



Board of directors

Oct. 26, 2023

Energy leaders since 1973

Dispatchable capacity

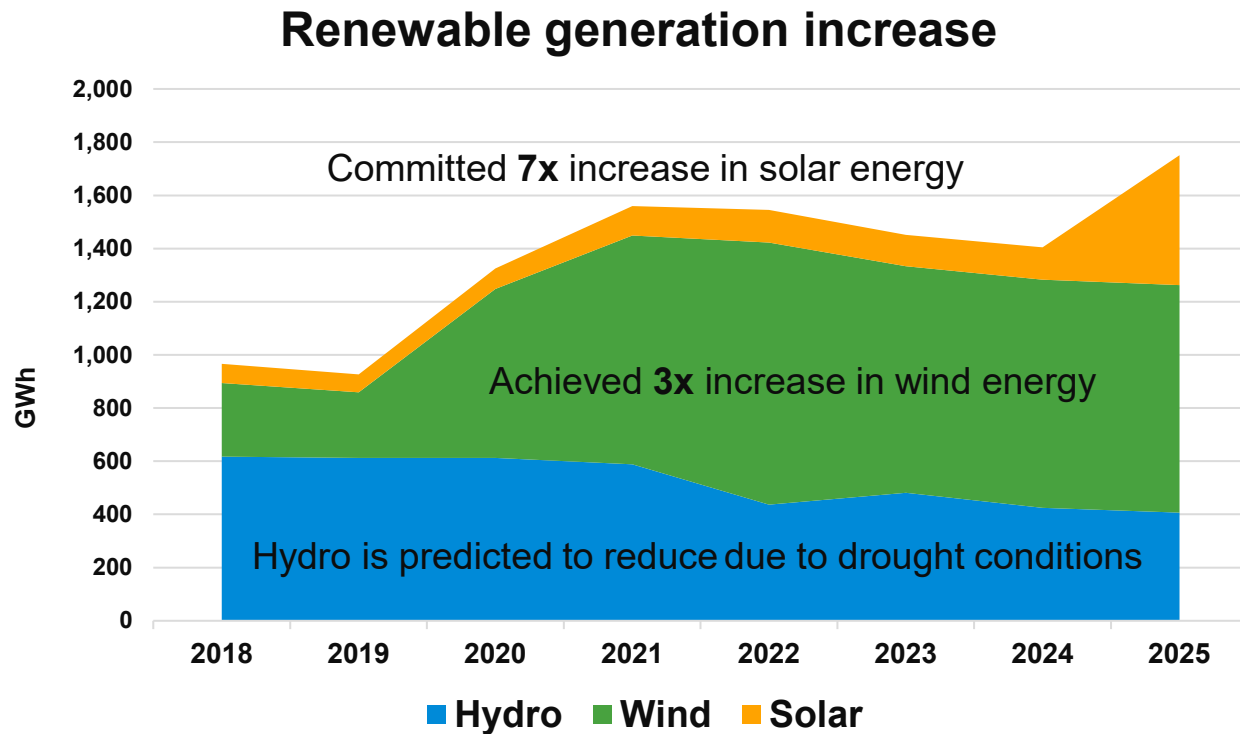
Raj Singam Setti, chief transition and integration officer



Introduction

- Background
- Electric Power Research Institute (EPRI) Vice President, Integrated Grid and Energy Systems Daniel Brooks
- Large Public Power Council (LPPC) President John Di Stasio
- Key takeaways
- Resolution of support

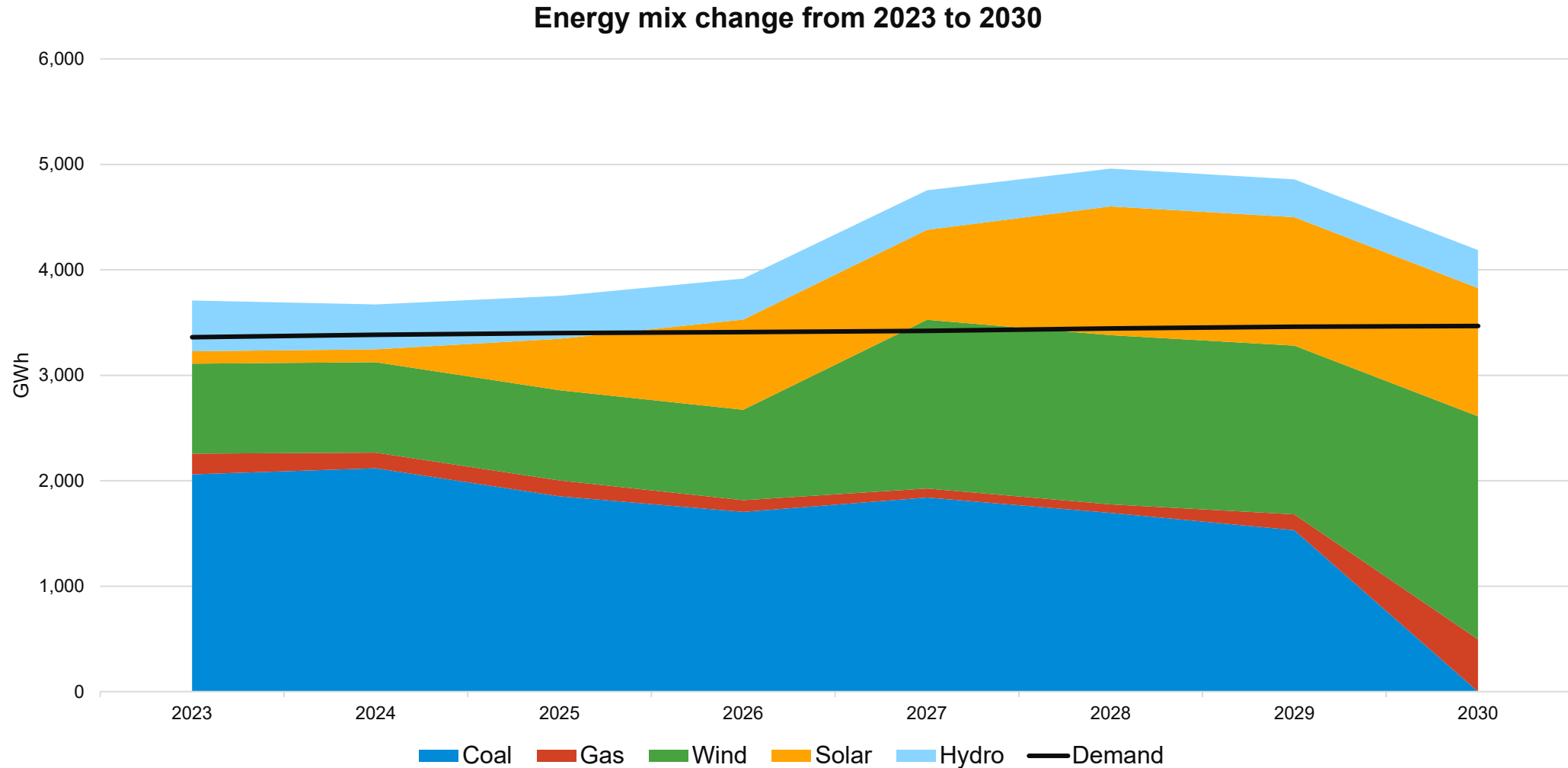
Progress made since passing the Resource Diversification Plan in 2018



- 225 MW of Roundhouse wind
- Announcement to retire coal resources
- Developed a distributed energy resources strategy
- 22 MW Rawhide Prairie Solar with 2 MWh battery
- 150 MW Black Hollow Solar power purchase agreement
- Finalizing winning proposals from 2022 solar and battery storage RFPs
- Planning to issue wind and storage RFP this year

Between now and 2030

Significant renewable generation added



Clean Energy Transition

- Platte River is developing 2024 IRP in line with:
 - Three pillars of reliability, financial sustainability and environmental responsibility
 - Our customers desires and directives
 - The best business practices of taking measured risks (financial and technological)
 - Uncertainty & variability
 - Emerging technologies of the future
- Dispatchable capacity is critical for clean energy transition goals
 - Long duration storage
 - Virtual power plant
 - Aeroderivative capacity with rapid start-up and ramp-up & down

Reliability and Resiliency for the Clean Energy Transition

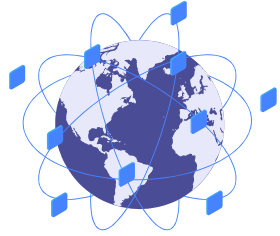
Platte River Power Authority
Board of Directors Meeting

