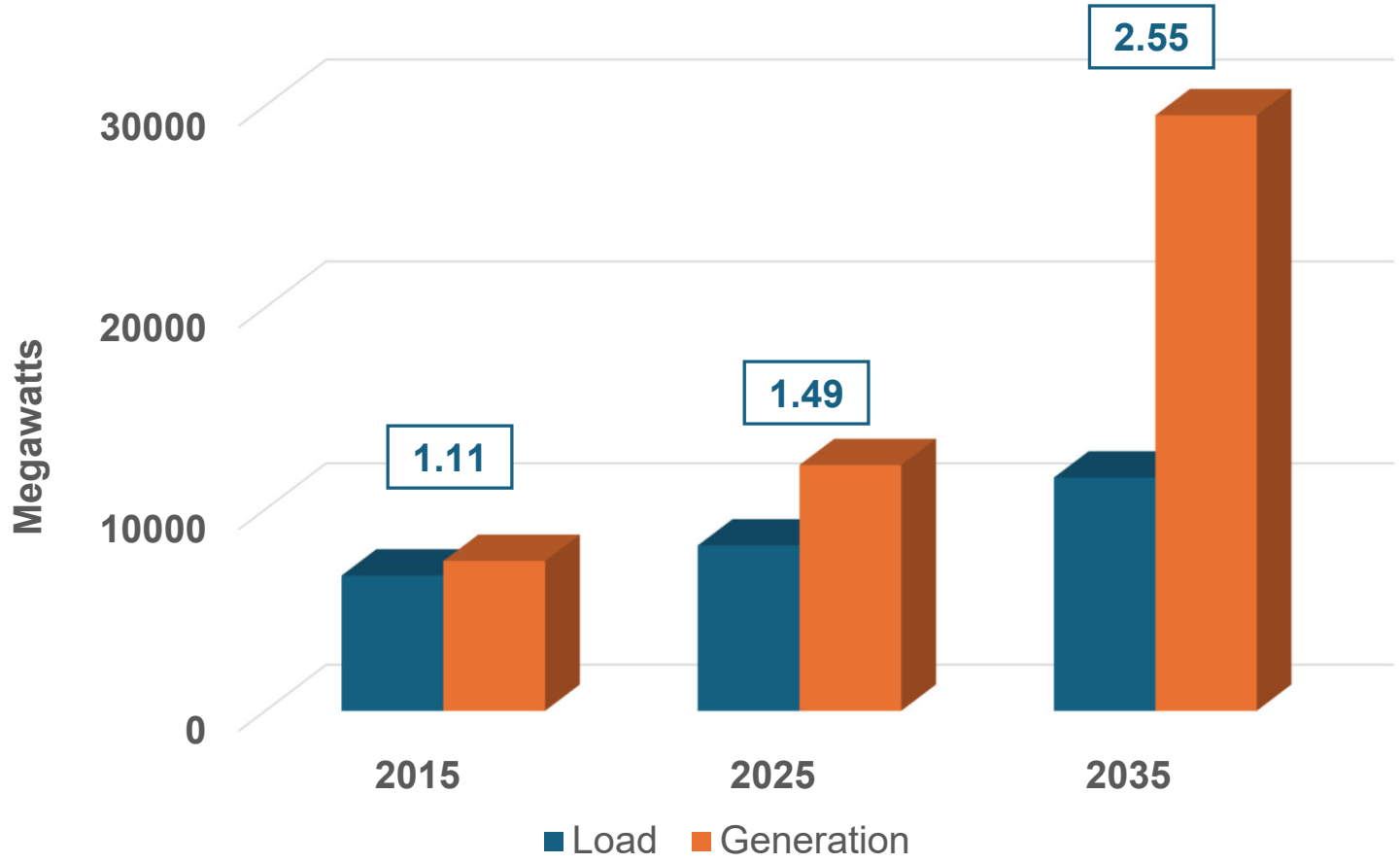


Key Transmission Expansion Drivers

- Load Growth
  - Large industrial + traditional growth
- Resource Transition
  - Geographic diversity
  - Generation to load ratio

