MEAN Power Supply Committee Meeting

Younes Conference Center, Kearney, Nebraska

November 18, 2026

2

Call to Order

Randy Woldt

Committee Chair

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3

Call to Order

- Nebraska Open Meetings Act – Section 84-1412 (8)
- Roll Call

4

Public Comment Period

5

Public Participation Policy - Summary

- Any member of the public may speak, subject to these rules
- Individuals must state the following:
  - **Name**
  - **Address** (unless the address requirement is waived to protect the security of the individual), and
  - **Name of any organization represented** by such person
- Public comment period will be a maximum of 30 minutes
- Comments are limited to 3 minutes per person
- Address comments to the Committee as a body and not to any individual member thereof
- Disruptive conduct is not allowed & individual may be asked to leave meeting

6

Consent Agenda

- Approval of Minutes of the August 19, 2026 Meeting
- The next meeting of the Power Supply Committee will be held on January 20, 2027 at the Younes Conference Center South, Kearney, Nebraska. In the case of inclement weather, the meeting may be held virtually.

7

Consent Resolution

Approval of the consent resolution as shown on page 3 of the meeting packet.

8

Markets+ and Western Resource Adequacy Program (WRAP) Participation Vote*

Jason Rosenkranz
Director of Wholesale Electric Operations

9

THE REQUEST

What we are asking the Committee to do today

Consider a resolution authorizing the Executive Director to execute agreements for MEAN to participate in Markets+ and the Western Resource Adequacy Program (WRAP), subject to final legal and management review.

AGENDA

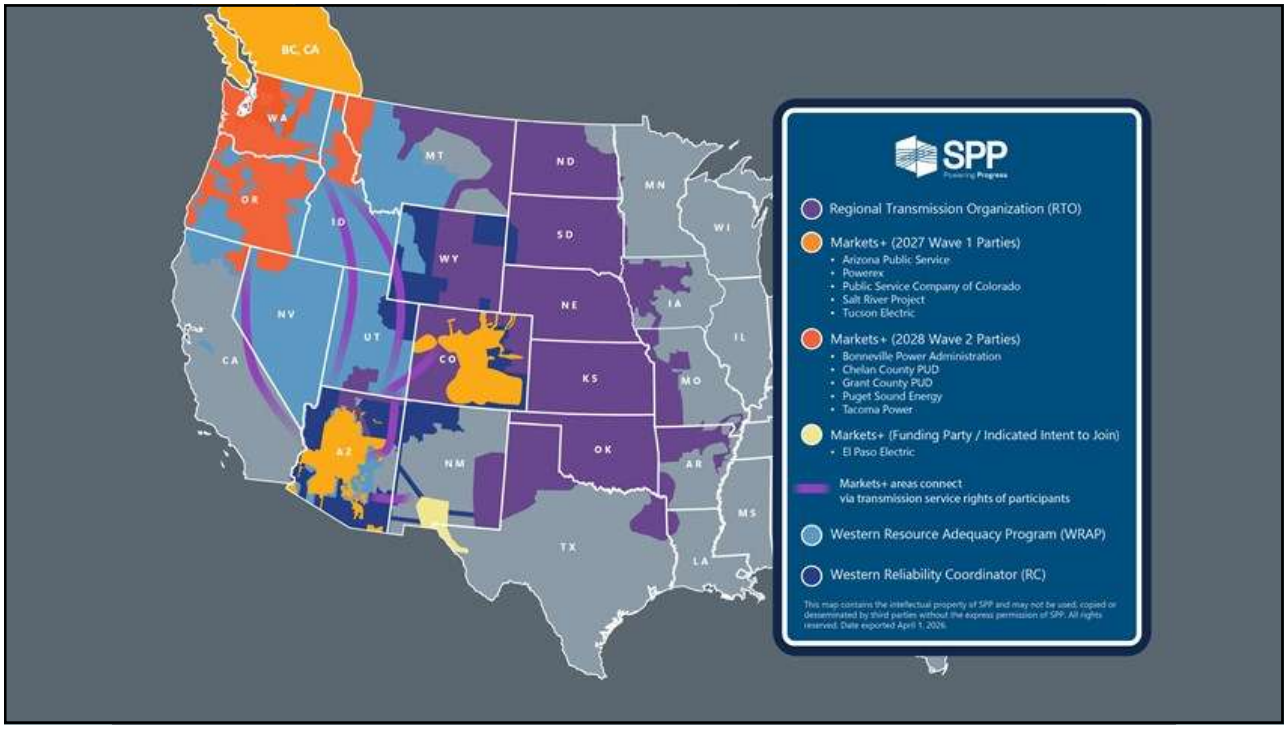
1. Program overview: Markets+ and WRAP
2. Timeline and what it means for MEAN
3. The draft resolution and recommendation