Daniel Brooks
Vice President – Integrated Grid & Energy Systems

2023 October 26



Presentation Outline



1

**Energy System
Modeling
for Pathways**



2

**Resulting Grid
Reliability
Challenges**



3

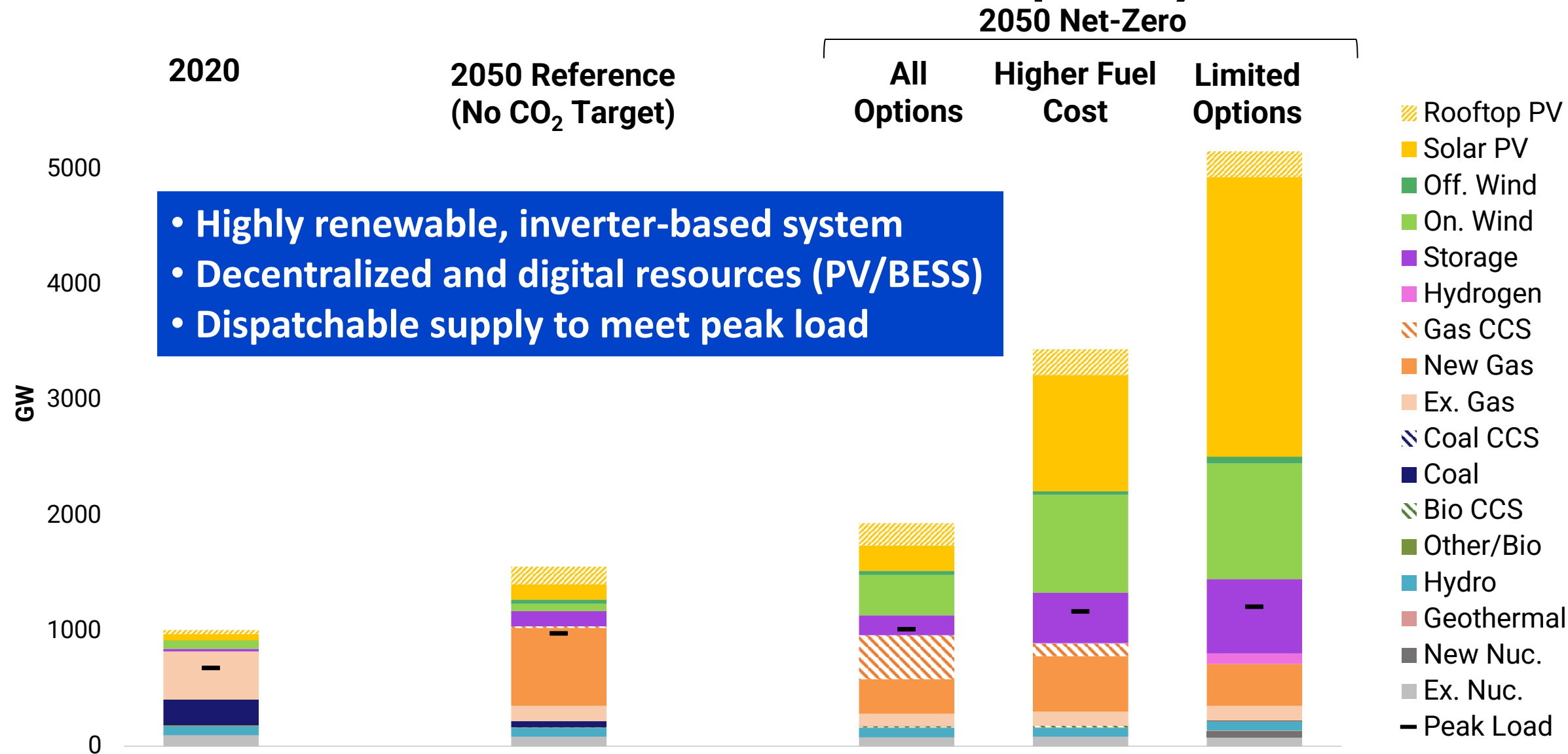
**Key Developments
Needed for Reliable
& Resilient Grid**

EPRI Analysis of U.S. Economy Decarbonization Targets

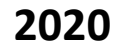


Recent EPRI analyses of technology deployments to meet U.S. 2030 (50%) and 2050 (Net-Zero) emission reduction targets show drastic changes required for energy systems and end uses.

2050 Net-Zero: U.S. Total Installed Capacity Mix



U.S. 2050 Net-Zero: Electricity Supply and Demand



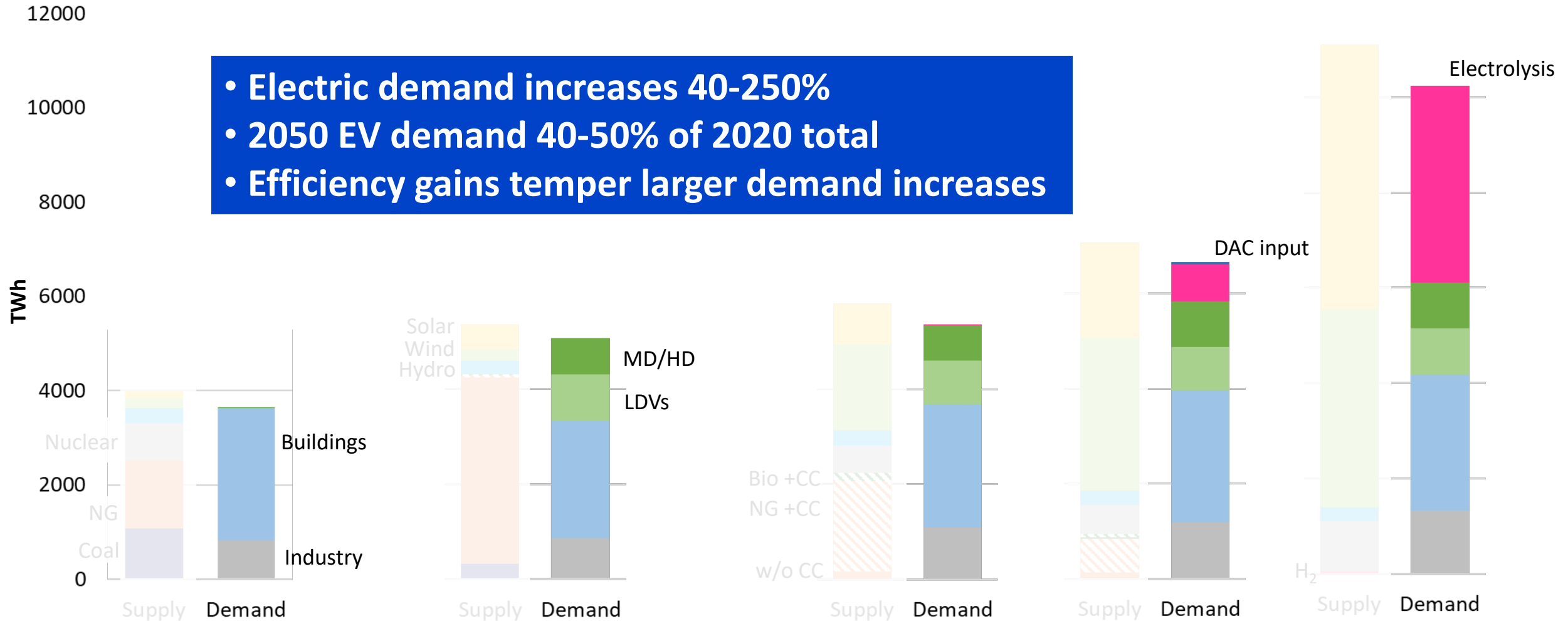
2050 Reference (No CO₂ Target)

