

**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, August 27, 2024, 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. Organized Day-Ahead Market Participation and an Overview of Impacts of SRP's Business Process..... BOBBY OLSEN and JOSH ROBERTSON

Informational presentation regarding: 1) how SRP executes planning and operations to meet the needs of SRP's customers for reliable, affordable, and sustainable energy; 2) which business practices would change if SRP participates in a day-ahead organized market; and 3) how a day-ahead market fits within SRP's strategic directions and the principles guiding a likely recommendation from Management regarding day-ahead markets before the end of 2024.

3. Adjourn..... PRESIDENT DAVID ROUSSEAU

The Board may vote during the meeting to go into Executive Session, pursuant to A.R.S. §38-431.03 (A)(3), for the purpose of discussion or consultation for legal advice with legal counsel to the Committee on any of the matters listed on the agenda.

The Board 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 SCHEDULED FOR
TUESDAY, OCTOBER 29, 2024**

08/20/2024

Safety Minute

Avoid Distracted Driving

Major Causes: Any activity that diverts attention from driving

- Phone use: texting or talking (including hands-free)
- Eating or drinking
- Fiddling with controls (music, navigation)

How to Drive Distraction-free:

- Don't use any devices while driving
- Plan the trip: plan the route, stop to eat or drink
- Passengers: navigation help, extra eyes, eliminate distractions
- Lead by example and encourage others



Distracted Driving
3,000 deaths annually
424,000 injuries annually
1,600,000 crashes annually

Meeting Objectives

- Discuss link between SRP's 2050 Vision, 2035 Corporate Goals, and Western Market Strategy.
- Review SRP planning process and the role of markets.
- Provide a foundational background for future day-ahead markets overview meetings.
- Prepare for future day-ahead market decision.



Organized Day Ahead Market Participation and an Overview of Impacts on SRP's Business Processes

SRP Board and Council Work Study Session

Bobby Olsen & Josh Robertson | August 27, 2024

2050 Vision, 2035 Goals & Western Energy Markets Strategy

Bobby Olsen



Delivering water and power®

MISSION

SRP serves our customers and communities by providing reliable, affordable and sustainable water and energy.

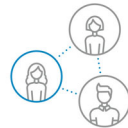
2050 VISION

A secure water and clean energy future empowers Arizona to thrive for generations to come.

STRATEGIC DIRECTIONS & Western Markets Strategy Alignment



CUSTOMERS Understand value from our customers' perspective and continually improve their experience with us to meet their evolving expectations



COMMUNITY Be a collaborative community partner and thought leader on issues at the heart of SRP's mission



RELIABILITY Invest in the long-term resilience, flexibility and security of our water and power systems



AFFORDABILITY Ensure continued affordability of the water and power we deliver by maintaining SRP's strong financial health and increasing our financial flexibility



SUSTAINABILITY Embed sustainable principles and practices in all that we do to create a lasting, positive social and environmental impact



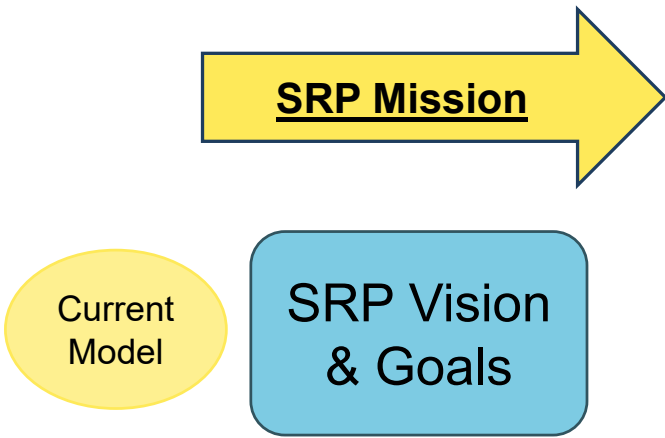
WORKFORCE Further develop an engaged and future-ready workforce that reflects and embraces the diverse backgrounds and perspectives of our communities



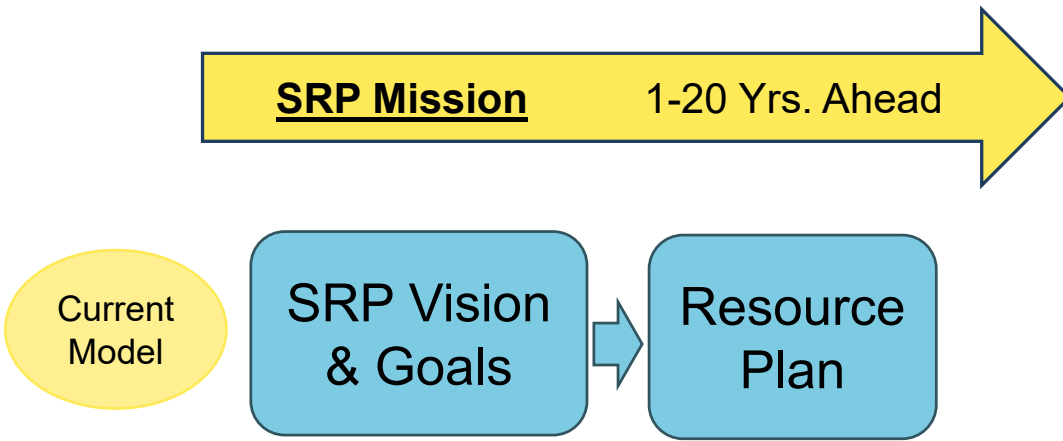
Resource Planning, Market Fundamentals & SRP Energy Market Priorities