MARKETS+

WRAP

2

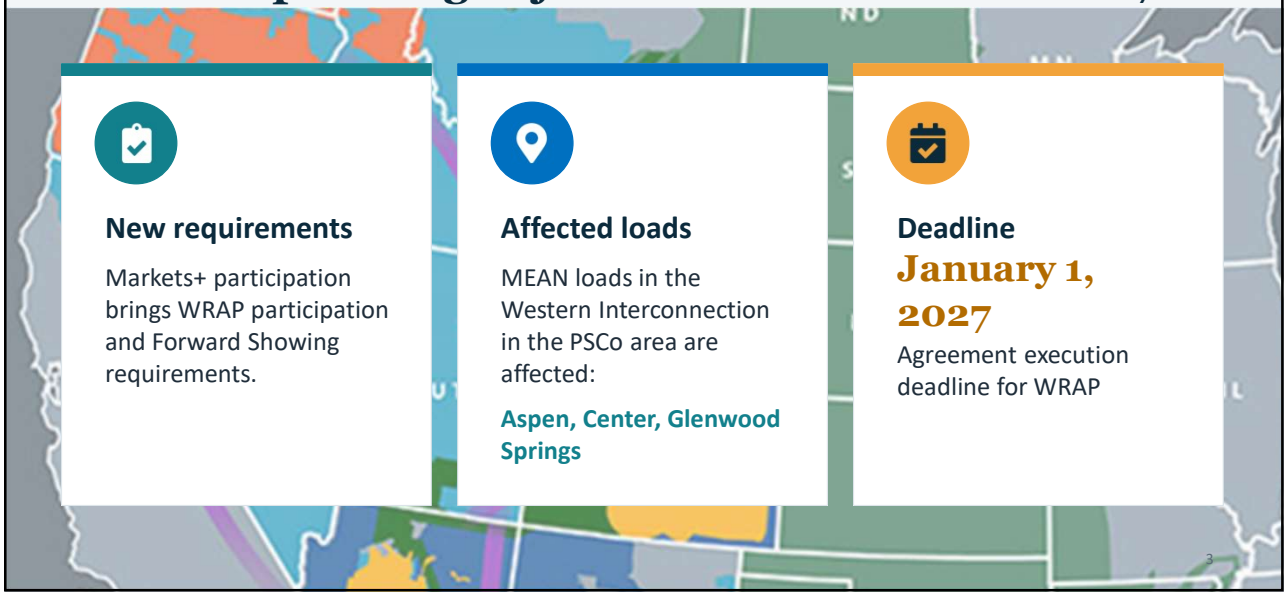
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11

WHY NOW

MEAN is planning to join Markets+ effective 2027



New requirements

Markets+ participation brings WRAP participation and Forward Showing requirements.

Affected loads

MEAN loads in the Western Interconnection in the PSCo area are affected:

Aspen, Center, Glenwood Springs

Deadline

January 1, 2027

Agreement execution deadline for WRAP

3

12

MARKETS+ AT A GLANCE

Developed and operated by SPP for the West

What it is

- Day-ahead and real-time wholesale market for the Western Interconnection
- Voluntary participation by balancing authorities and market participants
- Somewhat unique governance structure (SPP, Western Power Pool)

What it means for MEAN

- Participating entities: Aspen, Center, Glenwood Springs
- Partnership with TEA in making the transition
- A portion of MEAN's resources will be subject to WRAP requirements

MARKETS+

4

13

WRAP AT A GLANCE

Western Resource Adequacy Program (WRAP)

WRAP

Administered by

Regional resource adequacy program for the West, administered by Western Power Pool

Planning reserve margin

Sets a planning reserve margin that participants must meet

Forward Showing

Participants demonstrate qualifying capacity ahead of each season

MEAN planning reserve margin and showing deadlines: [NEEDED]

5

14

TIMELINE

Key dates from authorization to participation

Nov. 19, 2026
Board resolution

Jan. 1, 2027
Agreements executed

July 1, 2027
Forward Showing deadline

Oct. 1, 2027
Markets+ Go Live

Winter 2027/28
WRAP Binding Participation

6

15

MEAN MARKETS+ AND WRAP TRANSITION TIMELINE

Key commitment, Forward Showing, testing, and go-live milestones

WRAP

JAN 1, 2027

WRAPA signed and effective

WRAP

JUL 1, 2027

First Winter Forward Showing

Markets+

OCT 1, 2027

Markets+ expected go-live

7

16

MEAN Markets+ and WRAP Transition Timeline

Key commitment, Forward Showing, testing, and go-live milestones

JAN 1, 2027
WRAPA signed and effective

JUL 1, 2027
First Winter Forward Showing

OCT 1, 2027
Markets+ expected go-live

Date	Program	Milestone	Why it matters
Jan. 1, 2027	WRAP	WRAPA signing deadline and effective date	Commits MEAN to the Winter 2027-28 onboarding pathway.
Jan. 15, 2027	WRAP	Limited Data Request due	Provides initial load and resource information for onboarding.
Jan. 30, 2027	WRAP	Cash Working Capital support charge due	Current schedule places payment 30 days after WRAPA execution.
Mar. 1, 2027	WRAP	First Advanced Assessment data submittal	Supports planning reserve margin and resource QCC calculations.
July 1, 2027	WRAP	First Winter Forward Showing due	First binding Forward Showing for Winter 2027-28.
Sept. 15-Nov. 19, 2027	WRAP	Operations Program testing	Readiness testing before the first binding operations season.
Oct. 1, 2027	Markets+	Expected go-live	Target transition from testing and parallel operations into Markets+.
Oct. 31, 2027	WRAP	First Summer Forward Showing due	Binding Forward Showing for Summer 2028.
Nov. 20, 2027-Feb. 29, 2028	WRAP	First binding operations season	MEAN participates in the Winter 2027-28 binding season.

MEAN | Markets+ and WRAP

Current milestone schedule as of November 2026 17

17

Markets+ and Western Resource Adequacy Program (WRAP) Participation Vote*

Approval of the draft resolution as shown on page 4 of the meeting packet.