All Options

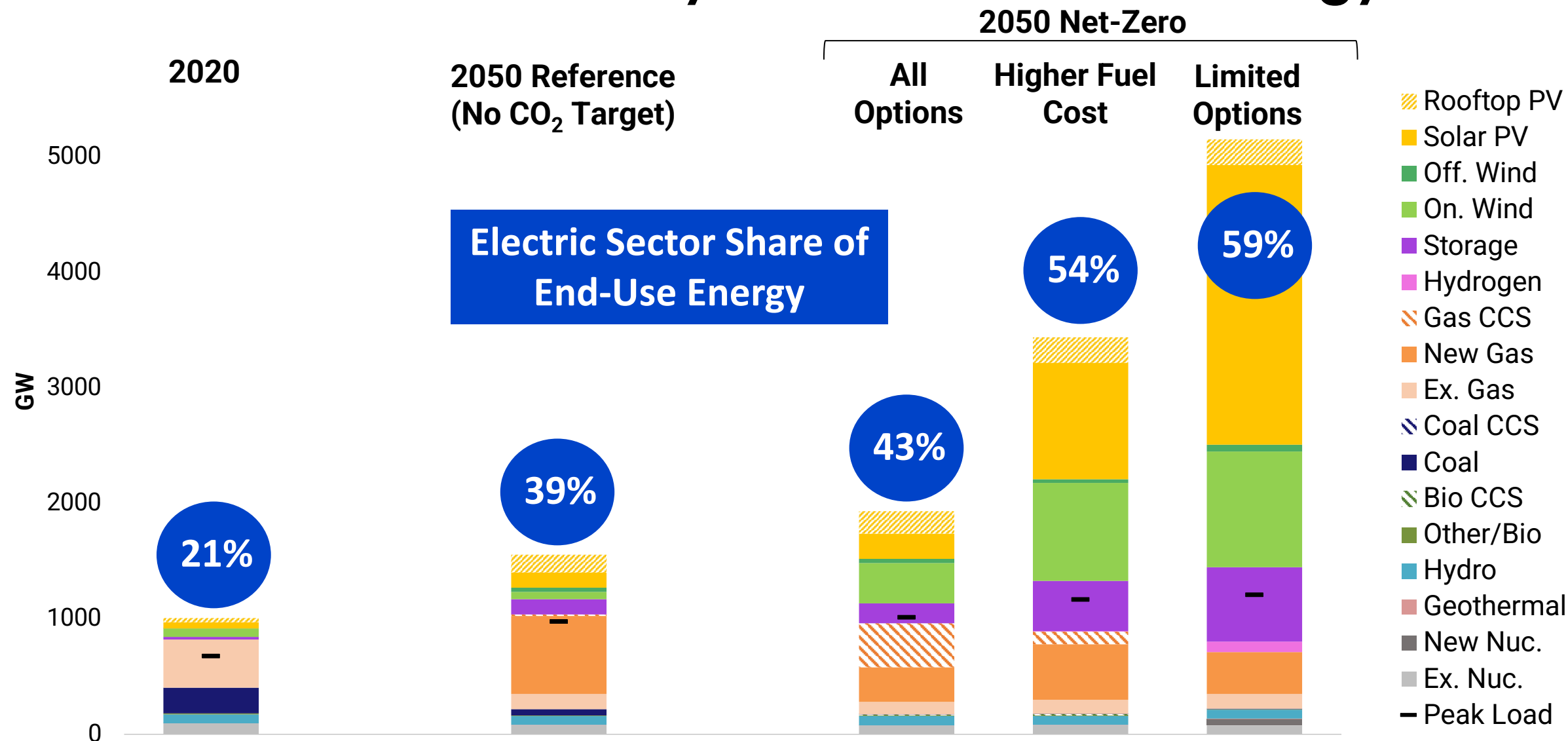
2050 Net-Zero

High Fuel Cost

Limited Options



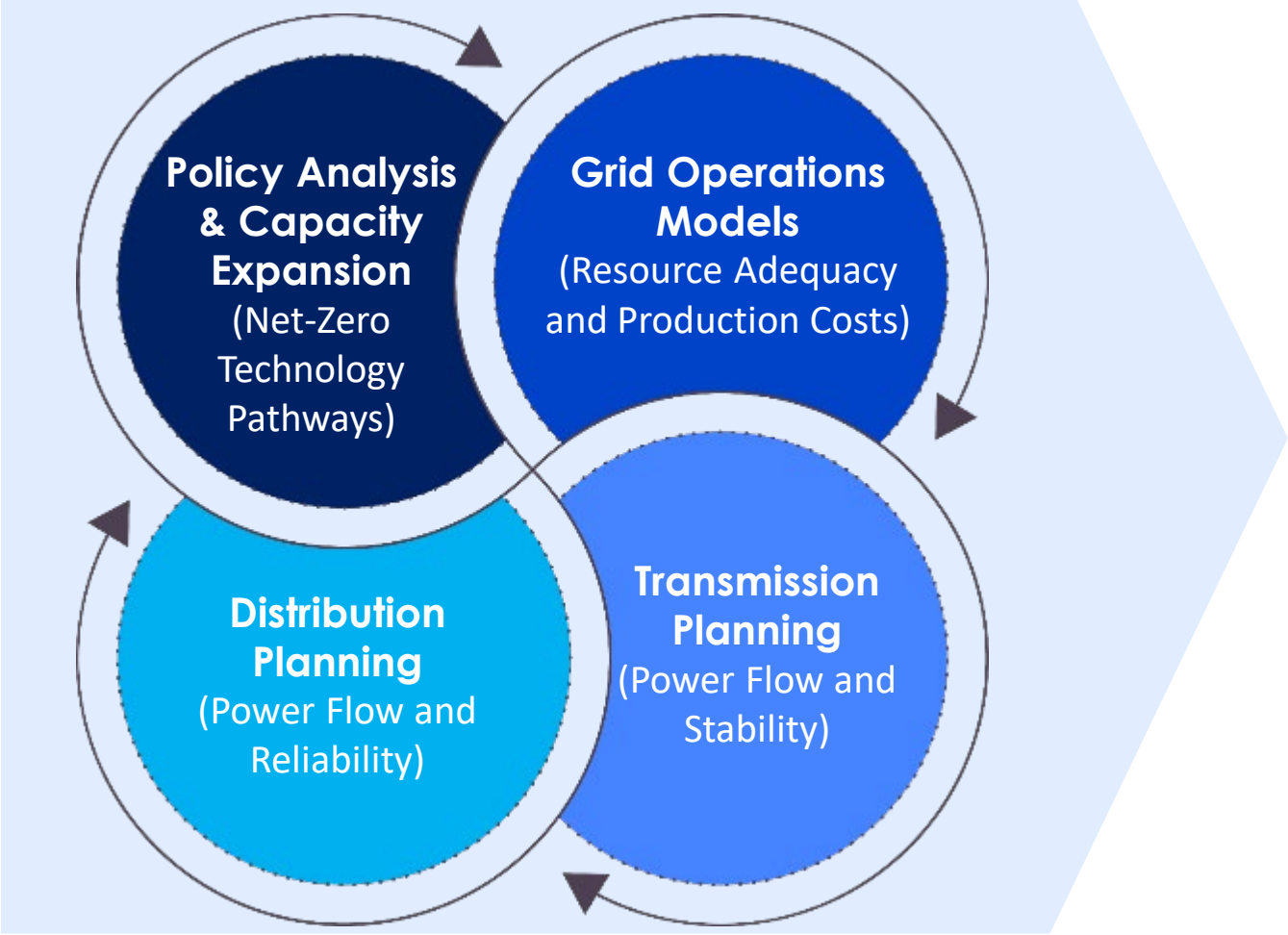
2050 Net-Zero: Electricity Share of End-Use Energy



Electric System Resiliency Must Increase as Energy Transition Occurs

Beyond Decarbonization Pathways: Reliability/Resiliency Planning

INTEGRATED STRATEGIC SYSTEM PLANNING (ISSP)

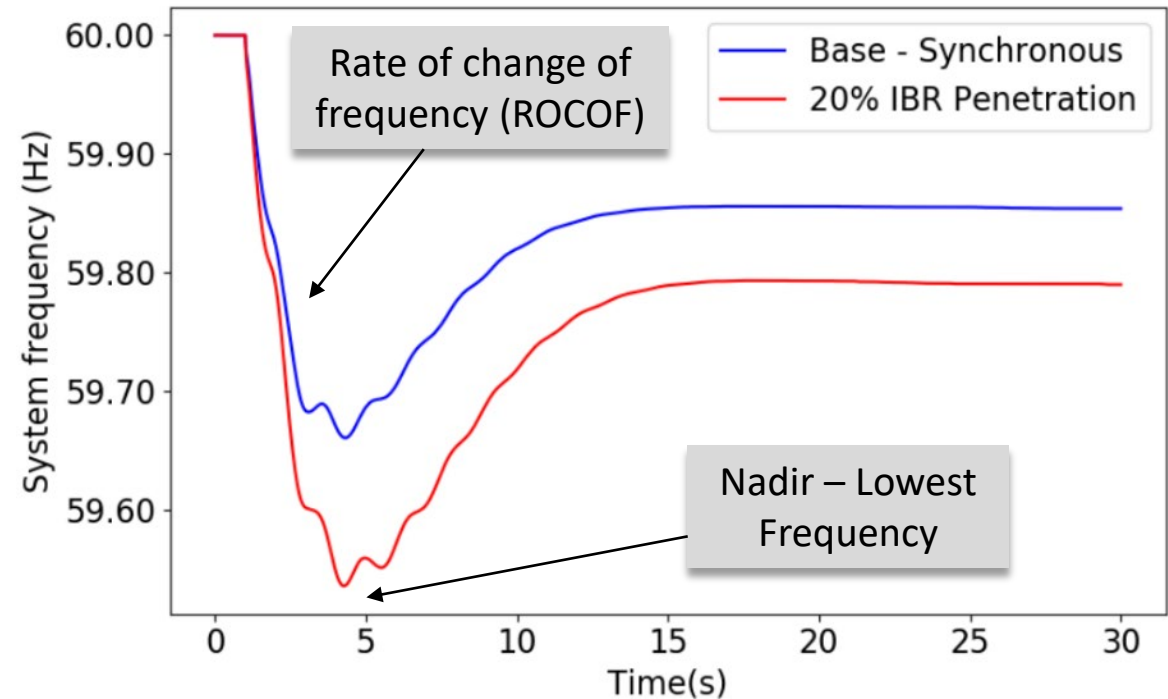


RESOURCE ADEQUACY	DELIVERY ADEQUACY
Additional resources to meet energy needs for resiliency to extreme future scenarios	Regional T&D capacity to integrate renewables and DER and meet increased electrification demand
BALANCING AND FLEXIBILITY	GRID STABILITY
Flexibility resources and operating reserves to manage variability and uncertainty	Resources and controls to maintain frequency and voltage for much faster dynamic system

EPRI's ISSP process provides a seamless analytical framework to assess future expansion plans across supply and delivery (T&D) incorporating operational reliability and resiliency realities of emerging resources.

Grid Stability with Higher Renewables and Less Inertia

Inertia of a synchronous AC system opposes frequency changes after sudden generation loss



New Operating Practices/Capabilities

- 120 GW*s >= Inertia **Normal**
- 120 GW*s > Inertia >= 110 GW*s **Yellow**
- 110 GW*s > Inertia >= 100 GW*s **Orange**
- 100 GW*s < Inertia **Red**

Emergency BPs	Inactive
System Inertia	99,999 MW-s
SCED	00:04:00
RLC	00:00:06
STLF Forecast High	21.6
STLF Next 30 Mins	Normal
QSE ICCP	Normal

Online Inertia Monitoring and Inertia Floors



Redispatch to Reduce Largest Contingency

New Frequency Support Resources/Services



“Synthetic Inertia” from Inverter-Based Resources



Synchronous Condensers

EPRI Resource Adequacy (RA) Initiative

RA Process

- Recommended Metrics and Criteria
- Approach to Developing Scenarios

Models and Data

- Resource Performance Modelling
- Guidance on Data Requirements

Analysis Tools

- Existing RA Tool Capabilities
- Apply New Approaches in Tools



Project concluding summer 2023 with recommendations and tools to support new RA process

Metrics and Criteria

Different metrics expose different levels of risk

LOLE is a frequency metric and typically evaluated on average

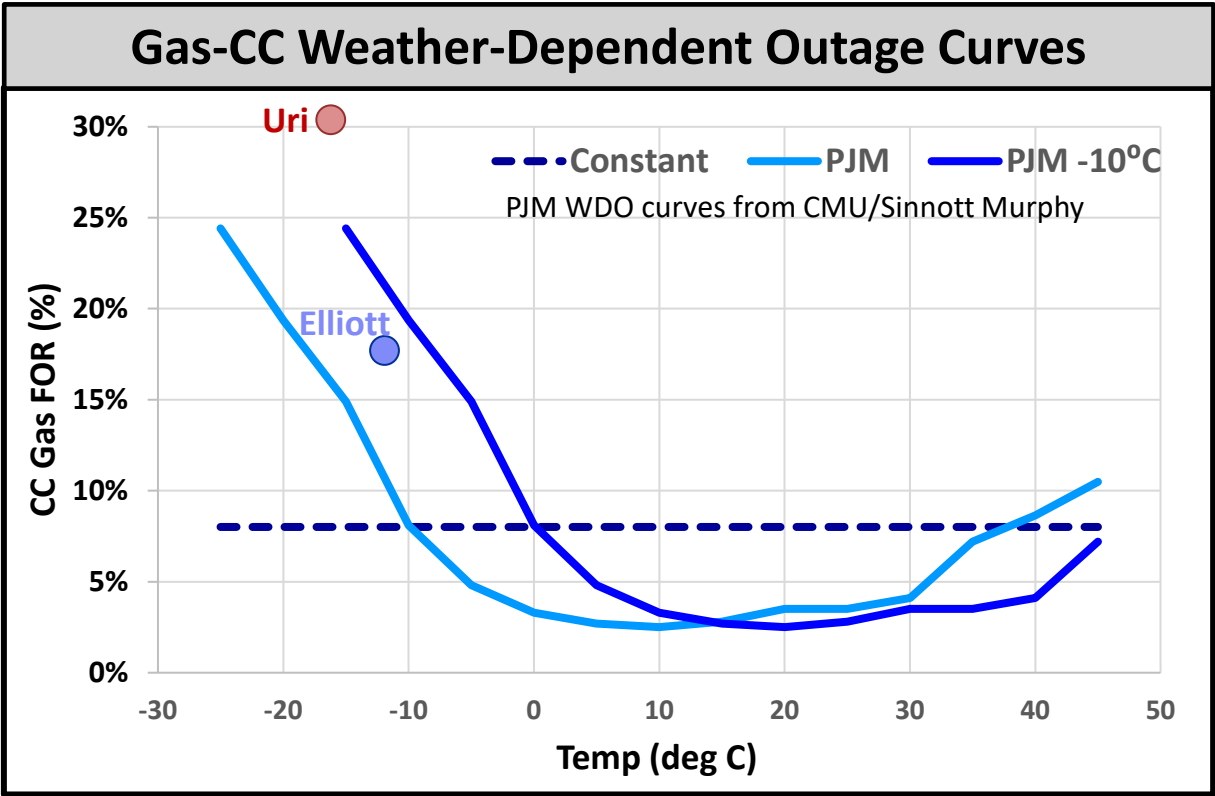
Metrics that include magnitude and duration expose additional risk

