

Regional Resource Adequacy Workshop #9: Transmission and Compliance

July 23, 2026

Agenda

- Transmission
 - Stakeholder Comment Themes
 - Unique Regional Issues:
 - Pacific Northwest
 - Nevada
 - New Mexico
- Compliance
 - Stakeholder Comment Themes
 - Conceptual Approaches

Transmission: Themes from Stakeholder Comments

- Received robust feedback from stakeholders on the proposed approach to transmission
- Broad alignment that deliverability is essential; RA capacity must be deliverable to load to have reliability value
- Many stakeholders cautioned that a blanket firm transmission requirement (e.g., 75% firm transmission) may be:
 - Commercially infeasible due to scarcity of firm rights- Firm transmission is hard to obtain, especially in the Pacific Northwest
 - Distorting because it may block participation or raise costs- A rigid requirement could increase costs, limit resource participation, and reduce liquidity
 - Misaligned with EDAM's market-based transmission framework- EDAM already includes transmission sufficiency tests; duplicating requirements may be unnecessary

Transmission: Themes from Stakeholder Comments

- Many stakeholders supported a more flexible, constraint-based deliverability framework; proposed replacing blanket firm transmission requirements with constraint-based or zone-based deliverability:
 - Suggested Proposed Alternatives:
 - Constraint-based demonstration: Require firm transmission only when crossing identified constrained paths
 - Deliverability zones: Identify “constraint-free” areas where firm transmission is not needed
 - Consider a regional deliverability study: similar to CAISO’s deliverability process
 - Hybrid approach: Use firm transmission for constrained paths + EDAM optimization elsewhere
 - Reasoning:
 - EDAM’s market optimization already handles much of the deliverability problem
 - A constraint-based approach better reflects actual system conditions
 - Avoidance of unnecessary procurement of firm rights where not needed

Transmission: Themes from Stakeholder Comments

- Several stakeholders supported firm transmission requirements if:
 - A clear, narrowly tailored waiver process for commercial infeasibility exists and;
 - Waivers do not undermine reliability
- Several stakeholders expressed concern that overly strict transmission rules could:
 - Reduce participation
 - Increase costs
 - Undermine the voluntary nature of the program

Next Steps

- The Work Group is considering this feedback and in the process of developing an updated proposal with the goal of having something to share with stakeholders at the August 20th workshop



Transmission and Delivery Practices

Retail choice in the Pacific Northwest

Spencer Gray

Executive Director

Northwest & Intermountain Power Producers Coalition (NIPPC)

July 23, 2026

Energy-only sales by retail power marketers

State	2024 Retail sales (TWh)
Montana	0.4
Nevada	4.9
Oregon	2.8
Washington	1.4
Subtotal	9.6
California	26.2
U.S.	496.2

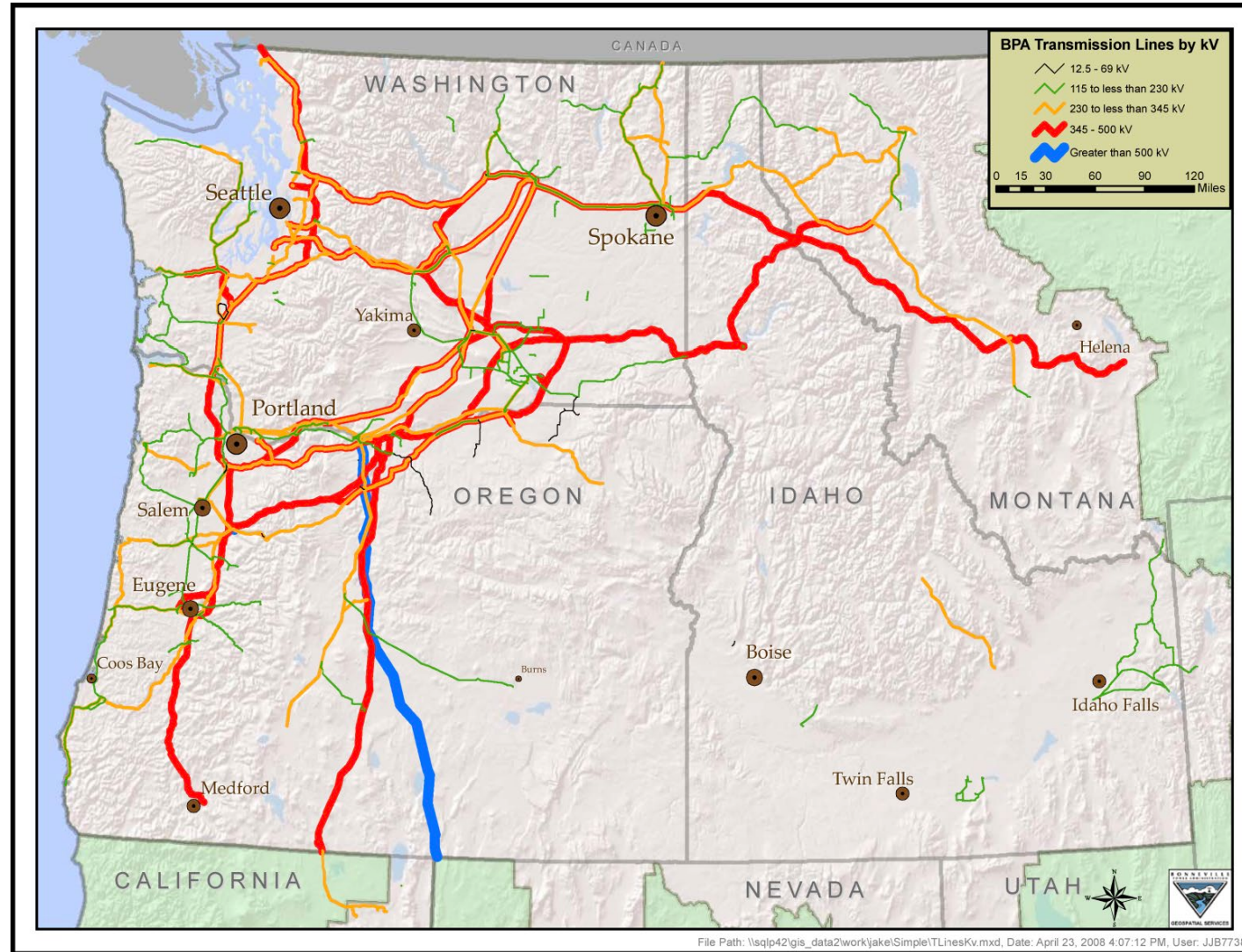
Oregon retail choice (direct access)