Bobby Olsen & Josh Robertson

SRP Planning Model & Organized Regional Markets

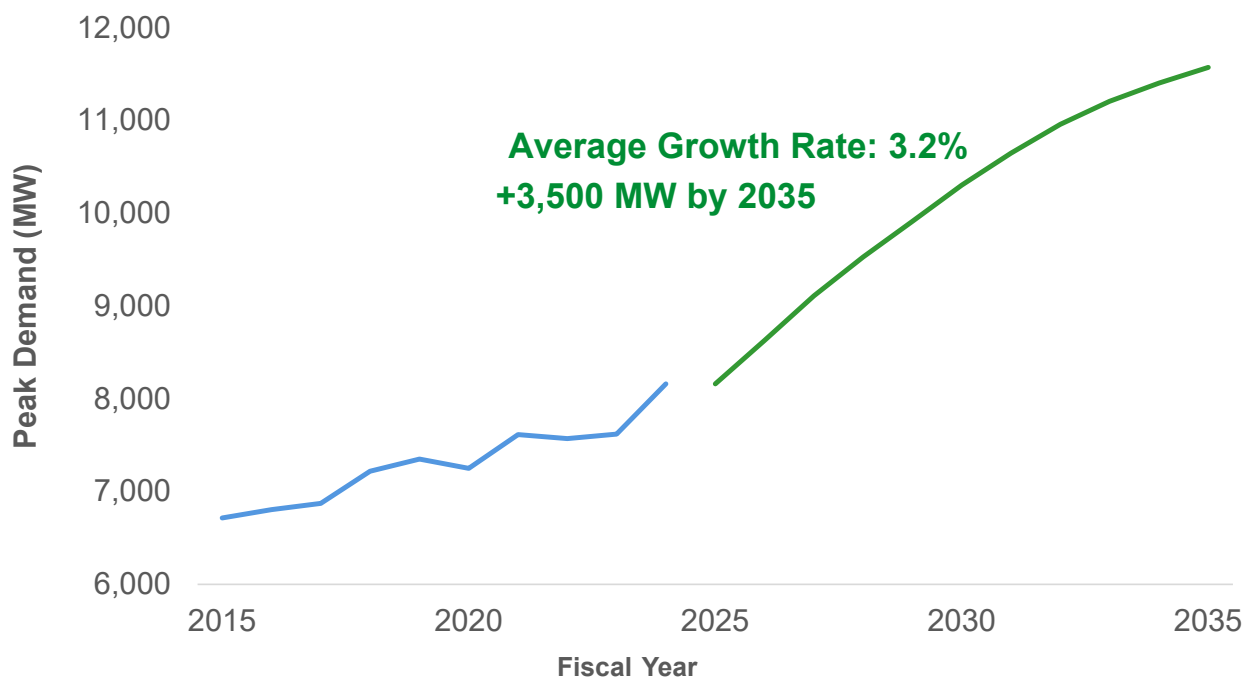


SRP Planning Model & Organized Regional Markets



Key Drivers for Resource Changes

Significant Load Growth



Average Growth Rate: 3.2%
+3,500 MW by 2035

Forecasted growth in annual energy – 4.6% per year through 2035

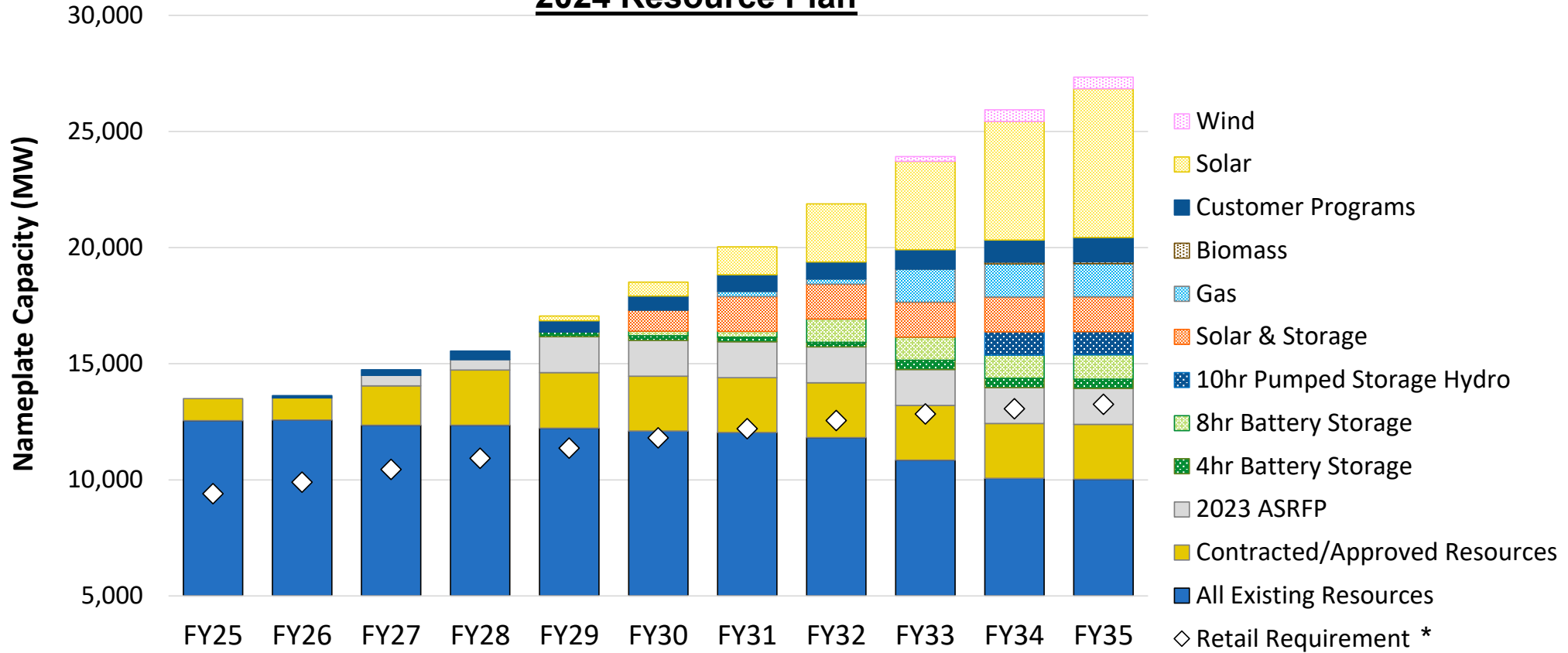
More Ambitious Carbon Reduction Goals

By 2035: Reduce the amount of CO₂ emitted by generation (per MWh) by 82% from 2005 levels by 2035 (previous goal was 65% reduction)