Potential for very different customer impacts for same LOLE level

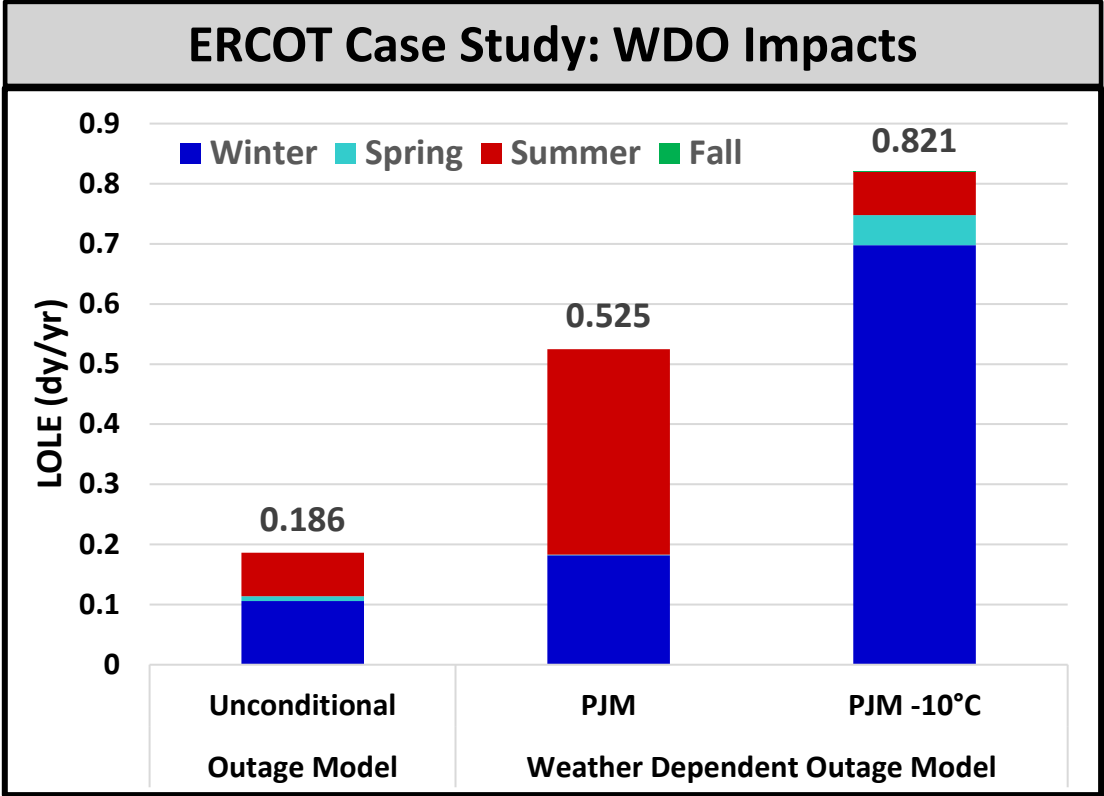
NPCC Case Study: Risk conveyed by metrics			
Region	Daily LOLE	Hourly LOLE	EUE-norm.
A	0.10	0.15	0.37
B	0.10	0.34	0.99
C	0.10	0.39	3.37
D	0.10	0.25	1.00
E	0.10	0.48	2.54
F	0.10	0.28	0.34
Metric Scope	Frequency	+ Duration	+ Magnitude
Relative Risk	Same	3X	10X

EPRI Initiative provides Metric Viewer tool and guidance to select metrics that expose true risk

Resource Models: Weather Dependent Outages (WDO)



Extreme temperature impacts generator forced outage rates

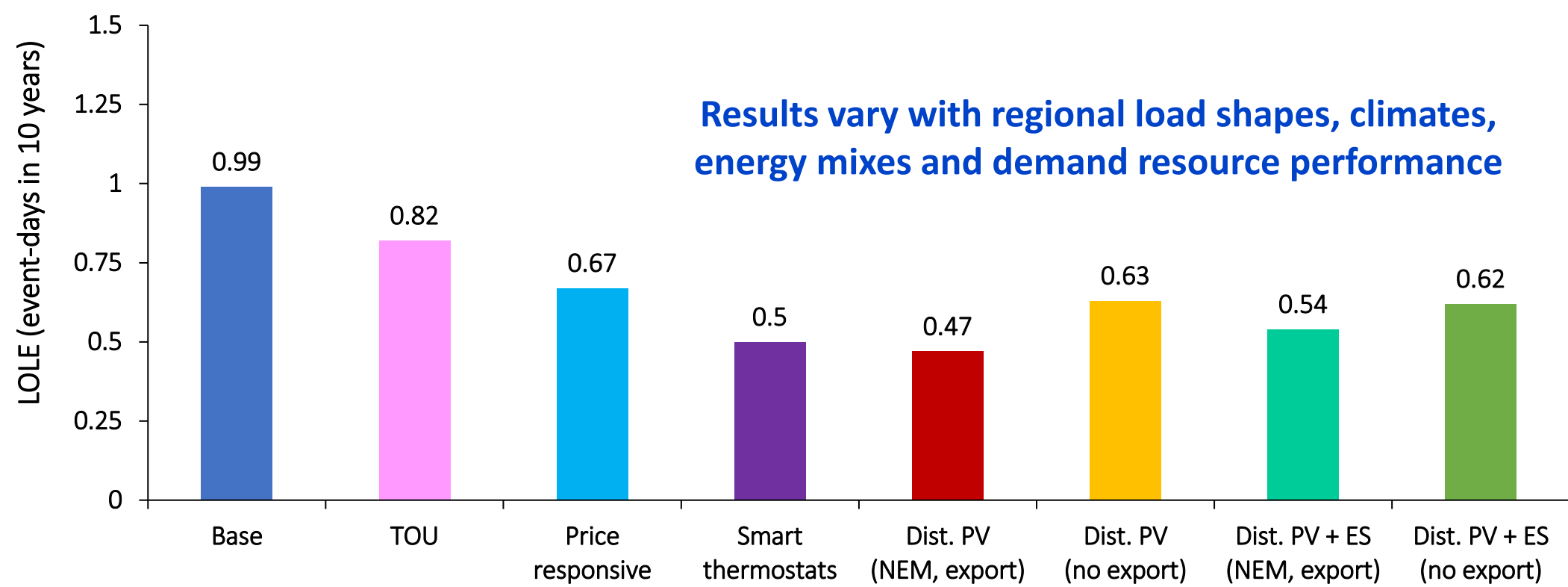


Including WDO in RA risk assessment exposes additional risk

EPRI RAI provides methodology for creating generation WDO curves, modeling guidance (renewables, storage, and, transmission, et. al.), and guidance on data and application in tools

Resource Models: Demand Flexibility Potential Value

Potential reduction in LOLE from 900 MW (3% peak demand) of various distributed resource types (technology and tariff) for specific utility system



EPRI RAI provides methodology for modeling flexible demand contributions to RA

Prerequisites for a Reliable, Resilient, Decarbonized Grid

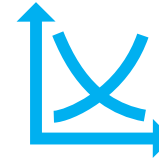
New Grid Operation Capabilities

New protection, control, and other technologies to reliably and resiliently operate the grid



Revised Market Designs

Markets incentive investment and properly compensate resources for grid services



Grid Investment and Development

Adequate investment, supply chain, and workforce to develop extensive new supply, demand, and T&D resources

Efficient Regulation and Collaboration



Faster timelines for siting, permitting, and building new infrastructure and developing and deploying new technologies



Clean, Dispatchable Supply Technologies

Development, demonstration, and deployment of new clean, firm supply technologies to support reliable grid operation supporting a net-zero economy



A blue-tinted photograph of four people standing in a row. From left to right: a man with curly hair and glasses wearing a white lab coat; a man with glasses and a tie wearing a white lab coat; a woman wearing a white hard hat and a dark polo shirt; and a man with glasses and a beard wearing a light blue button-down shirt. They are all smiling and looking towards the camera.

Together...Shaping the Future of Energy®



PRPA Board Meeting

October 26, 2023

Location: PRPA Headquarters
2000 E Horsetooth Rd, Fort Collins, CO, 80525

ABOUT LPPC

The Large Public Power Council (LPPC) is the voice of large public power in Washington, DC. We advocate for policies that support reliability, affordability and environmental stewardship for the communities we serve, while recognizing regional differences and respecting local governance.



LPPC By The Numbers

28 of the largest public power systems in the U.S.

