SPP Southwest Power Pool

WINTER 2024/25 RELIABILITY FORECAST & EMERGENCY COMMUNICATIONS WEBINAR

NOVEMBER 18, 2024

Working together to responsibly and economically keep the lights on today and in the future.

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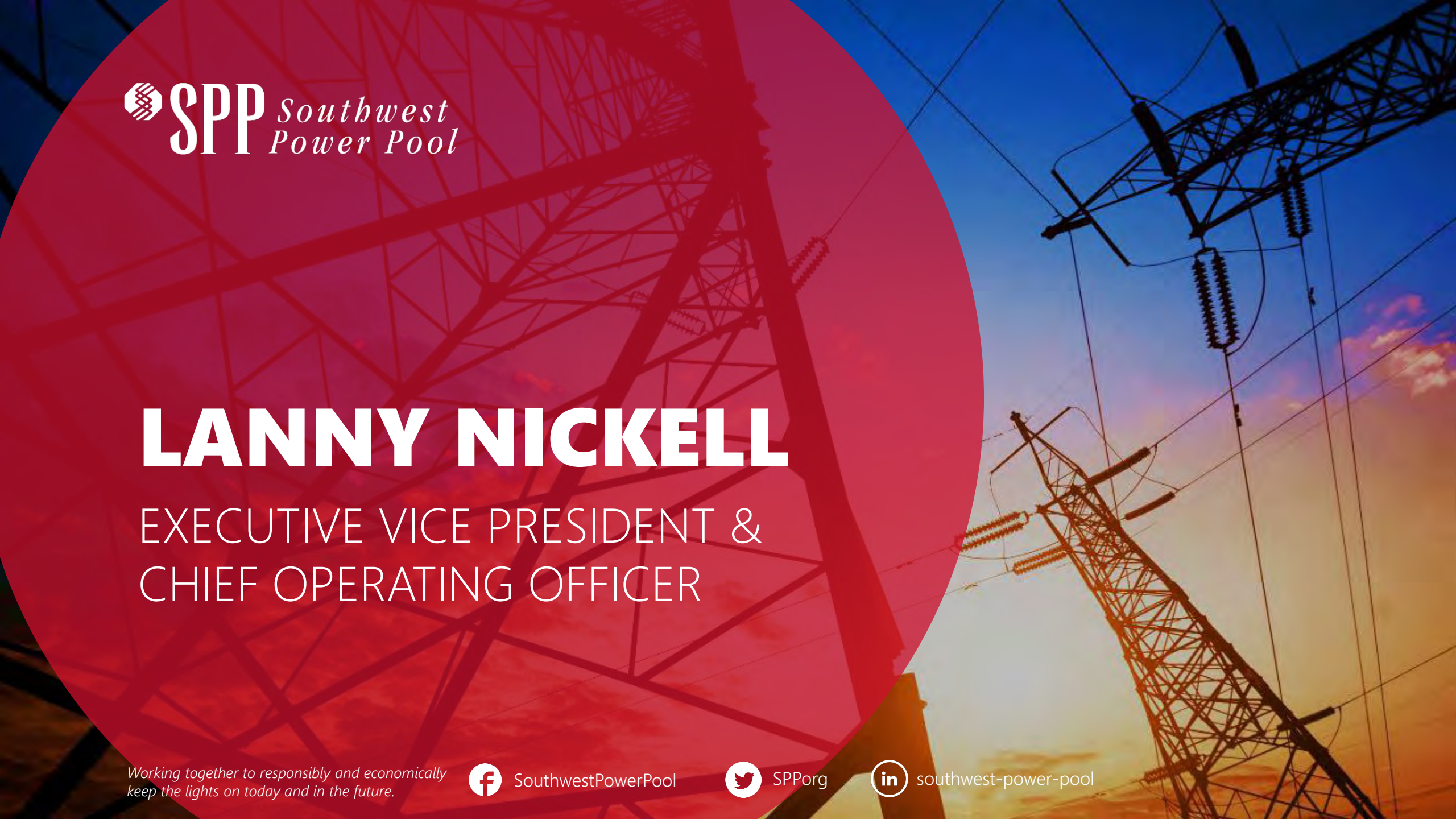
TODAY'S AGENDA

• Welcome and Introductory Remarks	**Lanny Nickell** Exec. VP and COO
• Resource Adequacy Policy Update	**Chris Haley** Supervisor, RA Policy
• Winter Weather Forecast	**Jeff Baskin** Technical Analyst
• Winter Reliability Assessment	**Patrick Delassus** Sr. Engineer II, Operational Planning
• Emergency Communications	**Derek Wingfield** Mgr, Communications and Stakeholder Affairs



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LANNY NICKELL

EXECUTIVE VICE PRESIDENT & CHIEF OPERATING OFFICER

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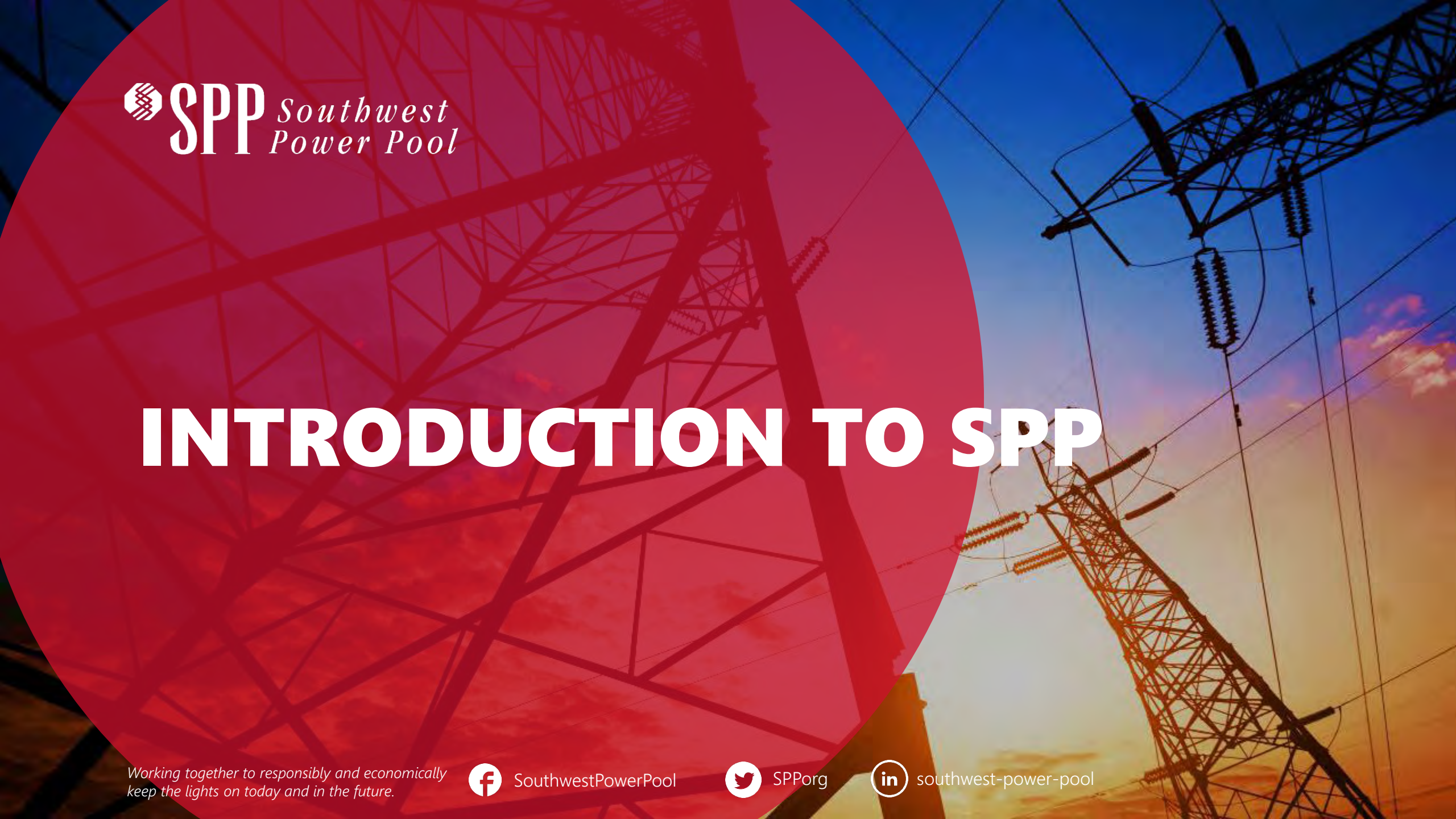

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INTRODUCTION TO SPP

Working together to responsibly and economically keep the lights on today and in the future.

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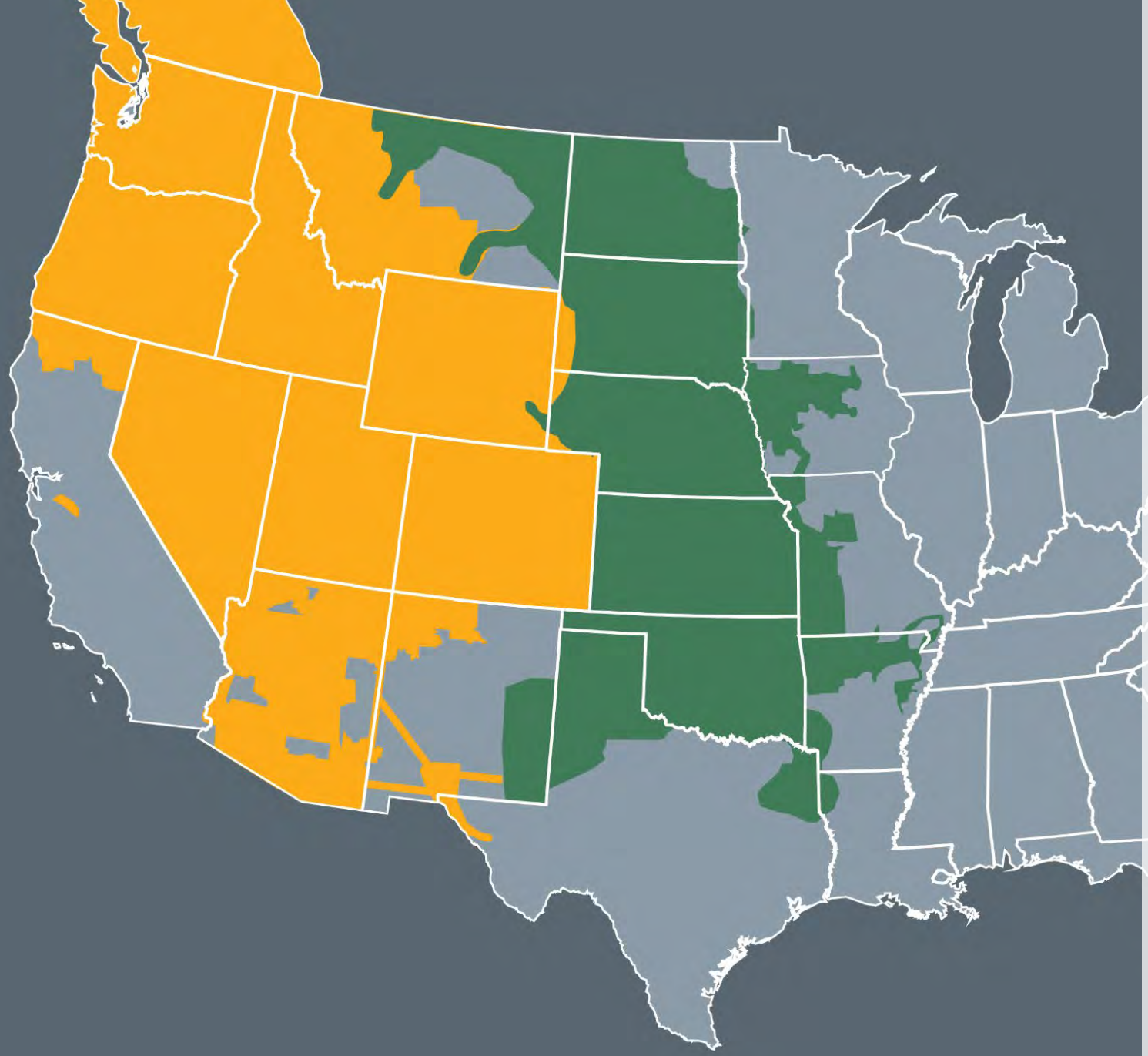
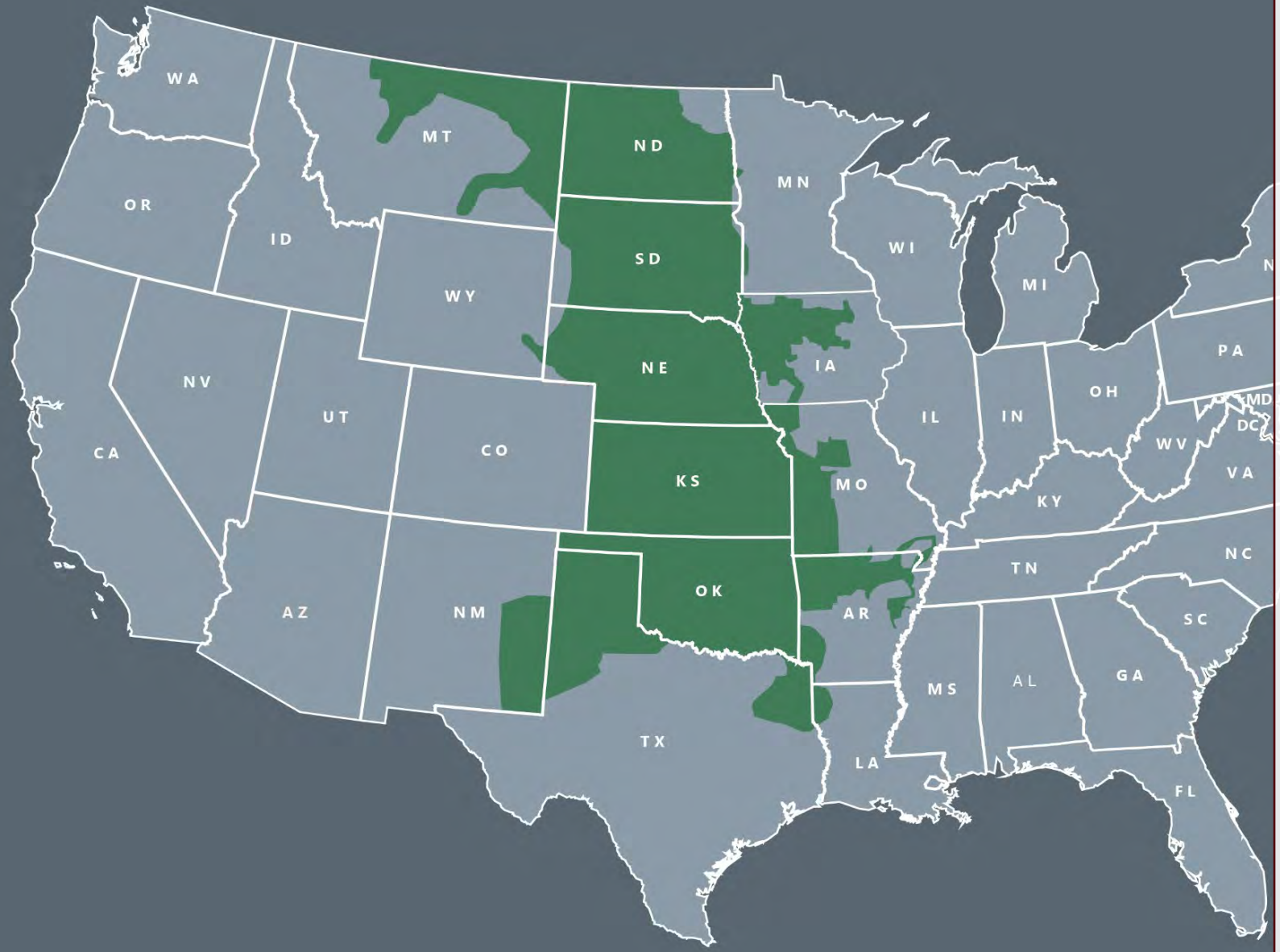


MEMBERS IN 14 STATES

WESTERN ENERGY SERVICES CUSTOMERS IN 14 STATES, 1 PROVINCE

RTO

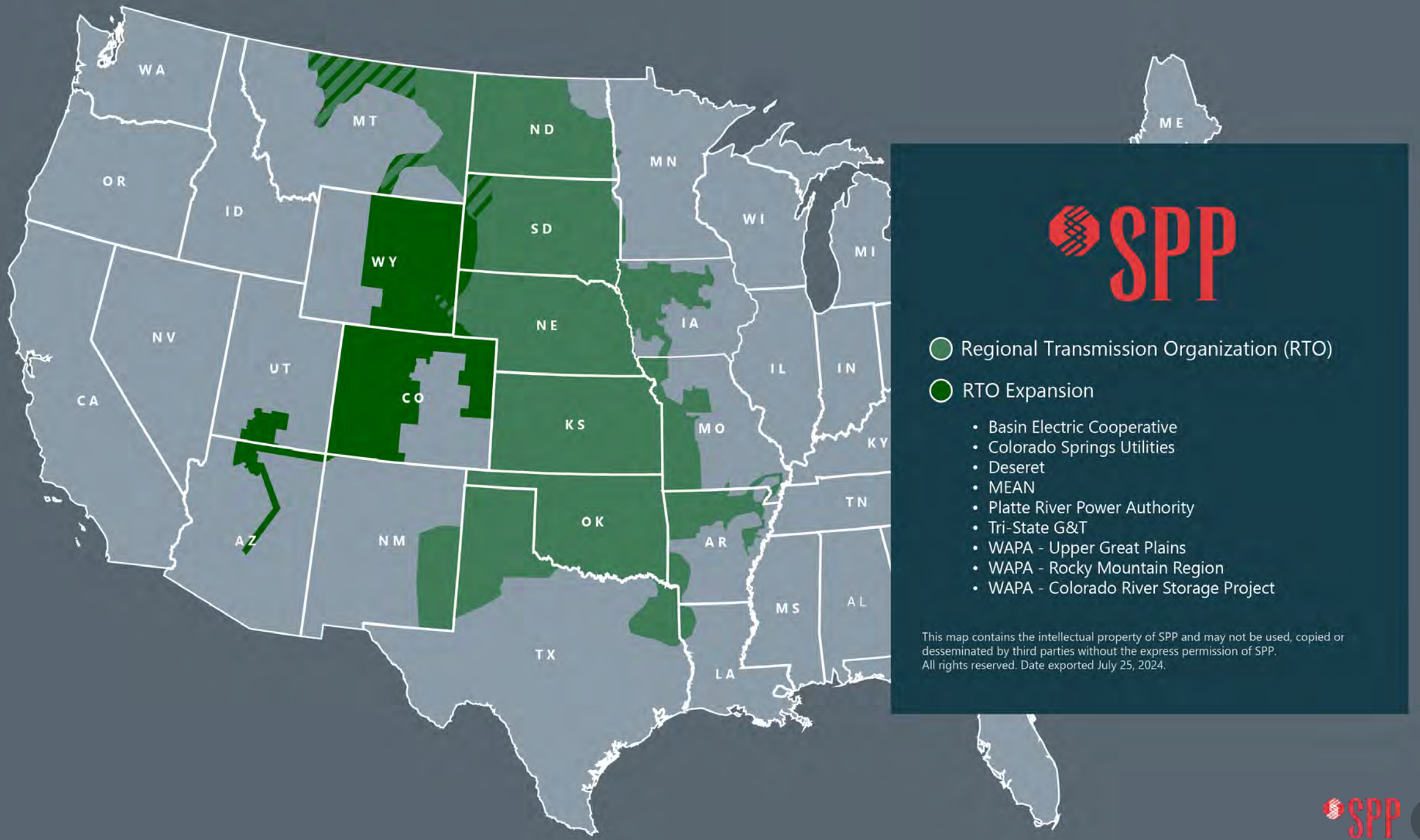
WESTERN ENERGY SERVICES



RTO OPERATING REGION

- **552,885** square mile service territory
- **~18 million** population served
- **967*** generating plants
- **5,267*** substations