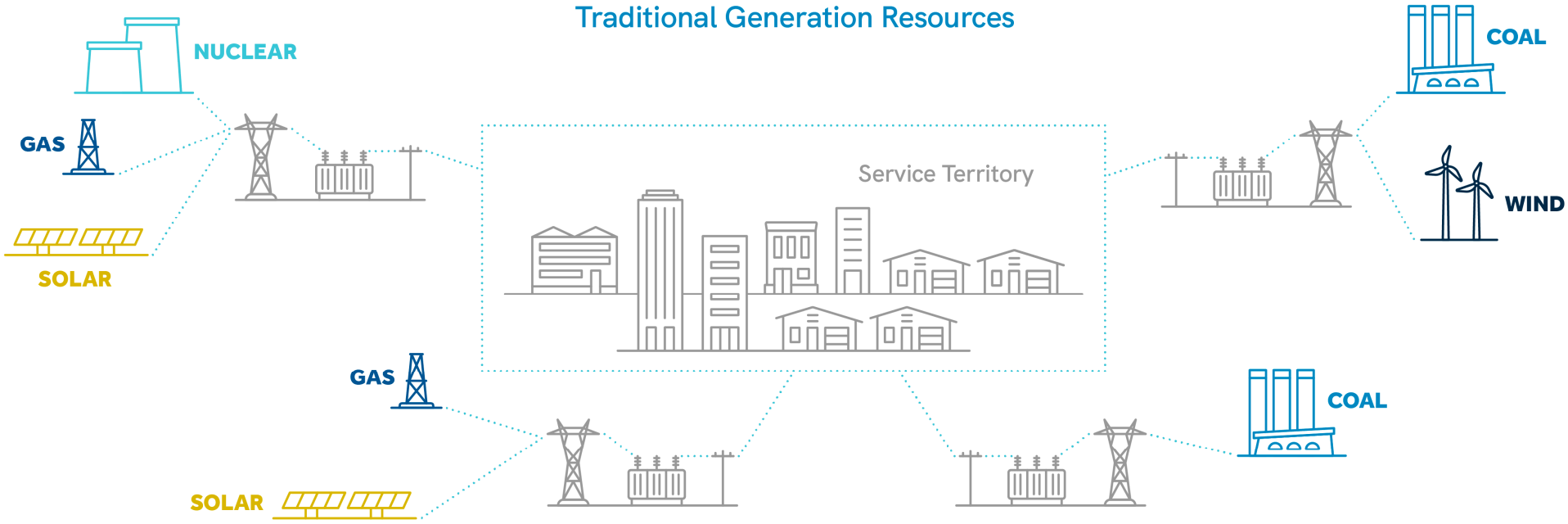


Generation to Load Ratio



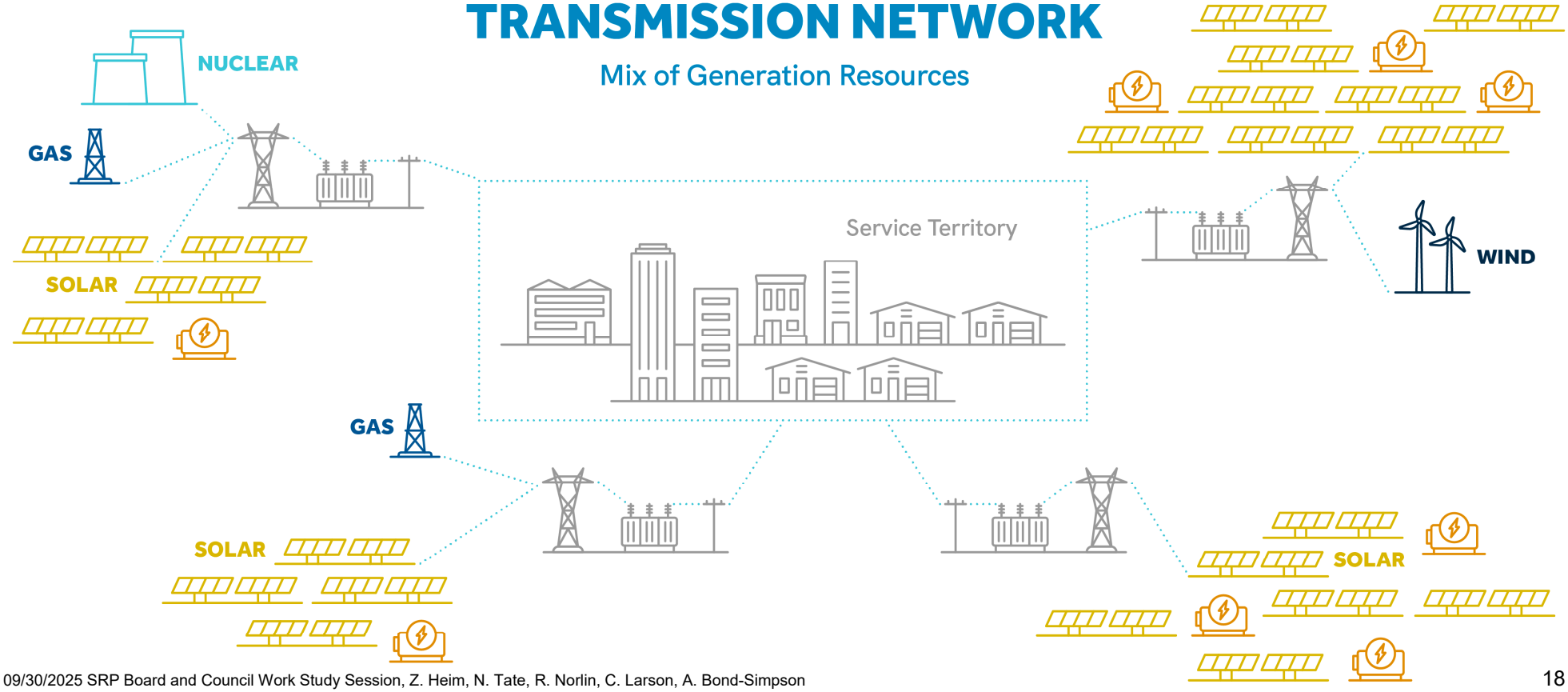
SRP'S CURRENT TRANSMISSION NETWORK

Traditional Generation Resources



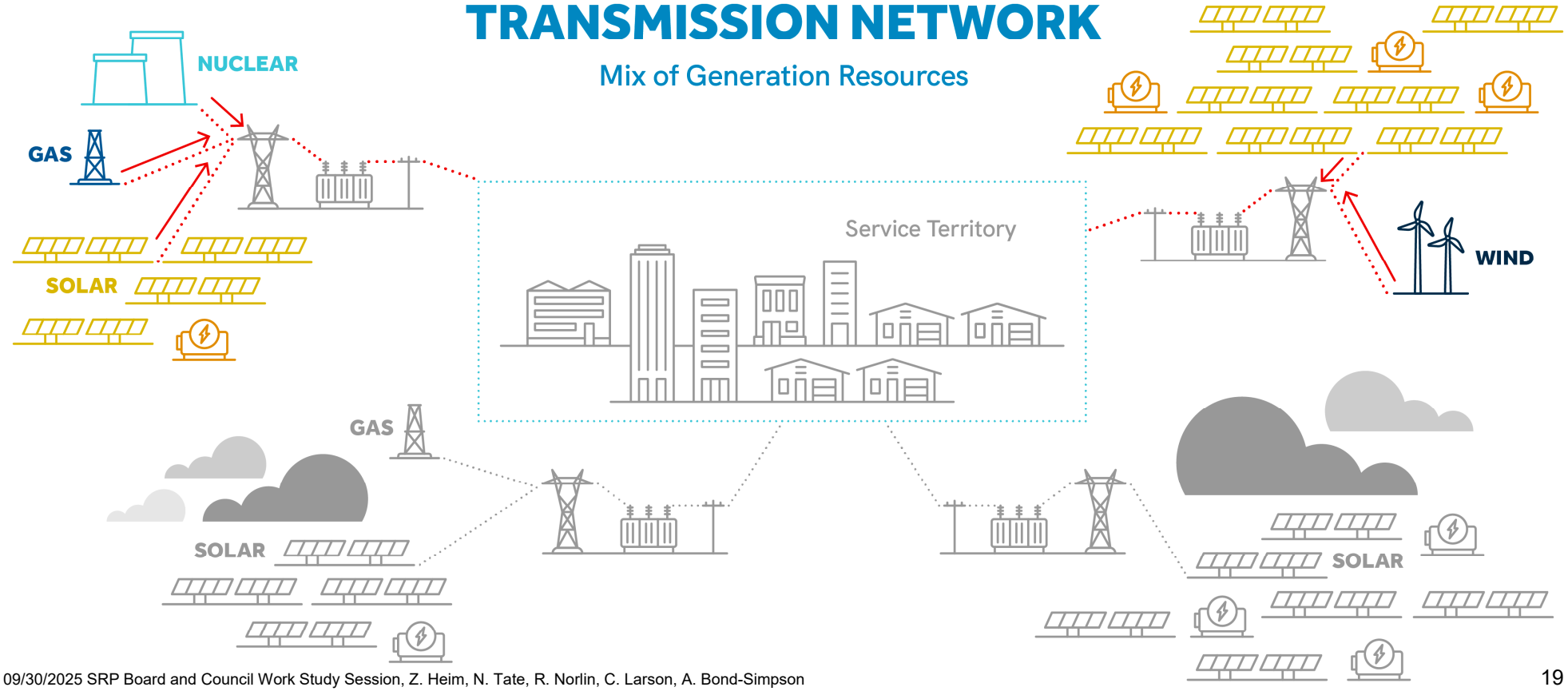
SRP'S FUTURE TRANSMISSION NETWORK

Mix of Generation Resources



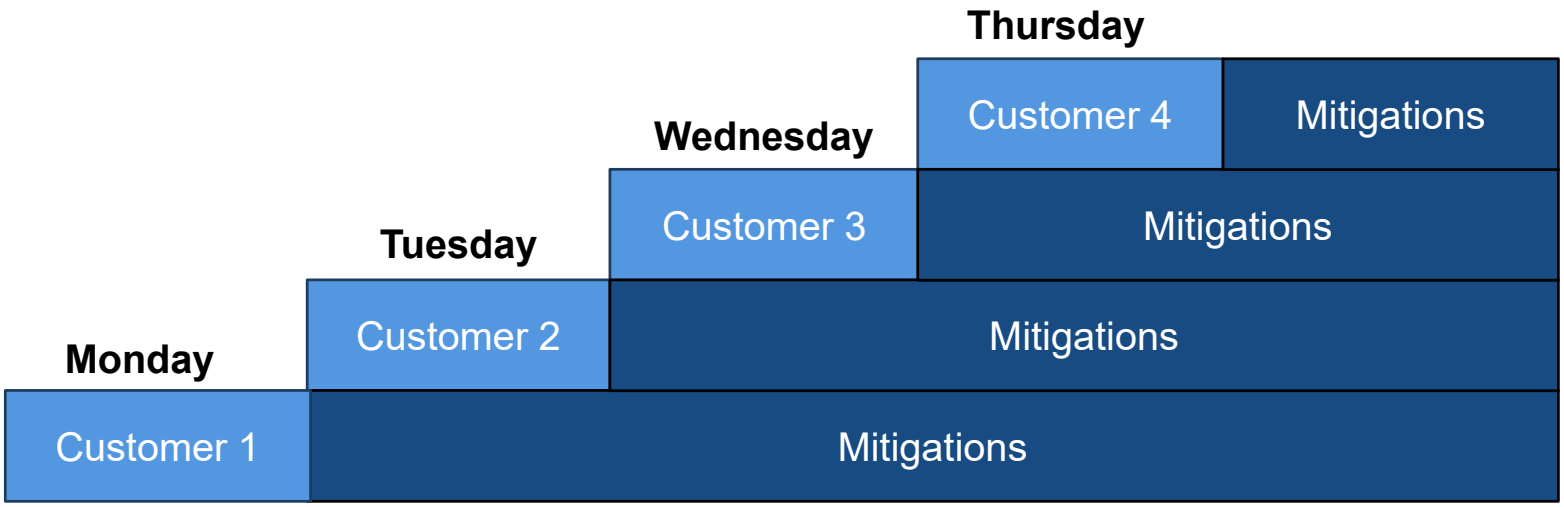
SRP'S FUTURE TRANSMISSION NETWORK

Mix of Generation Resources



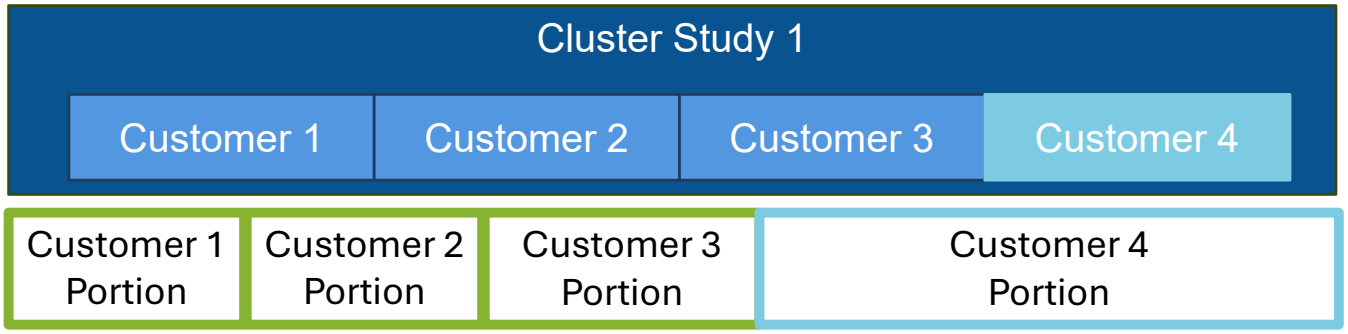
From Serial Planning Process...

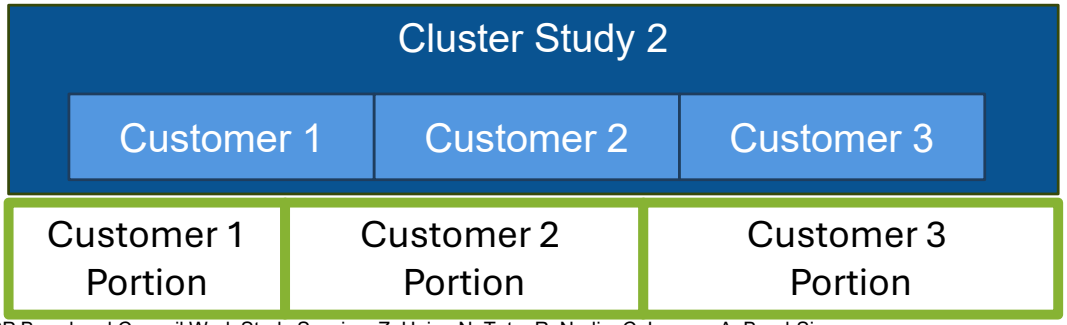
Each subsequent study accounts for previous mitigations