30.5 million consumers served across 22 states and Puerto Rico

80,000 megawatts of generation capacity

35,000+ circuit miles of high-voltage transmission lines

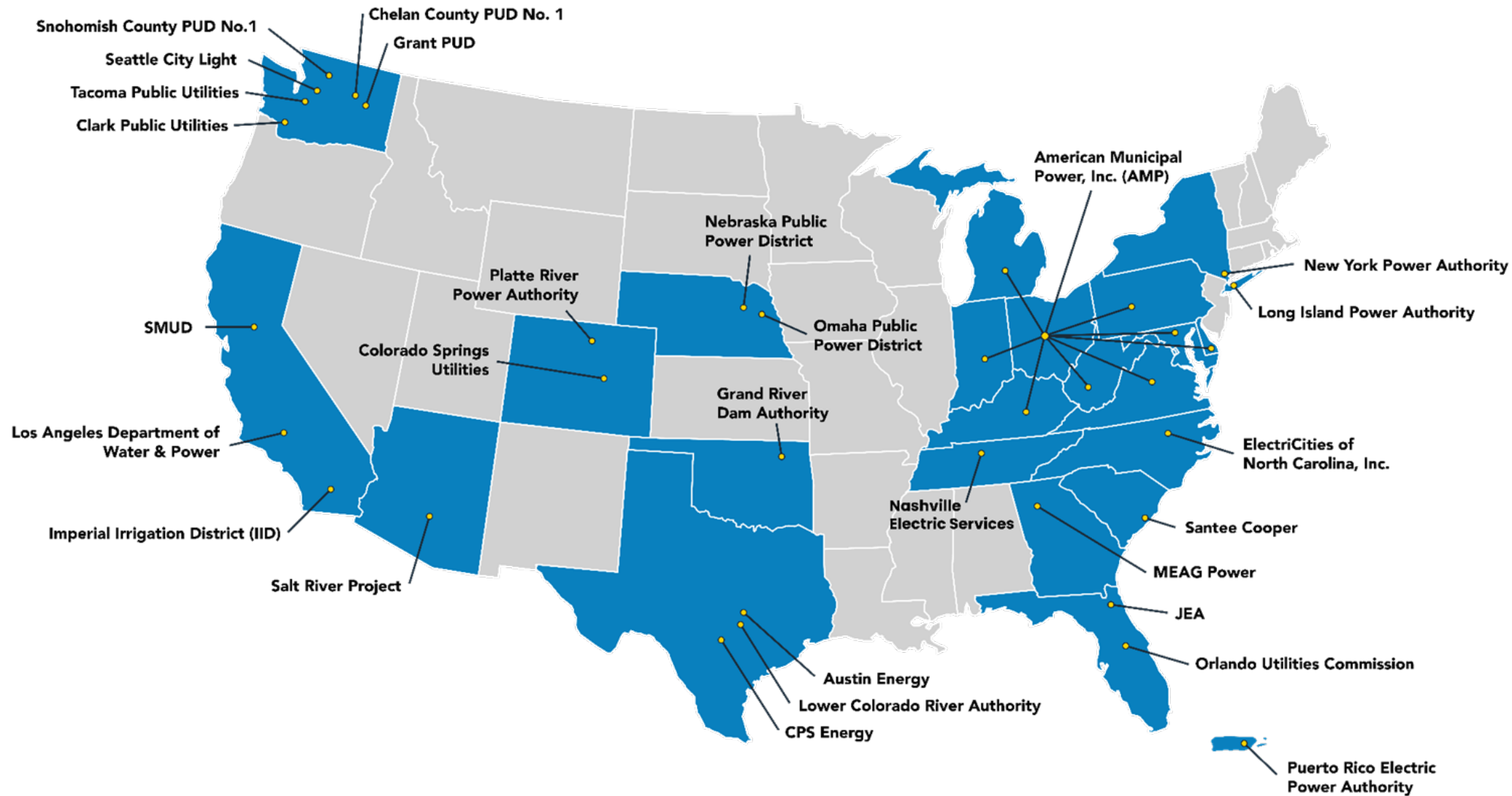
54,000+ local jobs supplied



POLICY PRIORITIES

- Infrastructure Financing
- Infrastructure Development
- Reliability, Resilience, and Security
- Environmental
- Support for Customers and Workers





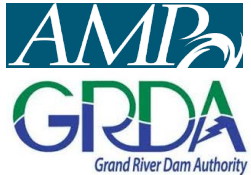
Member Utilities

Invested in communities. Customer-driven. Solutions-oriented.

Climate & Environmental Stewardship

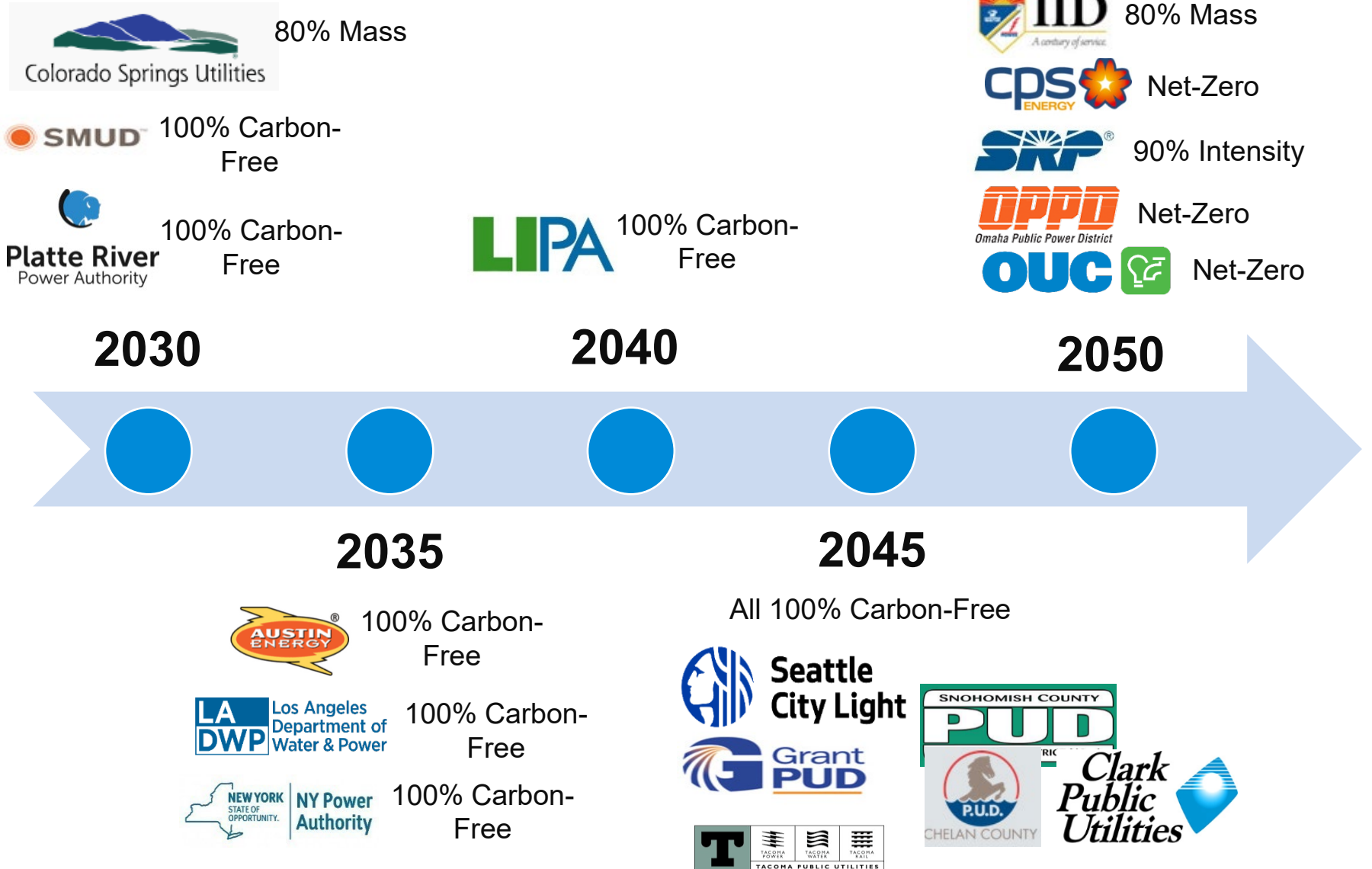
“LPPC supports federal actions and policies to responsibly advance a clean energy transition. These federal actions should be well-coordinated and part of an overall economy-wide approach that recognizes the need to maintain electric reliability and affordability for consumers, promotes a technology-neutral policy, respects regional differences, encourages innovative technologies, and enables flexible compliance”.

Wholesale systems without explicit targets



PREPA & JEA not
included

Carbon Reduction Targets



LPPC Natural Gas Generation: Planned + Existing

Gas to support the clean energy transition

- No members are retiring natural gas given its role in supporting reliability and flexibility
- 13 LPPC members are investing in new natural gas
- OPPD recently approved 1.5 GW of new natural gas assets through 2032
- SMUD is exploring carbon capture to maintain a plant critical for regional reliability
- GRDA commissioned a new single cycle natural gas plant for flexibility
- CPS Energy is adding new gas-fired generation to replace existing coal
- JEA bringing on new natural gas to balance renewable intermittency
- PREPA has added gas to serve peak and for ramping flexibility
- Nearly all new gas is planned to operate at much lower capacity factors, allow for up to 30% co-firing with hydrogen, and focused on reliability and system flexibility
- The focus is not on resources, but resource attributes



1050 Thomas Jefferson Street NW / 5th Floor / Washington, DC, 20007 / LPPC.org



Key takeaways

- Clean Energy Transition with Dispatchable Capacity to:
 - Support renewable resource performance
 - Ensure resource adequacy
 - Maintain reliability
 - Situational awareness & operational continuity
 - Integrate technologies of the future



Board of directors

Oct. 26, 2023

Energy leaders since 1973

Proposed 2024 Strategic Budget update – public hearing

Jason Harris, senior manager, financial reporting
and budget



Agenda

- Budget changes since work session
- Financial results
- Highlights – 2024 Strategic Budget

Budget changes since work session

- Updates to revenues and production cost model
 - New sales for resale contracts (revenue certainty)
 - Updated market assumptions
 - Fuel price and generation
 - Wheeling and interest income
- Refinements to departmental operations and maintenance expenses
- Updates to capital projects

Budget changes since work session

favorable/(unfavorable) change

<p>⬇ Sales to owner communities (\$0.3 million)</p> <ul style="list-style-type: none"> Final adjustments for production cost model estimates 	<p>⬇ Wheeling revenue (\$0.2 million)</p> <ul style="list-style-type: none"> Updated assumptions and projected loads
<p>⬇ Interest and other income \$0.2 million</p> <ul style="list-style-type: none"> Interest rates are projected to be higher, partially offset by keeping fiber rates flat 	<p>⬇ Purchased power (\$4.9 million)</p> <ul style="list-style-type: none"> Updated production cost model including increased purchases from WEIS and bilateral markets, increase in replacement power outage accrual. Xcel's estimated tariff also increased purchased reserves.
<p>⬇ Operating expenses \$0.1 million</p> <ul style="list-style-type: none"> Decreases: Nonroutine projects (CT inspection timing), water expenses and wheeling expenses. Increases: Xcel's estimated tariff for ancillary services, contracted services, Yampa operating expenses 	<p>⬇ Fuel \$1.7 million</p> <ul style="list-style-type: none"> Updated assumptions for prices and generation volumes for coal and natural gas resources
<p>⬇ Capital additions (\$2.3 million)</p> <ul style="list-style-type: none"> Increases: Bay connection to Severance Substation – noncarbon resources, Evergreen controls hardware upgrade – Rawhide Unit 1, Evaporative cooling and wet compression – combustion turbine Unit F, other new projects Decreases: Solar substation 230 kV – Severance Substation, Gas control valve replacement – combustion turbine Unit F, Hydrogen dryer and auto-purge – combustion turbine Unit F 	<p>⬇ Contingency appropriation (\$1 million)</p> <ul style="list-style-type: none"> Approximately 20% of operating expenses and capital additions

Financial results

Strategic financial plan indicators	Target minimums	2023 budget	2024 budget	Increase (decrease)	
Net income as a percentage of projected operating expenses ⁽¹⁾	3%	9%	9%	➡	0.0%
Fixed obligation charge coverage ratio	1.50x	2.43x	2.49x	⬆	2.5%
Debt ratio	< 50%	25%	24%	⬇	(4.0%)
Unrestricted days cash on hand	200	422	430 ⁽²⁾	⬆	1.9%

⁽¹⁾ Excludes projections for a portion of revenues that will be deferred to a future period and will be reflected in year-end results

⁽²⁾ Will change with the update to the 2023 estimate in the final budget document.