- About 3 TWh of load (325 aMW)
- Restructuring law: SB 1149 (1999)
- Quarter century of C&I (>1MW) retail choice (aka direct access (DA))
- Programmatic caps based on weather-normalized load of two IOUs
 - Separate regulatory caps for existing load and new load, plus waivers
- Exiting bundled customers pay exit fees; all direct access customers pay nonbypassable charges
- Annual selection windows and typical contract tenors of 1-5 years

More on Oregon direct access

- Retail power marketers = “electricity service suppliers” in Oregon
- ESSs compete with each other and utilities to supply energy to DA loads
- Typical contract enforcement: bilateral financial damages (liquidated damages) for failure to deliver
- Typically, ESSs are NITS customers of host balancing authority/transmission owner; manage independent BPA-centric transmission portfolio
- Until May 2024, no granular mandatory RA rules in Oregon for private LSEs
 - OAR Chapter 860, Division 95

BPA Transmission



Key BPA System Characteristics

- 15,000 circuit-miles
- 75% of high-voltage system within core PNW footprint
- Connective network, not native-load primarily
- Open access but non-FERC jurisdictional (for the most part)
- High percentage of long-term point-to-point sales and short-term scheduling flexibility, including widespread use of redirects
- \$1.6B revenue requirement
 - About 53% PTP, only 17% NITS
- Overwhelmed queues; almost no spare LTF available transfer capability
- Slow system expansion relative to RA and DA timelines

Retail choice and transmission

- Vast majority of U.S. retail choice load is in jurisdictions with restructured transmission: *LTF portfolios for RA purposes are not a thing*
- Bilateral West is unusual in retaining contract-path framework and promoting direct access and RA transmission requirements.

Key questions:

- How can customers have a meaningful choice of supplier if direct access tenors are determined by transmission expansion timelines?
- What is the appropriate role of TPs *versus* BAs *versus* LSEs *versus* load in transmission expansion that improves deliverability?
- How does priority service designation compare to actual deliverability?
- How can the RA program respect different state choices?

Between 2027 and 2036, long-term firm available transfer capability on BPA paths drops by ~73%