By 2050: Net zero carbon emissions (previous goal was 90% reduction from 2005 levels)

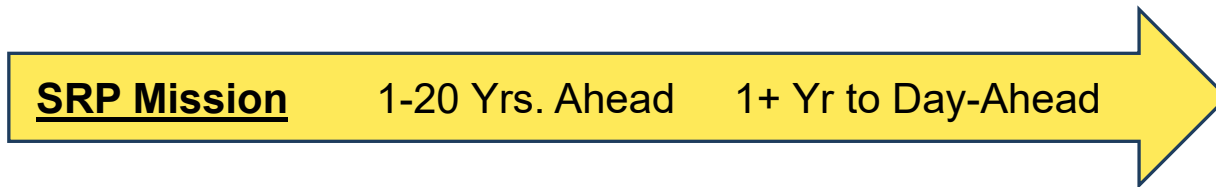
Planned Resource Additions

2024 Resource Plan

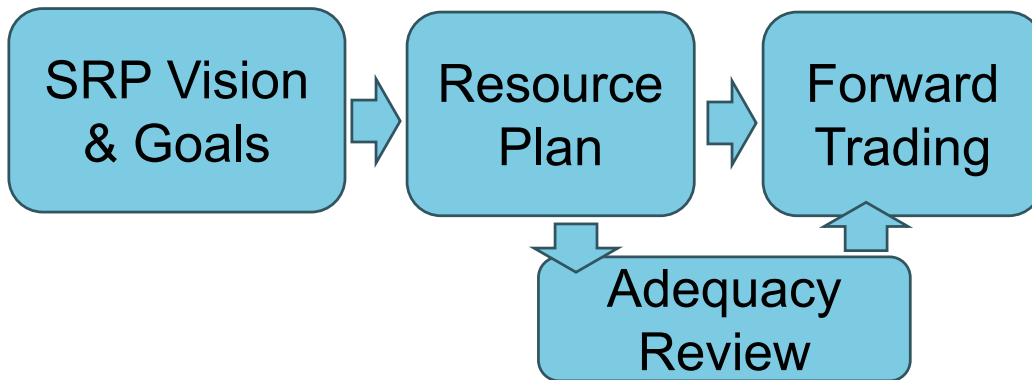


* Retail Peak Load + Firm Sales + Reserve Margin

SRP Planning Model & Organized Regional Markets



Current Model



Yearly Resource Adequacy Review & Adjustments

Resource Plan reviewed and updated every year. Changes driven by:

Updated customer demand forecast

Changes in resource economics

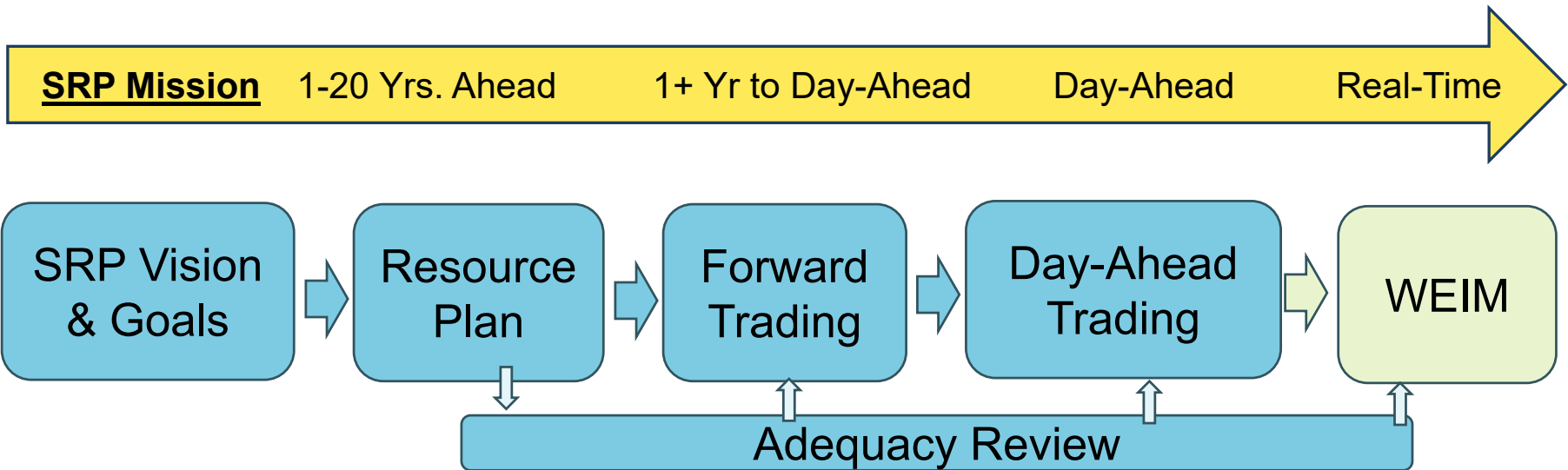
Ensuring SRP has adequate resources to serve load reliably