18

Integrated Resource Plan (IRP) Update

Jason Rosenkranz
Director of Wholesale Electric Operations

19

2027 IRP Background

What is the IRP?

- The Integrated Resource Plan (IRP) is a long-term planning document that identifies how we will meet our future electric resource needs, evaluating both supply-side (generation, purchases) and demand-side (energy efficiency, conservation) options.

Why is it required?

- Submission of the IRP is required by the Western Area Power Administration (WAPA) under federal regulation 10 CFR Part 905. All WAPA firm power customers must submit an updated IRP every 5 years.

What must the IRP include?

- The IRP must show how we plan to provide reliable and cost-effective service, taking into account environmental impacts, load forecasting, resource alternatives, and clear action steps for implementation.
- The IRP must include a public participation process, providing an opportunity for public input, and must document how public comments were gathered, considered, and addressed in the final plan.

When is it due?

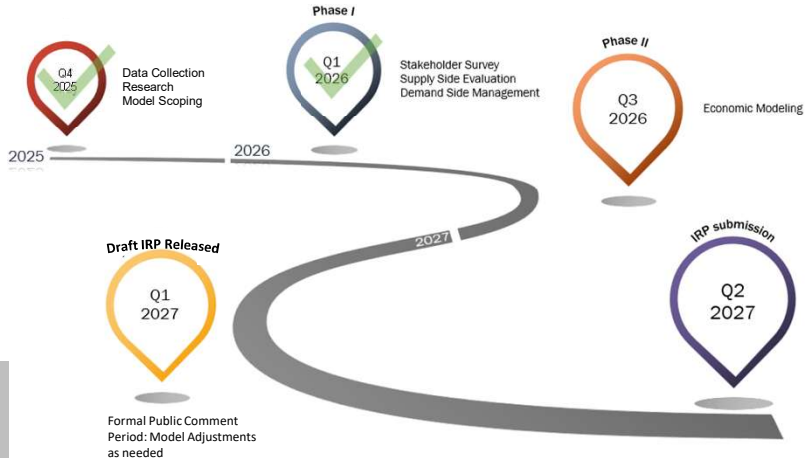
- Our IRP must be finalized and submitted to WAPA in Q2 2027, in order to meet regulatory compliance and avoid financial penalties.

20

2027 IRP Process Overview

- Define goals and gather data for resource planning
- Model scenarios and evaluate resource options
- Finalize plan and submit to WAPA

Public participation is allowed and encouraged throughout the process



*Timelines could change, visit nmppenergy.org for notices and up-to-date info

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21

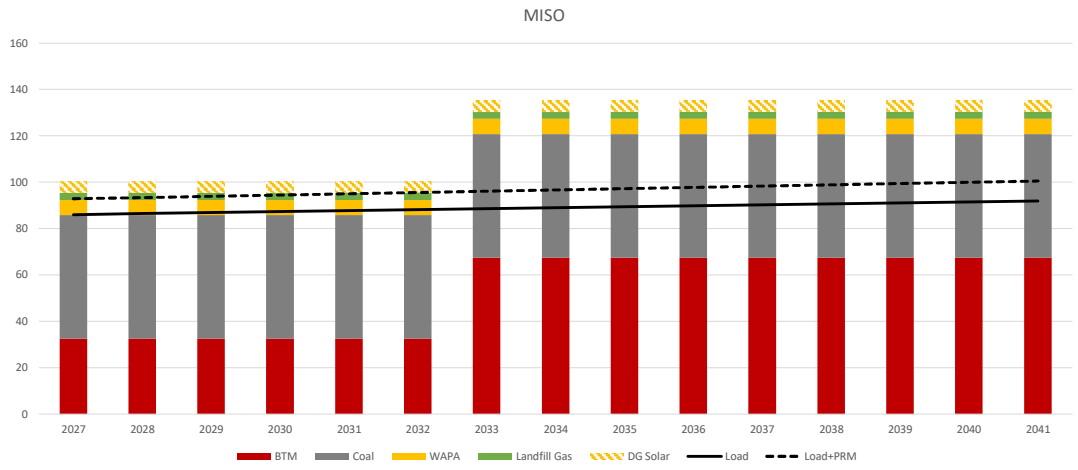
Assumptions for Modeling

- Extension of WAPA Displacement Contract for duration of the study period
- Build Decisions and Planning for West (RTOE and PSCO) will be combined
- An extension of the Point-to-Point Transmission Path from MISO to SPP will be available
- Planning Reserve Margins will continue to increase