* In SPP's balancing authority area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SPP
Regional Transmission Organization (RTO)
RTO Expansion
Basin Electric Cooperative
Colorado Springs Utilities
Deseret
MEAN
Platte River Power Authority
Tri-State G&T
WAPA - Upper Great Plains
WAPA - Rocky Mountain Region
WAPA - Colorado River Storage Project
This map contains the intellectual property of SPP and may not be used, copied or disseminated by third parties without the express permission of SPP.
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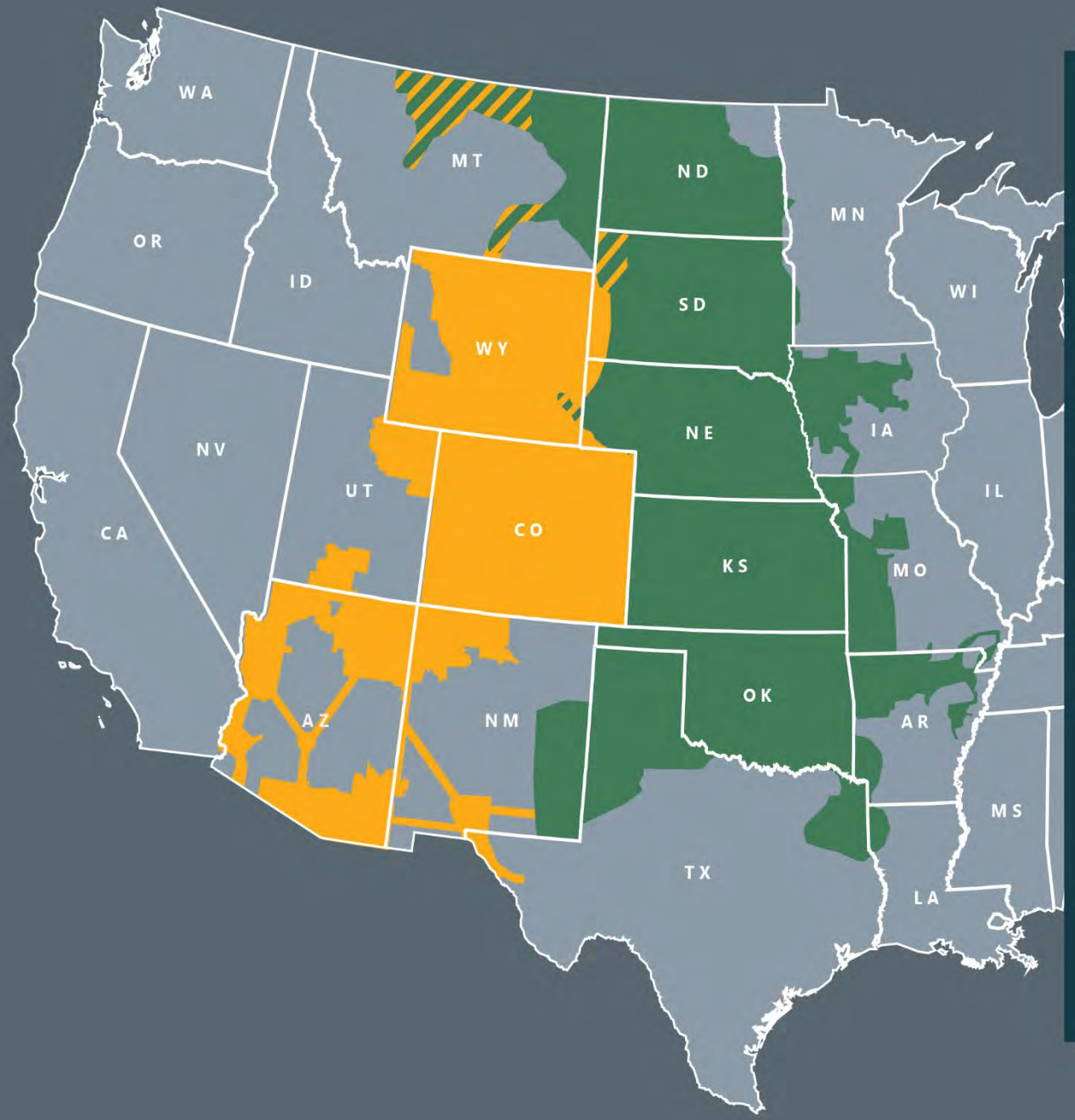


SPP

Regional Transmission Organization (RTO)

Western Reliability Coordinator

WHO IS SPP?

- 501(c)(6) nonprofit corporation
- One of 9 regional grid operators
- 116 member companies in 14 states
- “Air traffic control” for high-voltage grid
- Balance supply and demand across region
- Maintain reliable grid operations
- Operate wholesale energy market
- Plan future transmission needs

BALANCING ELECTRIC SUPPLY AND DEMAND

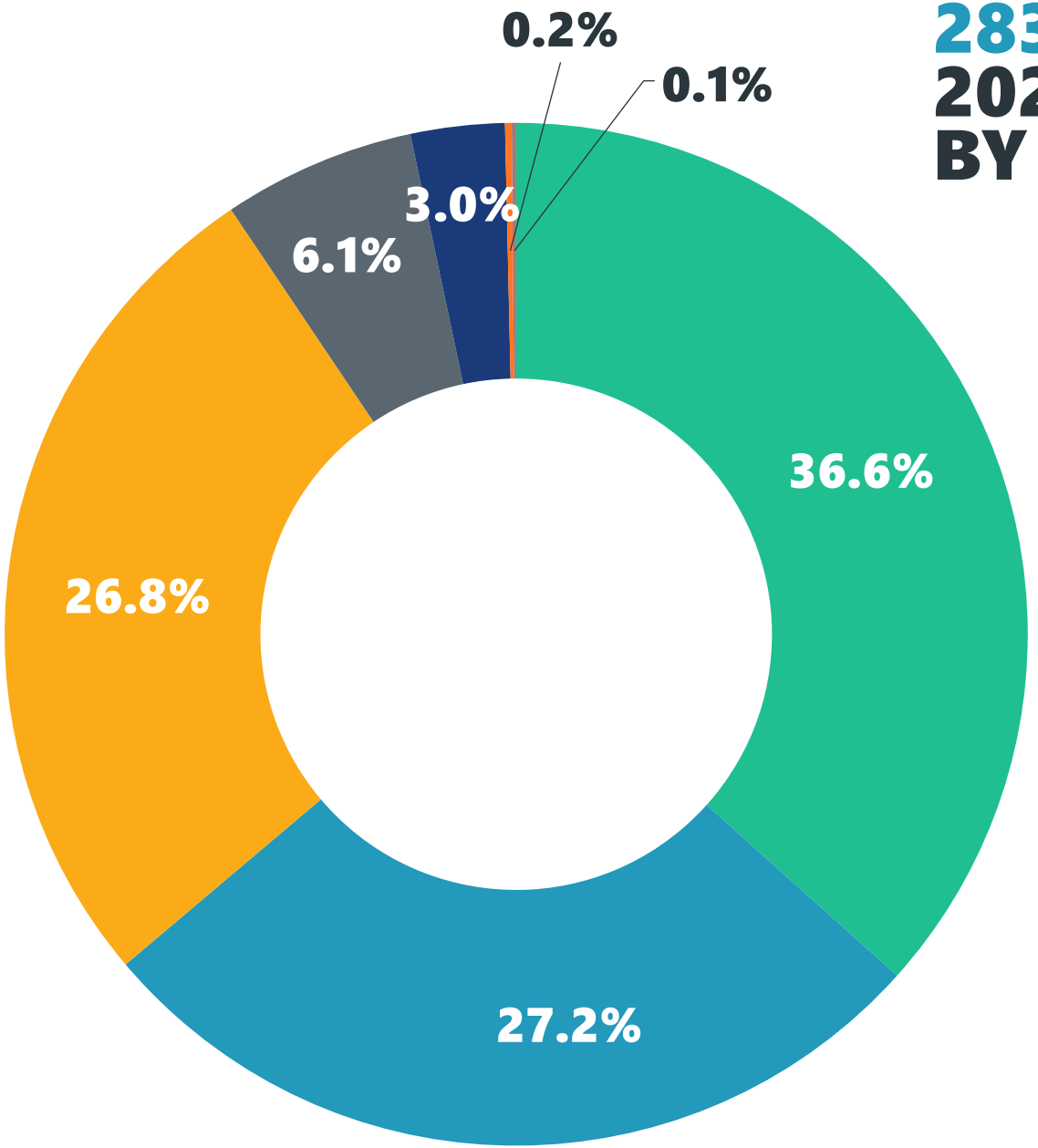
SUPPLY/GENERATION

- **101,310 MW** Nameplate Capacity
- **66,145 MW** Accredited Capacity *(as of Summer 2024)*

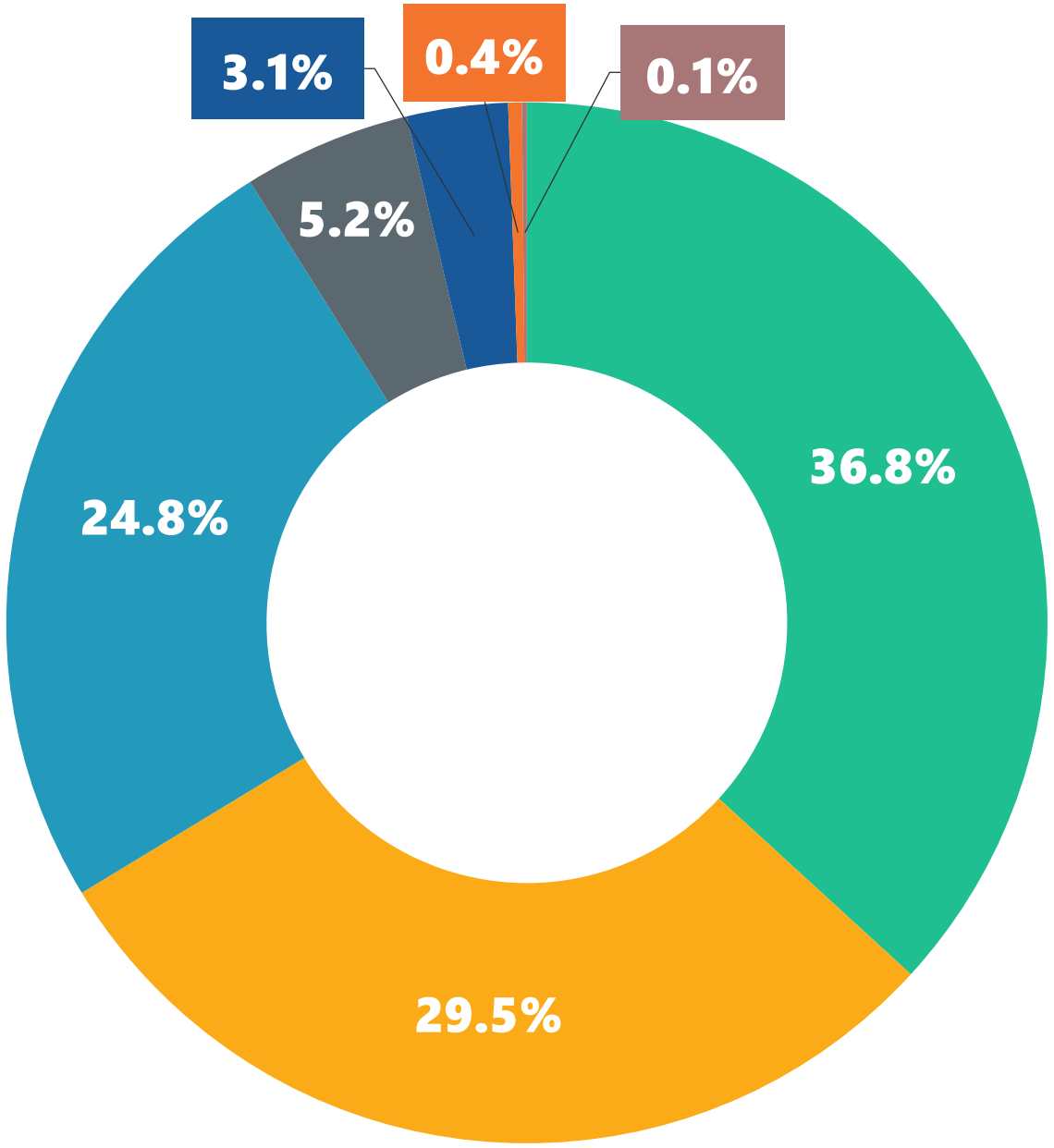
DEMAND/LOAD

- **56,184 MW** all-time coincident peak load (8/21/23)
- **47,157 MW** Winter peak (12/22/22)

283,577 GWH
2023 ENERGY PRODUCTION BY FUEL TYPE



- Wind (36.63%)
- Coal (27.19%)
- Natural Gas (26.76%)
- Nuclear (6.09%)
- Hydro (2.9%)
- Solar (0.2%)
- Other (0.1%)



222,050 GWH
YTD GENERATION

AS OF OCTOBER 1, 2024

- Wind (36.8%)
- Natural Gas (29.5%)
- Coal (24.8%)
- Nuclear (5.2%)
- Hydro (3.1%)
- Solar (0.4%)
- Other (0.1%)

SOUTHWEST POWER POOL GRID CONDITIONS

Normal Operations

Weather Advisory

Resource Advisory

Conservative Operations Advisory

Energy Emergency Alert Level 1

Energy Emergency Alert Level 2

Energy Emergency Alert Level 3

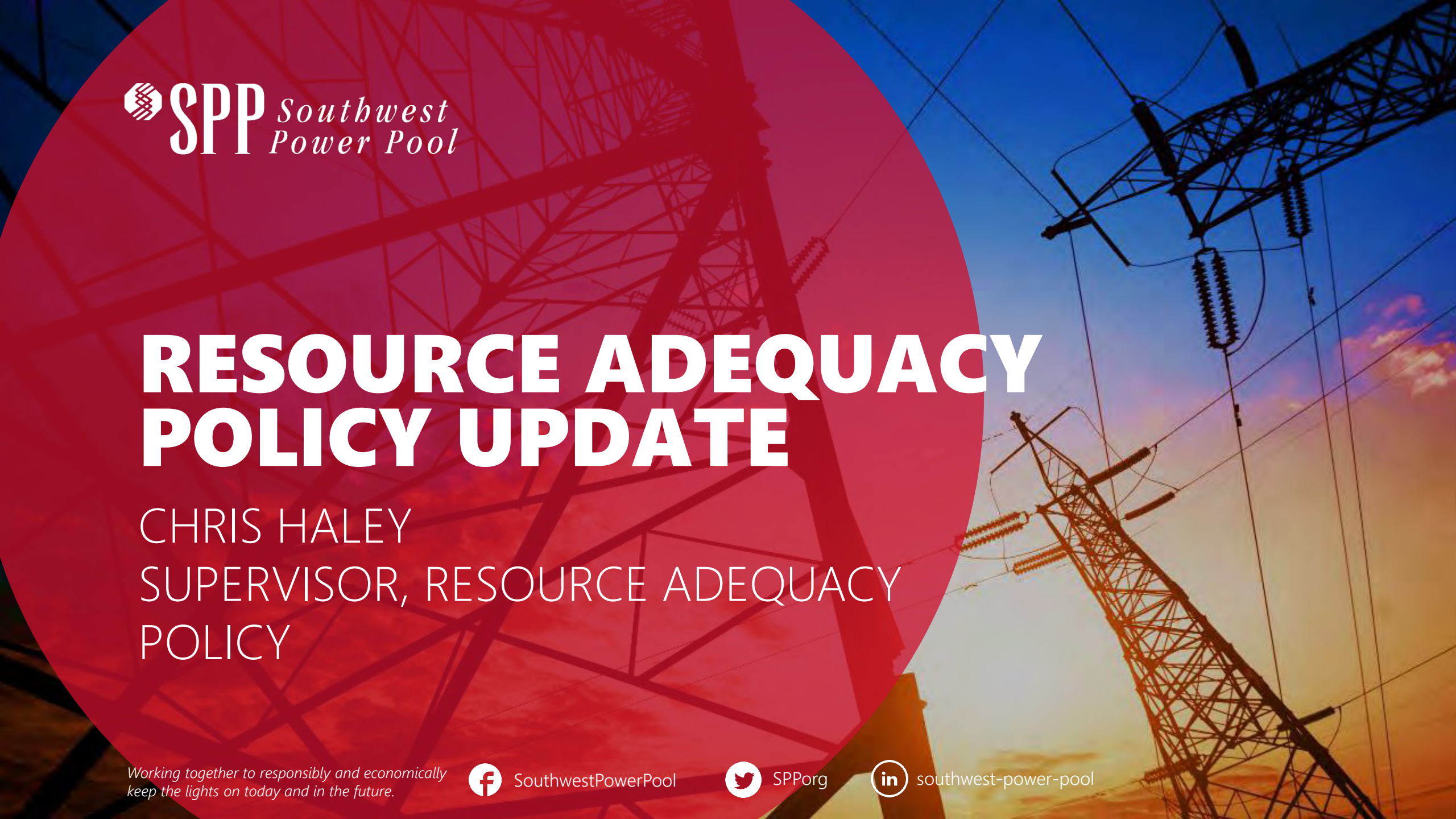
Restoration Event

Advisories raise awareness and do not require general audiences to take action. SPP member utilities should follow applicable procedures.

Energy Emergency Alerts indicate all available generators are being dispatched to meet region-wide demand. As conditions worsen and reserves become at risk, voluntary conservation or service interruptions may be necessary to prevent uncontrolled outages.

SUMMER 2024 RECAP

- **Summer 2024 peak of 54.4 GW (July 15), compared to all-time peak of 56.2 GW (Aug. 21, 2023)**
- **11 Resource Adequacy Advisories (19 days)**
  - 2023 = 19 Resource Advisories (30 days)
- **3 Conservative Operations Advisories (5 days)**
  - 2023 = 6 Conservative Ops Advisories (10 days)
- **1 EEA Level 1 on August 26**
  - Contributing factors: Elevated temps + low wind = high net load obligations
  - Previous forecast showed 90% confidence in maintaining reliability



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RESOURCE ADEQUACY POLICY UPDATE

CHRIS HALEY
SUPERVISOR, RESOURCE ADEQUACY POLICY

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2024 / FERC FILINGS

WHAT IS CURRENTLY AT FERC?