Reducing carbon intensity for every MWh delivered

Maintaining affordability for customers

Mitigating operational and infrastructure development risk of the plan

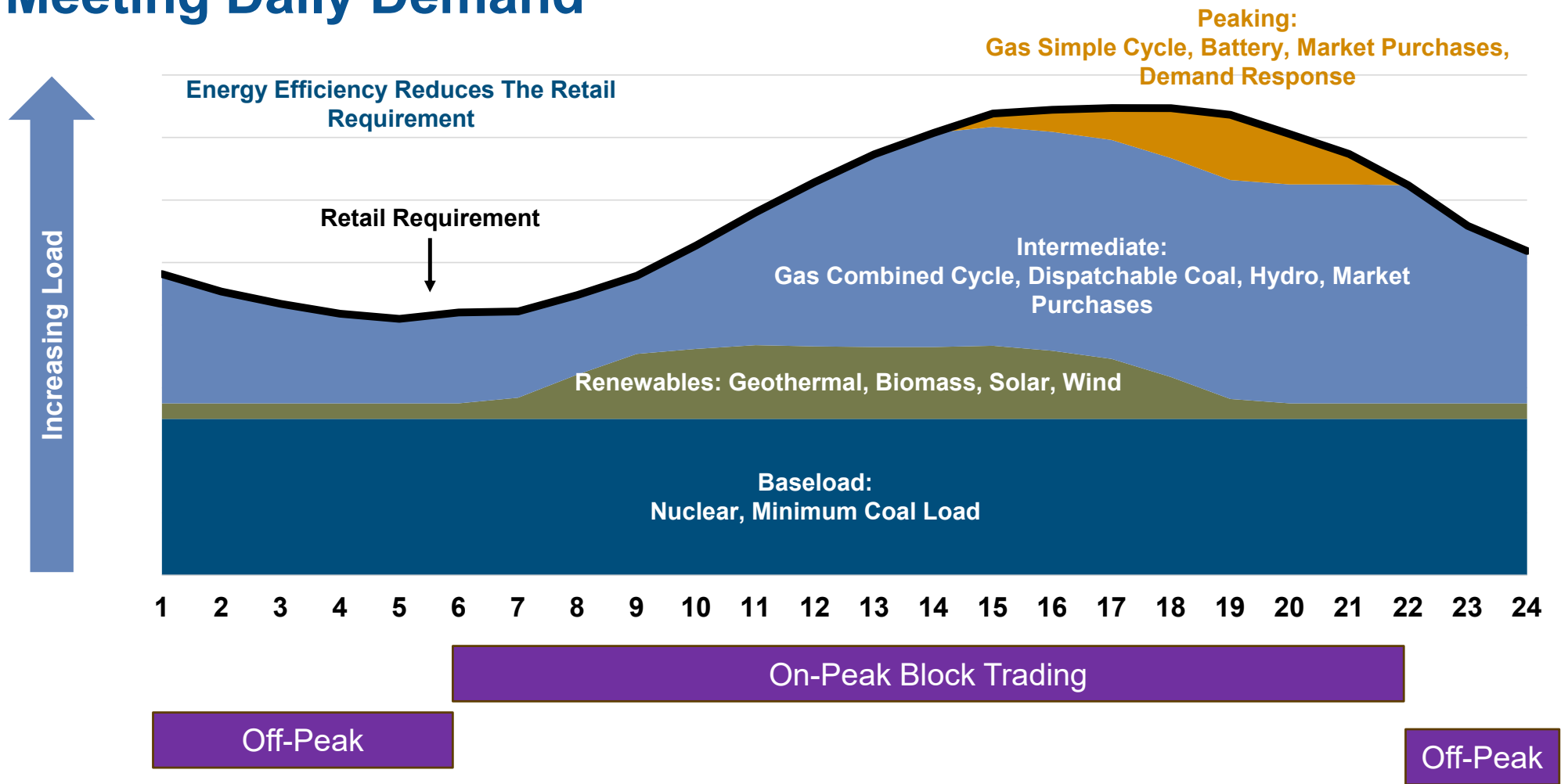
SRP Planning Model & Organized Regional Markets