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22

Long Term Capacity Position

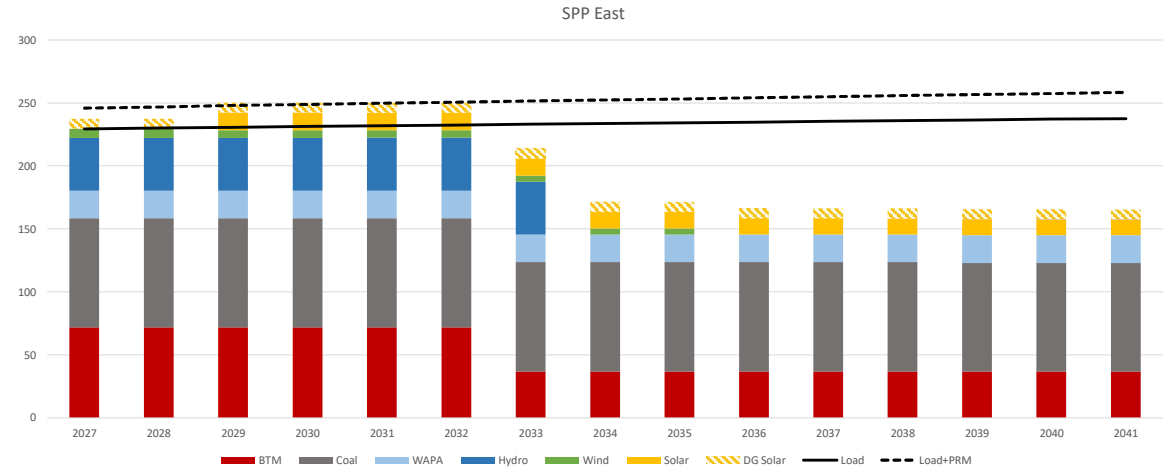


Initial results of modeling, subject to change with continued refinement and adjustments

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23

Long Term Capacity Position

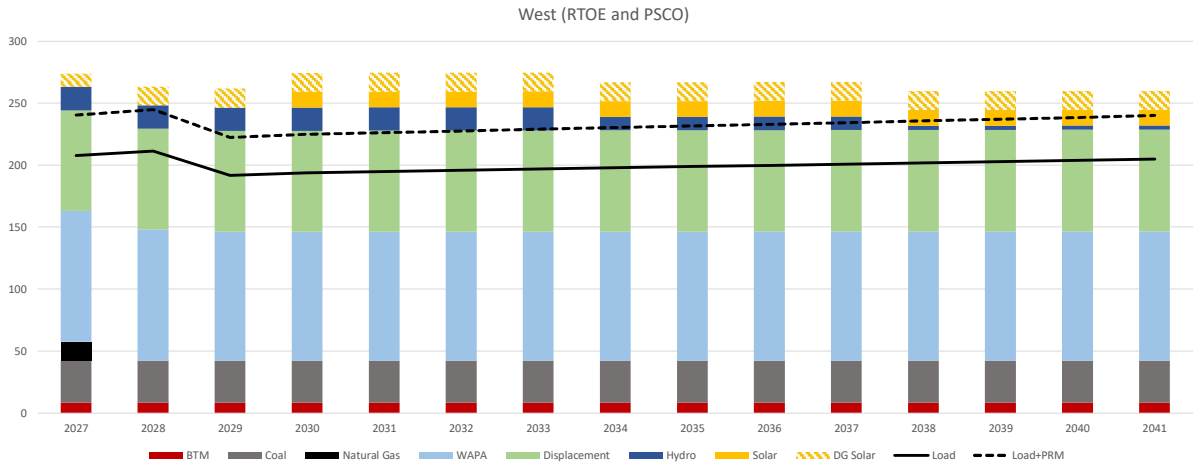


Initial results of modeling, subject to change with continued refinement and adjustments

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Long Term Capacity Position



Initial results of modeling, subject to change with continued refinement and adjustments

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Qualified Candidate Portfolios

Based on the IRP Survey results and an assessment of feasible resource options, the list of resources selected for modeling was narrowed to the following:

- Coal
- Natural Gas (Combustion Turbine, Combined Cycle, Linear Generator)
- Nuclear (Large Scale, Small Modular)
- Solar (With and Without Battery)
- Wind (With and Without Battery)
- Hydro PPA

26

Sensitivities

- Emissions Glide Paths for 2050 Vision
- Ownership vs. PPA Structure for Candidate Resource Technologies
- Tax Credit on candidate resource technologies
- Varying exposure to Market Prices

27

Timeline of IRP Phases

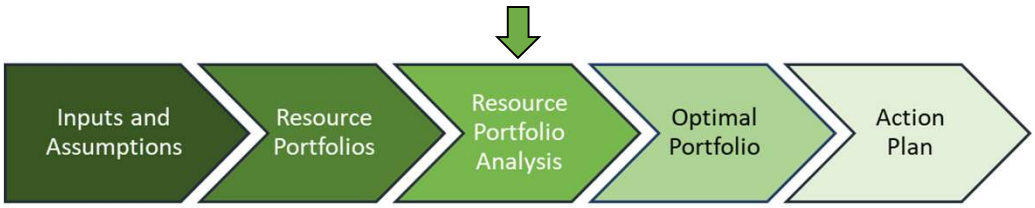
	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027	Q2 2027
Planning and Scoping										
Data Collection and Forecasting										
Needs Assessment										
Resource Options Development										
Scenario Modeling and Portfolio Analysis										
Stakeholder Feedback										
Draft IRP Report										
Final Review and Submission										

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28

Upcoming Action Items:

- January Meeting – Presentation of Results
- April Workshop to Review Results and Prepare for Recommendation
- May Meeting – PSC Recommendation and Board Approval
- July – Submittal to WAPA



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29

Resource Portfolio Development and Updates

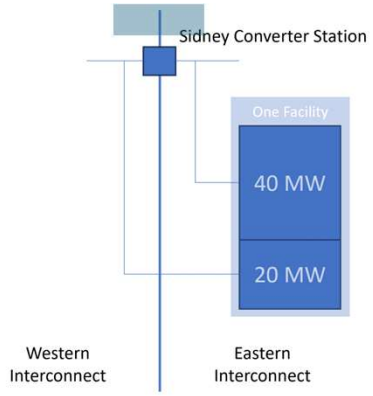
Jason Rosenkranz
Director of Wholesale Electric Operations