Budget results (\$ millions)	2023 budget	2024 budget	Increase (decrease)	
Total revenues	\$ 305.0	\$ 313.0	⬆	2.6%
Total expenditures	\$ 298.6	\$ 299.4	⬆	0.3%
Board contingency	\$ 52.0 ⁽³⁾	\$ 56.0	⬆	7.7%

⁽³⁾ Contingency transfer to be determined later in the year.

Financial impact

\$ in thousands	Proposed budget	Prices & model update impacts	Other O&M net increase and contingency increase	Capital & depreciation, amortization & accretion impacts ⁽¹⁾	Favorable (unfavorable) changes	Updated proposed budget
Revenues						
Sales to owner communities	\$ 236,072	\$ (335)			\$ (335)	\$ 235,737
Sales for resale - long-term	11,494	8,592			8,592	20,086
Sales for resale - short-term	44,939	(8,583)			(8,583)	36,356
Wheeling	9,123	(181)			(181)	8,942
Interest and other income	11,627	226			226	11,853
<i>Total revenues</i>	\$ 313,255	\$ (281)			\$ (281)	\$ 312,974
Operating expenses						
Purchased power	\$ 58,881	\$ (3,611)	\$ (1,284)		\$ (4,895)	\$ 63,776
Fuel	52,831	1,723			1,723	51,108
Production	55,538	59	20		79	55,459
Transmission	21,098		(98)		(98)	21,196
Administrative and general	36,298		(85)		(85)	36,383
Distributed energy resources	13,807		209		209	13,598
<i>Total operating expenses</i>	\$ 238,453	\$ (1,829)	\$ (1,238)		\$ (3,067)	\$ 241,520
Capital additions						
Production	\$ 8,722			\$ (1,720)	\$ (1,720)	\$ 10,442
Transmission	14,938			(137)	(137)	15,075
General	12,305			(488)	(488)	12,793
Asset retirement obligations	933				-	933
<i>Total capital additions</i>	\$ 36,898			\$ (2,345)	\$ (2,345)	\$ 39,243
<i>Total operating expenses and capital additions</i>	\$ 275,351	\$ (1,829)	\$ (1,238)	\$ (2,345)	\$ (5,412)	\$ 280,763
Debt expenditures	\$ 18,638				\$ -	\$ 18,638
Total expenditures	\$ 293,989	\$ (1,829)	\$ (1,238)	\$ (2,345)	\$ (5,412)	\$ 299,401
Contingency appropriation	\$ 55,000		\$ (1,000)		\$ (1,000)	\$ 56,000
Total expenditures and contingency	\$ 348,989	\$ (1,829)	\$ (2,238)	\$ (2,345)	\$ (6,412)	\$ 355,401
Change in net position	\$ 25,922	\$ (2,110)	\$ (1,238)	\$ (51)	\$ (3,399)	\$ 22,523

(1) Depreciation, amortization and accretion expense increased by approximately \$51K impacting change in net position.

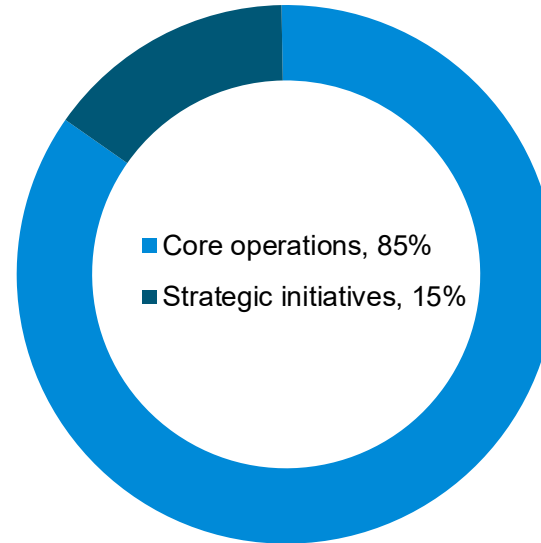
Highlights – 2024 Strategic Budget



Operating expenses and capital additions: \$280.8 million

Strategic initiatives

- Resource diversification planning and integration (dispatchable resource, noncarbon resources, distributed energy resources, integrated resource plan, organized energy markets)
- Community partner and engagement
- Workforce culture
- Process management and coordination (ERP, enterprise risk management, project management)



Core operations

- Baseload and peaking generation, transmission, energy efficiency
- PPAs for existing renewable resources & hydropower
- Predictive maintenance
- Proactive capital investments to maintain reliability, efficiency and environmental compliance

Revenues

- Stable owner community loads
- Decreasing sales for resale
- Increasing wheeling and interest income
- 5% average wholesale rate increase

2024 budget: \$355.4 M



Board of directors

Oct. 26, 2023

Energy leaders since 1973



Strategic Financial Plan update

Shelley Nywall, director of finance

Agenda

- Platte River financial governance framework
- Strategic financial plan
 - Updates, review and advantages
- Long-term financial sustainability benefits
- Financial flexibility in an uncertain environment
- Next steps

Platte River financial governance framework

- List of items that govern or influence our financial decisions
- Future plan is to create a comprehensive financial governance document



Strategic Financial Plan updates

- Last update was 2018
- Core of the plan remains unchanged; changes reflect documenting strategies and updates to current terminology
 - Added language reflecting rate stability strategies
 - Edited language and layout enhancing readability
 - Financial metric title changes
 - Debt ratio to adjusted debt ratio
 - Net income to change in net position
 - Unrestricted cash on hand to adjusted liquidity on hand
- Reviewed by Platte River's financial advisor, PFM Financial Advisors LLC
- Review with the board at least every five years (staff reviews throughout every year)
- Recommended changes do not impact current long-term rate projections

Strategic Financial Plan review

Goals	<ul style="list-style-type: none">• Support foundational pillars of providing reliable, environmentally responsible and financially sustainable energy and services• Support mission, vision and values• Preserve long-term financial sustainability• Manage financial risk
Objectives	<ul style="list-style-type: none">• Generate adequate earnings margin and cash flows• Maintain sufficient liquidity for operational stability• Maintain access to low-cost capital• Provide wholesale rate stability
Financial and rate requirements	<ul style="list-style-type: none">• Colorado Revised Statute 29-1-204(3)(j)• Power Supply Agreements• General Power Bond Resolution• <i>Documents relate to fixing rates and revenues sufficient to cover all expenses, bond service expenses and to provide reasonable reserves and adequate earnings margin to obtain favorable debt financing</i>

Strategic Financial Plan review

To meet objectives and requirements, staff established financial metrics and rate stability strategies

Financial metrics

- **Cash flow metric:** Generate minimum 1.50 times fixed obligation charge coverage ratio
 - Legal bond service coverage ratio requirement minimum 1.10 times
- **Earnings metric:** Generate minimum change in net position equal to 3% of annual operating expenses
- **Leverage metric:** Target adjusted debt ratio less than 50%
- **Liquidity metric:** Target minimum 200 days adjusted liquidity on hand
 - Includes rate stabilization fund - purpose is to reduce or eliminate the rate impact from an event that affects the ability to meet the minimum legal bond service coverage ratio requirement, but not to smooth the rate impacts of continued typical business operations
- *Based on rating agency criteria targeting a “AA” category credit rating*
- *Metrics provide adequate reserves and balance between financing capital investments with cash and debt*

Rate stability strategies

- Fiscal responsibility
 - Revenue generation
 - Expense management
 - Rate smoothing
 - Accounting policies to manage revenues and expenses for rate making purposes (GASB 62)
 - Multi-year rate smoothing strategies will also be used to avoid greater single year rate impacts or to accomplish specified financial objectives
-

Strategic Financial Plan advantages

- Targets “AA” category credit rating
- Financial metrics
 - Provide balance between cash and debt financing
 - May not be met in all years if staff considers the deficiency temporary
- Financial flexibility
 - Obtain access to capital markets at a lower cost of capital
 - Take advantage of opportunities for capital investments, lower expenses and provide benefits to the owner communities
 - Manage industry-related financial risks
 - Respond in a timely and value-maximizing manner to unexpected changes
- Stable more predictable rates
- Long-term financial sustainability

Long-term financial sustainability benefits

Platte River has benefited from its strong financial position, favorable credit rating and sound financial decisions

2023	Established favorable counterparty credit in the energy market and for power purchase agreements
2022	Blended the intermittent and dispatchable variable cost energy charges with the ability to absorb the shift of the risk of cost variances back to Platte River from the owner communities
2020	Provided a one-time \$1 million owner distribution to the governing body of the owner communities to assist with the COVID-19 pandemic impacts within their communities and refinance bonds resulting in \$4.6 million in net present value savings
2018	Adopted the resource diversification policy to transition Platte River to a noncarbon future as a significant initiative requiring a strong financial position and financial flexibility
2015	Refinanced bonds resulted in \$13.7 million of net present value savings
2009	Series DD bonds were paid off, the last bond issue requiring a bond reserve fund and Platte River's strong financial position eliminated the requirement to maintain bond required reserve funds, which were maintained at a negative arbitrage due to earnings restrictions
2008	Used cash reserves to fund combustion turbine Unit F and avoided private use restrictions associated with the use of tax-exempt bonds, which would have reduced the economic benefit of a long-term capacity sale

Sound financial strategies

- Preventative and predictive maintenance strategies and proactive capital investments are prioritized to provide long-term system benefits and efficiencies
- Various accounting policies to manage revenues and expenses for rate making purposes (GASB 62)

Financial flexibility in an uncertain environment



Electric utilities operate in a capital-intensive industry with investments in long-term generation and transmission assets. While Platte River implements the resource transition plan over the next few years, plans that have yet to be put in place are uncertain.

The Strategic Financial Plan financial metrics, rate stability strategies and “AA” category credit rating provide critical financial stability and flexibility, preserves long-term financial sustainability and more stable and predictable wholesale rates.