RR	Policy	FERC Filing	Docket
549	Winter Season Resource Adequacy Requirement	June 28, 2024	Docket No. ER24-2397
605	Availability Language	June 28, 2024	Docket No. ER24-2397
554	Performance Based Accreditation	February 23, 2024	Docket No. ER24-1317
568	Effective Load Carrying Capability	February 23, 2024	Docket No. ER24-1317
600.15	RTO West Expansion for Attachment AA	June 4, 2024	Docket No. ER24-2184
621	Fuel Assurance	September 3, 2024	Docket No. ER24-2953
622	Summer and Winter Season PRM	October 11, 2024	Docket No. ER25-89

2024/2025 WINTER OUTLOOK

CURRENT WINTER SEASON OBLIGATION FOR 2024/25

In Attachment AA, the Winter Season is defined as December 1st through March 31st

The Winter Season Obligation is a requirement of the Tariff

- Does not have the same level of enforcement associated with the Summer Season Resource Adequacy Requirement (RAR)
  - Does not yet require Resource Adequacy staff to validate the data submitted by the Load Responsible Entities and Generator Owners
- Does not require resources to be made available during the seasonal timeframe
- Current 15% Planning Reserve Margin (PRM) applies

FUTURE WINTER SEASON RAR

FERC Approved

Winter Season requirement begins with the 2025/2026 Winter Season

- Applies Deficiency Payment process to Winter Season

The RAR is equal to the LRE's Winter Season Net Peak Demand plus its Winter Season Net Peak Demand multiplied by the Planning Reserve Margin

- The PRM is currently 15% for both the Summer and Winter Seasons
- Starting with the 2026/27 Winter Season the Winter PRM will be 36%

Requires the same data submittal, validation process, and studies that are in place today for the Summer Season

- Like the Summer Season, the Winter Season will have its own data submittal and study timeline

2024/2025 CAPACITY AND LOAD OUTLOOK

UPCOMING WINTER SEASON FORECAST

Reserve Margin Calculation = Total Capacity – Net Peak Demand / Net Peak Demand

These values reflect the data submitted by the Load Responsible Entities for the 2024/25 Winter Season, but have not been validated against Attachment AA requirements

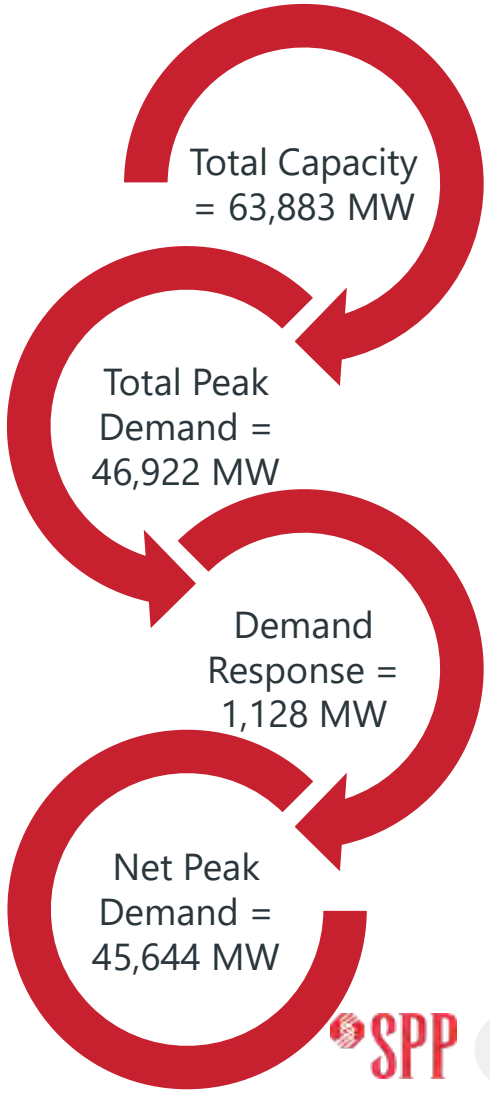
- Current accreditation policies can be found in Section 7.1 of the SPP Planning Criteria

Capacity values shown are based on the current accreditation policies for both conventional and renewable resources

- Does not include the affects of Performance Bases Accreditation (PBA) or Effective Load Carrying Capability (ELCC) policies filed with FERC

Winter Season Obligation is based on the Net Peak Demand

- Forecasted reserve margin for the upcoming Winter Season is ~40%



2025/2026 WORK PLAN AND INITIATIVES

2025 RA WORKPLAN

This is a target date and would apply to the corresponding BOD/RSC cycle

Project	*2025 Workplan*	Status	Revision Request	Staff Start Date	REAL Policy Date	MOPC RR Date	Comments
Long Term PRM Projection	No	Started	TBD	July '24	Nov '24	April 2025	*2029 PRM Requirement Study (January/April RSC ?)*
Determine the value of Resiliency	✓	*Started*	TBD	In progress	Mar '25	TBD	Primarily a transmission planning function to be discussed in coordination with the 2025 ITP
Warm Weather De-rates	✓	Started	TBD	August '24	April '25	TBD	*To be included in the 2025 LOLE Study*
LRE Peak Demand Accountability	✓	Not started	Yes	August '24	June '25	Oct '25	Staff suggests this initiative be prioritized *in 2025 and in conjunction with LFTF and DR*
Demand Response+	✓	Not started	Yes	Oct '24	Sept '25	Jan '26	*RA, Ops and Market coordinated effort*
Long Term Resource Mix		Not started	TBD	Jan '25	Mar '26	TBD	Replicates the REAL future resource mix study with updates
Normalized EUE Standard	✓	Not started	Yes	Jan '25	Mar '26	June '26	Replicates the REAL future resource mix study with updates
Outage Planning Alignment		Not started	*Yes*	Jan '25	Mar '26	June '26	Additional policy and direction needed
Seasonal RA Requirements	No	Not started	Yes	Jan '26	June '26	Oct '26	
Non-firm Import Availability	No	Not started	Yes	Jan '26	Jan '27	June '27	Evaluate post 2025 LOLE Study
Cost & Benefit for Reliability Standards (PRM/EUE)	✓	Not Started	TBD	Oct '24	Jan '27	April '27	Precursor to standardized EUE, may include VOLL, includes discussion on balance of affordability and reliability. More policy discussion and direction needed by REAL
CP vs NCP Demand Methodology	No	Not started	Yes	Jan '27	June '27	Oct '27	There is an accreditation component and a RAR component
Enable more gen to connect faster	✓	Not started	TBD	TBD	TBD	TBD	CPPTF, GIAG, and TWG are primary
Ramping for RA	*No*	MWG/ Monitoring	Yes	TBD	TBD	TBD	Staff will monitor ramp trends and reconsider at SAWG after MWG work and/or if trends are concerning

RA STUDY TIMELINE TARGETS

Study	Scoping	Staff Start	*Analysis Completed*
2025 Loss of Load Expectation (LOLE) Study	August 2024	February 2025	February 2026
Warm weather de-rates analysis	August 2024	October 2024	June 2025
2025 Effective Load Carrying Capability (ELCC)	August 2024	February 2025	October 2025
Seasonal RA requirements analysis	June 2025	January 2026	October 2026
Future Resource Mix/Expected Unserved Energy Study – PRM (Year 8) Projection Study	January 2025	June 2025	April 2026
Non-firm Import Availability Evaluation	September 2025	January 2027	June 2027
Analysis of CP vs. NCP impacts	January 2027	June 2027	October 2027

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SEASONAL OUTLOOK

WINTER 2024-2025

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WINTER 2024-25

Back to La Nina Again!

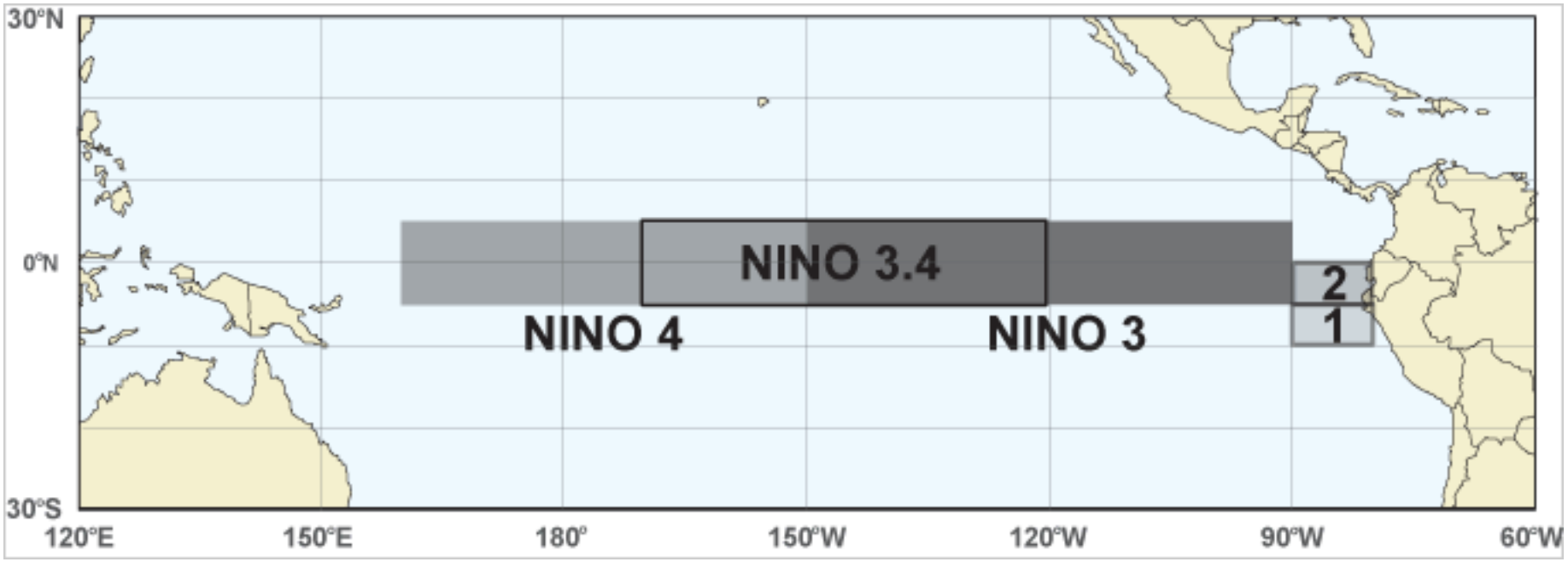
Weak to Moderate La Nina Forecast for Winter Months

Less Correlation of Winter Weather Patterns with Weak La Nina

WHAT IS EL NINO/LA NINA?

Fluctuation of Water Temperatures in Equatorial Pacific Ocean

Warm Phase is El Nino, Cold Phase is La Nina

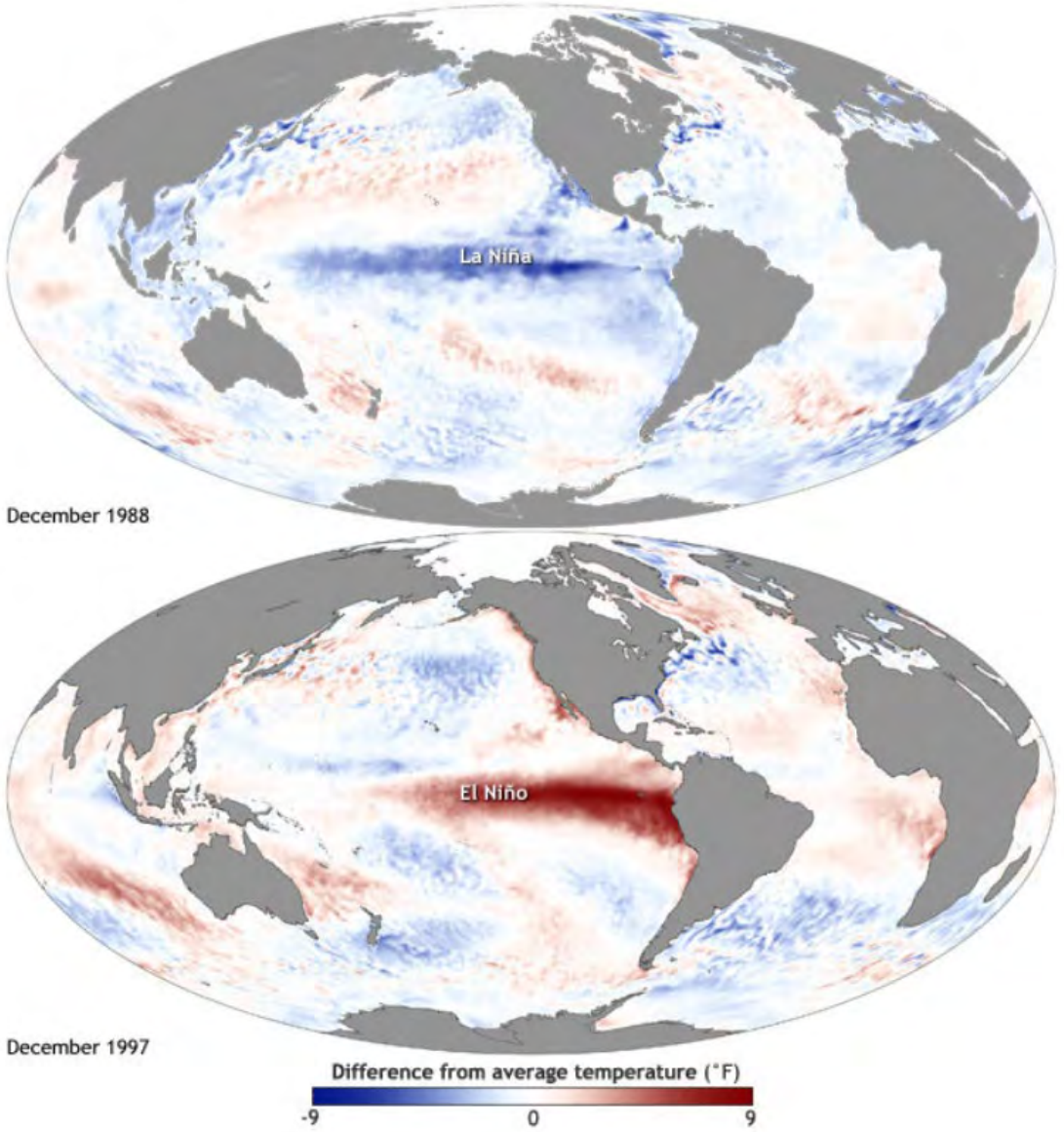


LA NINA

Colder Than Average Sea Surface Temperatures

EL NINO

Warmer Than Average Sea Surface Temperatures



THREE NINAS AND A NINO

Triple Dip La Nina – 3 Consecutive Winters 20-21,21-22,22-23

Likely contributed to extreme Winter Weather events Feb ’21 and Dec ‘22 (“Uri” and “Elliott”)

Strong El Nino 23-24

Warm Winter except Gerri/Heather

Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2012	-0.9	-0.7	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.4	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	2.0
2024	1.8	1.5	1.1	0.7	0.4	0.2	0.0	-0.1	-0.2			

Oceanic Nino Index (ONI)

LA NINA FORMING

El Nino ended around April

Current Conditions are Neutral

~75% La Nina Formation by December

La Nina can contribute to extreme events, but less correlation with weak events

Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2012	-0.9	-0.7	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.4	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	2.0
2024	1.8	1.5	1.1	0.7	0.4	0.2	0.0	-0.1	-0.2			

Oceanic Nino Index (ONI)

NINO TO NINA

La Nina Watch in effect

~ >75% of La Nina Through February 2024 (DJF)

~ 30% Moderate La Nina(<-1)

~ 5% Strong La Nina(<-1.5)

~ <1% Super La Nina(<-2)

Greater chance of impact with moderate/strong La Nina

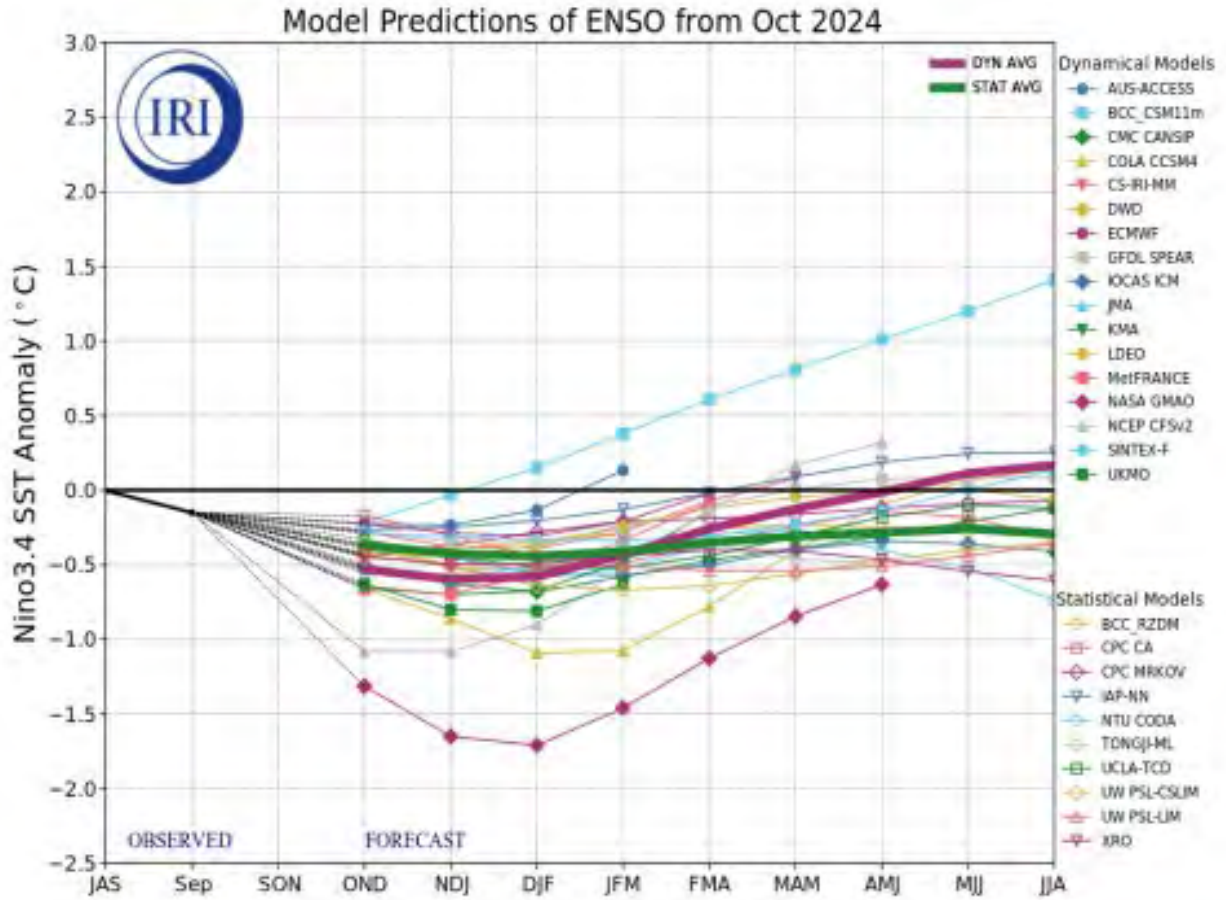


Figure provided by the International Research Institute (IRI) for Climate and Society (updated 18 October 2024).