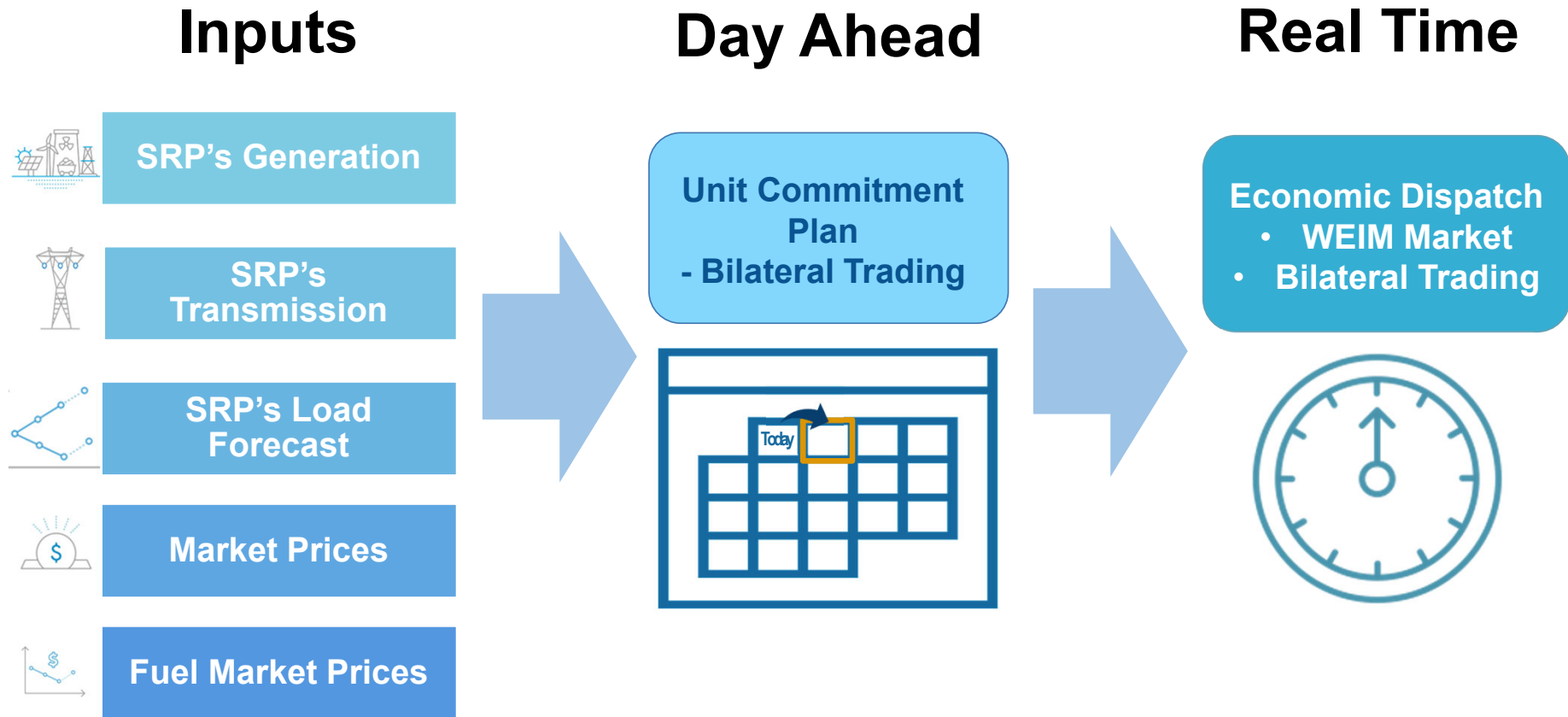
Internal/Regional & Bilateral

Organized Regional Market

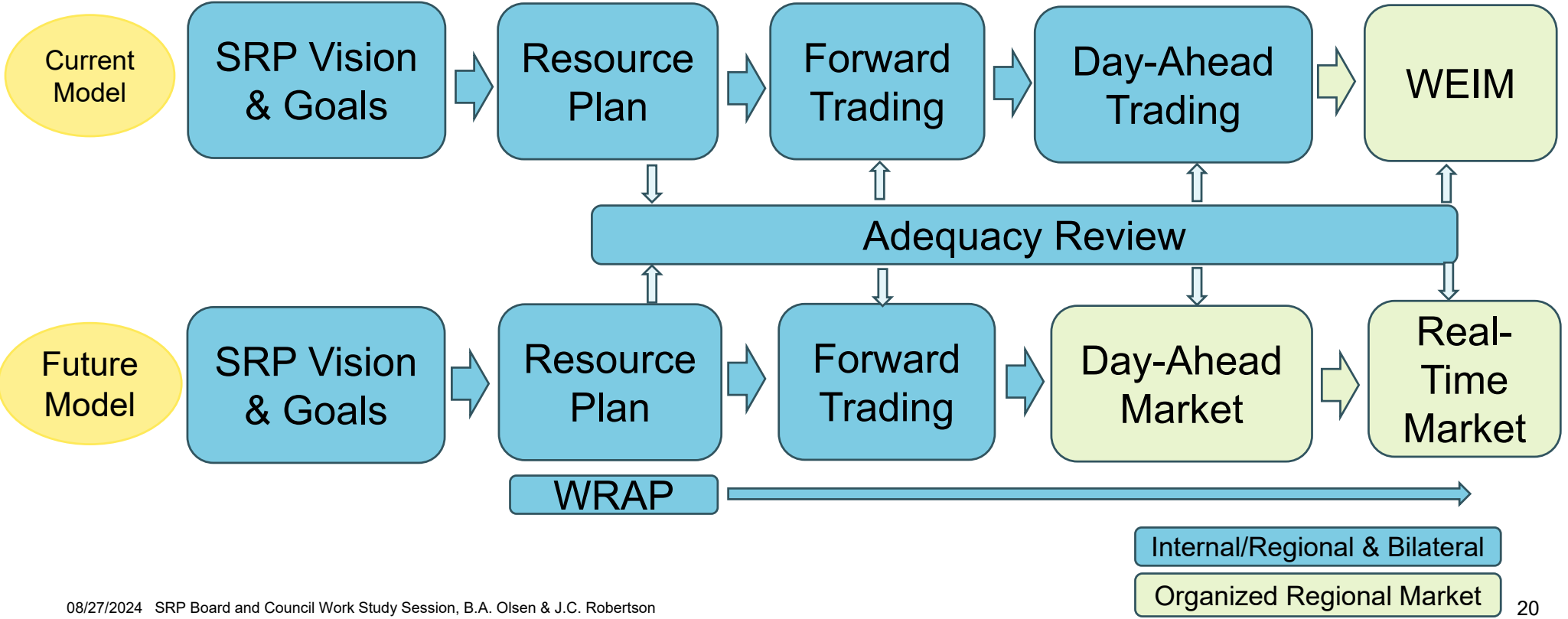
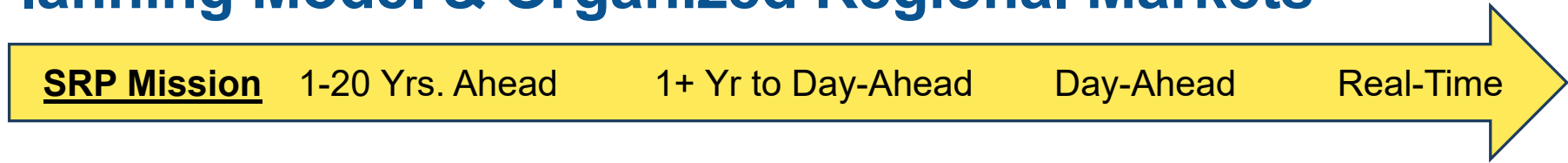
Meeting Daily Demand



Current Short-Term Trading



SRP Planning Model & Organized Regional Markets



Short-term Resource Adequacy Review & Adjustments

Hypothetical Example

- Day 6-7
 - Resource adequacy assessment: Heatwave predicted; high demand expected. Plan to ramp up generation from gas plants.
- Day 5
 - Major failure at a gas plant. Coordinate with SRP grid operator to manage load.
- Day 3-4
 - Work to put the gas plant online continues. Power purchase made.
- Day 2
 - The gas plant not online; adjust forecast up. Short 100 MW-call on WRAP for Energy Deployment.
- Day 1-2
 - Participate in day-ahead and real-time market.