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30

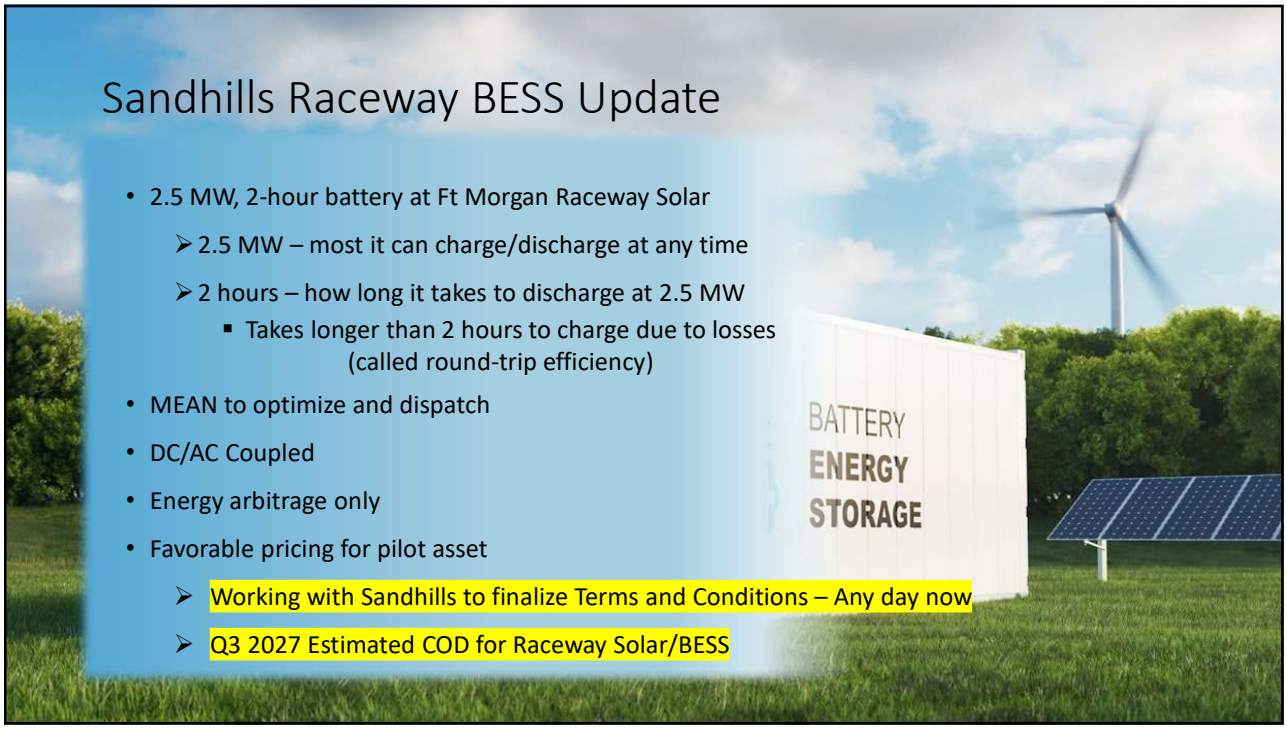
Resource Portfolio Development and Updates