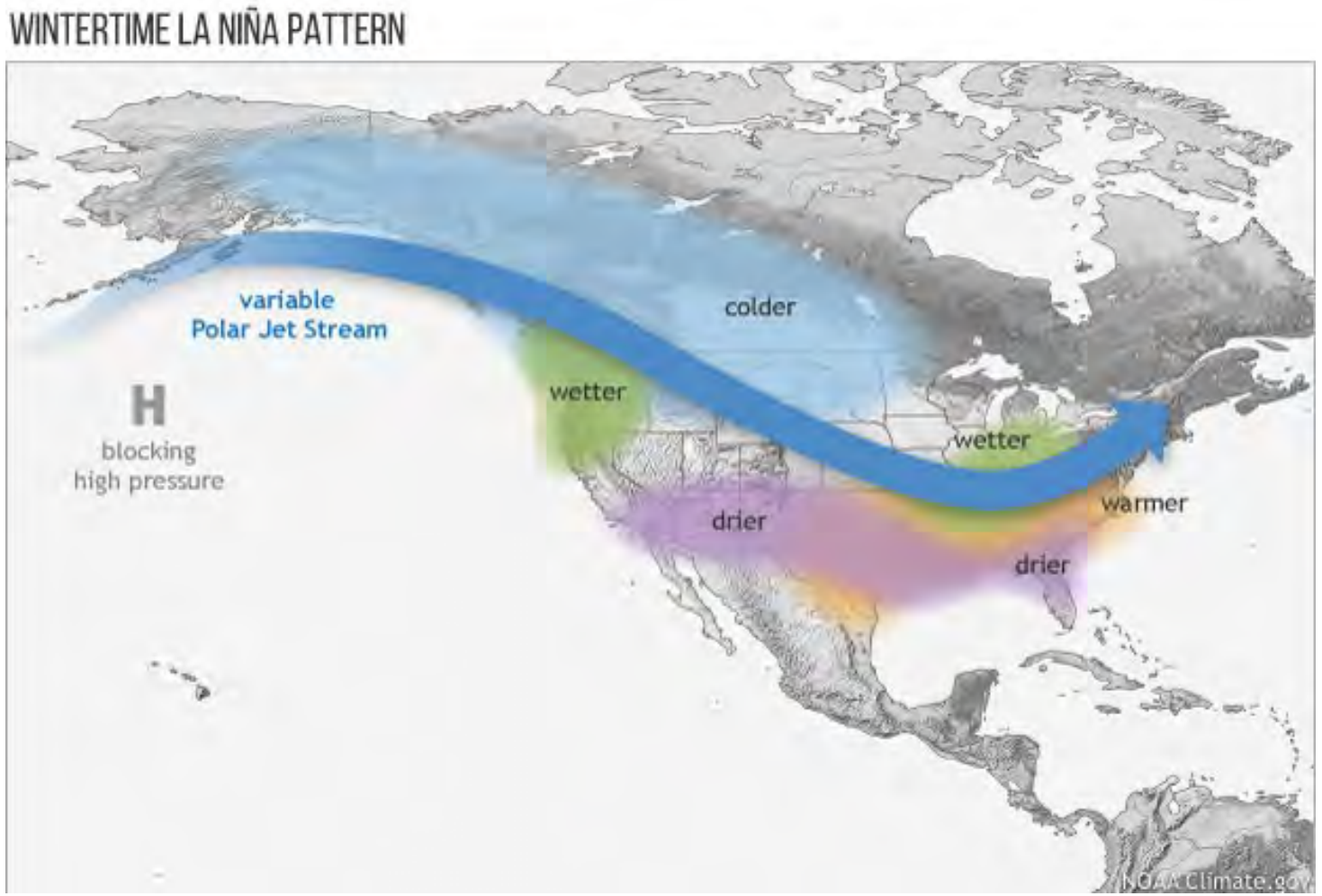
LA NINA

Strong Polar Jet Stream

High Variability

Summer - Prone to Heat Drought Southern/Central Plains

Winter - Prone to SEVERE ARCTIC OUTBREAKS



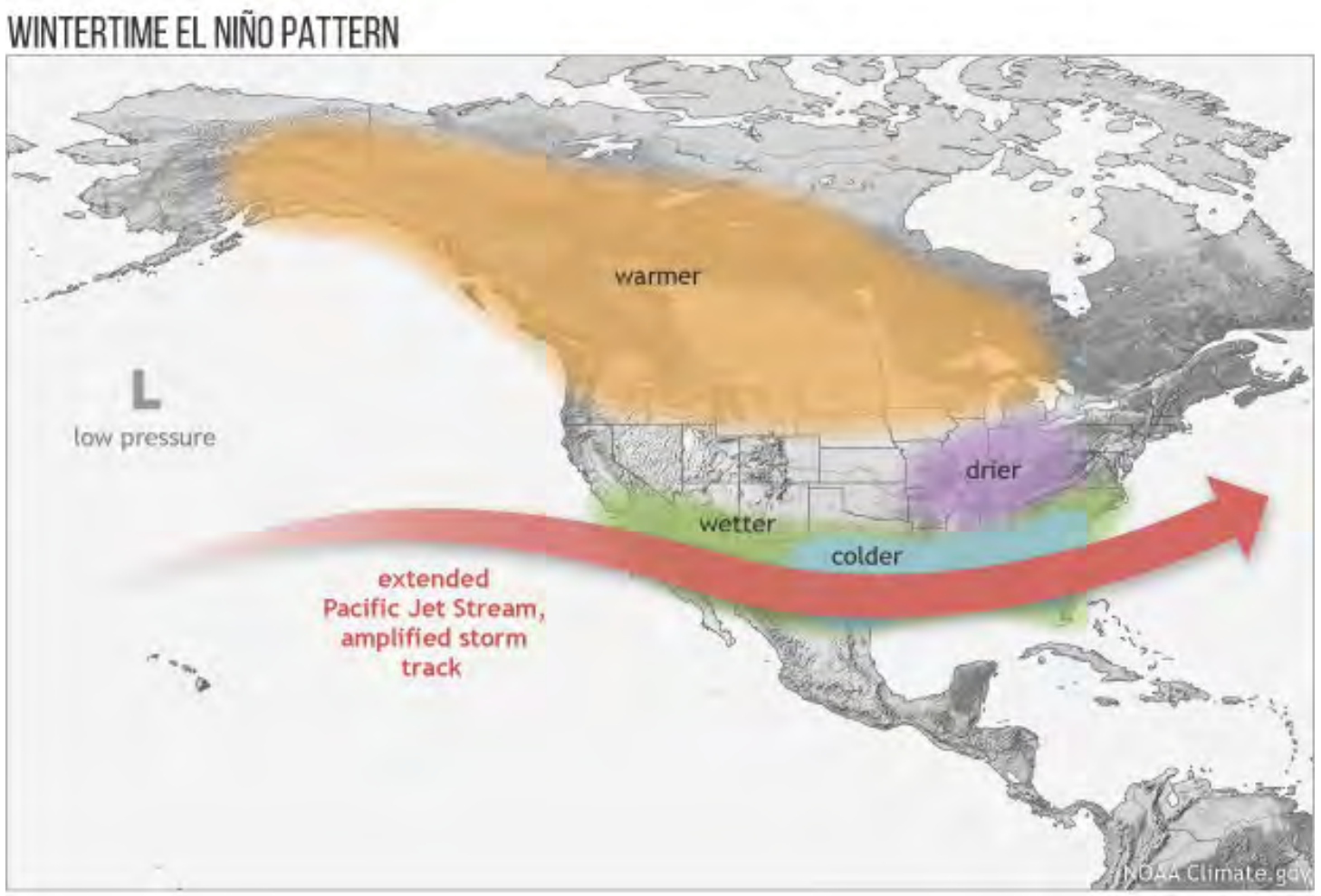
EL NINO

Strong Sub-Tropical Jet Stream

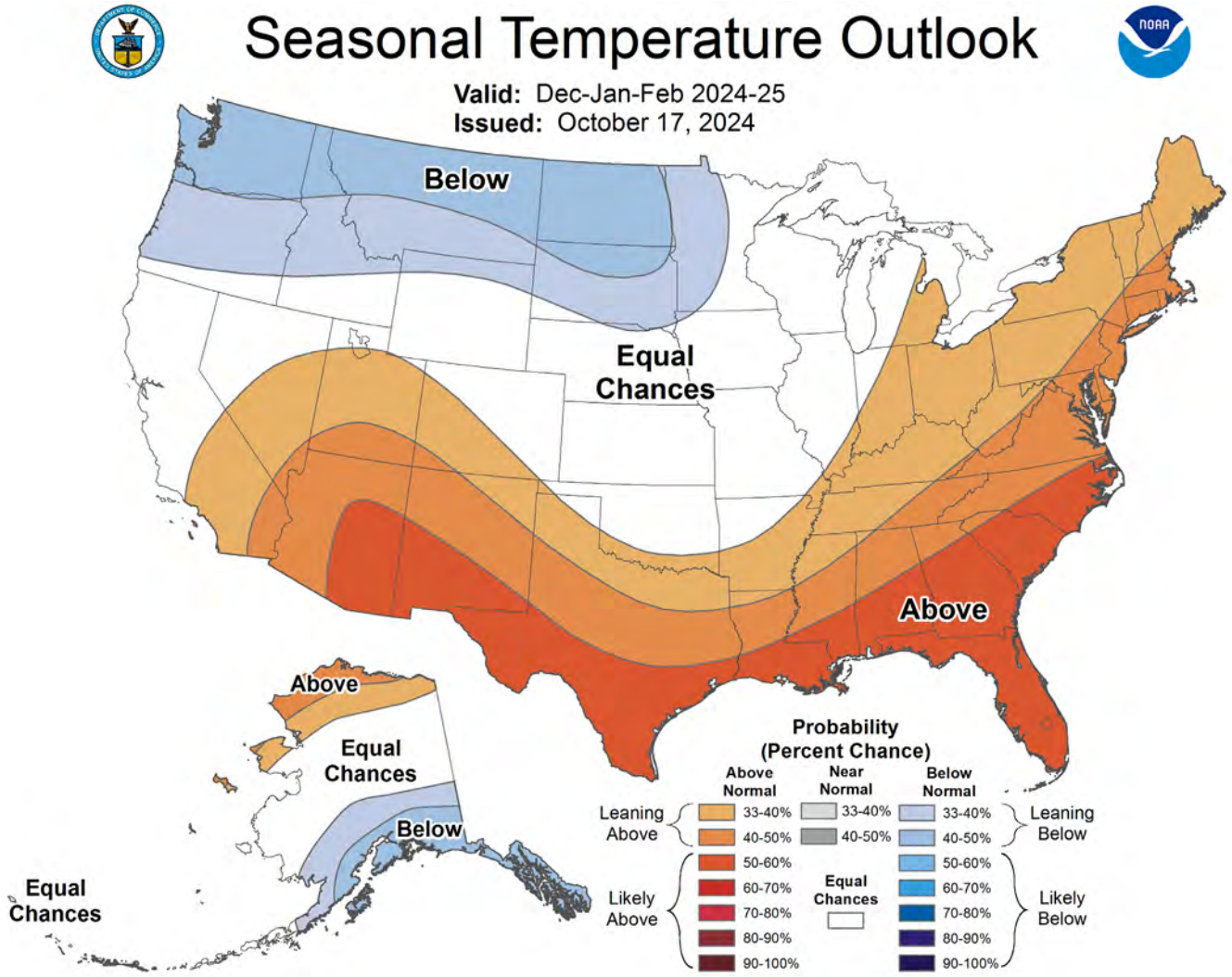
Summer – Less Atlantic Hurricane Activity

Winter – Above to Much Above Normal Temps Central/Northern Plains

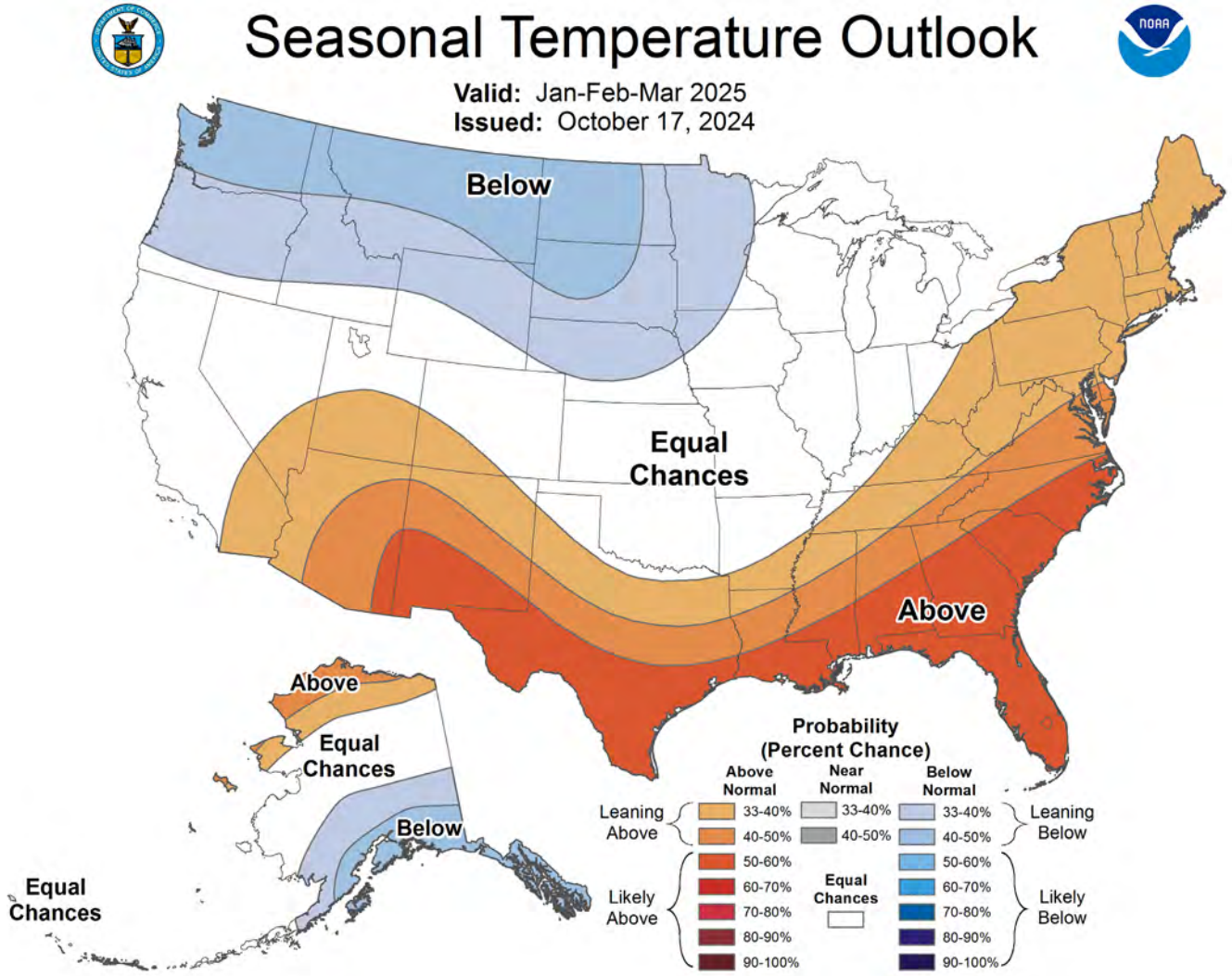
Winter – Colder & Wetter South



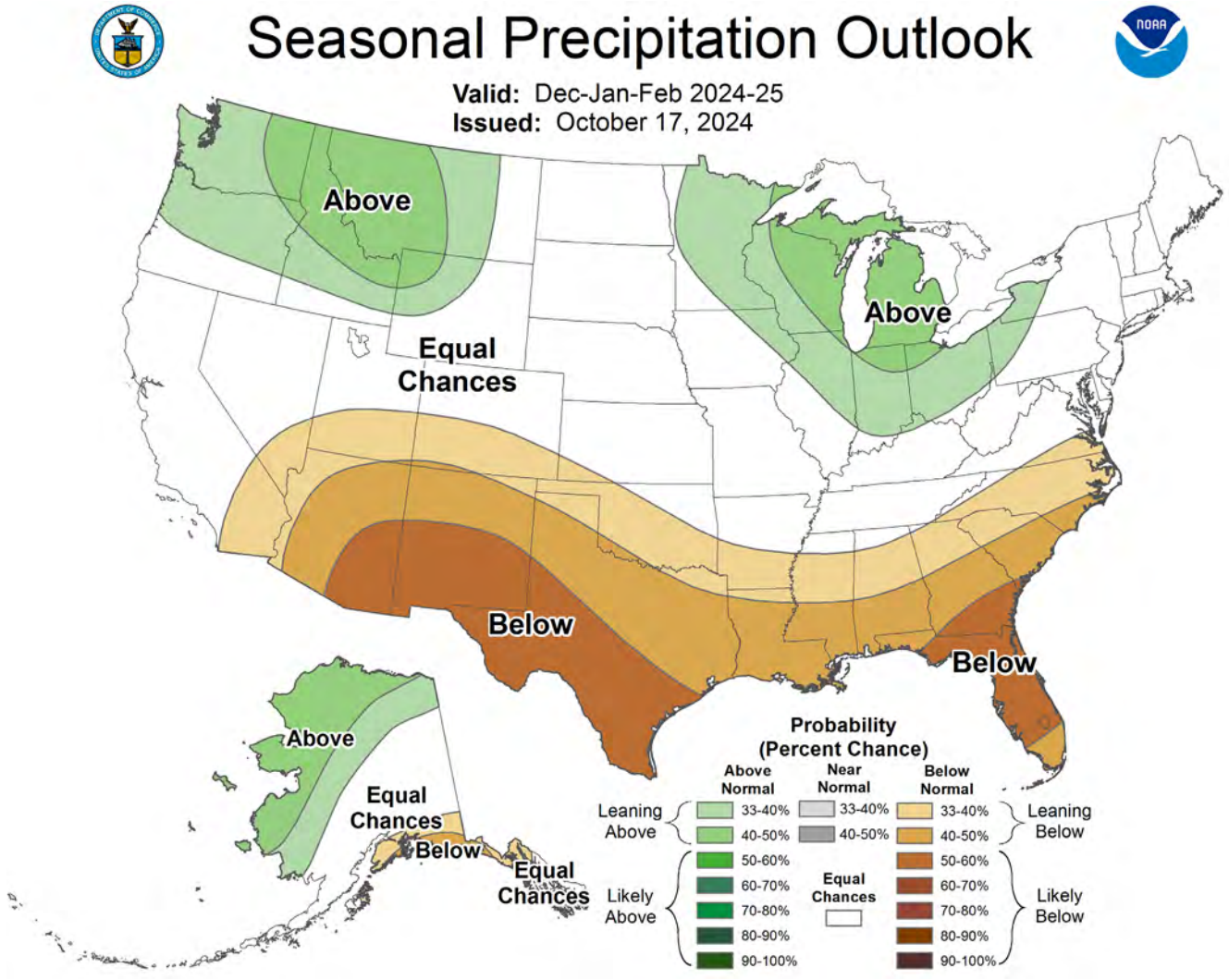
WINTER 2024-25 TEMPERATURES – OCT UPDATE



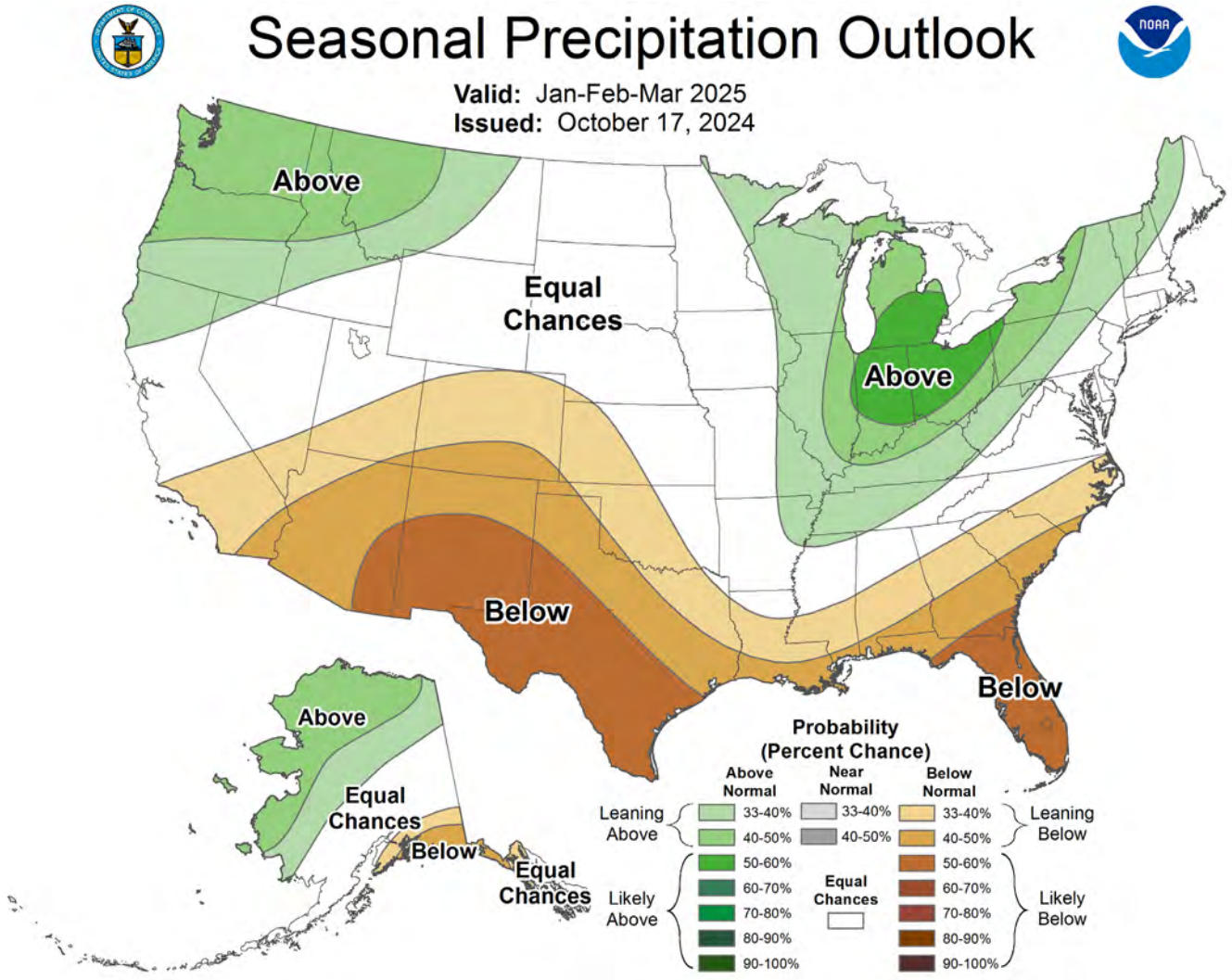
WINTER 2024-25 TEMPERATURES – OCT UPDATE