Friday

… To A Cluster Planning Process

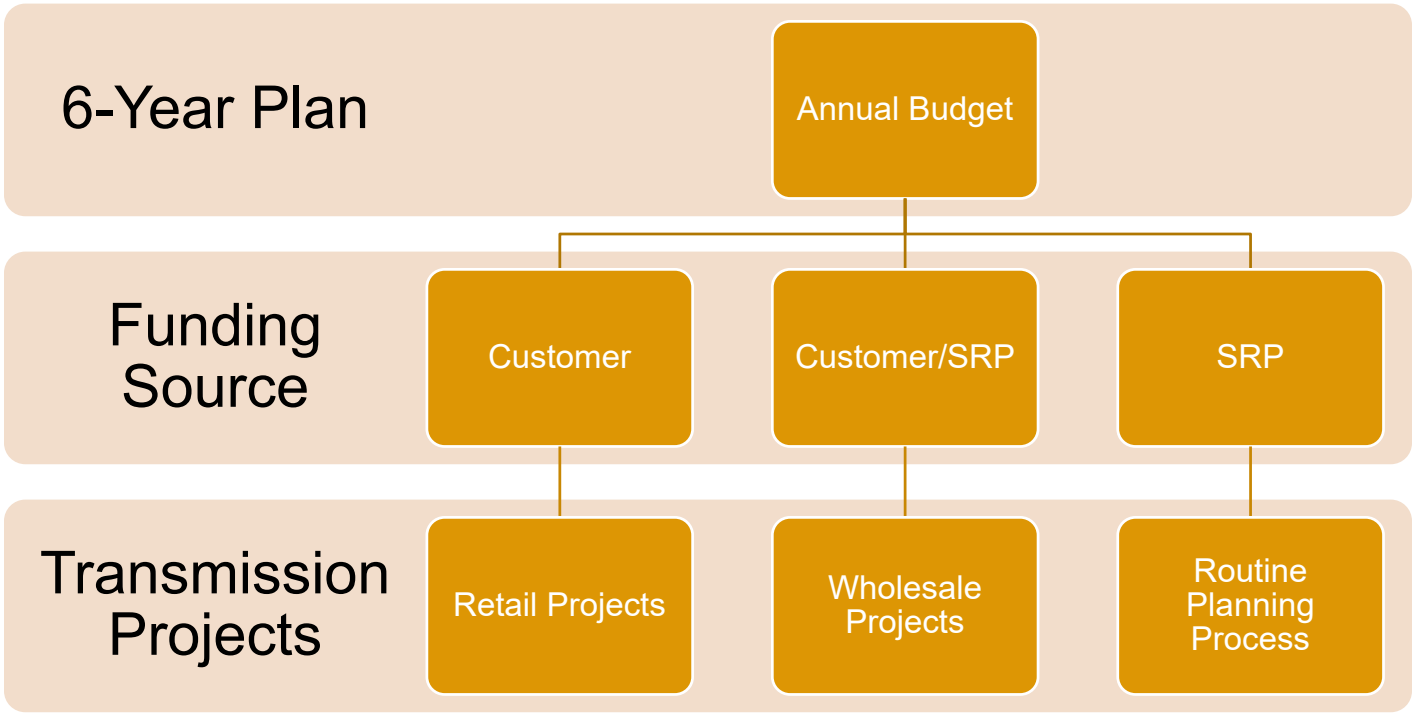




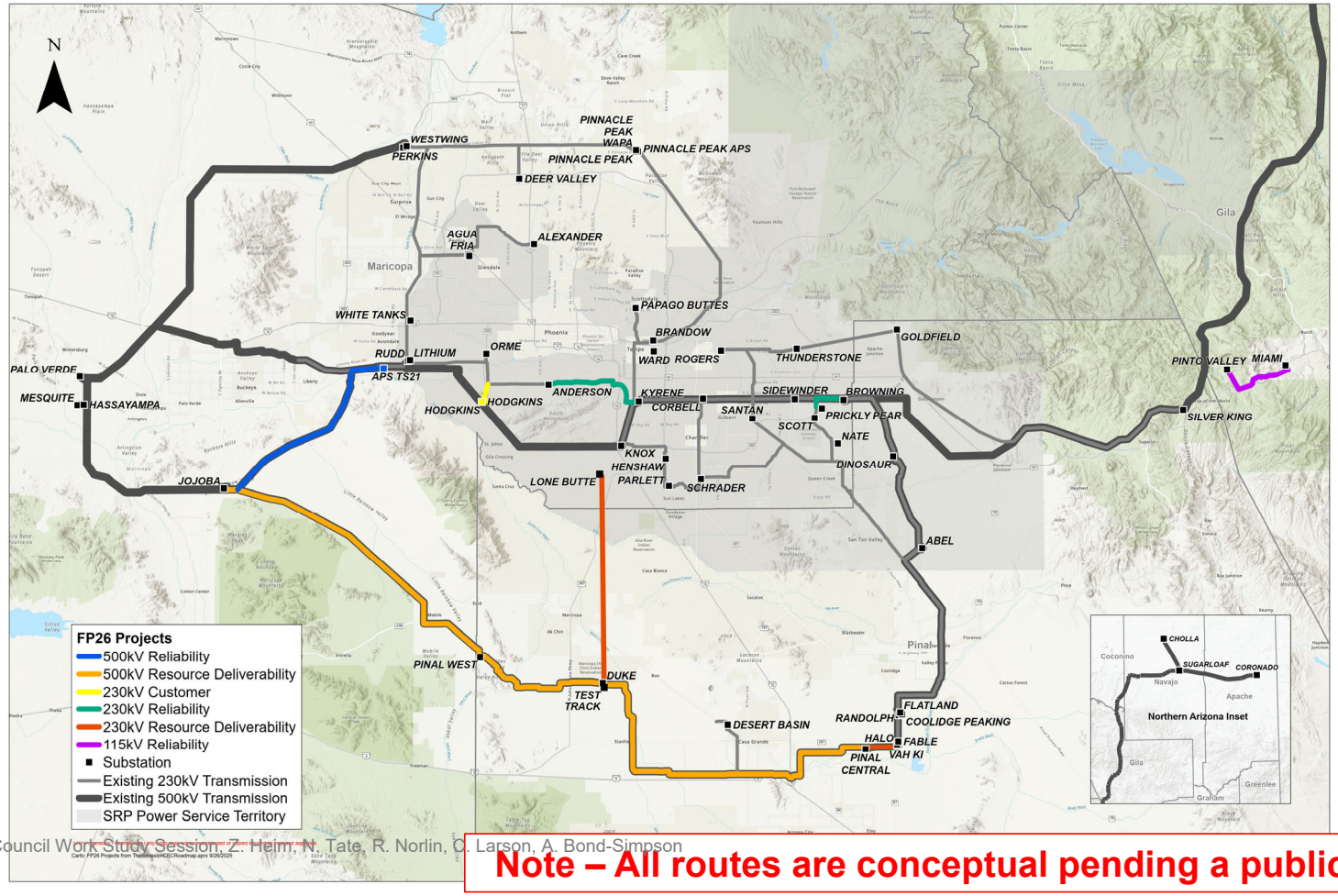
Transmission Study Summary

Cluster Study	Number of Projects	Total MW	Network Mitigations	Financial Plan
Generation Transitional	16	3400	9	FP26
Generation Cluster 24	9	4400	11	FP27
Generation Cluster 25	15	5000	12	FP28
Load Serial	35	7000	10+	Various
Transitional Load Cluster	24	7200	82	FP28