Characteristics and Purpose of Day-Ahead Market

- Conducted the day prior – commits resources for the next operating day
- Determined by Resource Offers and Demand Bids
- Minimizes production costs
- Provides price assurance prior to real-time

Day-Ahead Market Concepts

All participants must have sufficient resources to meet their loads

Self-scheduling allowed

All resources will participate in the new market

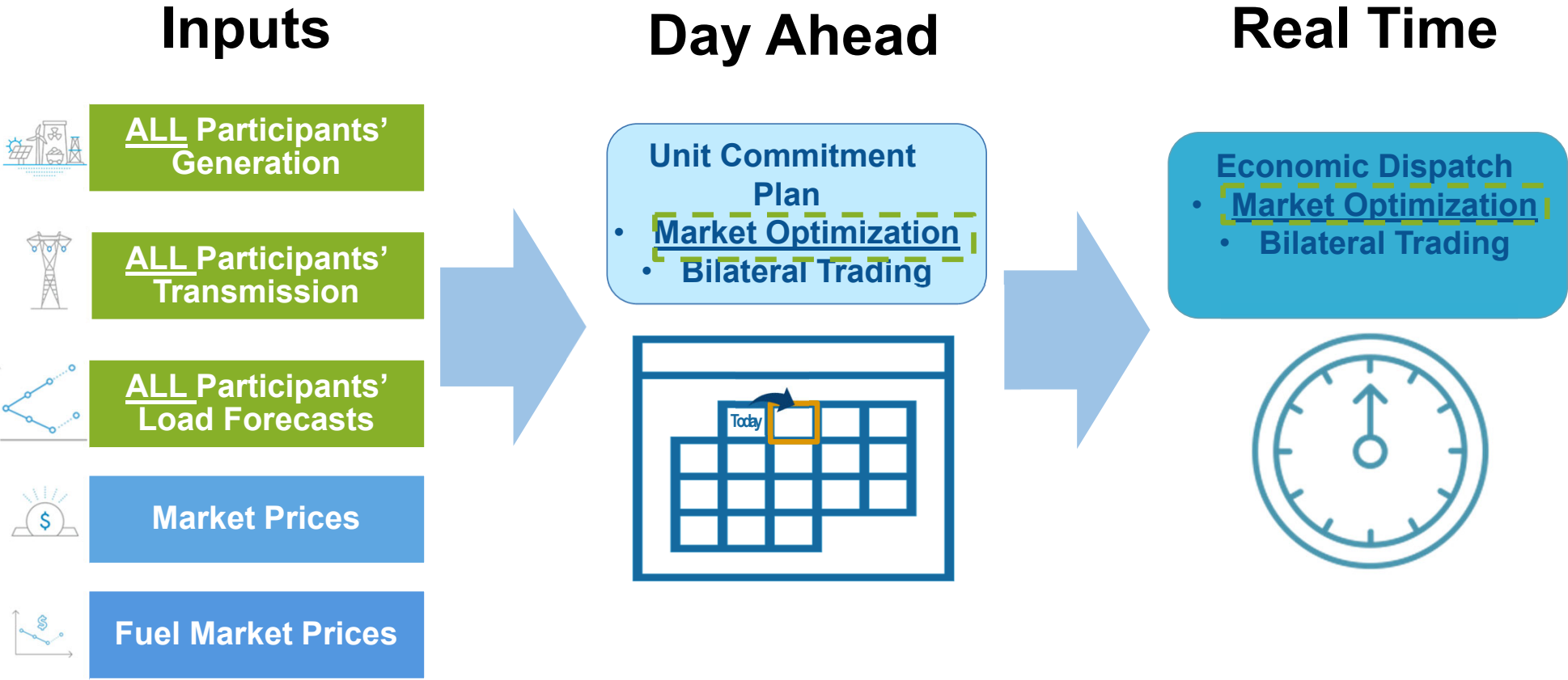
Centralizes unit commitment and energy dispatch across the entire footprint

Dispatch includes transmission optimization

Bilateral trading can still occur

SRP remains its own Balancing Authority and retains its Open Access Transmission Tariff