WINTER 2024-25 PRECIP – OCT UPDATE



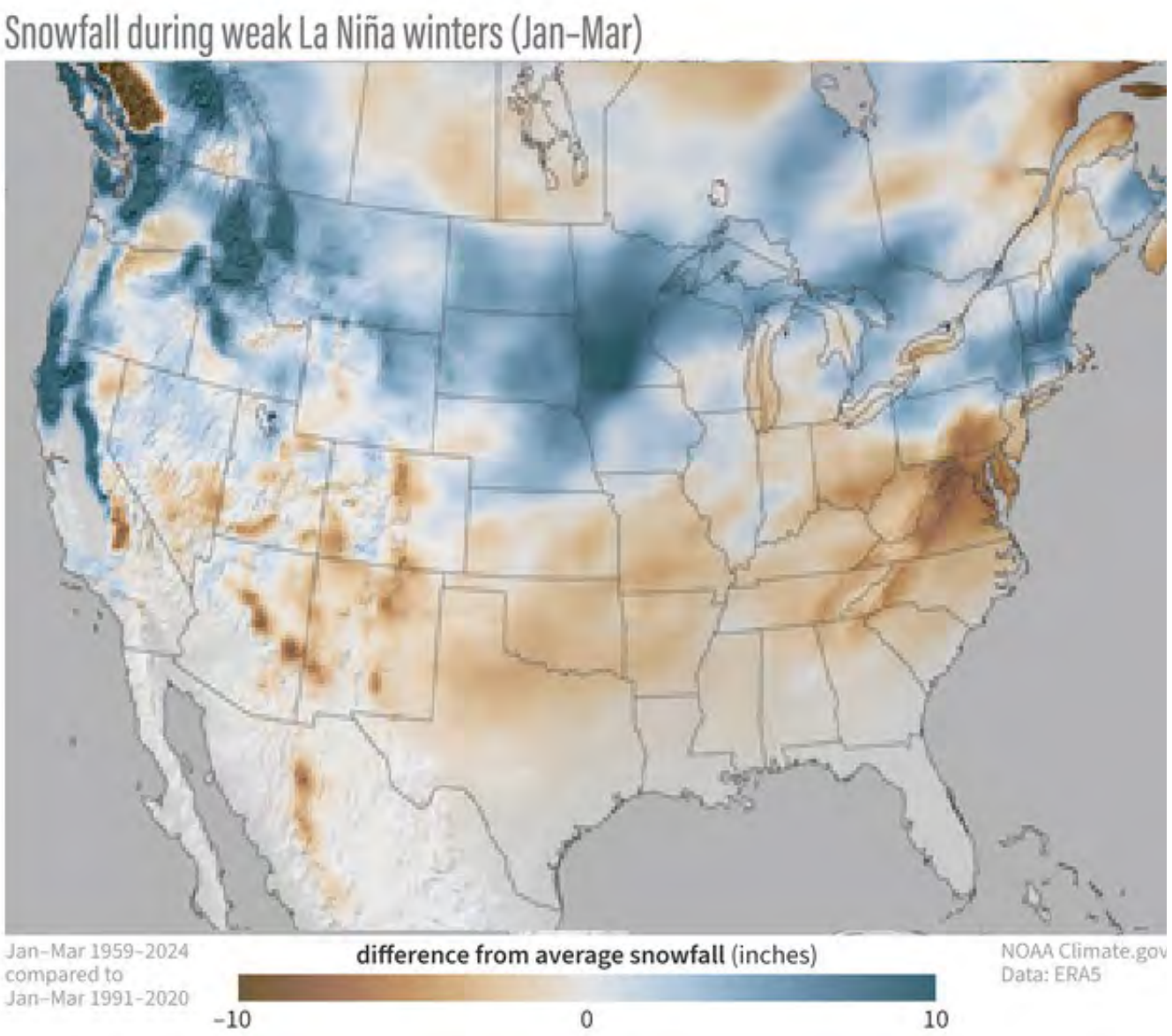
WINTER 2024-25 PRECIP – OCT UPDATE



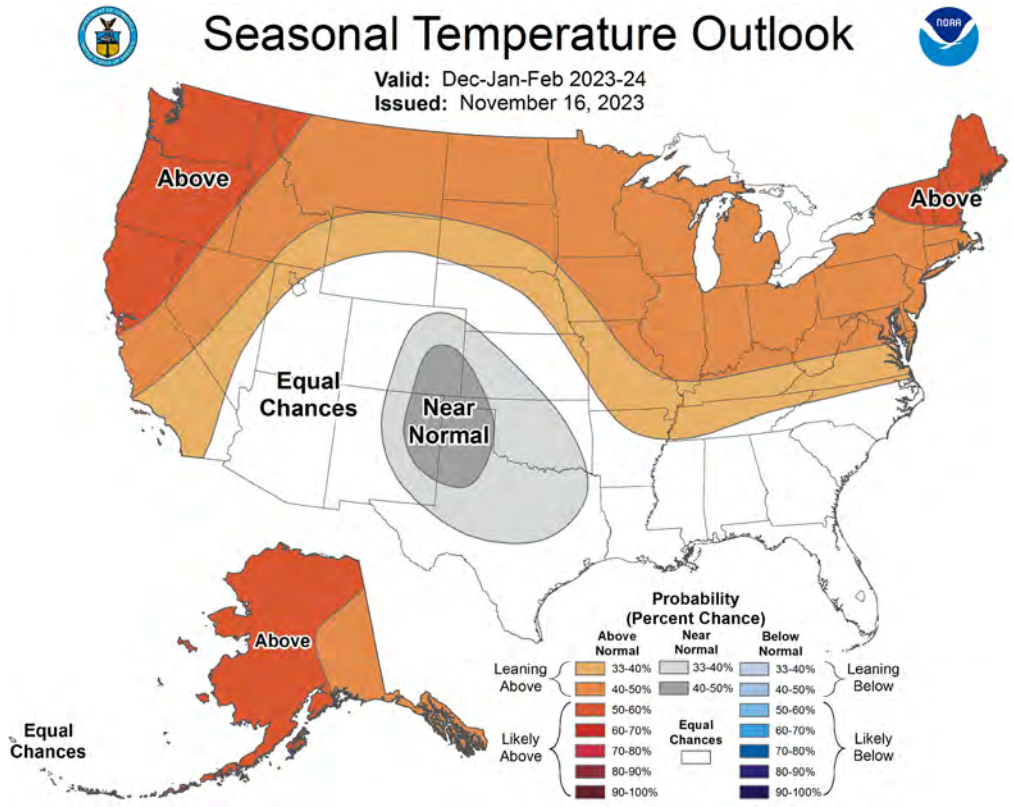
SNOWFALL CORRELATION WITH WEAK LA NINA

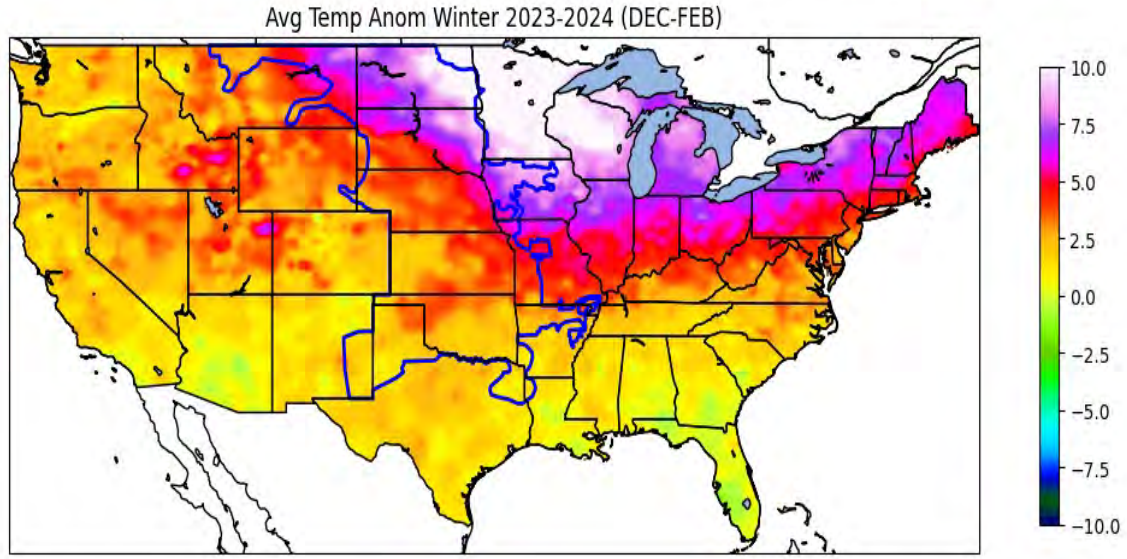
Greater Snowfall favored North and North Central

Less Snowfall favored South and South

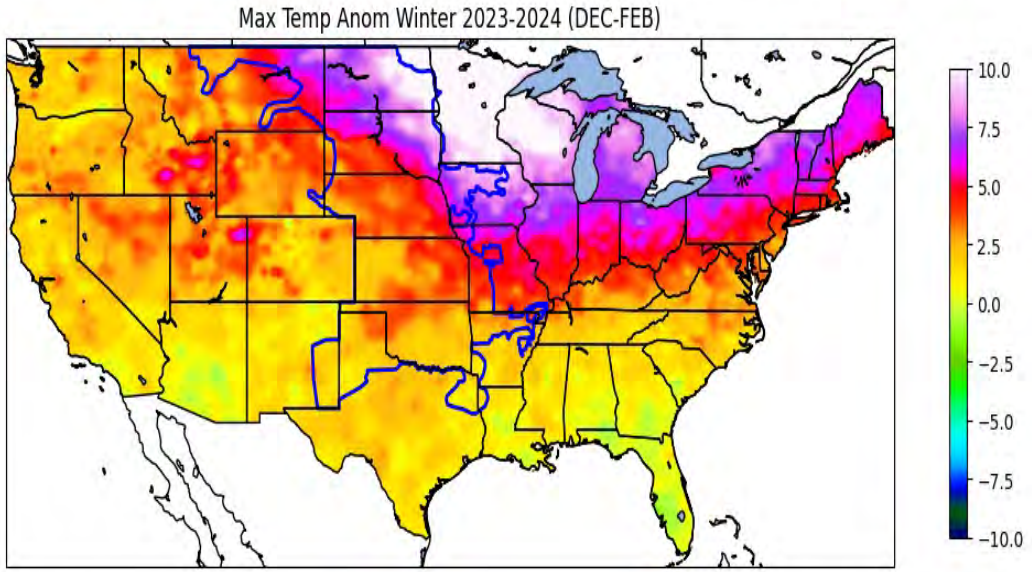


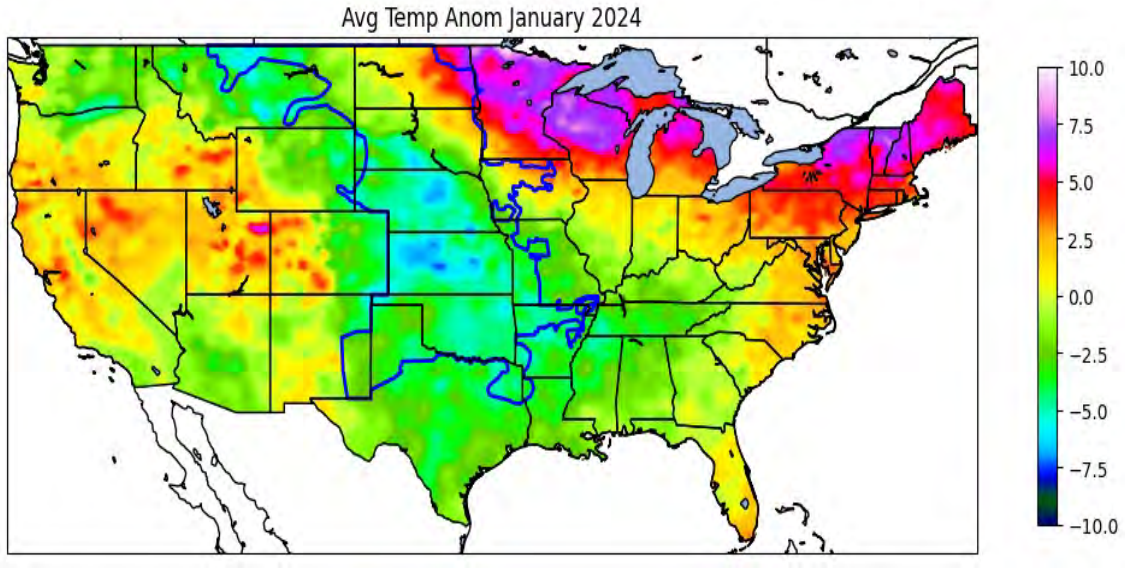
SEASONAL OUTLOOK VERIFICATION DEC23-FEB24





WINTER 23-24 OVERALL VS JANUARY 24





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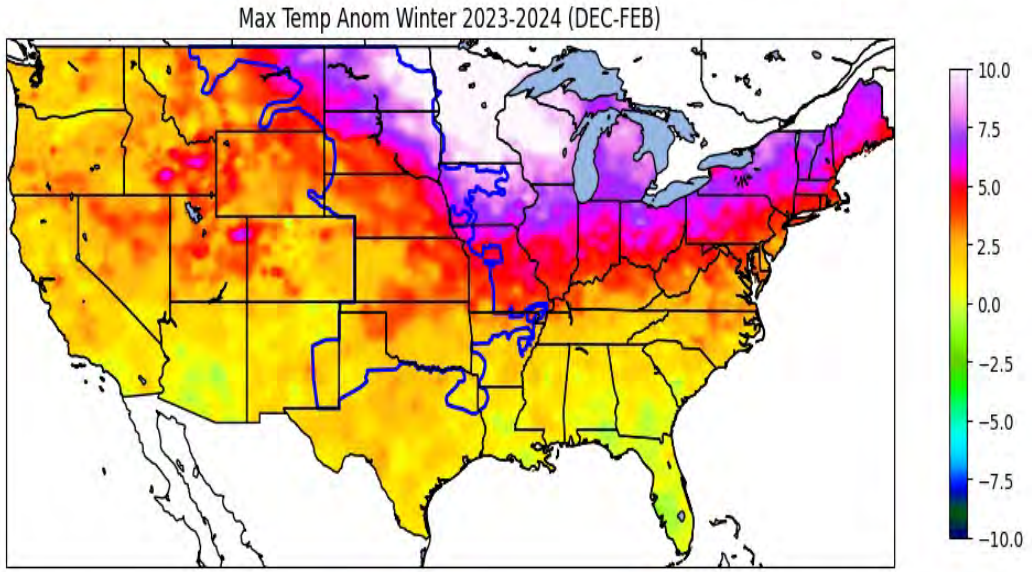
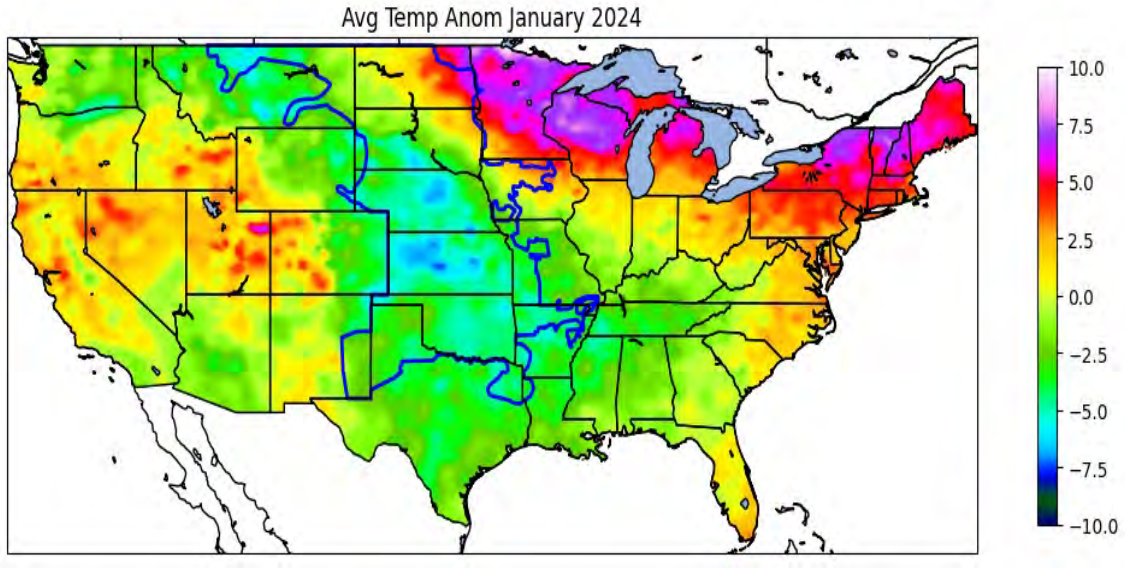
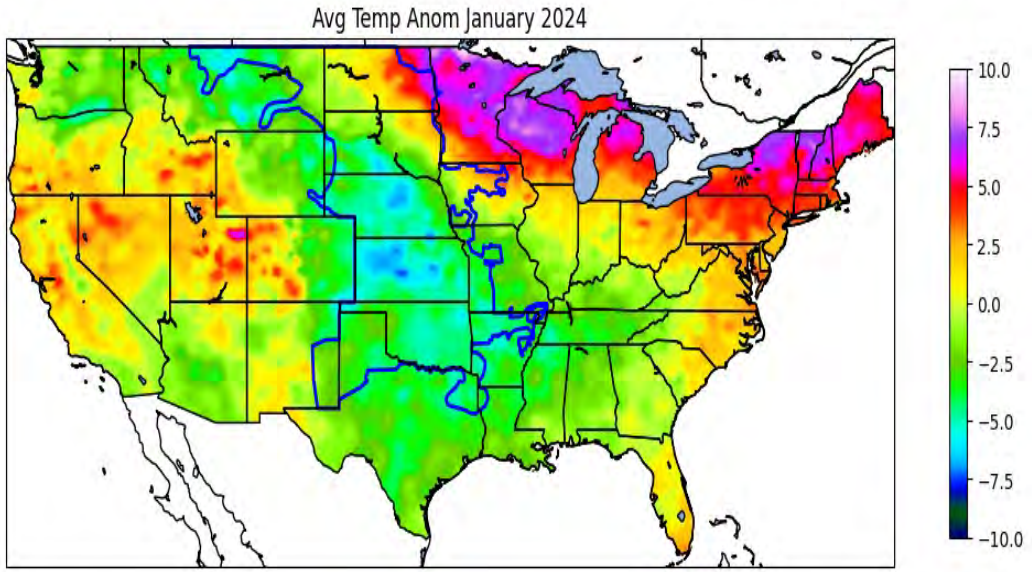
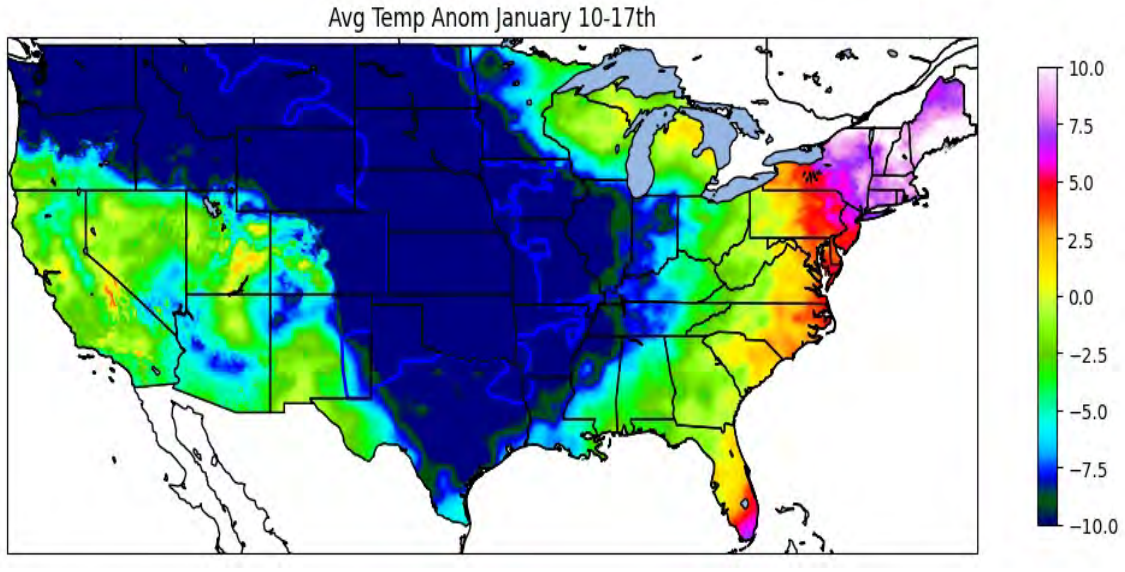