BPA long-term available transfer capability⁴
MW

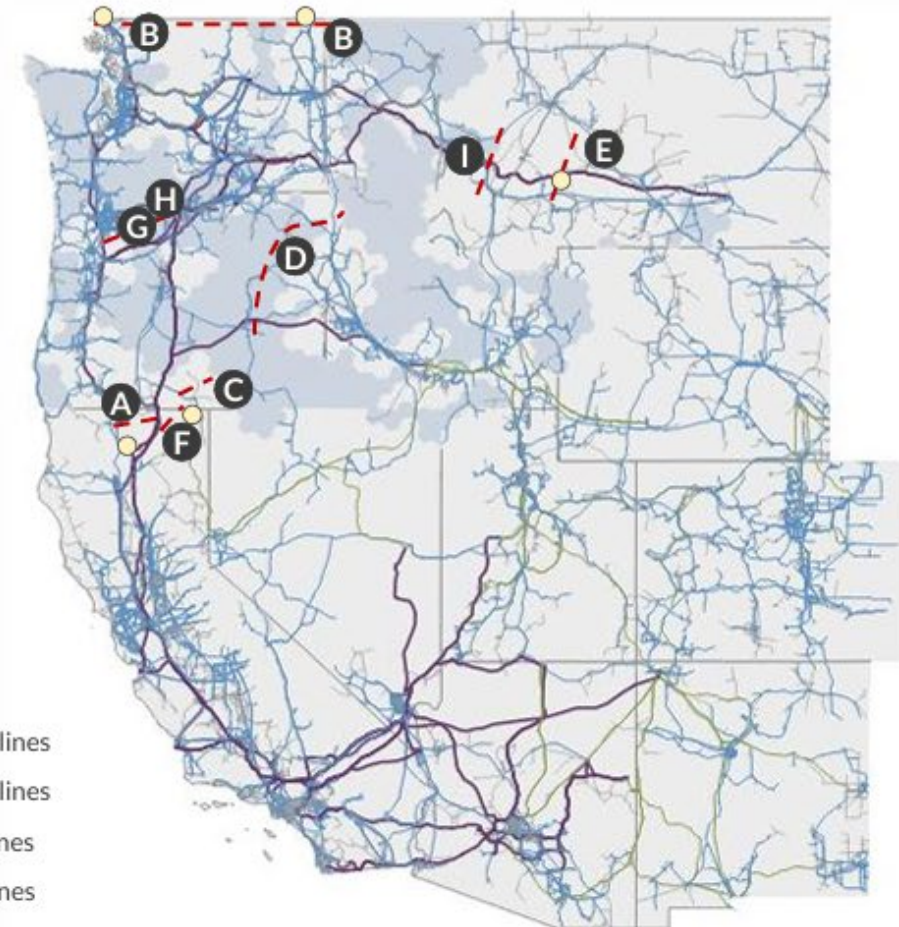
Path and intertie locations

	Path Name ¹	TTC ²	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
A	AC Intertie N>S	2725	0	0	0	0	0	0	0	0	0	0
A	AC Intertie S>N	795	331	331	181	0	0	0	0	0	0	0
B	Northern Intertie N>S	2150	0	0	0	0	0	0	0	0	0	0
B	Northern Intertie S>N	1120	0	0	0	0	0	0	0	0	0	0
C	DC Intertie N>S	3100	0	0	0	0	0	0	0	0	0	0
C	DC Intertie S>N	1904	450	100	200	0	0	0	0	0	0	0
D	LaGrande E>W	413	106	106	106	106	106	106	106	106	106	106
D	LaGrande W>E	350	0	0	0	0	0	0	0	0	0	0
E	Montana Intertie E>W	1930	0	0	0	0	0	0	0	0	0	0
F	RATS N>S	300	1	1	1	1	1	1	1	1	1	1
F	RATS S>N	300	281	100	100	100	100	100	100	100	100	100
G	John Day Wind Gen	1255	0	29	29	29	29	29	29	29	29	29
H	Rock Creek Wind Gen	1200	75	76	76	76	76	76	76	76	76	76
I	West of Garrison E>W	1618	0	0	0	0	0	0	0	0	0	0
I	West of Garrison W>E	931	0	0	0	0	0	21	21	21	21	21

Available transfer capability

Key:

-  BPA
-  Intertie
-  Path³
- Network:**
-  <100 kV lines
-  100+ kV lines
-  345 kV lines
-  500 kV lines



1) Approximate location 2) Total transfer capability. 3) Based on BPA mapping. Some paths perpendicular. 4) BPA calculates forecasted ATC by subtracting firm existing transmission commitments and transmission reliability margin from the TTC

22,103MW of transmission queued demand on Cross Cascades North and South reveals a growing East-West generation-to-load bottleneck

BPA pending long term transfer queue by path
MW

Path locations

	Path Name ¹	TTC ³	Queued demand ²
A	Cross Cascades North E>W	8670	11,856
B	Cross Cascades South E>W	5466	10,247
C	West of John Day E>W	4350	7,145
D	North of Pearl S>N	2067	6,081
E	West of McNary E>W	4500	6,008
F	Northern Intertie S>N	2500	5,600
G	North of Grizzly N>S	4800	4,073
H	West of Hatwai E>W	4275	4,006
I	West of Slatt E>W	4600	3,954
J	North of Hanford N>S	5100	3,868
K	North of Echo Lake S>N	3016	3,624
L	West of Lomo E>W	4200	3,430
F	Northern Intertie N>S	2000	3,235
M	West of Garrison E>W	2200	3,140
N	South of Allston N>S	3009	3,087
O	South of Custer N>S	2715	2,889
P	Raver-Paul N>S	1555	2,380
Q	John Day Wind Gen	1255	600
M	West of Garrison W>E	1618	500
R	RATS N>S	300	367
S	LaGrande E>W	413	198
T	Rock Creek Wind Gen	1200	151