Budget Pathways

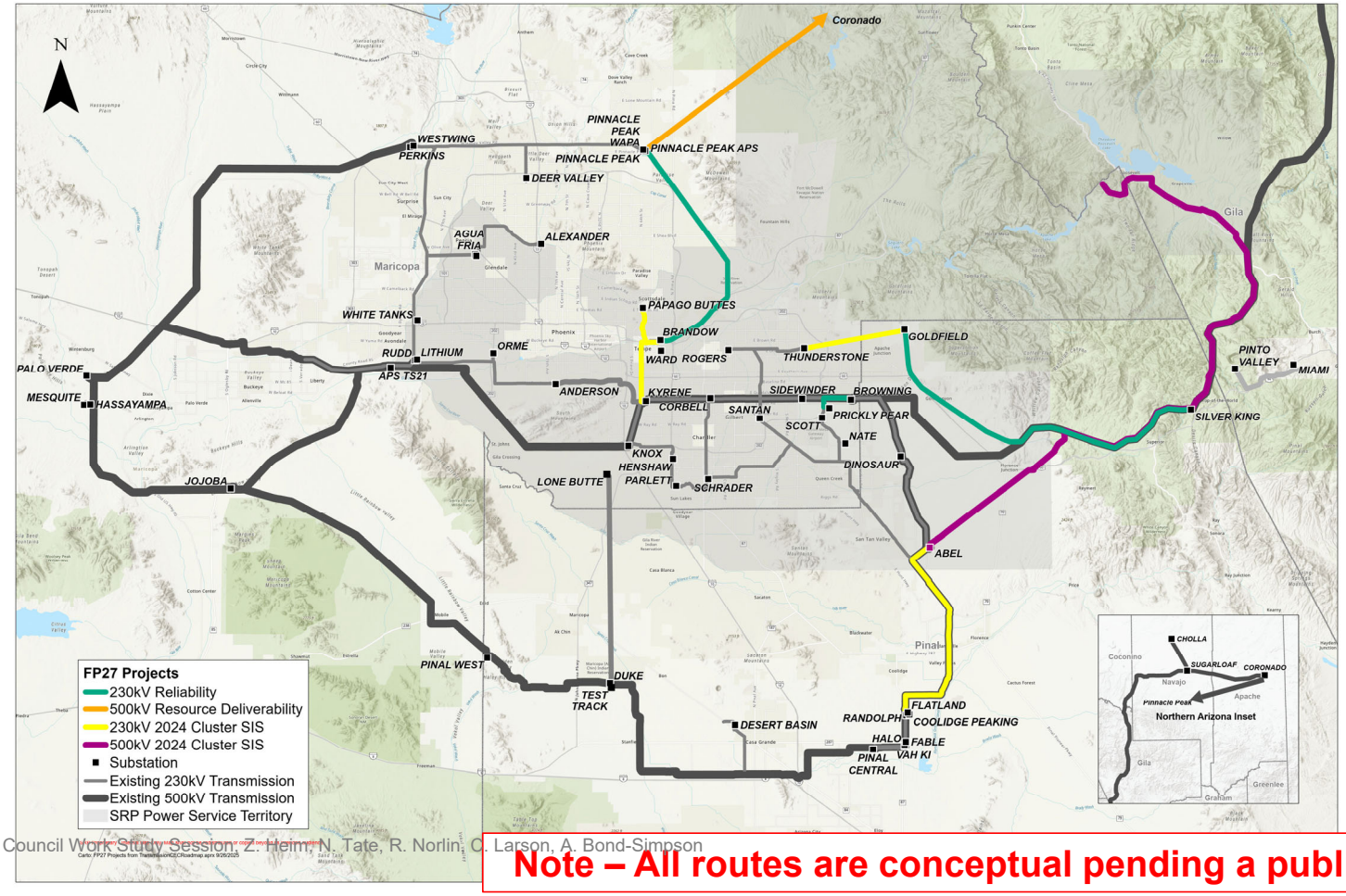


New Transmission Projects in FP26 Budget



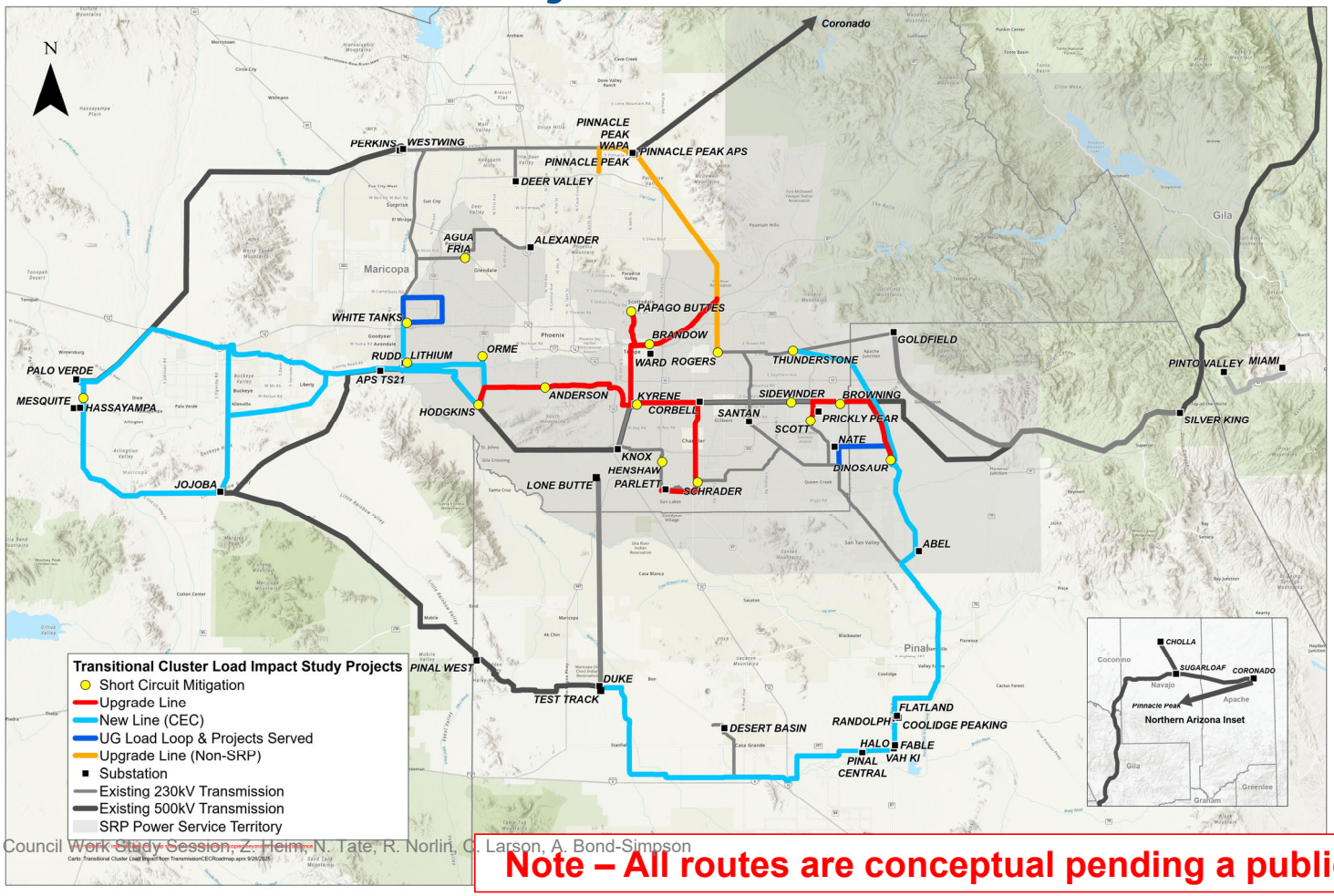
Note – All routes are conceptual pending a public CEC process

New Transmission Projects in FP27 Budget



Note – All routes are conceptual pending a public CEC process

Potential Future Load Projects



Note – All routes are conceptual pending a public CEC process

Transmission Line Siting

- Identify Line Routes
- Public Engagement
- Certificate of Environmental Compatibility (CEC) from Arizona Corporation Commission (ACC)
- National Environmental Policy Act (NEPA) process, for federal land

Key Strategies

SRP Board and Council Work Study Session

Ryan Norlin | September 30, 2025

Project Delivery Methods

Lower Volume
More Time-Flexible
Greater SRP Control

Project Application

Higher Volume
Time-Constrained
Higher Risk Transfer

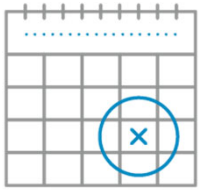
PROJECT PHASE	SELF-BUILD	DESIGN-BID-BUILD	ENGINEERING, PROCUREMENT, & CONSTRUCTION (EPC)
Design	SRP	Contractor(s)	Contractor
Major Equipment	SRP	SRP	SRP or Contractor
Materials	SRP	SRP	Contractor
Construction	SRP	Contractor(s)	Contractor

Implementation Strategies

Engineering, Procurement & Construction (EPC) Partnerships

- Award Contracts to at Least Two (2) Contractors (Partners) for EPC Services
- Multi-Year Term for Large-Scale Transmission Projects
- Planned Award by **April 2026**

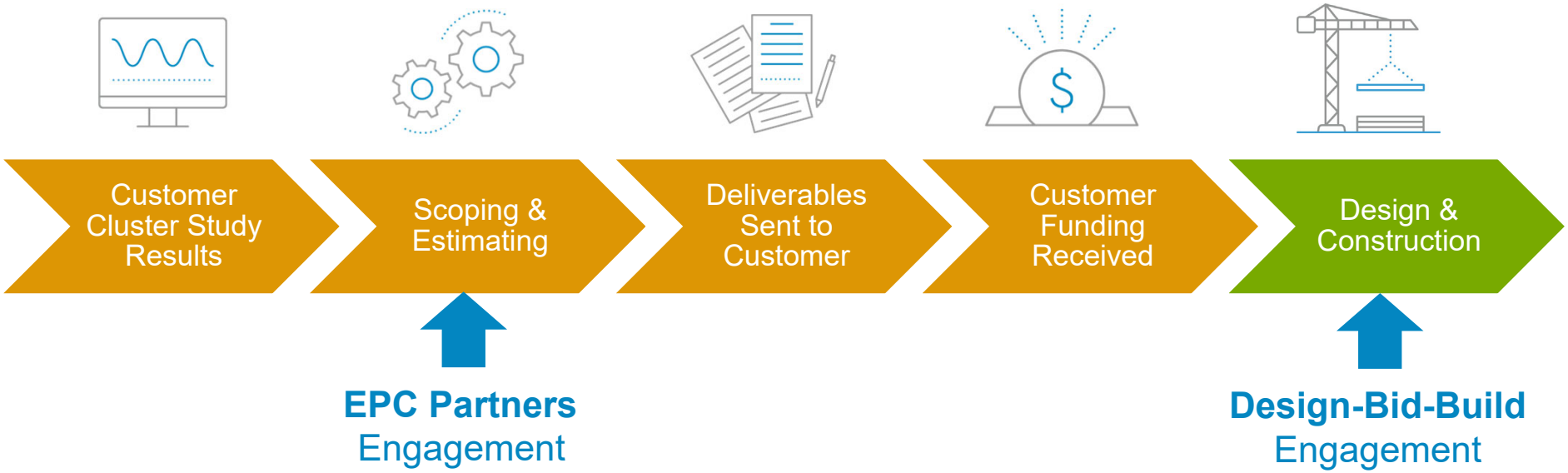
Equipment Procurement



- Lead-Times for High Voltage Transformers & Breakers: **3-4 Years**
- Early Procurement Equipment Option Offered to Customers

Project Streamlining Opportunities

- EPC Partners Unlocks Opportunities Beyond Design and Construction
- Early Engagement During Project Development Increases Cost Certainty for Customers



Hyperscale Substation Construction

- Footprint Increasing with Load Requests
- Some Capable of Gigawatt Delivery

Now

Before

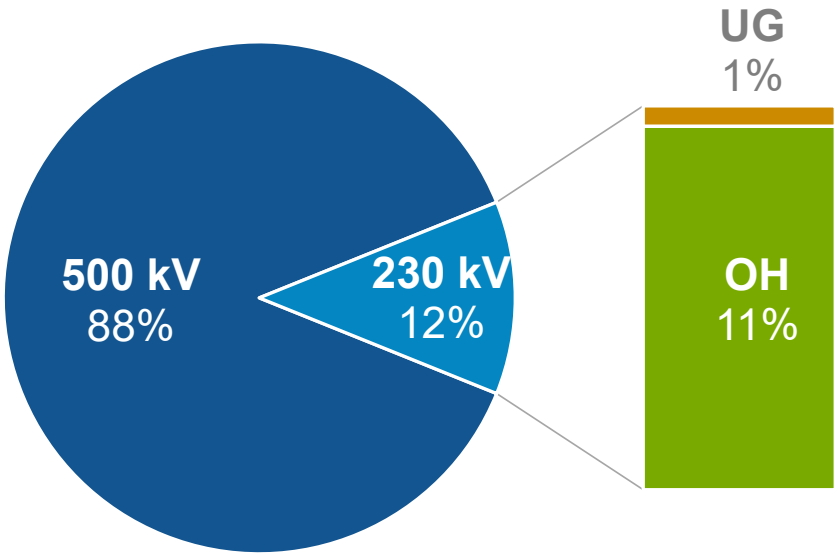
6 Acres
320 MVA

Example:
~400%
Increase
In Size & Power Output

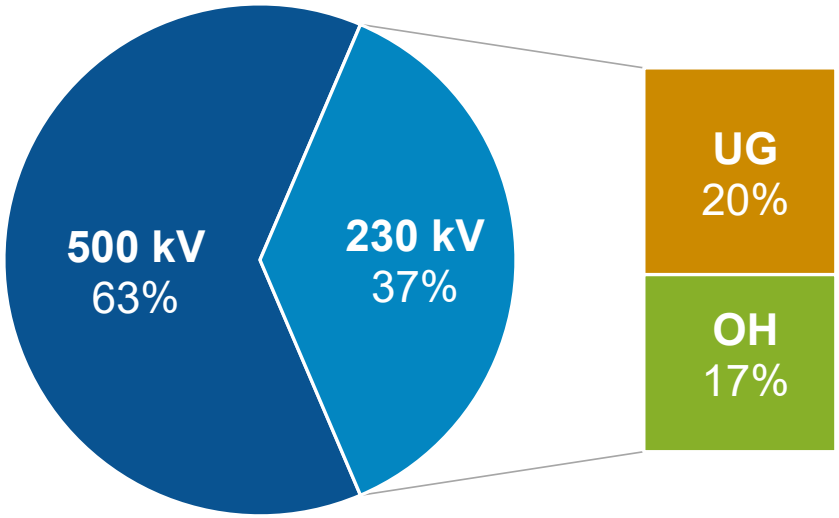
24 Acres
1,184 MVA
(>1GW)