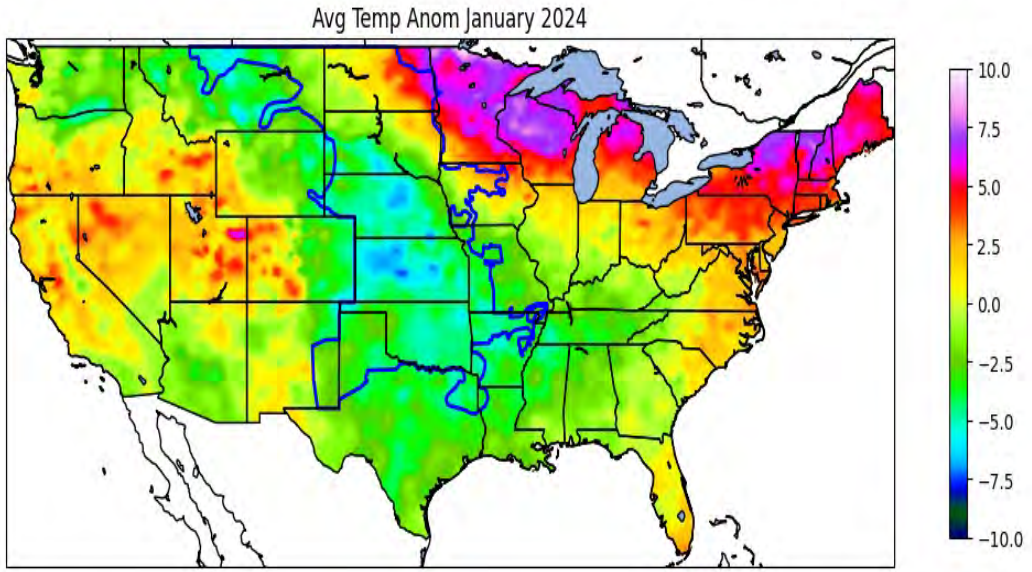


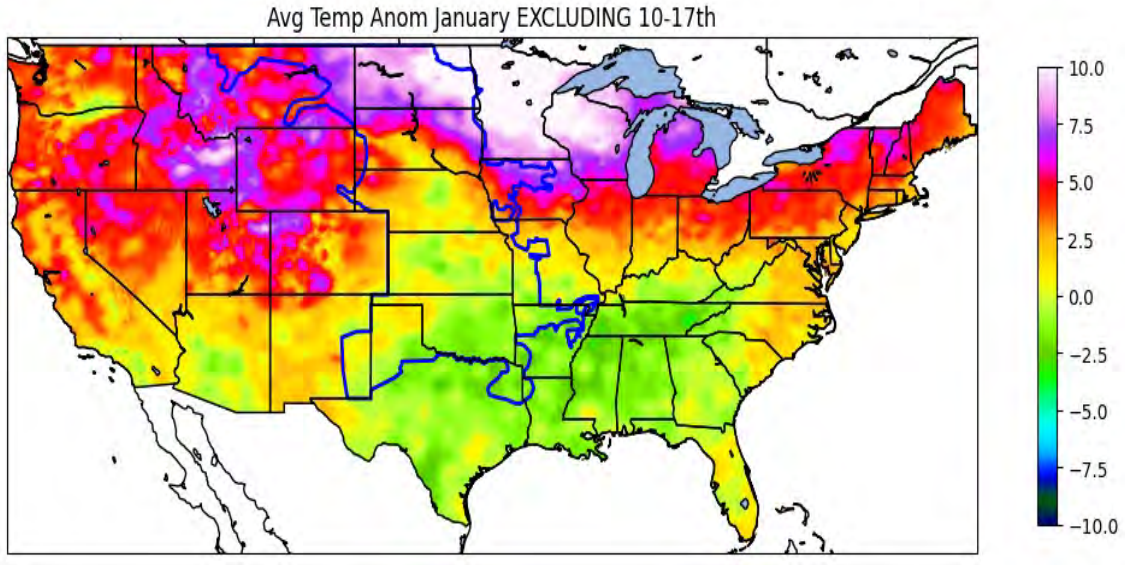
JANUARY 24 VS JANUARY 10TH-17TH 24



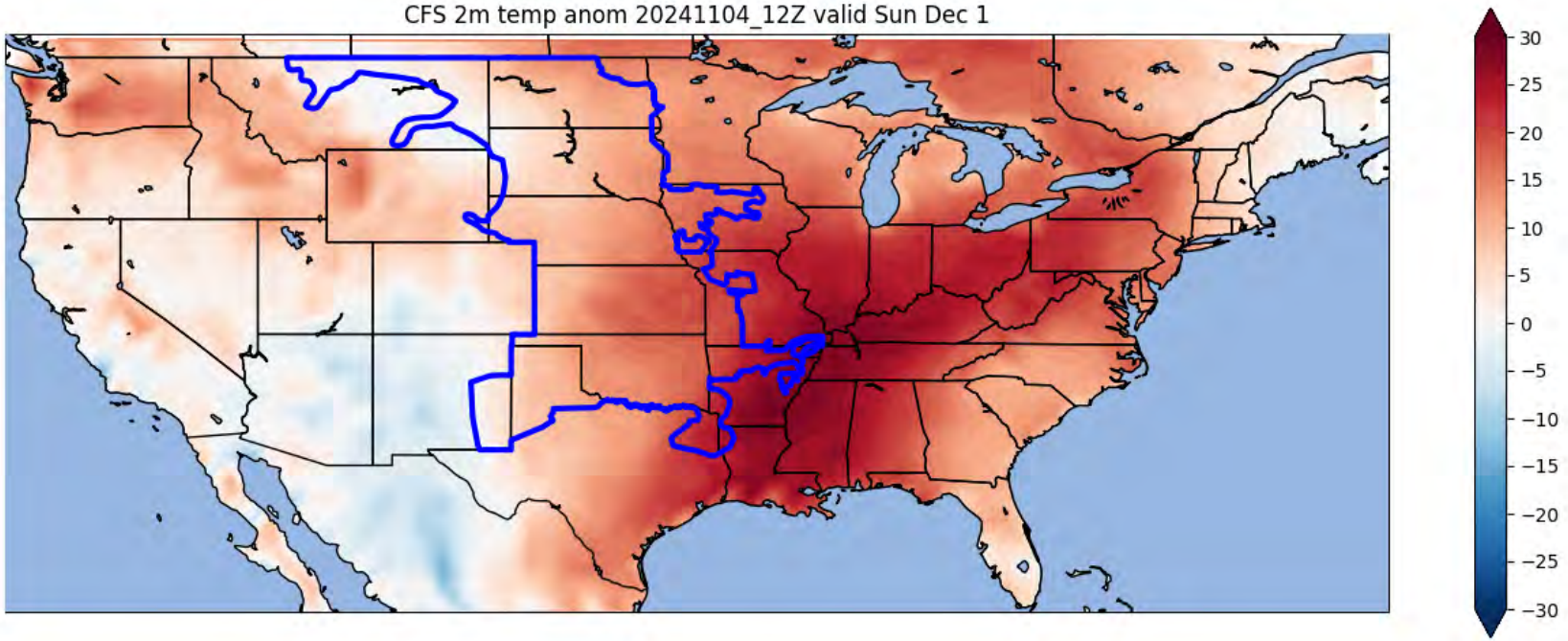


JANUARY 24 VS JANUARY 24 EXCEPT 10TH-17TH





CFS DAILY LOW TEMPERATURE ANOMALY (20 YR MEAN)



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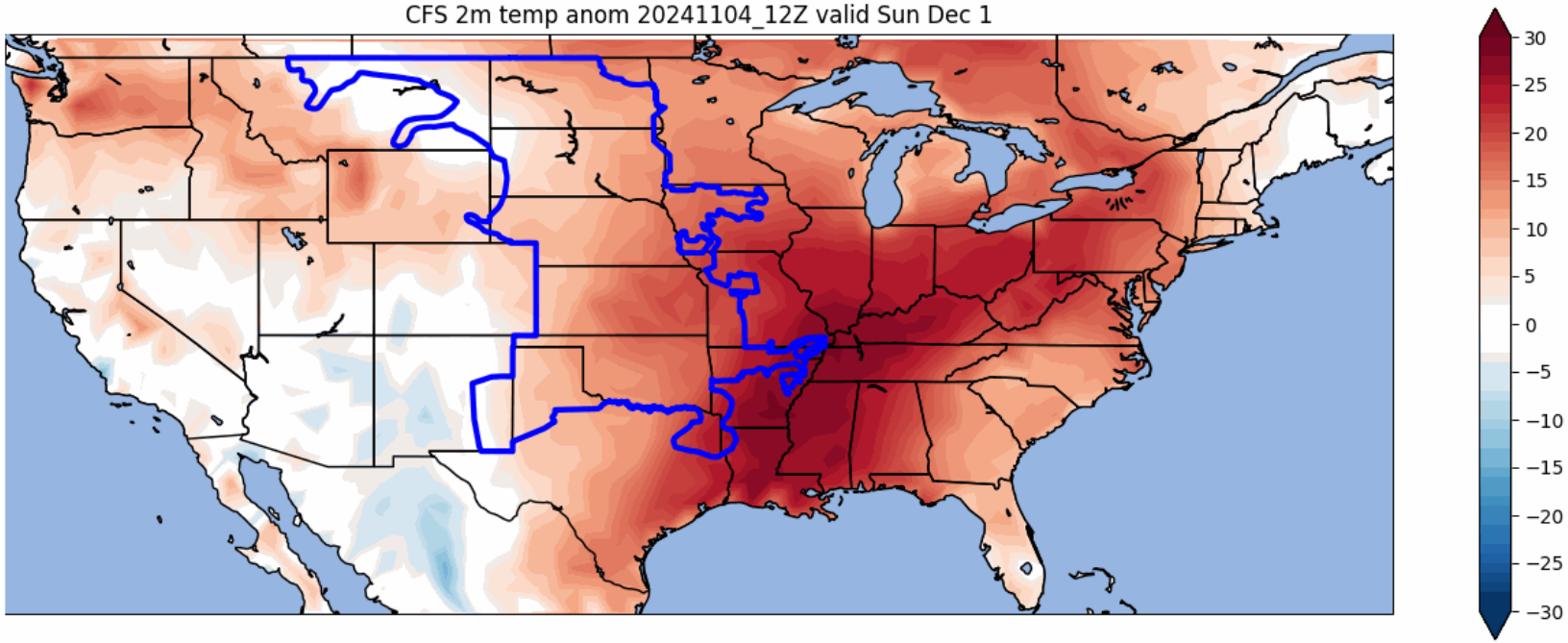

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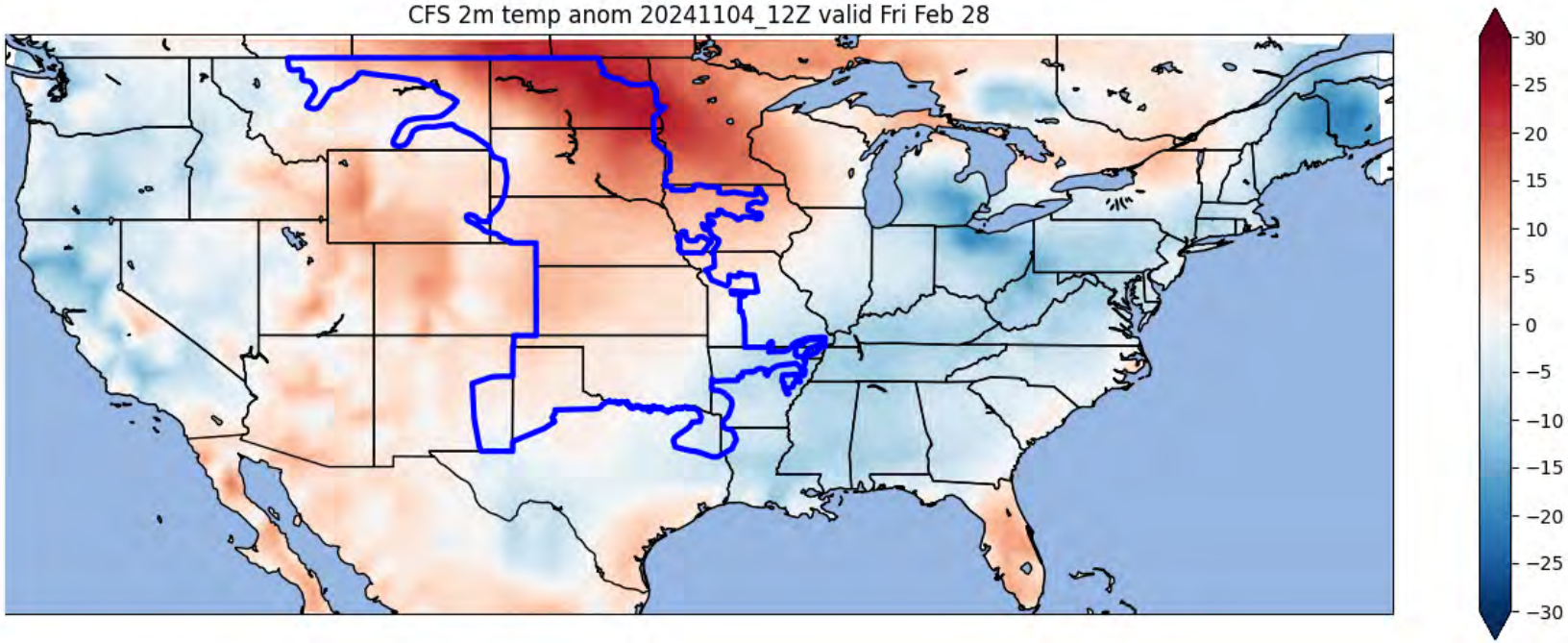
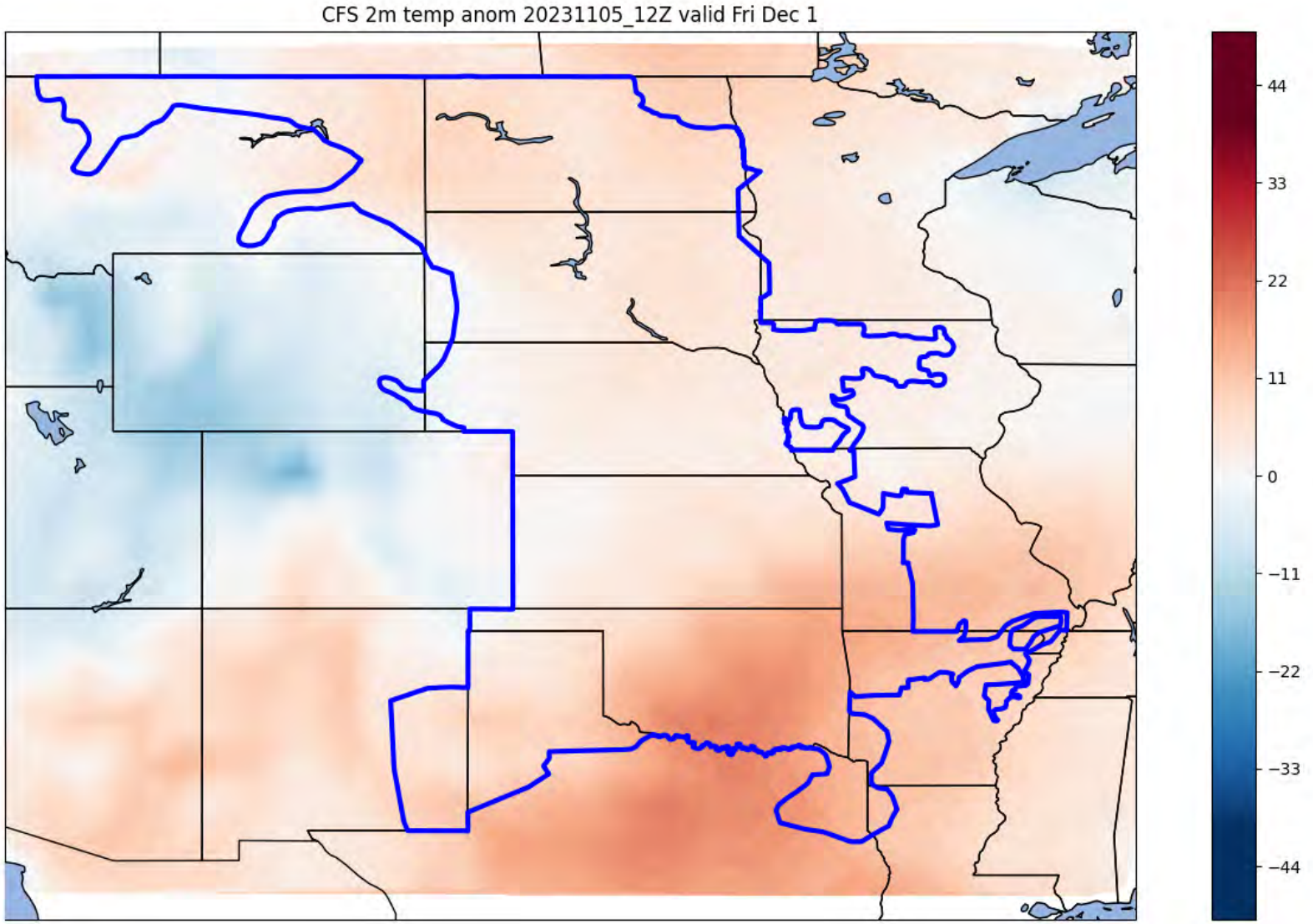


LAST YEAR CFS DAILY LOW TEMPERATURE ANOMALY (20 YR MEAN)



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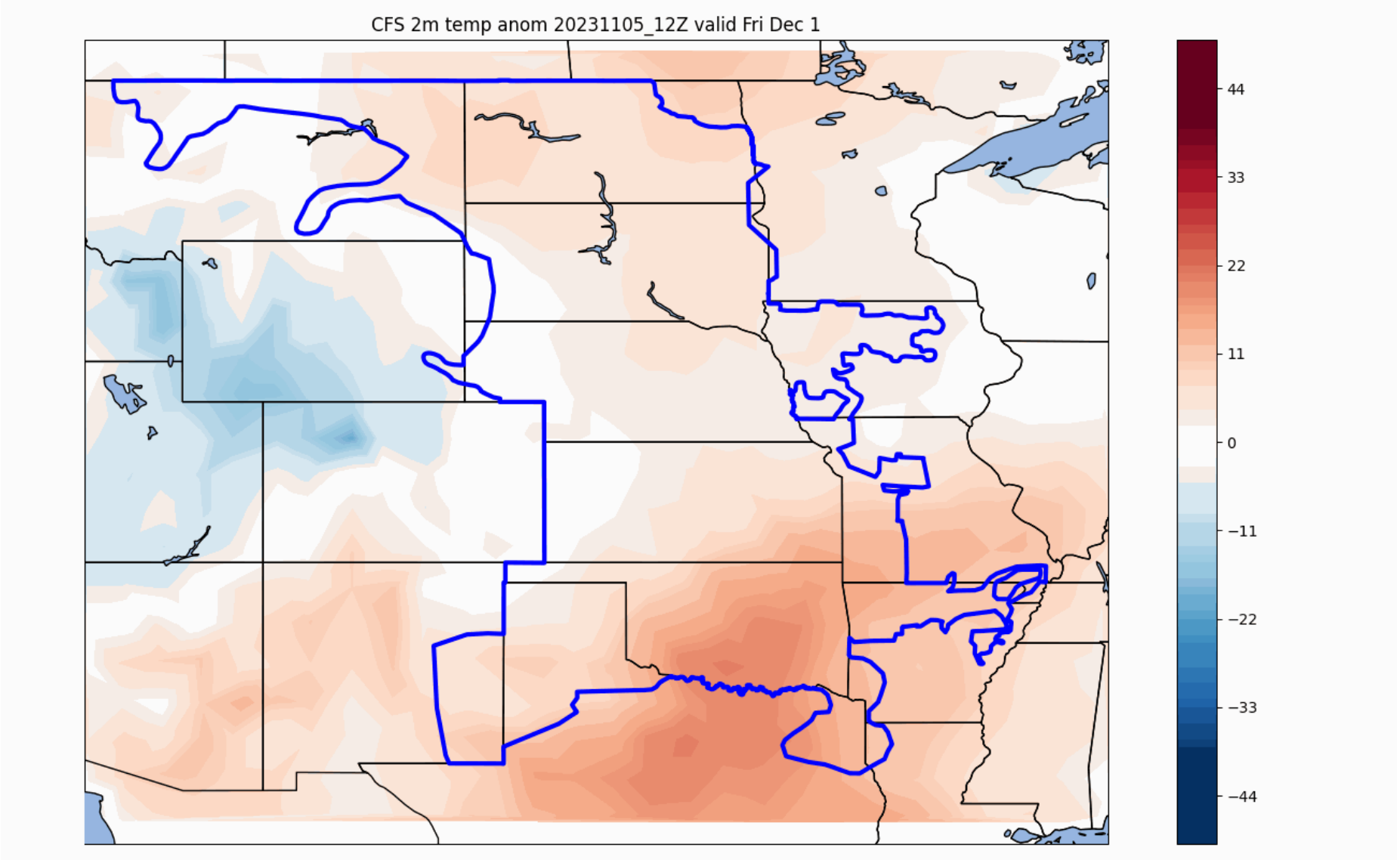