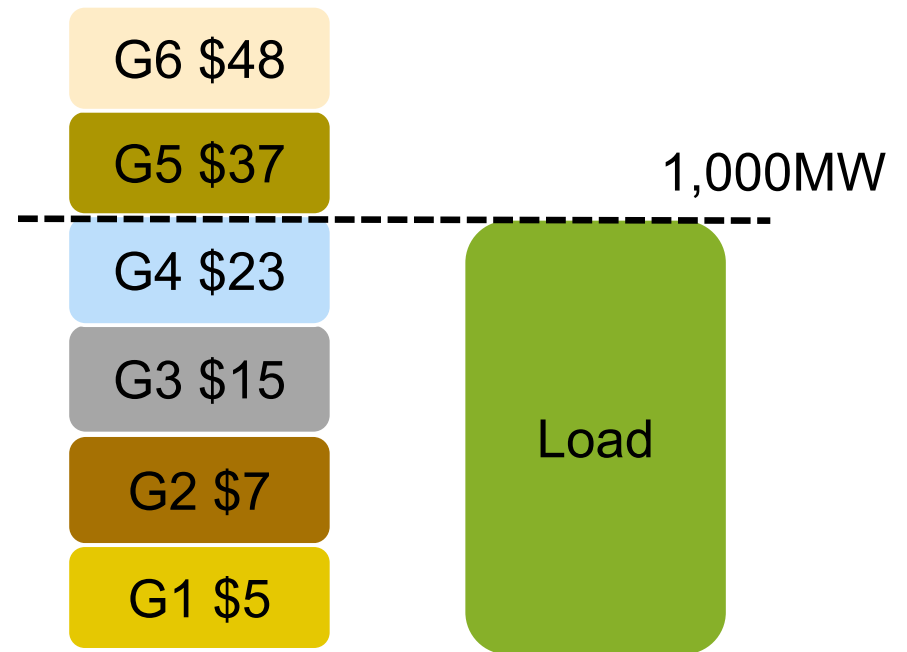
Trading in Organized Markets



Unit Commitment in Day-Ahead Market

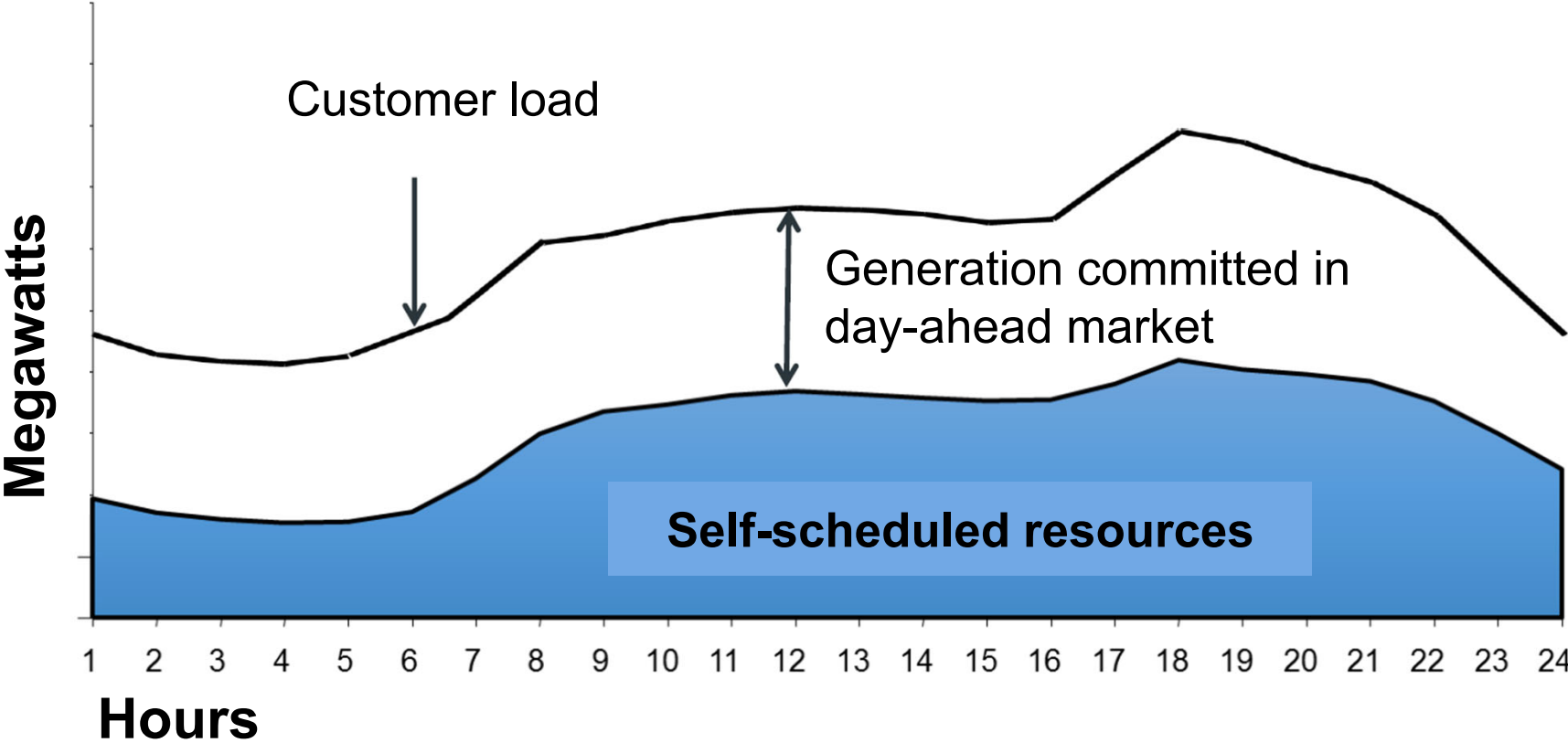
- Generation and self-scheduled commitments based on SRP's market participation strategy and unit requirements.
- The most cost-effective combination of generating units to meet the forecasted demand determined.

Highest Incremental Cost \$\$



Lowest Incremental Cost \$

Meeting Daily Demand in an Organized Market



SRP 2035 Goals



AFFORDABILITY

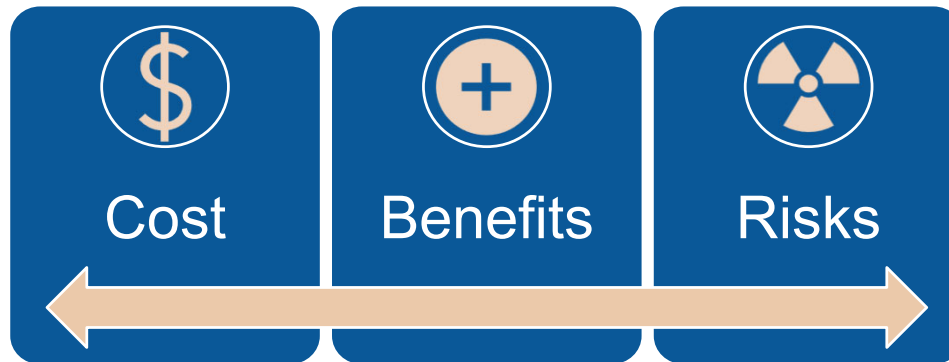
Ensure continued affordability of the water and power we deliver by maintaining SRP's strong financial health and increasing our financial flexibility.

- 1 Maintain a strong yet flexible financial position as measured by SRP's key financial indicators and credit ratings.
- 2 Shape and participate in regional Western electric markets that provide value for SRP and our customers.