High Voltage Transmission Growth

2035 Transmission Study
627 New Circuit Miles

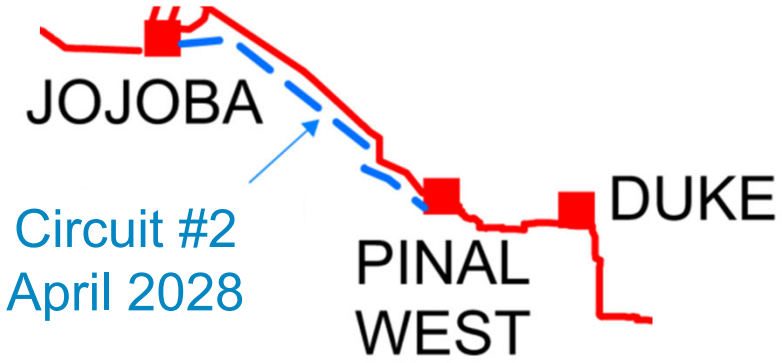


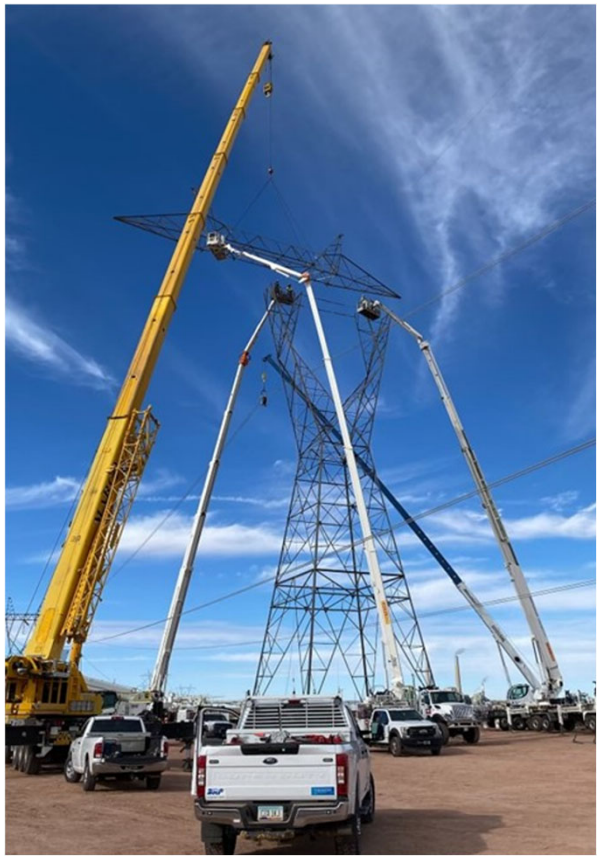
Transitional Load Cluster Study
350 New Circuit Miles



High Voltage Transmission Line Construction

- Increasing Need for New High Voltage Transmission
- Recent 500 kV Project: Jojoba-Pinal West #2 Line
- 32 Miles and 126 Lattice Structures
- First Transmission Engineering, Procurement & Construction (EPC) Award





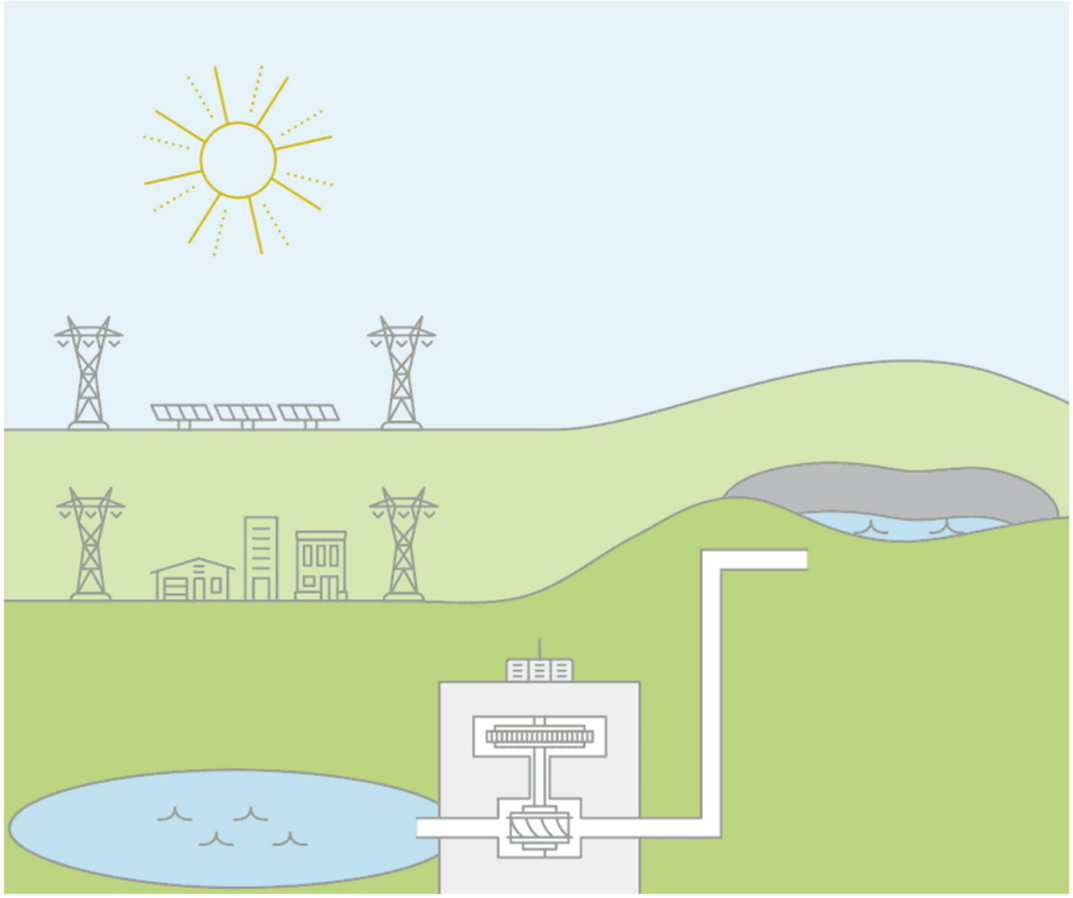
SRP Pumped Storage

Board Work Study Session

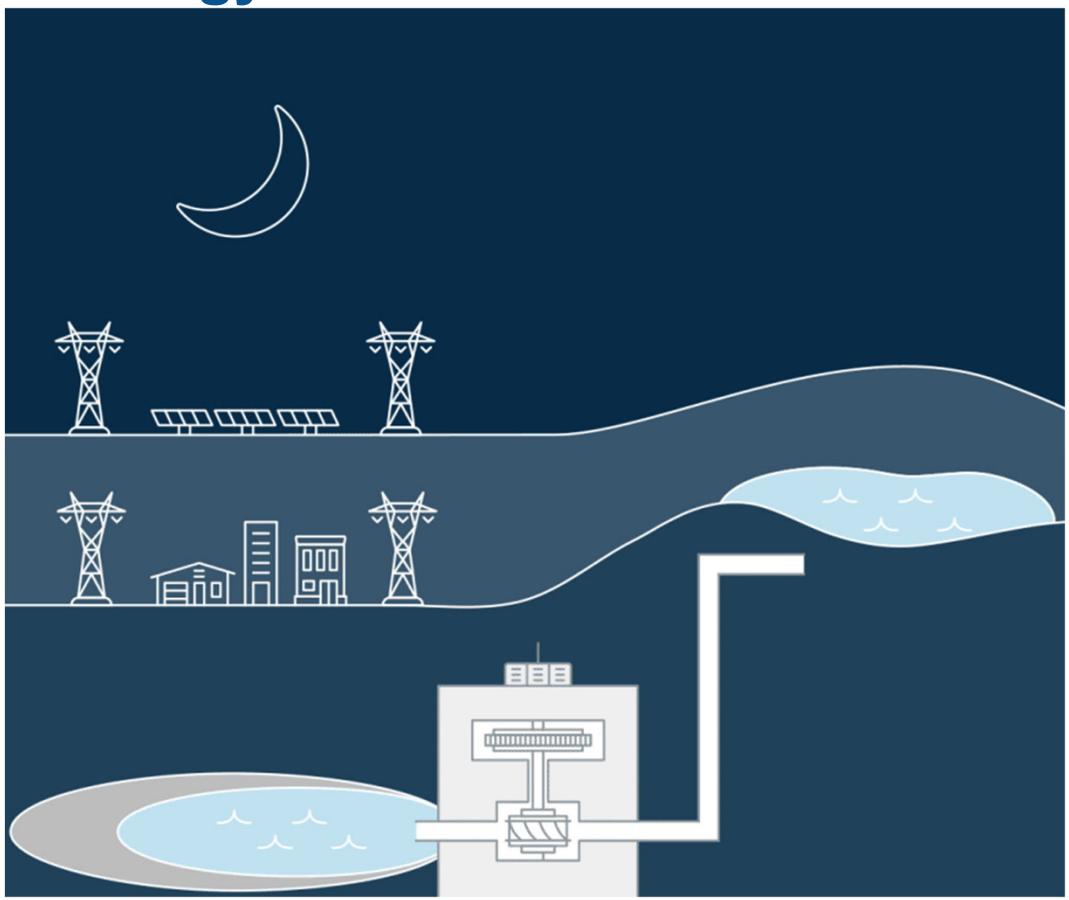
Craig Larson, Senior Director Power Generation

Angie Bond-Simpson, Senior Director Resource Management

Salt River Pumped Storage Project
Stores Excess Power During the Day

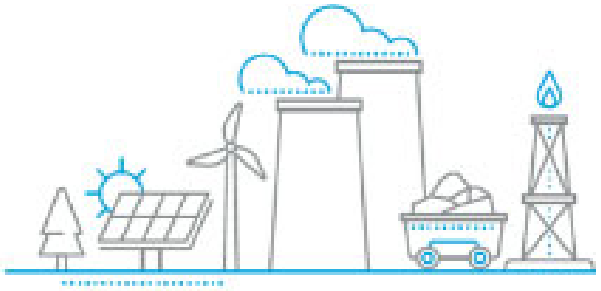


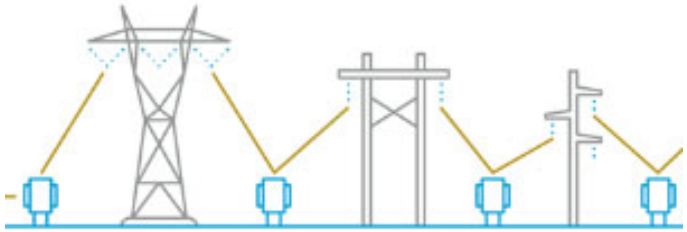
Salt River Pumped Storage Project
Releases Stored Energy When Needed



Key Takeaways from SRP's Integrated System Plan

- Transforming grid to **decarbonize** and respond to **growth**
- SRP will need to more than **double if not triple resource capacity** in the next decade, based sustainability targets and current customer requests
- Firm capacity **and** renewables are part of **least-cost portfolio** in all scenarios
- Pumped Hydropower Energy Storage (PHES) **selected** in **all 42 cases** of 2023 ISP