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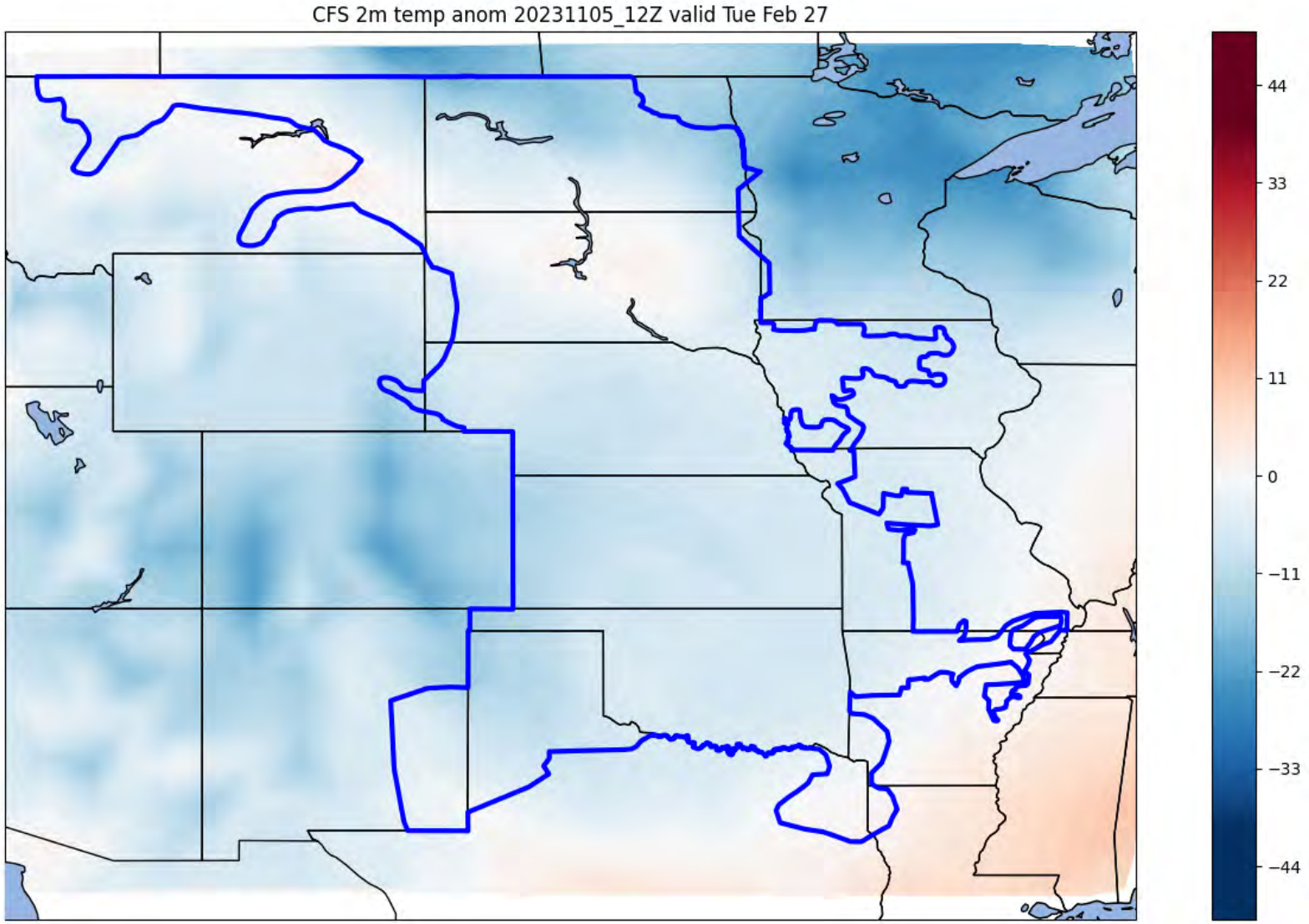


OUTLOOK SUMMARY FOR SPP FOOTPRINT

- Overall, near normal temperatures favored Central
- Warmer than normal temperatures favored South
- Colder than normal temperatures favored North
- High variability likely
- Possible extreme fluctuations between mild and cold phases
- Increased chance of Winter Weather Precipitation events North/Central.
- Less Snow/Ice favored South, but does not exclude potential of extreme event

SPP Southwest Power Pool

SEASONAL OUTLOOK

WINTER 2024-2025

Working together to responsibly and economically keep the lights on today and in the future.

SouthwestPowerPool

SPPorg

southwest-power-pool

SPP Southwest Power Pool

2024-25 WINTER SEASONAL ASSESSMENT

PATRICK DELASSUS

SENIOR ENGINEER II, OPERATIONAL PLANNING

Working together to responsibly and economically keep the lights on today and in the future.

SouthwestPowerPool SPPorg southwest-power-pool

SYSTEM RELIABILITY STUDY SCOPE

- Study period ranges from December 2024 through the end of March 2025
- Peak load profile studies: 90/10 winter model with 46 gigawatts (GW)
- Load profile in models scaled to represent non-coincidental peak loads on past five year's historical average
- Includes outages of the day with the most planned generation and transmission outages for winter 2024-25 in CROW

SYSTEM RELIABILITY STUDY SCOPE

- Unscheduled outages selected from Urgent, Emergency and Forced outages that occurred during 2023-24 winter period
- Security constrained unit commitment and contingency analysis applied to each case

SYSTEM RELIABILITY STUDY SCOPE

- Per FERC recommendations from 2021 cold weather event, performed eight transfer analysis scenarios within SPP footprint and to/from MISO to identify additional power transfer limit:
  - MISO Regional Bi-Directional Transfer
  - SPP North-South Bi-Directional Transfer
  - SPP/MISO Bi-Directional Transfer
  - MISO Wind Transfer

SYSTEM RELIABILITY REPORT & RESULTS

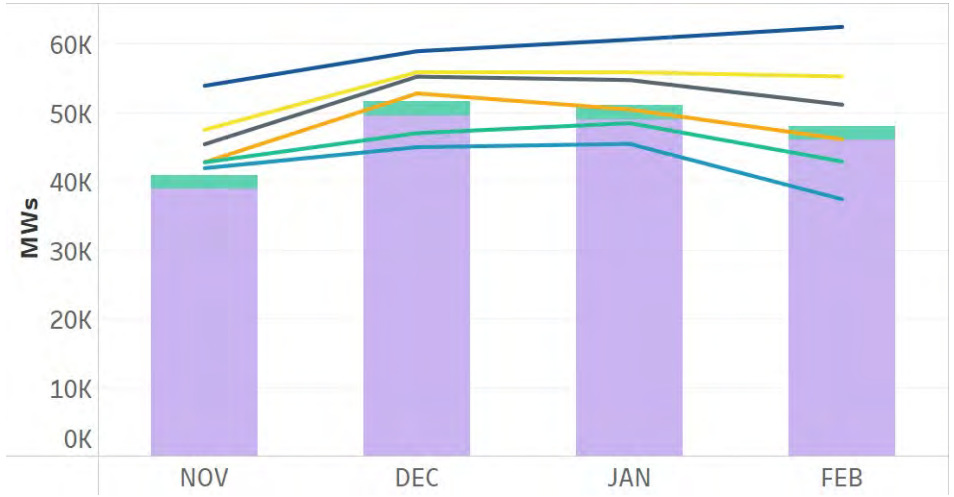
- Final Report posted on Globalscape for TOPs
- Transmission constraints expected to be manageable through normal SPP congestion management processes
- SPP will monitor multi-day reliability assessment (MDRA), outage coordinator's outage studies and OPAs prior to outage implementation. If necessary, will coordinate with applicable TOPs to develop suitable mitigation plans.

GENERATION ASSESSMENT PROCESS (GAP)

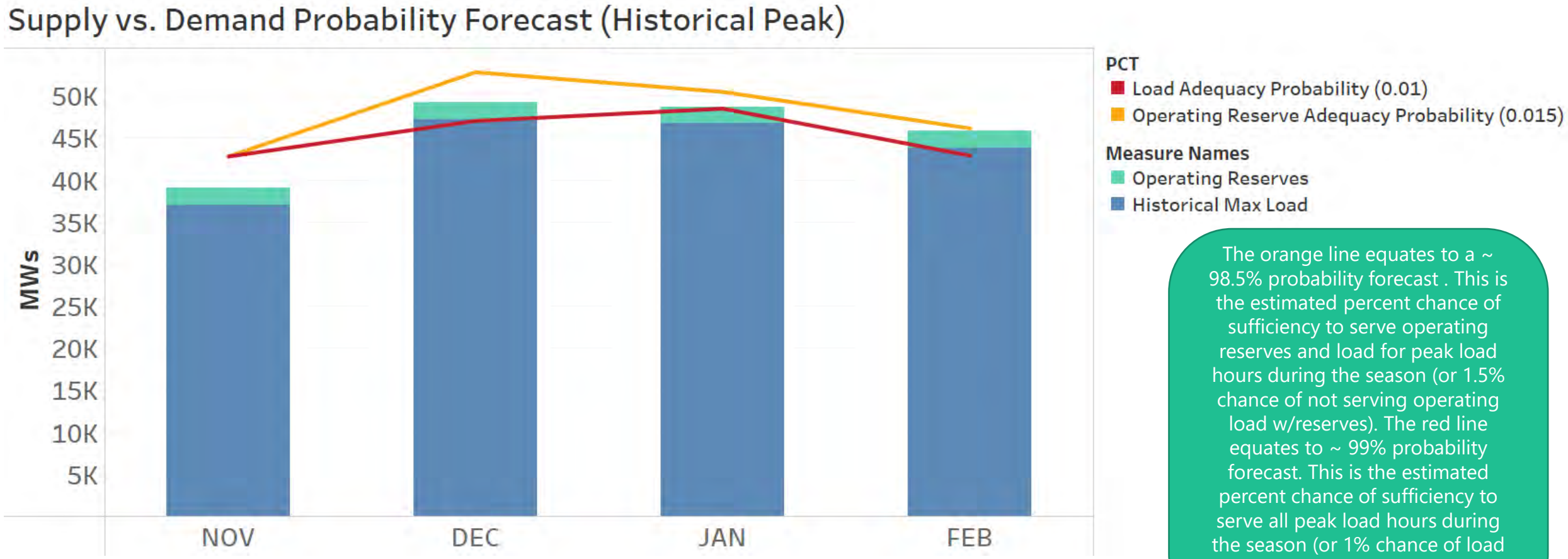
- Generation Assessment Process (GAP) has helped SPP and generator owners (GO) work together to find time where maintenance margin is available to pre-approve outages.
  - Gives both SPP and GOs higher confidence that outages will be approved when scheduled.
- Available maintenance margin is publicly posted and updated daily at 5:00 a.m., 1:00 p.m., and 9:00 p.m. on SPP portal.
- https://marketplace.spp.org/pages/available-outage-maintenance-margin

CAPACITY EVALUATION

- The seasonal capacity evaluation was performed by looking into a probabilistic forecasted availability based on historical generation availability in the associated months on peak load hours
- Four different probabilities were determined and can be used to estimate the percent chance to:
  - Serve historical load
  - Serve historical load with Operating Reserve
  - Serve 5% load increase
  - Serve 5% load increase with Operating Reserve

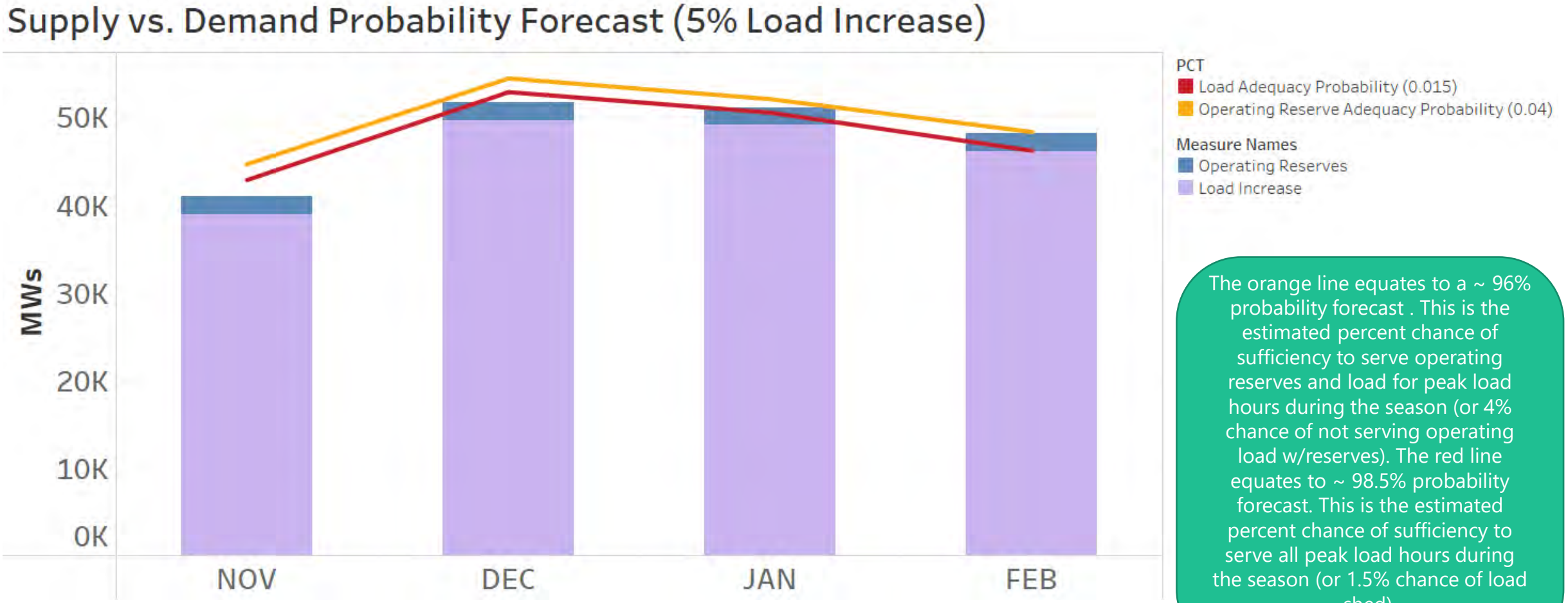


CAPACITY EVALUATION

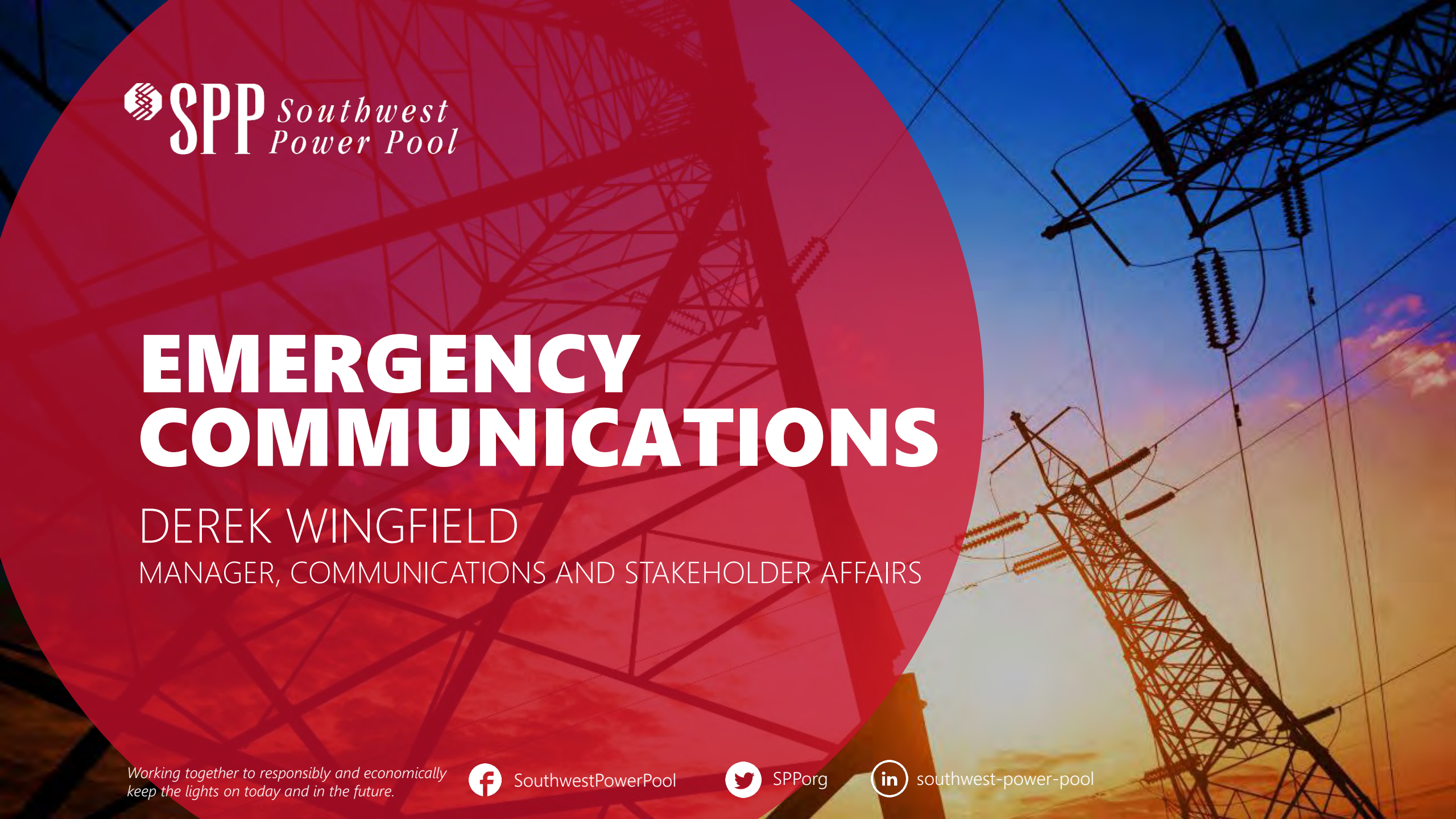


The orange line equates to a ~ 98.5% probability forecast . This is the estimated percent chance of sufficiency to serve operating reserves and load for peak load hours during the season (or 1.5% chance of not serving operating load w/reserves). The red line equates to ~ 99% probability forecast. This is the estimated percent chance of sufficiency to serve all peak load hours during the season (or 1% chance of load shed).

CAPACITY EVALUATION



The orange line equates to a ~ 96% probability forecast . This is the estimated percent chance of sufficiency to serve operating reserves and load for peak load hours during the season (or 4% chance of not serving operating load w/reserves). The red line equates to ~ 98.5% probability forecast. This is the estimated percent chance of sufficiency to serve all peak load hours during the season (or 1.5% chance of load shed).



SPP Southwest Power Pool

EMERGENCY COMMUNICATIONS

DEREK WINGFIELD

MANAGER, COMMUNICATIONS AND STAKEHOLDER AFFAIRS

Working together to responsibly and economically keep the lights on today and in the future.