Sandhills Solar near Sidney, NE

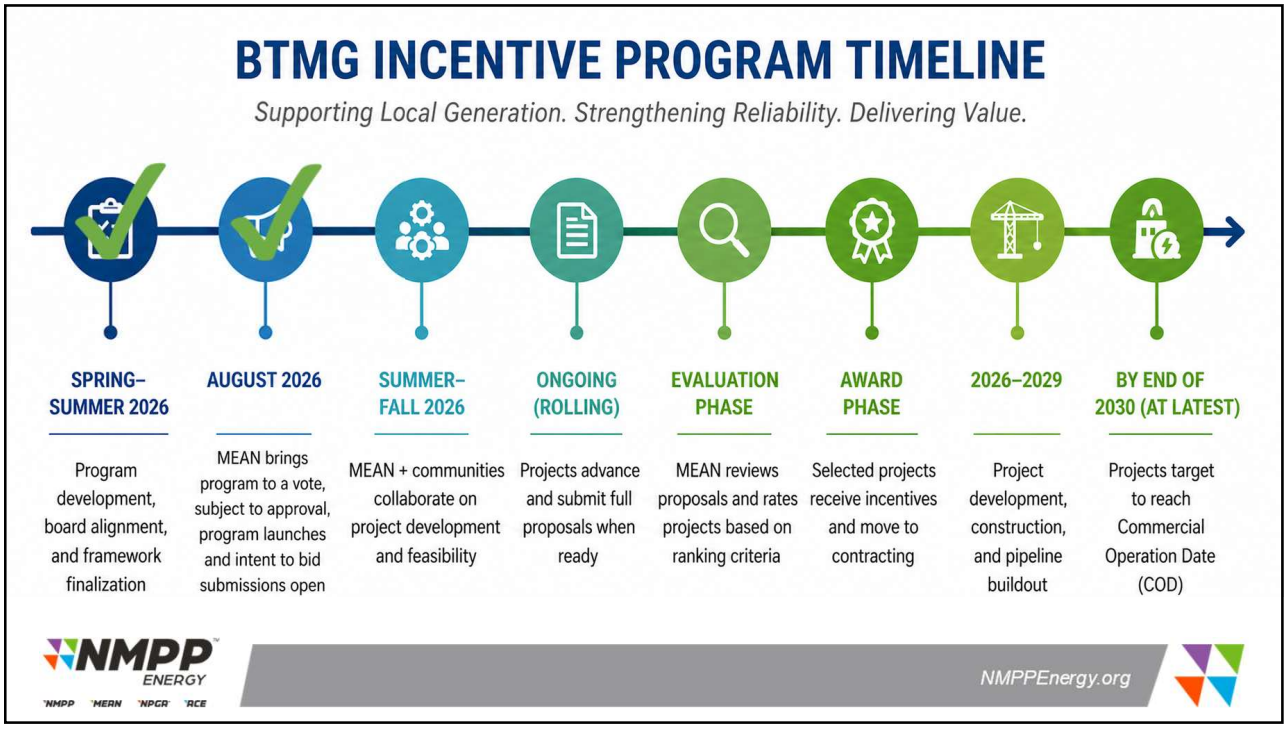


- **Phase 1 – 40 MW (COD Q1, 2029)**
  - Connect to East
  - Generator Interconnection Agreement in-hand
    - R-Line contingent, limited to 8.5 MW non-summer
    - *Sandhills verifying the need for contingency with SPP*
    - R-Line expected to be operational Q4 2028
  - Firm transmission in-hand up to 35 MW
  - PPA to be reviewed when received
  - Price
    - Combined price for both phases
    - Can escalate modestly for Phase 2 upgrades
- **Phase 2 – 20 MW (COD TBD)**
  - Connect to West
  - No Interconnection Agreement
  - PPA or amendment later

31


Sandhills Raceway BESS Update
• 2.5 MW, 2-hour battery at Ft Morgan Raceway Solar
➢ 2.5 MW – most it can charge/discharge at any time
➢ 2 hours – how long it takes to discharge at 2.5 MW
▪ Takes longer than 2 hours to charge due to losses (called round-trip efficiency)
• MEAN to optimize and dispatch
• DC/AC Coupled
• Energy arbitrage only
• Favorable pricing for pilot asset
➢ Working with Sandhills to finalize Terms and Conditions – Any day now
➢ Q3 2027 Estimated COD for Raceway Solar/BESS
BATTERY
ENERGY
STORAGE

32


BTMG INCENTIVE PROGRAM TIMELINE
Supporting Local Generation. Strengthening Reliability. Delivering Value.
SPRING–SUMMER 2026
Program development, board alignment, and framework finalization
AUGUST 2026
MEAN brings program to a vote, subject to approval, program launches and intent to bid submissions open
SUMMER–FALL 2026
MEAN + communities collaborate on project development and feasibility
ONGOING (ROLLING)
Projects advance and submit full proposals when ready
EVALUATION PHASE
MEAN reviews proposals and rates projects based on ranking criteria
AWARD PHASE
Selected projects receive incentives and move to contracting
2026–2029
Project development, construction, and pipeline buildout
BY END OF 2030 (AT LATEST)
Projects target to reach Commercial Operation Date (COD)
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BEHIND-THE-METER GENERATION CAPACITY INCENTIVE PROGRAM

Capacity Incentive Program | NOW ACCEPTING PROPOSALS

Supporting local reliability, community resilience and MEAN resource adequacy

PROGRAM AT A GLANCE

$6/kW-MO	Minimum capacity incentive rate
UP TO 10 YEARS	Program commitment term
ONGOING	Intent to Bid and proposal submissions; rolling evaluation
DEC 31, 2030	Latest eligible commercial operation date

COMMUNITY ACTION ITEMS

1. Identify an eligible BTM generation opportunity
2. Submit a nonbinding Intent to Bid (RFP Attachment C)
3. Review Program Terms & Conditions and RFP requirements
4. Submit a project proposal for MEAN evaluation

PROGRAM DETAILS + RFP nmppenergy.org/news/mean-launches-behind-meter-generation-capacity-incentive-program

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34

Southeast Nebraska Energy Alliance (SNEA) Interlocal Participation

MEAN will not move forward with participation in the proposed interlocal project.

01
Project Risk
The proposed development and contractual commitments presented an unfavorable risk profile for MEAN.

02
Alternative Resources
MEAN can leverage other resource and transmission options to address capacity needs with greater flexibility.

03
Interlocal Structure
The proposed interlocal framework introduced governance and long-term commitment considerations.

PATH FORWARD

Continue pursuing alternative capacity and transmission arrangements to support MEAN's resource adequacy needs.

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35

POTENTIAL REDLANDS HYDROELECTRIC PROJECT

Proposed 10-year power purchase agreement | Grand Junction, Colorado

7.36 → 13.43 GWh
Annual generation (8760)

1.4 → 2.0 MW
Existing → replacement

PROJECT OVERVIEW

- MEAN would begin offtake June 1, 2028.
- Existing hydro delivers up to 1.4 MW through approximately October 2029.
- Planned rebuild increases maximum output to 2.0 MW for the remainder of the term.
- Proposed pricing includes a 2.5% annual escalator; 10-year term with extension option is MEAN's preference.

STATUS & NEXT STEPS

1. **PPA negotiations**
   Review draft PPA and Term Sheet; confirm term and commercial provisions.
2. **Delivery / interconnection**
   Coordinate with Xcel on distribution wheeling and generator interconnection.
3. **Network designation**
   Evaluate designation under MEAN's existing PSCO network service.
4. **Operating terms**
   Document scheduling, resource management and REC ownership.