Value Proposition of Markets

Leveraging load and resource diversity over a larger footprint through expanded markets can deliver benefits to customers such as reduced costs and enhanced reliability

Each new market opportunity must be evaluated



SRP's Energy Market Principles

Customer Benefits

- Net benefits
- Load and resource diversity
- Maintain or enhance reliability
- Path to RTO

Governance

- Independence / transparency
- Public Power representation
- Local resource decision making
- Utility input on grid operations

Transmission Cost Allocation

- New project cost allocated based on needs and measurable benefits
- Transmission costs recovered via “license plate” charge

Generation Resource Sufficiency

- Maintain vertically integrated utility structure
- Self scheduling of generation
- Resource adequacy construct

SRP's Energy Market Principles

Customer Benefits	Governance	Transmission Cost Allocation	Generation Resource Sufficiency
<ul style="list-style-type: none">• Net benefits• Load and resource diversity• Maintain or enhance reliability• Path to RTO	<ul style="list-style-type: none">• Independence / transparency• Public Power representation• Local resource decision making• Utility input on grid operations	<ul style="list-style-type: none">• New project cost allocated based on needs and measurable benefits• Transmission costs recovered via “license plate” charge	<ul style="list-style-type: none">• Maintain vertically integrated utility structure• Self scheduling of generation• Resource adequacy construct

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SRP's Energy Market Principles

and

Alignment with SRP's Strategic Directions



CUSTOMERS Net benefits; Load and resource diversity; Maintain or enhance reliability; Path to RTO



COMMUNITY Leadership and collaboration with various entities across Western Interconnection



RELIABILITY Maintain or enhance reliability



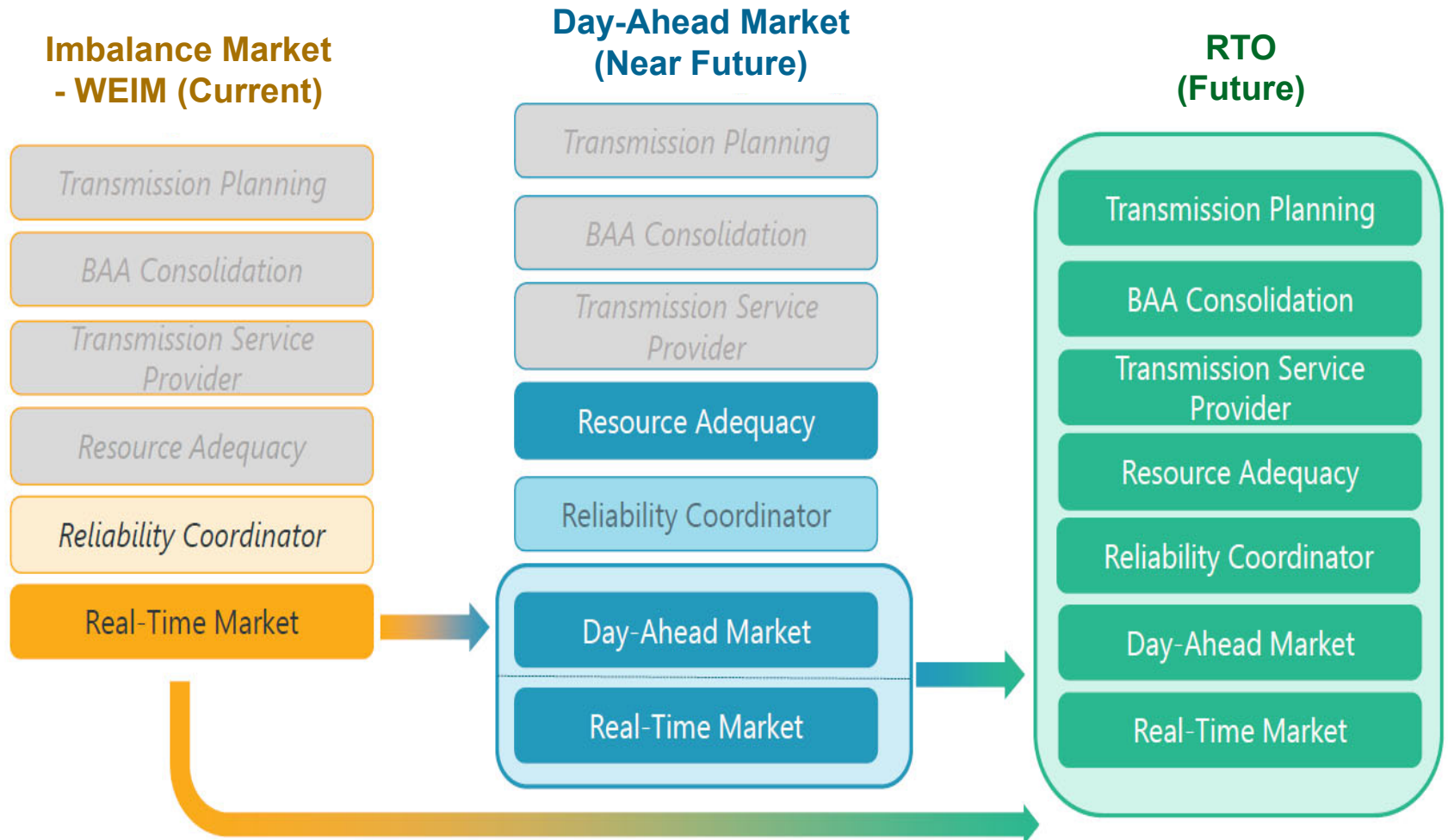
AFFORDABILITY Net benefits



SUSTAINABILITY Load and resource diversity; Efficient integration of new renewable resources

SRP's Energy Market Principles

Potential Phases of the Markets



Day-Ahead Market Participation

What Does Not Change for SRP

Board decision making authority

Strategy and goals setting

Resource planning

Resource adequacy review

Next Steps

- **Additional Future Presentations**
 - September: Day-Ahead Market Options Comparison
 - October: Day-Ahead Markets Benefits Overview
 - November: Request for Board Approval for SRP's Day-Ahead Market Participation

thank you!