- Capital investment forecast
- Coal inventory sales
- Commodity prices
- Debt issuance costs
- Economic externalities
- Integrated Resource Plan
- Load forecast
- Regulations
- Staffing
- Surplus sales prices and volumes

Challenges from evolving industry

- Asset integration schedule
- Federal hydropower allocations
- Decommissioning
- Deferred revenues and expenses
- Distributed energy resources and strategy
- Emissions expense
- Noncarbon energy curtailments
- Organized energy markets
- Resource diversification policy
- Supply chain

Next steps

- Board approval of the Strategic Financial Plan requested at the December 2023 board meeting
- Staff will continue to evaluate the financial metrics to determine the best path forward to achieve financial and operational goals, objectives and strategic initiatives for Platte River and the owner communities

Questions



Platte River
Power Authority
Energy leaders since 1973



Board of directors

Oct. 26, 2023

Energy leaders since 1973

IRP community engagement update

Eddie Gutiérrez, chief strategy officer



Key highlights from engagement

- Extreme weather modeling and climate change
- What is a dispatchable resource?
- Energy market and resource planning
 - Source of "other purchases"
- Electrification efforts and growth in demand/load
- Equity
- Behavioral change vs. adding more resources

Community meetings

Longmont

Completed

- Longmont Sustainability Advisory Board
- Longmont Neighborhood Group
- City council

Planned

- Climate Action Sunday (community event)
- Latino chamber of commerce
- Longmont economic development partnership
- Equitable climate action team

Loveland

Completed

- City council
- Loveland Utilities Commission
- Downtown Development Authority
- Renewables Now Loveland

Planned

- League of Women Voters
- FUEL – Loveland's young professional group
- Loveland Chamber of Commerce Ambassadors

Community meetings

Estes Park

Completed

- Town board
- League of Women Voters
- Estes Park Sierra Club

Planned

- Chamber of Commerce
- Rotaries

Fort Collins

Completed

- Fort Collins Energy Board
- Colorado State University
- Fort Collins Natural Resources Advisory Board
- COSSA
- Northern Colorado Renewable Energy Society
- City council
- Fort Collins Sustainability Group
- Larimer County



Fall marketing campaign

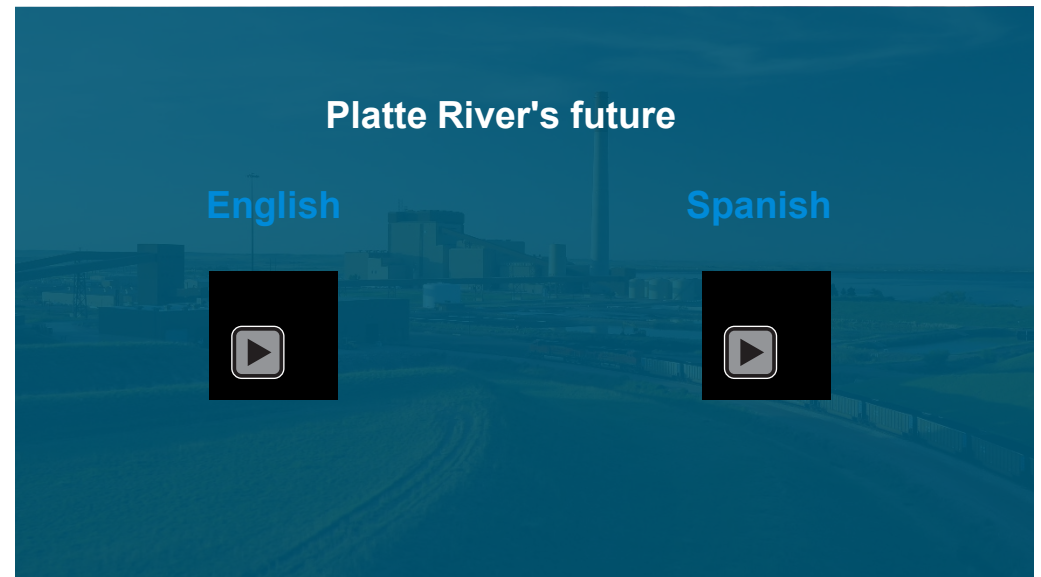
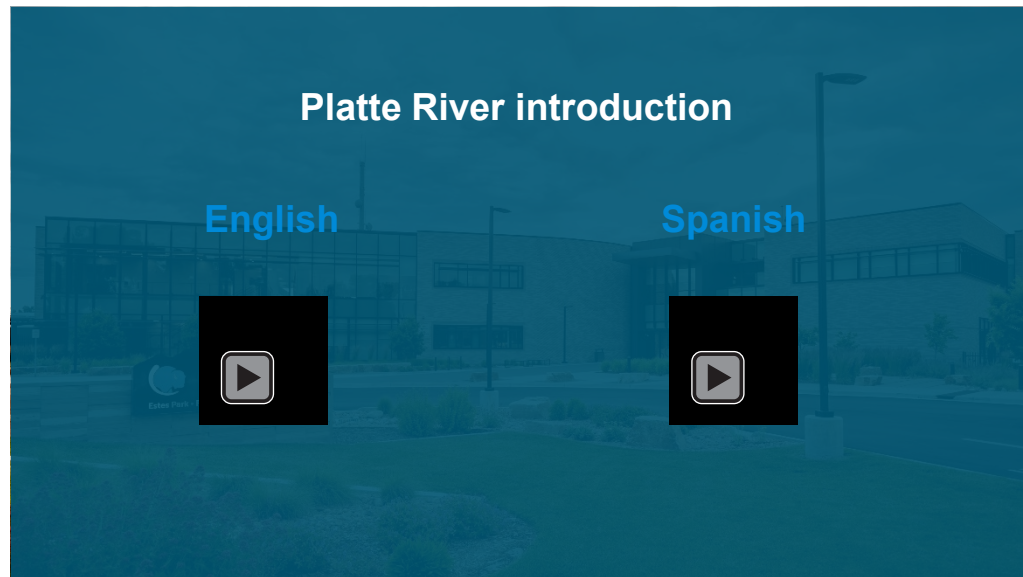
Marketing campaign

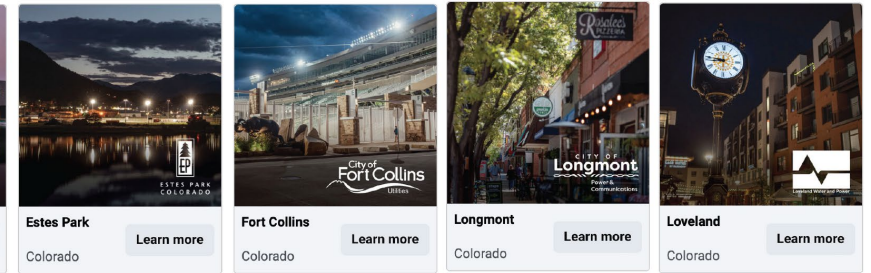
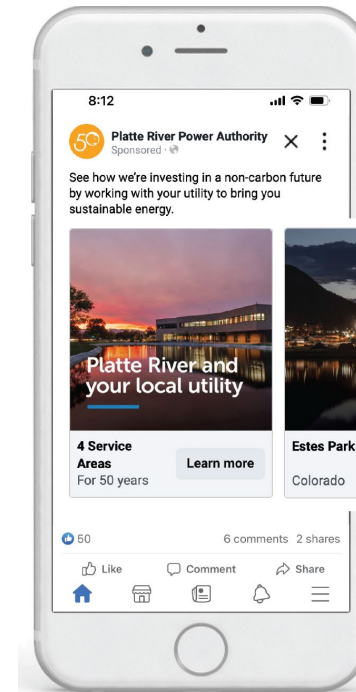
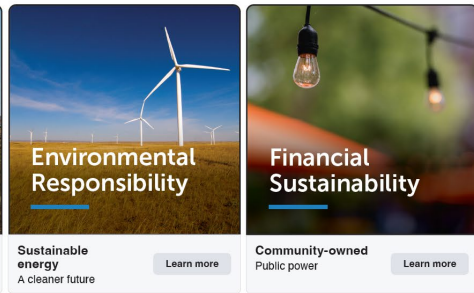
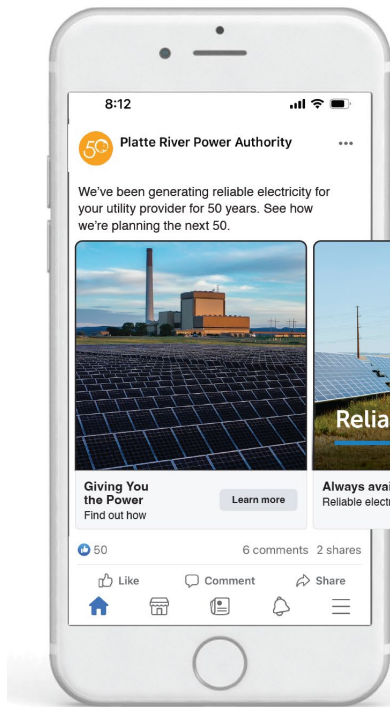
Overview

- Celebrating 50 years of serving Estes Park, Fort Collins, Longmont and Loveland
- Highlights our commitment to the principles that have shaped our history and will direct our transition to a noncarbon energy future
- As we plan for the next 50 years, we remain committed to our foundational pillars:
 - Reliability
 - Environmental responsibility
 - Financial sustainability

The *giving you the power* campaign

Radio ads, digital billboards, newspaper and digital ads, social media ads and posts







Marketing strategy

- Celebrate 50 years of reliable power and ongoing collaboration with our owner communities
- Wholistic approach utilizing all platforms: digital, print, out of home
- Educate and inform on ongoing resource planning, align with 2024 IRP efforts and related community engagement
 - Proactive media approach
 - Website page with more information and continued transparency
 - Educational social media campaigns
 - Continue to schedule community meetings

Questions



Platte River
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SPP RTO West update

Melie Vincent, chief operating officer

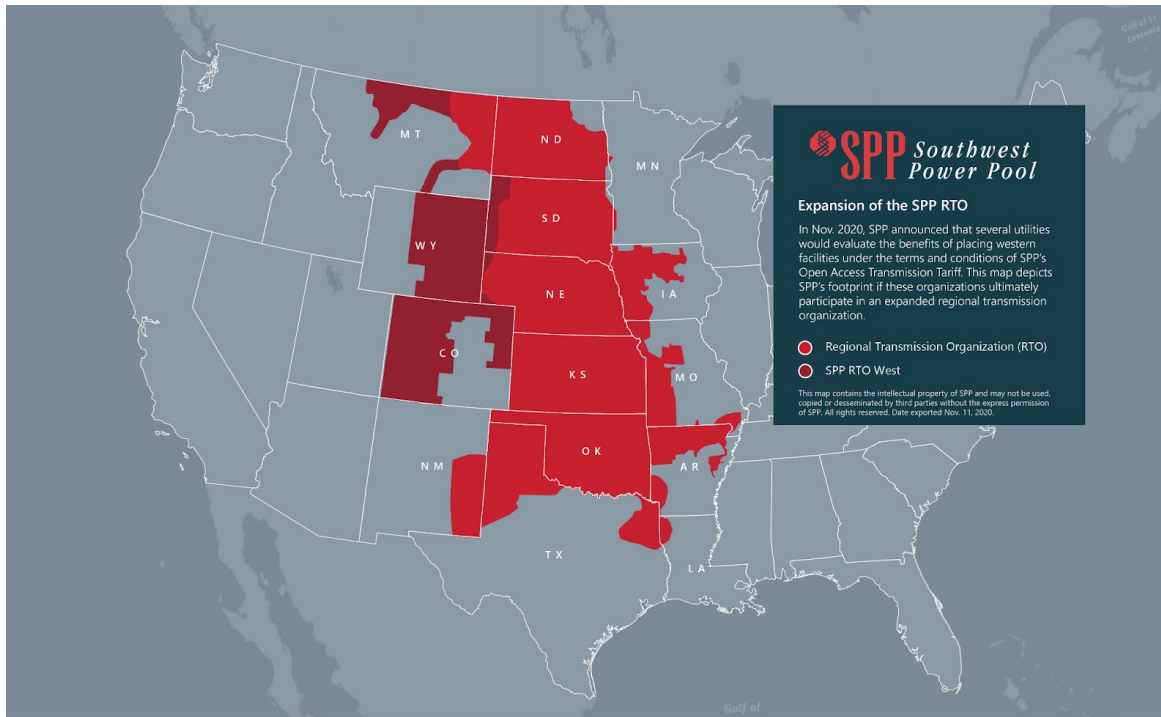


Agenda

- SPP RTO West refresher
- SPP RTO West participation requirements
- SPP RTO West latest developments
- Platte River SPP RTO West steering committee