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36

New Load Process Development

Jason Rosenkranz
Director of Wholesale Electric Operations

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37



38

WHY NOW

Large new loads may arrive faster than planning cycles

Key drivers of new process need

- Spot load growth above an established threshold that the load forecast does not capture
- Resources and transmission studies that may not be in place when load arrives
- No clear signal of whether a request is firm

How our members could be affected

- New load growth would likely require new resources to serve
- Costs may not follow the load that causes them
- Late studies could push back service dates

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39

ABOVE-THE-TREND LOADS

Spot loads behave differently from trend growth

Trend load

Gradual growth that the regular load forecast and resource plans already anticipate.



Spot load

A discrete, step addition above a threshold of about 1 MW that the forecast does not capture.

NOTE: The ~1 MW threshold is a working figure for discussion and illustration only at this time.

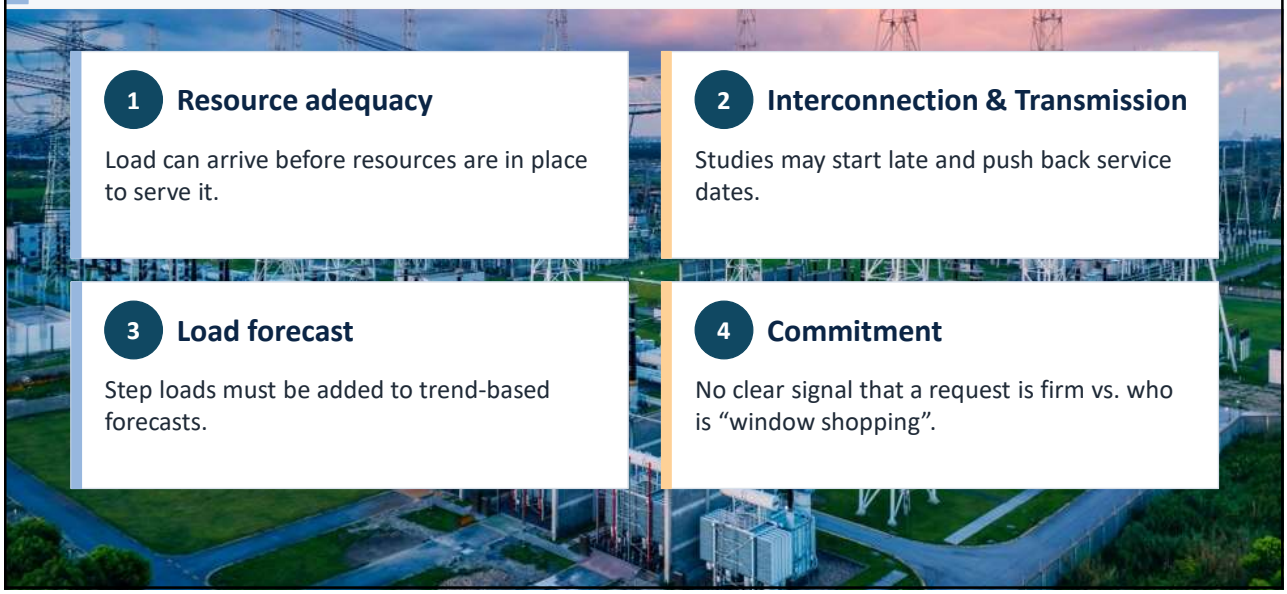
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THE GAP WITHOUT A PROCESS

Four exposures when spot loads arrive ad hoc



1 Resource adequacy

Load can arrive before resources are in place to serve it.

2 Interconnection & Transmission

Studies may start late and push back service dates.

3 Load forecast

Step loads must be added to trend-based forecasts.

4 Commitment

No clear signal that a request is firm vs. who is “window shopping”.

41

WHAT THE PROCESS MUST PROTECT

Four outcomes the process should secure



1. **Existing members**
   Service and rates are not degraded by new load growth
2. **Resource adequacy**
   Requirements are met before load is energized
3. **Interconnection & Transmission studies**
   Required studies are completed on time
4. **Cost fairness**
   Costs follow the load that causes them

42

PEER EXAMPLE: NPPD

How NPPD approaches new load

Figures taken from NPPD documents, for reference only

Early 2024
NPPD established its New Load Process

≥ 5 MW
Generation Security Deposit Agreement applies (single site or aggregate)

$12,000
per MW
Payment divided between two steps in the process

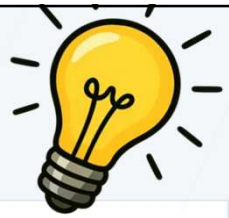
> 20 MW
Additional requirements come into play for ‘large loads’

NPPD numbers, not a MEAN proposal. Source: NPPD New Load Process documents.

43

POSSIBLE ELEMENTS OF A NEW PROCESS

Design ideas from the NPPD approach



Staged commitment

Requirements grow as the project firms up

Readiness checklist

Load, site, financing and service date defined up front

Financial signals

Deposits or agreements confirm anticipated load

In-service date

Customer receives an estimated date to plan against

Scaled requirements

Thresholds tied to project size in MW

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44

CONCEPTUAL PROCESS

Four stages from request to service



For discussion only. Not a proposed design.