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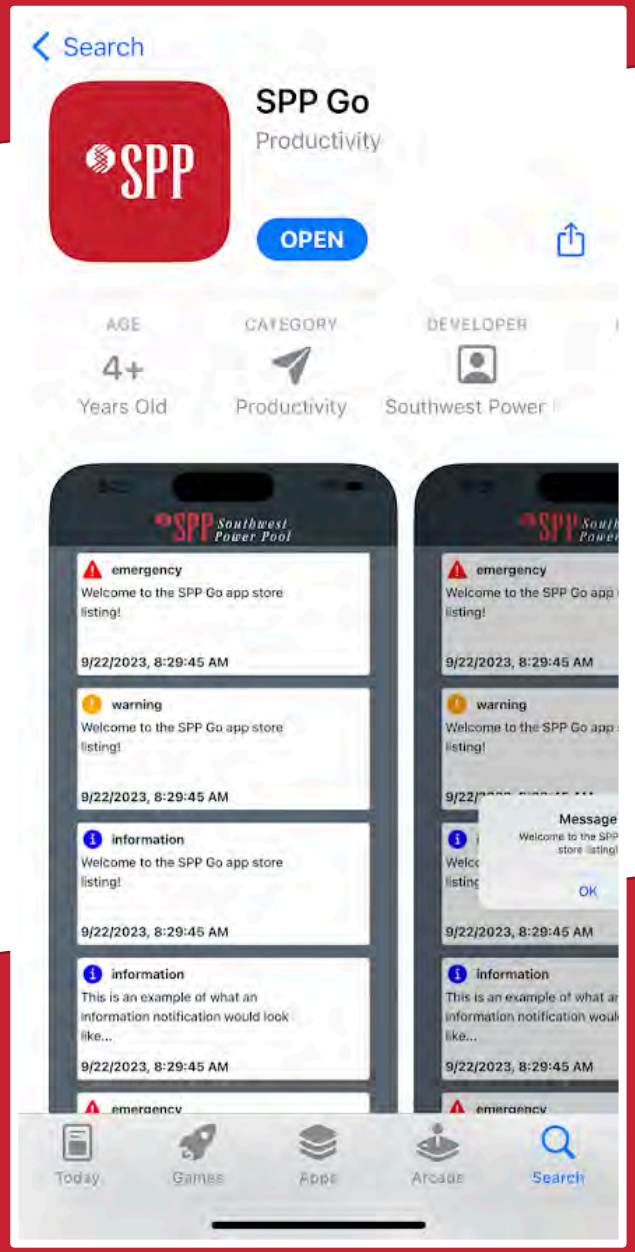
SPP GO MOBILE APP

Download the SPP Go app in the Apple App Store and Google Play Store, and receive notifications about energy emergencies via push notification.

Download on the App Store

GET IT ON Google Play



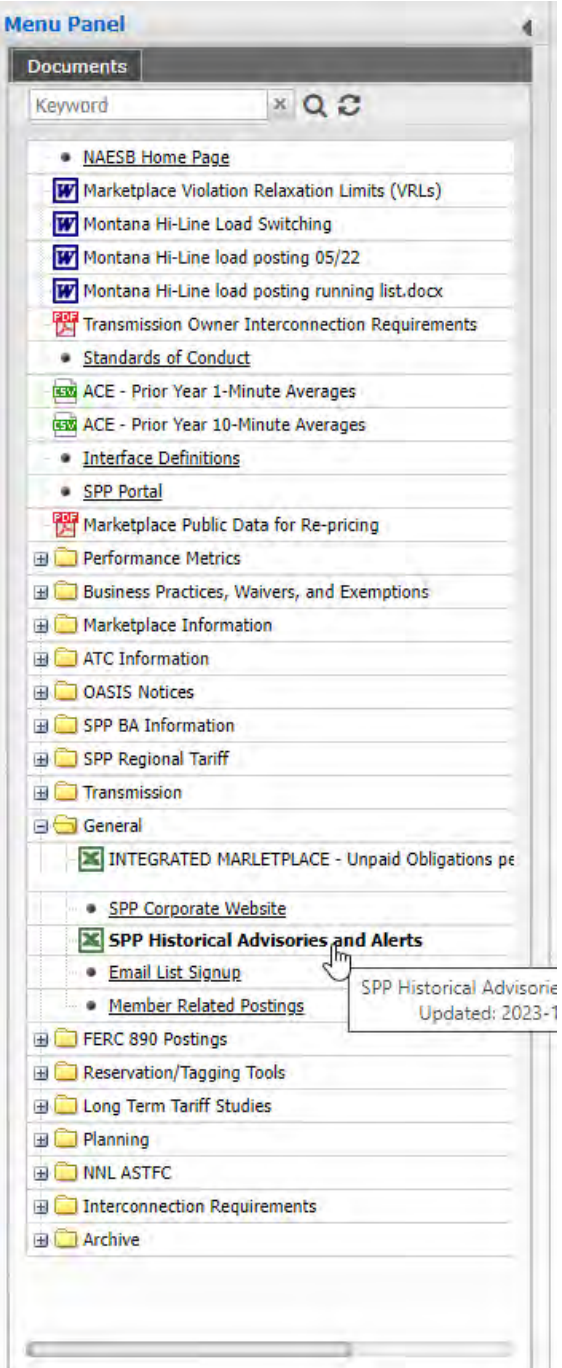
HISTORICAL ADVISORY/ALERT RECORDS

1. Visit SPP.org, and click Markets & Operations > OASIS

   OR

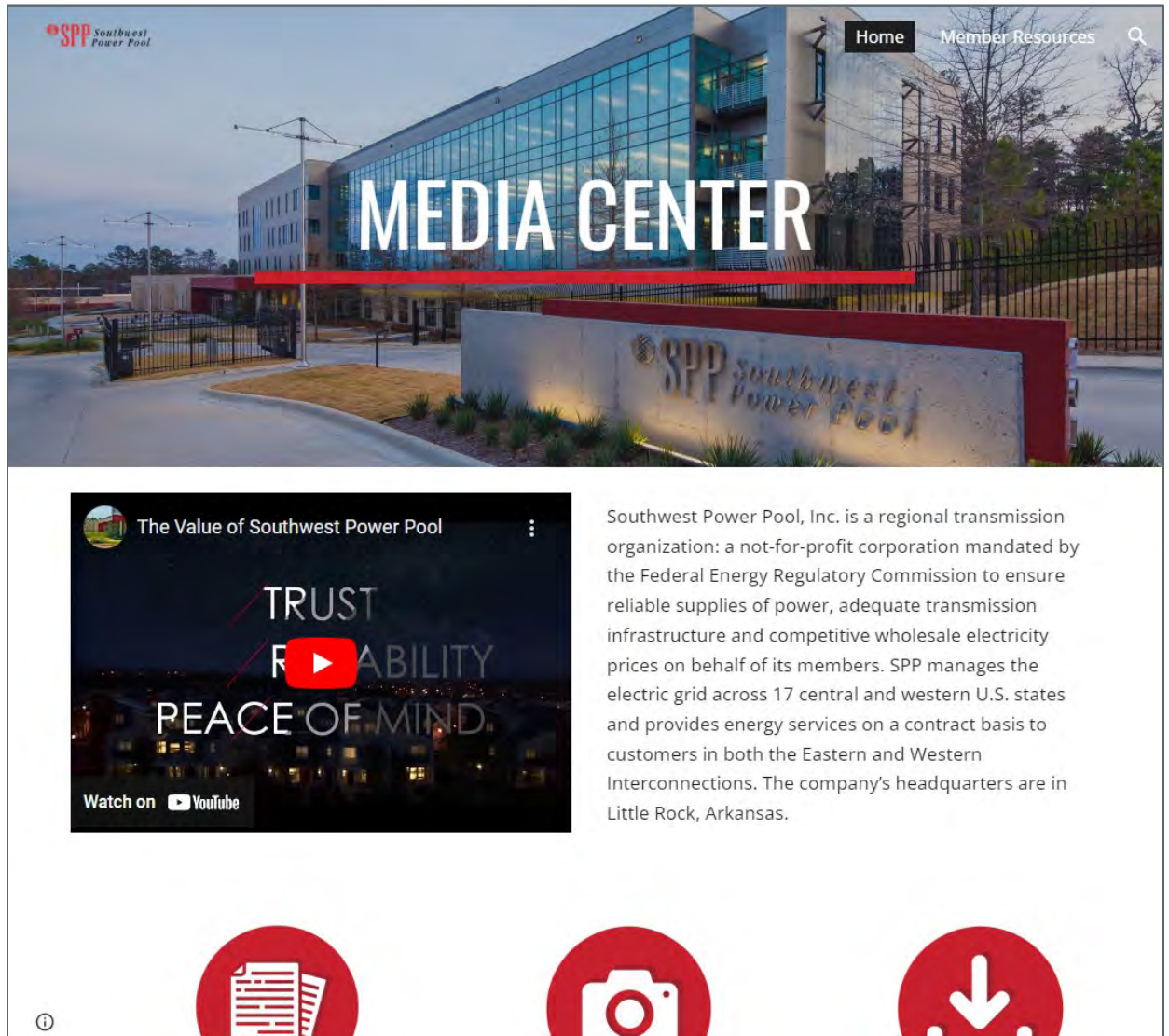
   Browse to http://www.oasis.oati.com/SWPP

2. In the Menu Panel, open General tab and look for “SPP Historical Advisories and Alerts”.

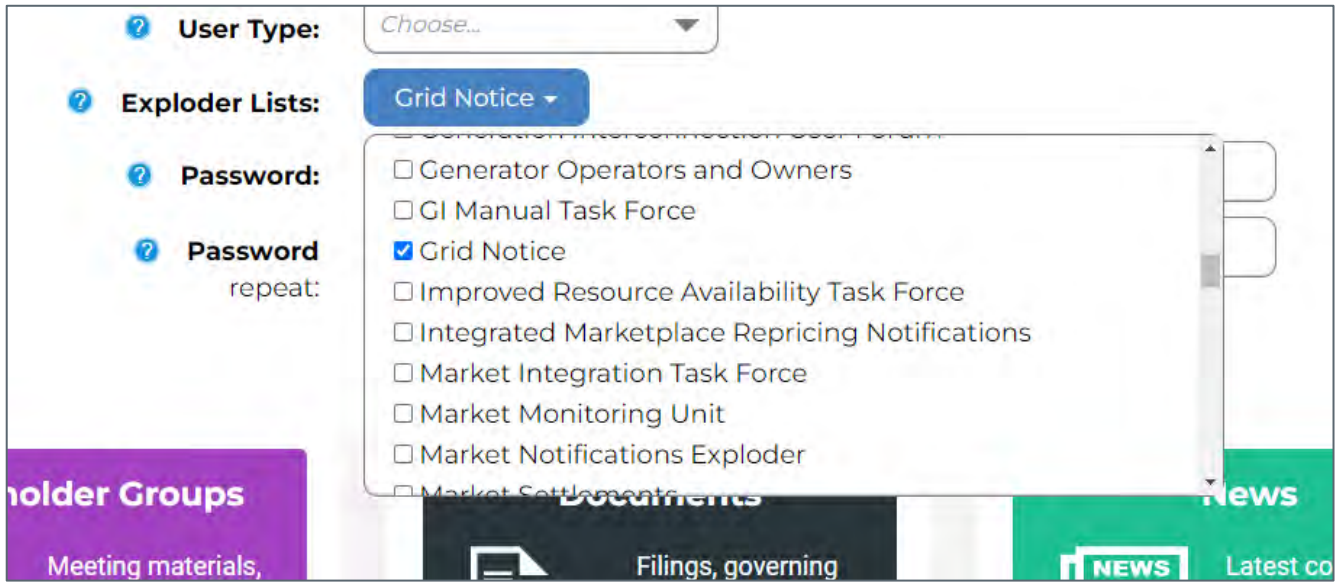


MEDIA CENTER AND MEMBER RESOURCES

- Browse to www.SPP.org/newsroom and click Media Center
- Includes videos, fact sheets, message templates, etc.



EXPLODERS



- To sign up :
  - Log into SPP.org and click "Hi, [your name]" in top right of screen to update account preferences. (Create an account if you don't have one.)
  - In list of available exploders, check the box next to those you'd like to receive.
  - Click "Submit" at bottom of form to save changes.

EXPLODERS

Grid Notices

Real-time updates

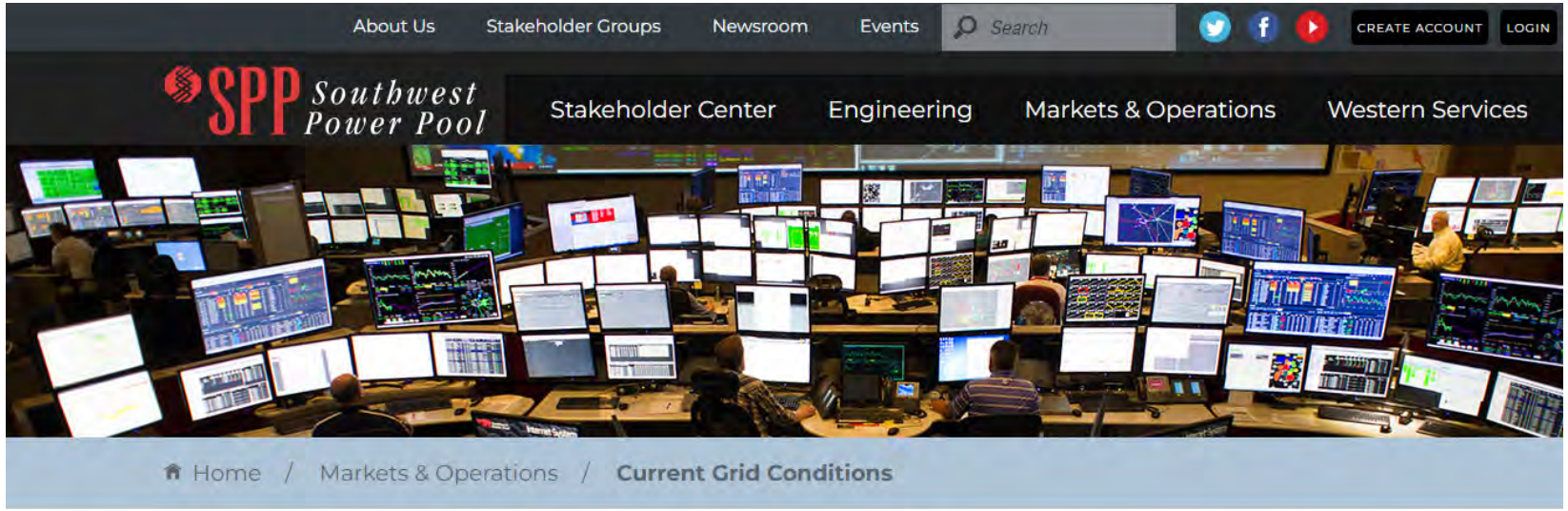
Emergency Communications User Forum

Meeting announcements and procedural info

News

General corporate news including emergency notices

SPP.ORG/GRID-CONDITIONS



CURRENT GRID CONDITIONS

The entire SPP Balancing Authority footprint is operating under normal grid conditions.

Updated 1:00 p.m. CT Thursday, October 31, 2024
The entire SPP Balancing Authority footprint is operating under normal grid conditions.

SPP terminated the Resource Advisory for today (10/31) effective 1:00 p.m. CT due to improved system conditions.

The Resource Advisory was declared for the entire Balancing Authority effective Thursday, October 31, from 9:00 a.m. CT until a previously anticipated end time of 7:00 p.m. CT.

- **Resource Advisories do not require the public to conserve energy** but are issued to raise awareness of potential threats to reliability among entities responsible for operating transmission and generation facilities.

MARKETS & OPERATIONS

- Advancing Technology
- Current Grid Conditions
  - 2021 Winter Storm Review
  - December 2022 Winter Storm Review
- SPP Portal
- Market Monitoring
- Net Benefits Test
- Operating Reliability
- Outage Coordination
- Revision Requests

SOCIAL MEDIA

Twitter: SPPorg

Facebook: SouthwestPowerPool

LinkedIn: southwest-power-pool

Instagram: southwestpowerpool

SOUTHWEST POWER POOL GRID CONDITIONS

Normal Operations

Weather Advisory

Resource Advisory

Conservative Operations Advisory

Energy Emergency Alert Level 1

Energy Emergency Alert Level 2

Energy Emergency Alert Level 3

Restoration Event

Advisories raise awareness and do not require general audiences to take action. SPP member utilities should follow applicable procedures.

Energy Emergency Alerts indicate all available generators are being dispatched to meet region-wide demand. As conditions worsen and reserves become at risk, voluntary conservation or service interruptions may be necessary to prevent uncontrolled outages.

EMERGENCY COMMUNICATIONS MATRIX

Emergency Level	Triggering Event	Operations	Stakeholder	Regulatory	Public/Media
Normal Operations	None	Standard procedures	None	None	None
Weather Advisory	Extreme weather expected in the SPP RC area.	**SPP posts to OASIS and RCIS, and notifies TOP/GOP operators**	**SPP sends Grid Notice exploder**	None	**SPP updates SPP.org Current Grid Conditions page**
Resource Advisory	Severe weather, significant outages, wind and/or load forecast uncertainty expected in SPP BA.	Same as above	Same as above	None	Same as above
Conservative Operations Advisory	Based on weather, operational, cyber or other events, SPP may postpone/cancel outages, commit long-lead resources and take other actions declared necessary to operate more conservatively	SPP ops notifies comms, posts to OASIS and RCIS, and notifies TOPs, GOPs and Ops managers and market participants of need for conservative operations.	Same as above	**SPP notifies members of its Regional State Committee**	SPP updates Current Grid Conditions page, **publishes banner to SPP.org homepage and issues notice via social media**

Bold text indicates incremental activities that differ from prior levels.

EMERGENCY COMMUNICATIONS MATRIX

Emergency Level	Triggering Event	Operations	Stakeholder	Regulatory	Public/Media
Energy Emergency Alert Level 1	All available resources are committed to meet obligations, and SPP is at risk of not meeting required operating reserves.	SPP posts to OASIS and RCIS, and notifies TOP/GOP operators.	• SPP sends Grid Notice exploder • **SPP directly notifies BOD/MC, MOPC, elected officials, member comms/gov't affairs reps, et al.** • **SPP will schedule calls as needed and w/appropriate frequency**	SPP notifies RSC **and coordinates periodic briefings with state commissioners**.	SPP updates Current Grid Conditions page, publishes banner to SPP.org homepage, issues notice via social media, **and distributes a press release.**

Bold text indicates incremental activities that differ from prior levels.

EMERGENCY COMMUNICATIONS MATRIX

Emergency Level	Triggering Event	Operations	Stakeholder	Regulatory	Public/Media
Public Appeal for Conservation	Conservation appeal is required w/issuance of an EEA 2. If SPP determines earlier conservation may mitigate operational risk, it may be **requested** earlier.	SPP coordinates requests/directions of conservation appeals through its communications dept. If appeal is requested apart from an EEA 2, Ops staff will notify TOPs, GOPs, MP and other stakeholders.	**SPP coordinates with TOP members to request or direct conservation appeal. SPP will instruct member reps to confirm receipt of instructions and indicate time they completed the appeal.** As above, SPP also directly notifies BOD/MC, MOPC, elected officials, member comms/gov't affairs reps, et al., and will coordinate calls as needed.	Same as above, SPP notifies RSC and coordinates periodic briefings with state commissioners.	Same as above.

Bold text indicates incremental activities that differ from prior levels.

EMERGENCY COMMUNICATIONS MATRIX

Emergency Level	Triggering Event	Operations	Stakeholder	Regulatory	Public/Media
EEA Level 2	SPP can no longer provide expected energy requirements, OR SPP foresees/implements procedures up to but excluding service interruptions to maintain regional reliability.	Same as EEA 1.	Same as EEA 1.	Same as EEA 1.	Same as EEA 1.
EEA Level 3	SPP is using operating reserves, carrying reserves below the required minimum and has initiated assistance through its Reserve Sharing Group. SPP foresees or has implemented service interruptions.	Same as above.	Same as above.	Same as above.	Same as above.

Bold text indicates incremental activities that differ from prior levels.

EMERGENCY COMMUNICATIONS MATRIX

Emergency Level	Triggering Event	Operations	Stakeholder	Regulatory	Public/Media
Load Shed	SPP is using operating reserves, carrying reserves below the required minimum and has initiated assistance through its Reserve Sharing Group. SPP foresees or has implemented service interruptions.	Operations has specific reporting requirements associated with curtailing load, and communicates directly with TOPs regarding their load-shed obligations.	Same as above.	Same as above.	Same as above, and **SPP will coordinate with members to conduct periodic press conferences at least daily**.

Bold text indicates incremental activities that differ from prior levels.

Q&A / WRAP-UP

ON THE HORIZON

- Contact list updates
  - Email to follow this meeting
- Test of public appeal process w/TOP communications reps: December
- Summer 2025 Reliability Forecast and Emergency Comms Webinar: May 2025 (details TBD)
- 2025 External Affairs Conference
- RTO Expansion