SPP RTO West

Regional footprint



Market participants

- Basin Electric Power Cooperative
- Colorado Springs Utilities (CSU)
- Deseret Power Electric Cooperative
- Municipal Energy Agency of Nebraska (MEAN)
- Platte River Power Authority (PRPA)
- Tri-State Generation and Transmission Association
- Western Area Power Administration (WAPA) – LAP and CRSP

Fast facts

- Go-live April 1, 2026
- ≈ 10,000 miles of high voltage transmission
- ≈ 21 TWh annual net energy load

SPP RTO West versus SPP WEIS

RTO responsibilities

- Tariff administration and design
 - Resource commitment and dispatch
- Market monitoring
- Open access transmission
- Resource adequacy
- Congestion management
- Parallel path flow management
- Ancillary services
- Transmission planning and expansion
- Interregional coordination

Energy imbalance requirements

- Tariff administration and design
 - Resource dispatch
- Market monitoring
- Open access transmission in real-time
- Supply adequacy

Benefits of RTO West

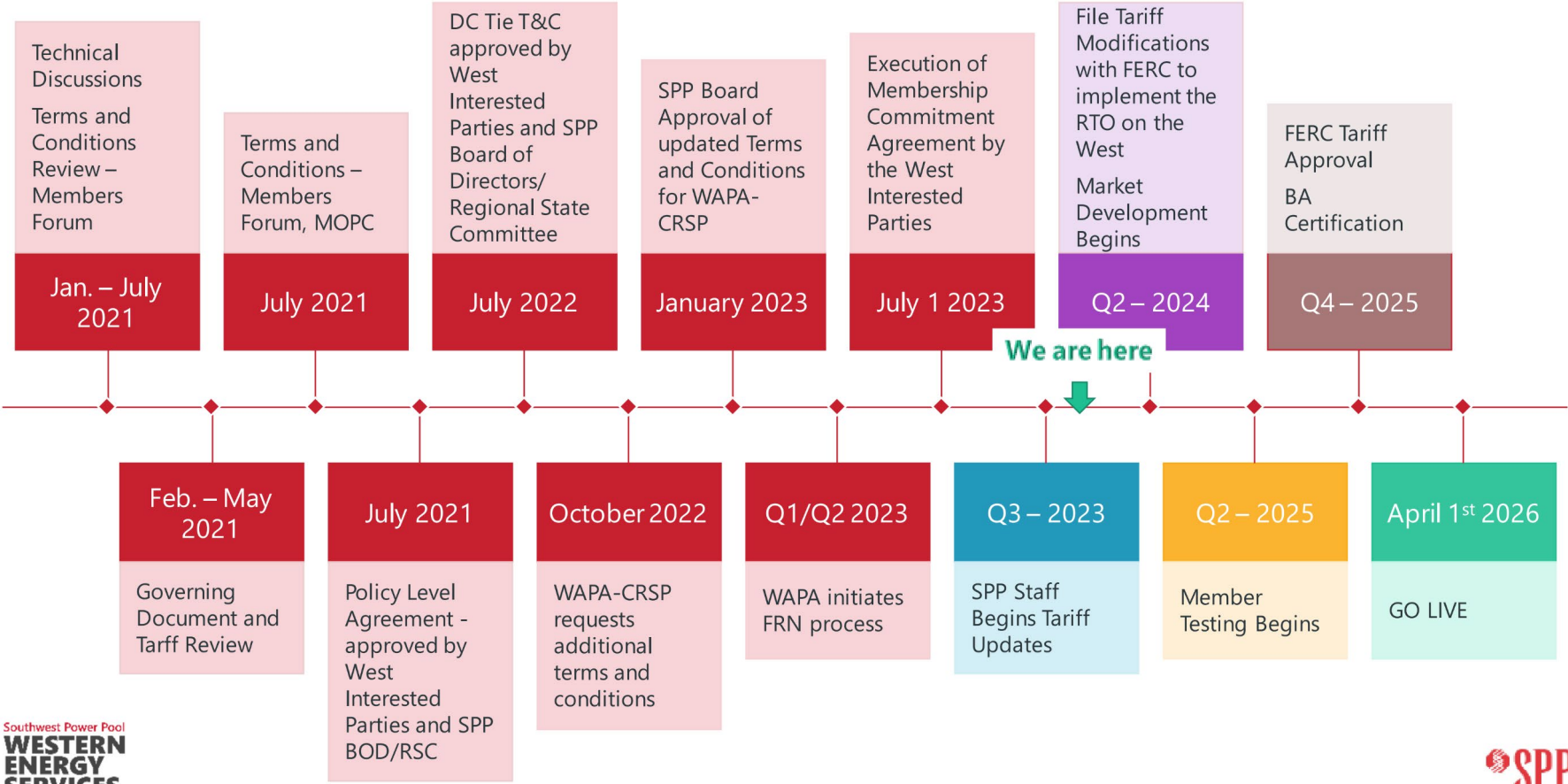
Versus SPP WEIS

- Unit commitment leads to more economic resource operation
- Resource adequacy requirements improve reliability of the region
- Regional transmission planning allows development of a more efficient grid network
- Network transmission in day-ahead and real-time markets reduces power delivery costs
- Co-optimization of energy and ancillary service dispatch reduces overall costs
- Congestion hedging mitigates risk of price divergence between resources and load
- Allows for integration of greater volumes of intermittent, renewable resources

SPP RTO West participation requirements

- Credit rating of BBB- or higher and minimum capitalization requirements
- Annual risk management certification
- Load serving entities must meet resource adequacy requirements
- Energy trading risk management system
- Market operations system
- Security administrator on staff
- Digital communication including inter-control center communications (ICCP)
- Automatic dispatch systems for resources to follow market instructions
- Energy management system to collect and communicate data to SPP
- Reliable system metering

SPP RTO West development



SPP RTO West implementation timeline

	2023		2024				2025				2026	
Activity	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25	Q2 25	Q3 25	Q4 25	Q1 26	Q2 26
Commitment agreements*	7/1, 10/10											
Tariff and member on-boarding	8/1-3/31											
Requirements and design		10/2-7/1										
MOPC approval				4/1								
Development				4/1-12/31								
Internal Testing (SAT, SIT/FIT)						10/1-7/1						
Member Testing							4/1-12/31					
Parallel Operations											1/26-4/1	
Go-live												4/1

Platte River RTO West steering committee

- The Platte River RTO West steering committee is comprised of seven staff members from across the organization, including power markets, finance, generation, power delivery, legal and IT/OT, with the COO serving as executive sponsor
- Platte River has secured consulting services to manage the implementation project, complete gap assessments and provide expertise to assist in decision-making
- Current market development activity
 - Resource adequacy requirements
 - Transmission zone development
 - Market stakeholder constructs

Summary

- Participation in an RTO is a critical element of the Resource Diversification Policy as well as part of our strategic plan
- Development and implementation of an RTO is large undertaking that requires collaboration within and across multiple organizations
- Working with a consultant with extensive market experience, staff has developed an implementation plan for successful entry into RTO West on April 1, 2026
- Staff is actively engaged in market participant working groups to develop key aspects of the new market

Questions



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September operational results

Owner community load	Budget	Actual	Variance	% Variance	
Owner community demand	608 MW	618 MW	10 MW	1.7%	◆
Owner community energy	266 GWh	256 GWh	(10 GWh)	(3.8%)	■
Net variable cost* to serve owner community energy	\$3.8M	\$2.0M	\$1.8M	47%	●
	\$14.27/MWh	\$7.65/MWh	\$6.62/MWh		

*Net Variable Cost = total resource variable costs + purchased power costs - sales revenue

Market impacts to net variable cost

Downward pressure	
Generation and market outcomes pushing costs lower	
Higher bilateral sales prices	\$2.9M
Coal generation volume savings	\$1.9M

Upward pressure	
Generation and market outcomes pushing costs higher	
Lower bilateral sales volume	(\$0.8M)
Coal generation prices	(\$1.0M)

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

YTD operational results

Owner community load	Budget	Actual	Variance	% Variance	
Owner community demand	4913 MW	4843 MW	(70 MW)	(1.4%)	◆
Owner community energy	2498 GWh	2397 GWh	(101 GWh)	(4%)	■
Net variable cost* to serve owner community energy	\$32.5M	\$25.5M	\$7.0M	21.5%	●
	\$13.02/MWh	\$10.65/MWh	\$2.37/MWh		

*Net Variable Cost = total resource variable costs + purchased power costs - sales revenue

Market impacts to net variable cost

Downward pressure	
Generation and market outcomes pushing costs lower	
Coal generation volume savings	\$17.8M
Higher bilateral sales prices	\$14.3M

Upward pressure	
Generation and market outcomes pushing costs higher	
Higher market purchase volume and average price	(\$6.9M)
Lower bilateral sales volume	(\$10.7M)

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■



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September financial summary

Category	September variance from budget (\$ in millions)		YTD variance from budget (\$ in millions)	
Change in net position*	\$1.9	●	\$14.7	●
Fixed obligation charge coverage	.76x	●	.48x	●
Revenues	\$1.3	●	\$(3.6)	◆
Operating expenses	\$0.7	●	\$16.4	●
Capital additions	\$0.1	●	\$19.1	●

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

* YTD change in net position includes \$2.2 million unrealized gains on investments.



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