1. Intake	Request logged above the ~1 MW threshold
2. Evaluate	Resource adequacy and interconnection & transmission studies scoped
3. Commit	Agreements and deposits per the process in order to progress
4. Energize	Service date confirmed; load enters the forecast





Detailed steps, thresholds and instruments are to be developed in a follow-on project.

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TIMELINE AND NEXT STEPS

What to expect moving forward

Timeline

- **January Board**
  High level draft process
- **February – April**
  Refinement
- **May - Finalize Process**
  Present to Board
- **June 1, 2027**
  Implementation



Proposed next steps

1. Consensus on the need for a New Load Process to be developed
2. Confirm the ~1 MW threshold
3. Get input from key stakeholders (you)
4. Sketch out process steps

46



Discussion & Questions

Questions, concerns and direction on a MEAN New Load Process

47

Transmission Cost Increases Associated with Grid Modernization including Southwest Power Pool Regional Transmission Organization Expansion (RTOE)

Jason Rosenkranz
Director of Wholesale Electric Operations

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48

Rising Transmission Costs Ahead

Transmission costs: Collection, upgrades, and how it gets billed



49

Why Costs Are Heading Up

Four forces at work

Growth and modernization

Load growth and grid modernization are expected to require more upgrades.

Costs stack up

New upgrades sit on top of older ones, each recovered over about 40 years.

Inflation

Construction costs continue to rise over time.

Shared high-voltage cost

Lines at 300 kV and above are paid by the whole region, so every zone feels them.

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The Annual Cycle

Project, bill, collect, then true up

August 1	January 1	May 1, next year	August 1, again
Transmission owner posts its projected ATRR for the coming year.	New rates take effect for the year.	Actual costs are compared with what was collected.	Any difference, plus interest, joins the next projection.

ATRR (Annual Transmission Revenue Requirement) is the yearly dollar amount an owner may recover for its transmission system.

Example shown: NPPD schedule; other owners use different dates, same pattern. Customers can review and challenge the inputs.

51

Step 1: Existing Lines

Each owner files an annual revenue requirement

Formula rate

Each owner files a stated rate or formula with FERC and fills it in from its own financial records.

>

What goes in

Operating costs, depreciation, taxes, return or debt service, less revenue credits.

>

What comes out

A net revenue requirement for the zone, spread over the zone's peak load.

The RTO (SPP/MISO) administers the tariff, bills customers, and passes the revenue to the owner.

52

Step 2: New Upgrades that Qualify for Regional Cost Sharing

How new lines and other transmission facilities join the revenue requirement

1	**Approved**	RTO approves project and Notification to Construct (NTC) is issued. This process varies somewhat between SPP and MISO.
2	**In service**	Once built, the cost is added to the owner's base plan upgrade ATRR.
3	**Recovered over decades**	Each upgrade is recovered over about 40 years as it depreciates.

Upgrade costs are separated from the zone's own ATRR and shared under Schedule 11.

NOTE: Excludes Direct Assigned Facility (DAF) costs

53

How New Upgrades Join the Revenue Requirement

Lines and substations: from approval to collection

1

Approve

SPP approves project upgrades and tells owners to build them.

2

Build and recover

Owners build, then claim costs in their revenue requirement (ATRR).

3

Allocate

SPP assigns costs to zones by voltage and load.

4

Collect

Customers pay through zonal rates and Schedule 11.

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Who Pays

Voltage sets how widely costs are shared

300 kV and above	100 to 299 kV	Below 100 kV
100%	**1/3 | 2/3**	**100%**
Shared across the SPP region. In MISO, costs for high-voltage Multi-Value Projects (MVP) and Long-Range Transmission Plan (LRTP) projects are spread across all zones.	Split about one-third regional, two-thirds zonal. Upgrades approved after 12/19/25 also use subregional allocation.	Charged to the owner's zone.

The regional share is divided among zones by load ratio share, using each zone's prior-year peak loads.

55

From Zone to Member Bill

How the dollars reach load

Zonal rate

The zone's ATRR divided by the zone's peak load.

+

Regional Cost Share

The zone's share of regional upgrade costs, set by load ratio share. (if applicable)

=

Member bill

Each member pays on its own load share. Ancillary service charges are added.

56

Where MEAN Loads Are Located

Each zone has its own ATRR

SPP East	MISO	SPP RTOE	Public Service Co. of Colorado
Zones 17 & 19	Zone 24	Zones 102, 103 & 104	

Each zone has its own ATRR, so the same upgrade can land differently.

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The Bottom Line

What SPP is forecasting

SPP Southwest Power Pool

≈$4.6B	2034	10 years	2.0%
Total inflated base plan funded ATRR, 2006 to 2035	Peak year for annual cost in the forecast	Forecast horizon, 2026 to 2035	Annual construction price inflation assumed

SPP's forecast has annual costs peaking in 2034, at least for now.
Customers serving load pay these costs.

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58

What This Means for Members

Expect, plan and engage

Expect

Transmission charges on member bills are likely to rise over the next decade.



Plan

Reflect higher transmission costs in rate and budget planning at local municipal level.



Engage

Attend Board meetings to learn of important developments.



59

NEXT STEP

Wholesale Electric Operations and Finance will be working together to strengthen surveillance of transmission rate changes.

CAUTION: Costs will not be known with certainty due to varying dates for ATRR postings and zonal load updates, actual municipal load, etc.



Questions and discussion

60

Adjourn

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61