Salt River Pumped Storage Project
Need and Benefits

- Reliable capacity for growing load
  - 1,000 MW in first phase
  - Additional 1,000 MW in second phase
- Renewable energy support
  - 10+ hours of storage duration
  - Fast start, fast ramping
- Resource diversity
  - Provides system inertia
  - Frequency and voltage support
- Long asset life

Salt River Pumped Storage Project
Unique Advantages Compared to Other Projects

- Existing lower reservoir and water availability
- 1,400 feet of elevation change to enhance efficiency
- Longstanding relationship with the USBR
- SRP experience operating existing pumped storage generation

Lifecycle Cost Analysis

Angie Bond-Simpson

Technology Comparison: Pumped Storage & Li-Ion Batteries

HDR conducted a lifecycle cost comparison between:

- Pumped Hydropower Energy Storage (PHES)
- Lithium-Ion Battery Energy Storage System (BESS)

10-hour storage duration were considered for:

- 1,000 MW of each technology type
- 2,000 MW of each technology type

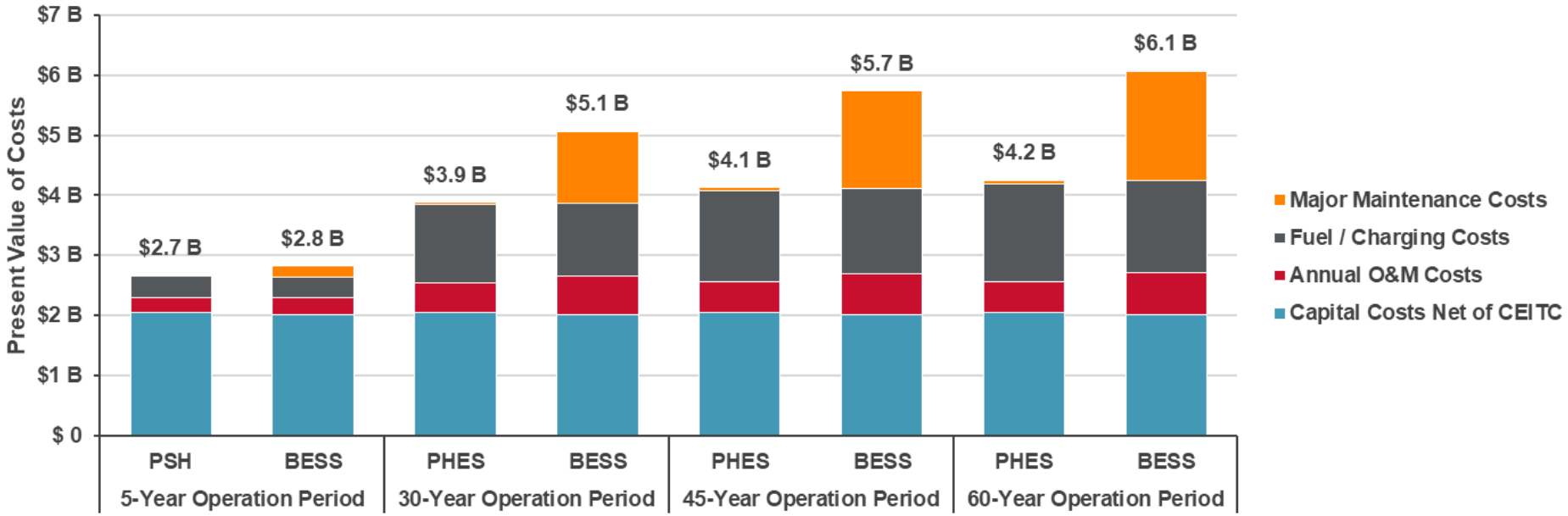
Evaluated lifecycle costs for periods of:

- 30 years
- 45 years
- 60-years

Comparison of Life Cycle Cost Drivers

Life Cycle Considerations	Salt River Pumped Storage	Lithium-Ion Batteries
Capital Cost of Initial Construction	↔	↔
Routine O&M	↓	↑
Energy/Charging Costs	↔	↔
Major Maintenance	↓	↑
Capacity Augmentation	N/A	↑
Removal & Replacement	N/A	↑
Eligibility for Investment Tax Credit (ITC)	✓	✓

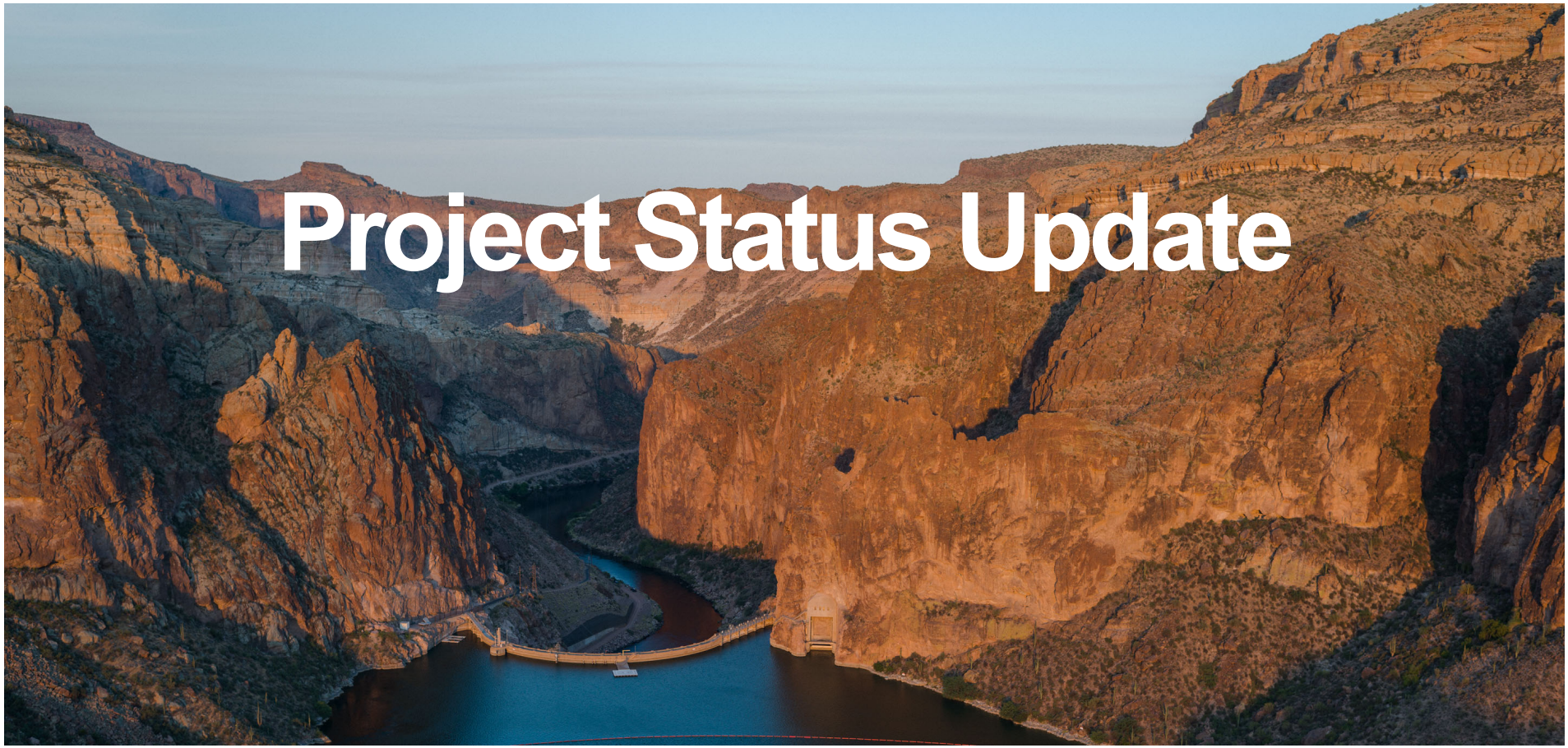
Results: First 1,000 MW of 10-Hour Storage



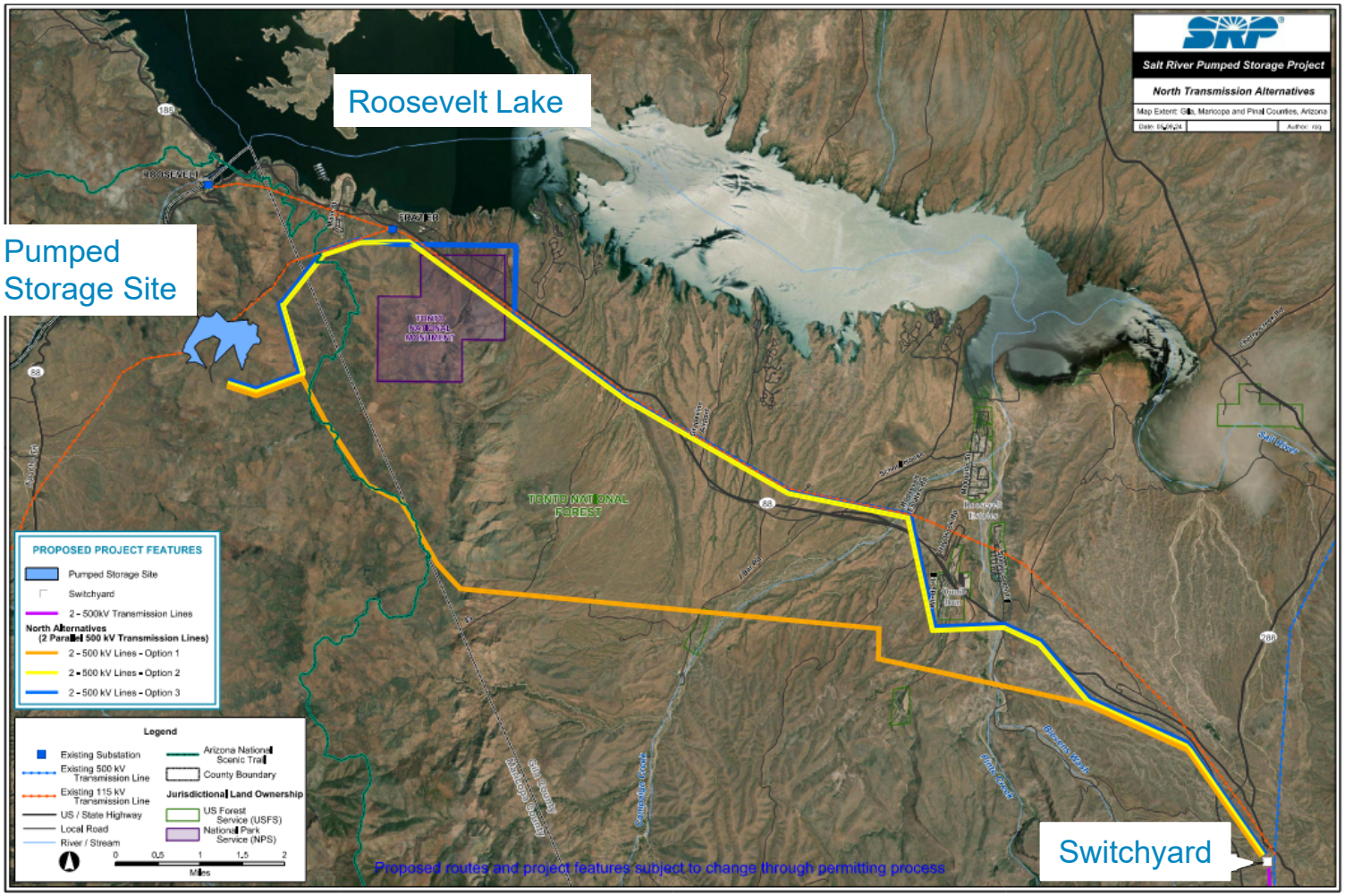
Key Takeaways:

- Life Cycle Costs for BESS grow faster than PHES over time:
  - Ongoing augmentation and maintenance requirements favor PHES by year 5
  - BESS replacement at year-15 compared to PHES 80+year service life
- Second 1,000 MW of PHES has lower cost per kW of capacity than the first 1,000 MW

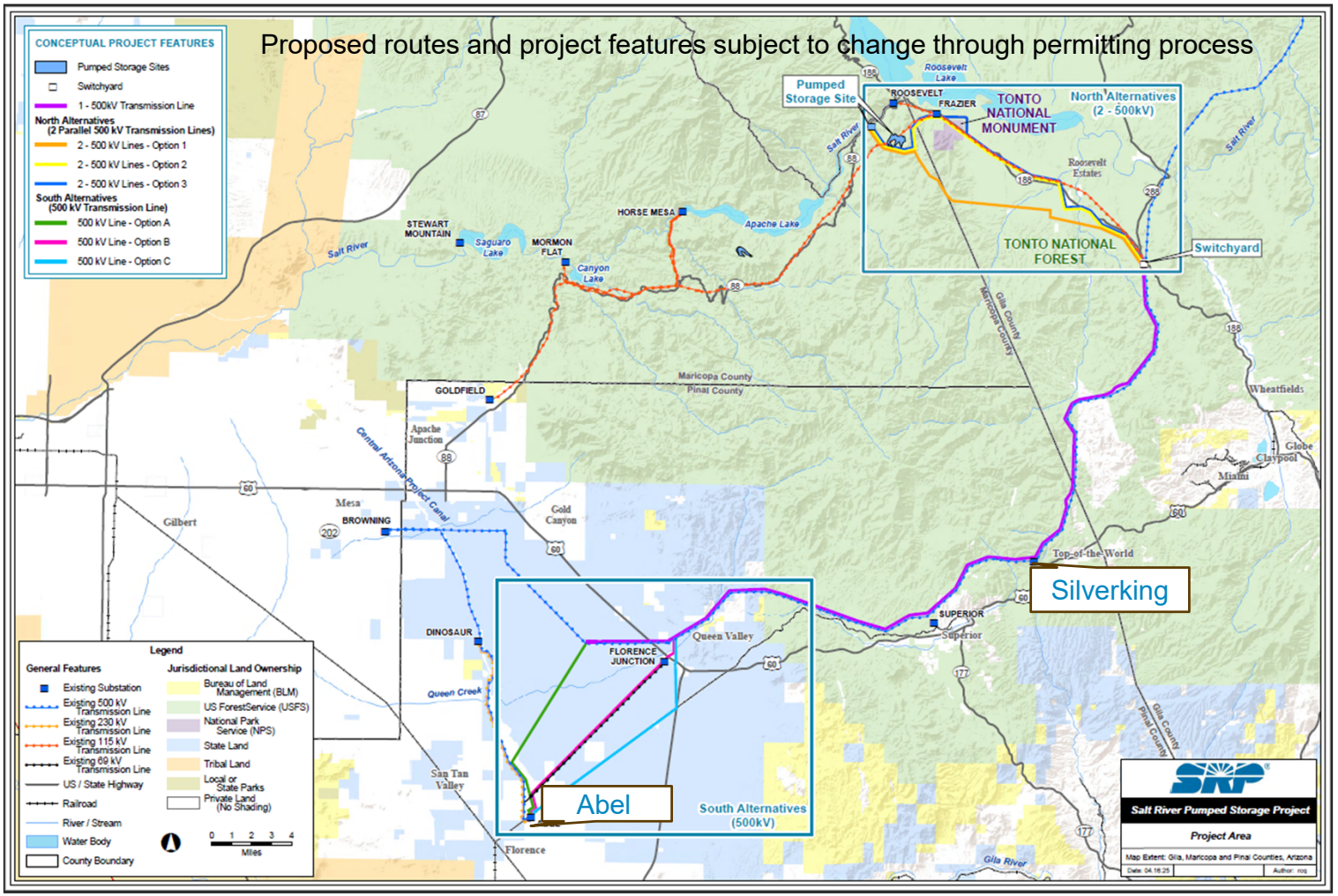
Project Status Update



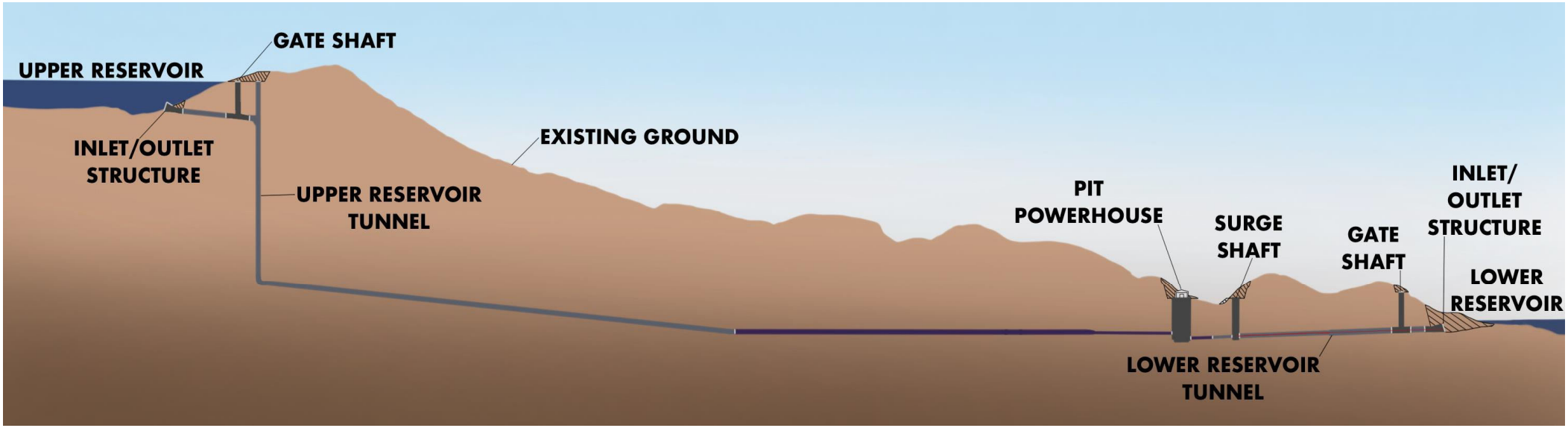
Pumped Storage Project Area



Conceptual Transmission Routes

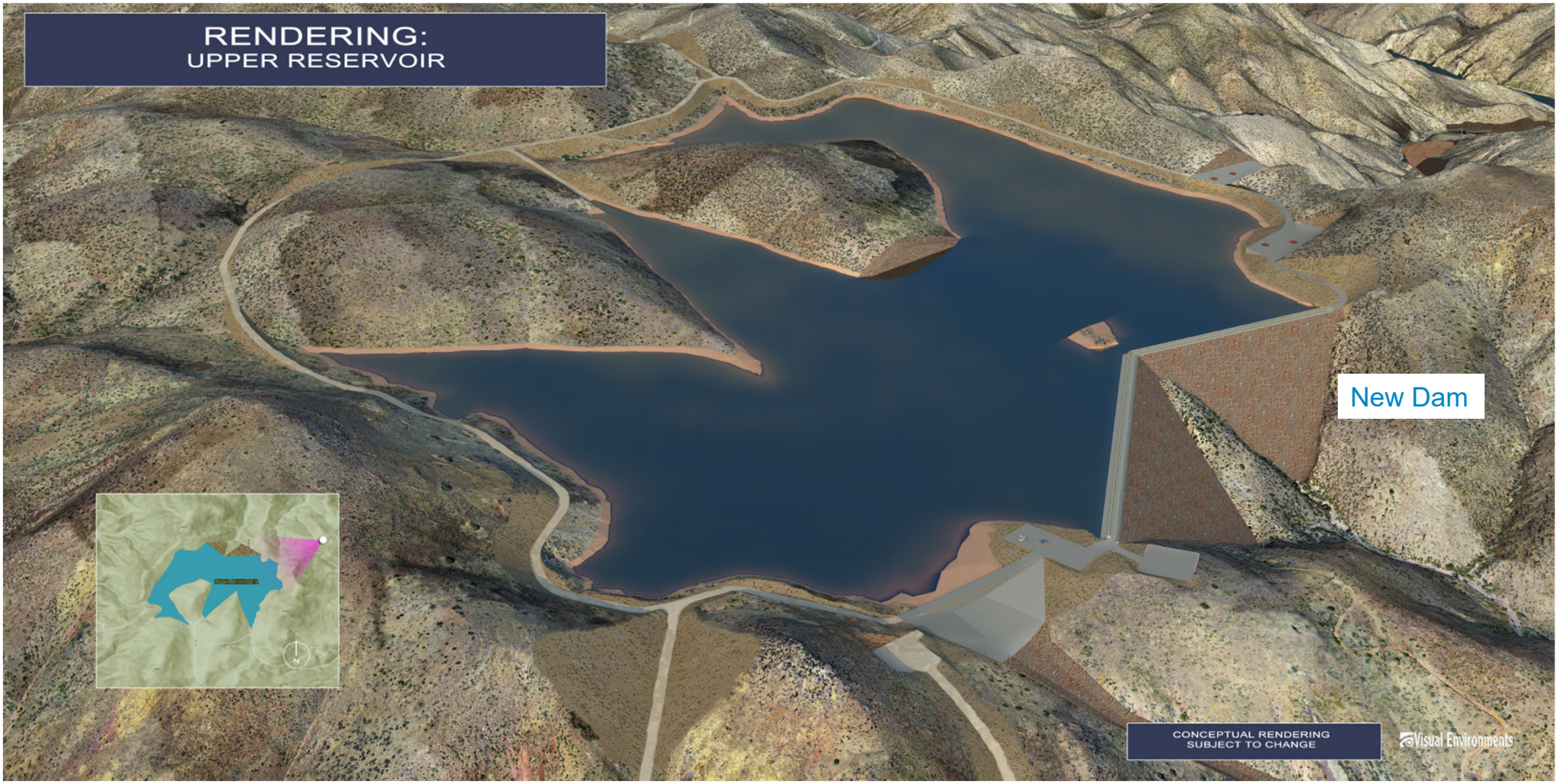


Pumped Storage Option: Pit Waterway Profile



Considerations:

- Access
- Safety
- Constructability
- Schedule
- Feedback from workshops

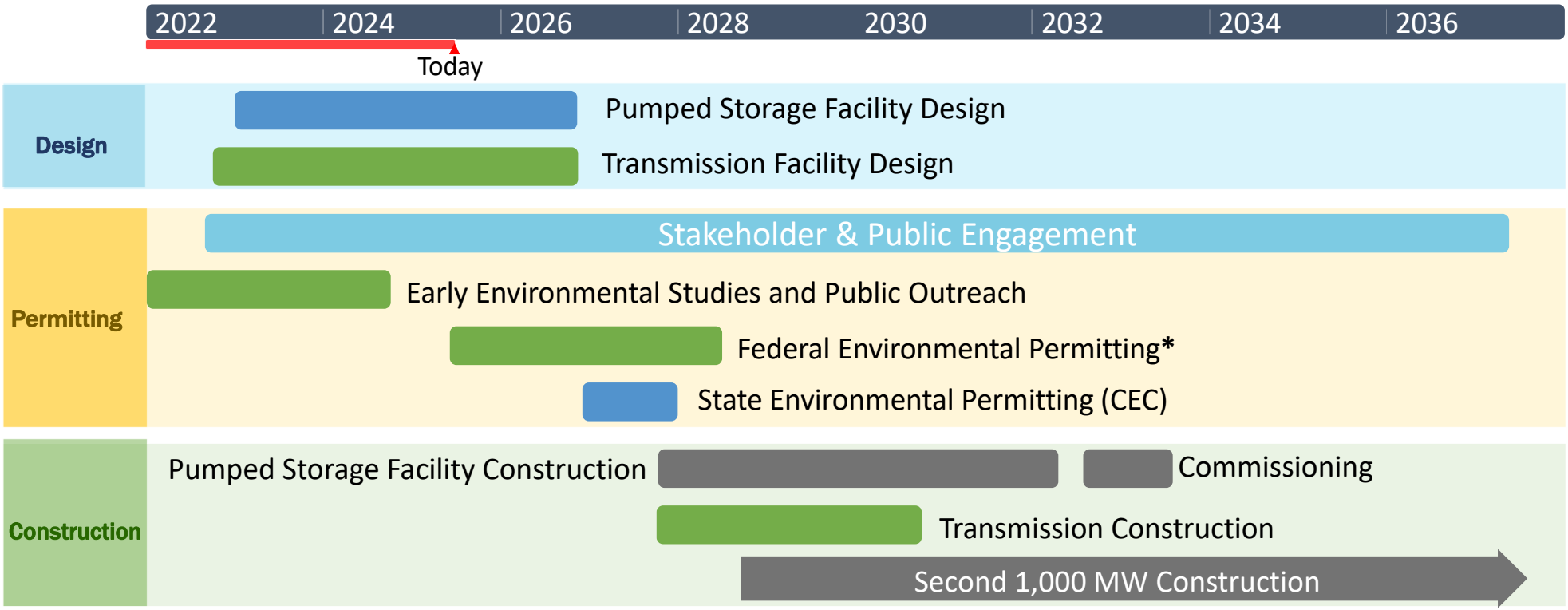

RENDERING:
UPPER RESERVOIR
New Dam
CONCEPTUAL RENDERING
SUBJECT TO CHANGE
Visual Environments

Water System Support of Pumped Storage

- New upper reservoir-10,000-20,000 AF
- Apache Lake-245,138 AF
- Total Salt System Conservation Storage-2,004,287 AF


RENDERING:
PIT STYLE POWERHOUSE FACILITIES
Switchyard
Powerhouse 1
Powerhouse 2
Inlet/Outlet Structure
CONCEPTUAL RENDERING
SUBJECT TO CHANGE
Visual Environments
3/28/25

Preliminary Timeline



*Includes NEPA, NHPA, etc. with lead and cooperating Federal Agencies.

Project Design Activities

Civil and Major Mechanical –Utilizing Competitive Design Process

- **Civil**: 60% design in progress, next step is proposal development
- **Major Mechanical Equipment:** Scale model development and testing is underway, next step is proposal development

Power Delivery: Scope is being finalized, next steps are bidding and award.

Supplier Engagement Approach

Goals

Engage local vendors to boost regional economy.
Ensure transparency and clear supplier requirements.

Approach

Civil Works Contractor-led workshops (Lane & Bechtel), supported by SRP.
Share project scope, material/labor needs, and processes.

Outreach

Targeted invites + industry/LinkedIn promotion.
Track attendance for inclusivity.

Project Budget

Estimated Project Cost

Power Generation First 1000 MW- **$4,222M***

- Includes **~$230M** of enablement activities for second 1000 MW

Power Delivery First 1000 MW-**$835M***

FY26

- Budget-**$89M**
- Forecast-**$188.8M**
  - Partnership timing
  - FY25 Underruns
  - Long lead procurement

FY27(Proposed)

- Budget-**$154M**
  - Assumes 50% partnership
  - Includes design work for second 1000 MW

*Total project cost, not inclusive of potential tax credits. SRP's share 50%

Project Budget (continued)

Long Lead Time Procurement

Total **$220M**
- Board approval request in December meetings
- FY26 **$22M**
- FY27 **$0**
- Remainder of project **$198M**

Q24 Cluster Study Mitigation Costs

Total **$366M**
- Non-cash commitment
- Covers SRP's portion of mitigations
- Included in Power Delivery budget

National Environmental Policy Act Update

National Environmental Policy Act (NEPA)

- Compliance required when a Federal Agency authorizes, permits, funds, or carries out a major federal action.
- Process law - requires federal agencies to assess the environmental effects of their proposed actions or approvals prior to making a decision.
- Requires agencies to consider alternatives to the proposed action
- Allows public review and engagement in federal decision-making process
- Does not require federal agencies to select the least environmentally damaging alternative or to mitigate for impacts – must describe the project, evaluate impacts and make reasoned decision.
- NEPA does not give the agencies additional authority to impose conditions or mitigation

National Environmental Policy Act (NEPA)

- Three levels of compliance:
  - Categorical Exclusions – common actions with negligible impacts
  - Environmental Assessments – more complex projects but no significant impacts
  - Environmental Impact Statements (EIS) – large complex projects with significant impacts (PSP)
- NEPA compliance and EIS often used as umbrella to package project and decision making:
  - Agency and applicant define purpose and need for project
  - Identify and analyze reasonable alternatives (must meet purpose and need)
  - Resolution of impacts
  - Documents compliance with other laws and regulations: Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Clean Water Act (CWA), etc.

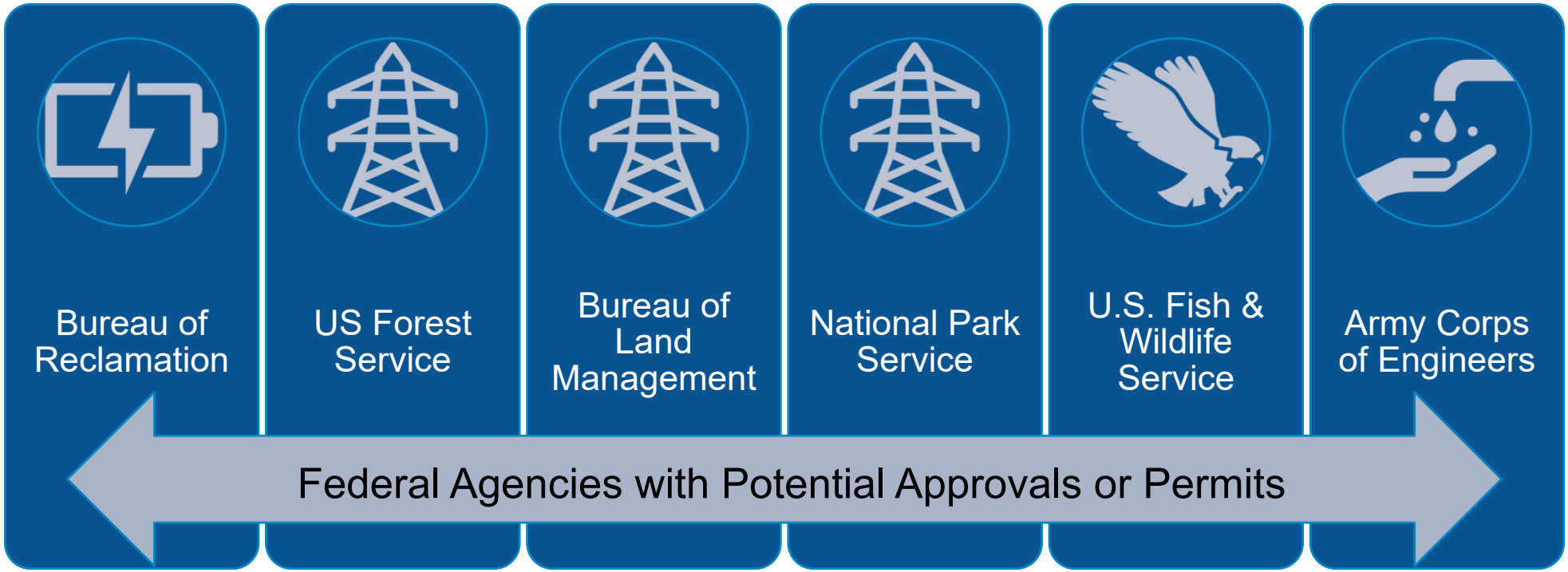
NEPA – EIS Process

Key Steps

1. Project Planning & Agency Coordination
2. Notice of Intent (NOI)
3. Public Scoping Meetings
4. Draft EIS Preparation
5. Public Review of Draft EIS
6. Final EIS
7. Record of Decision (ROD)

2 Year process
beginning winter of 2025

Pump Storage Project (PSP) – Federal Agency Actions



thank you!