Developer IOU Energy Marketer / Trader Municipal Utility PUD Electric Cooperative Federal Agency Other

Key:

BPA

Path

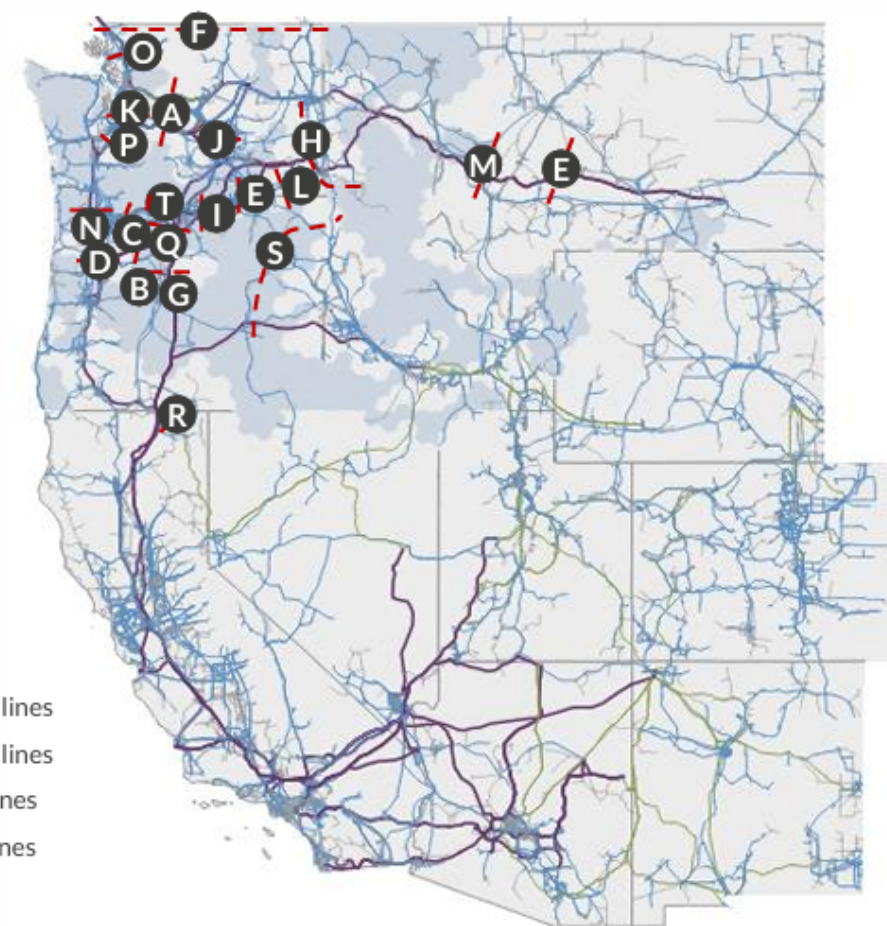
Network:

< 100 kV lines

100+ kV lines

345 kV lines

500 kV lines



1) Approximate location 2) MW values are a sum of the MWs from each request that flows across each specific path. A single request can appear on multiple paths if it routes across several corridors. 3) Total transfer capability. Listed values in MW.

Toward a more holistic and adaptive treatment of BPA transmission rights in Northwest utility planning and procurement processes

ELAINE HART

SYLVAN
ENERGY ANALYTICS

GridLAB

MARCH 2025

[Sylvan-and-GridLab_Renewables-Transmission-Rights.pdf](#)

TABLE 2. Historical BPA transmission curtailments across all hours and during hours with greater regional resource adequacy risk.

	ALL HOURS (2008-2024)	CAPACITY CRITICAL HOURS (2012-2022)	HOURS ON DAYS WITH CAPACITY CRITICAL HOURS (2012-2022)
Hours with curtailment (% of hours)	246 (0.17%)	4 (0.14%)	44 (0.17%)
Total curtailed MWh	98,590	875	18,195
Priority 7 Firm curtailed MWh	21,505	787	6,508
% Curtailment that had Priority 7 Firm rights	21.8%	89.9%	35.8%

Review of BPA Curtailment Data from 2008 to 2024

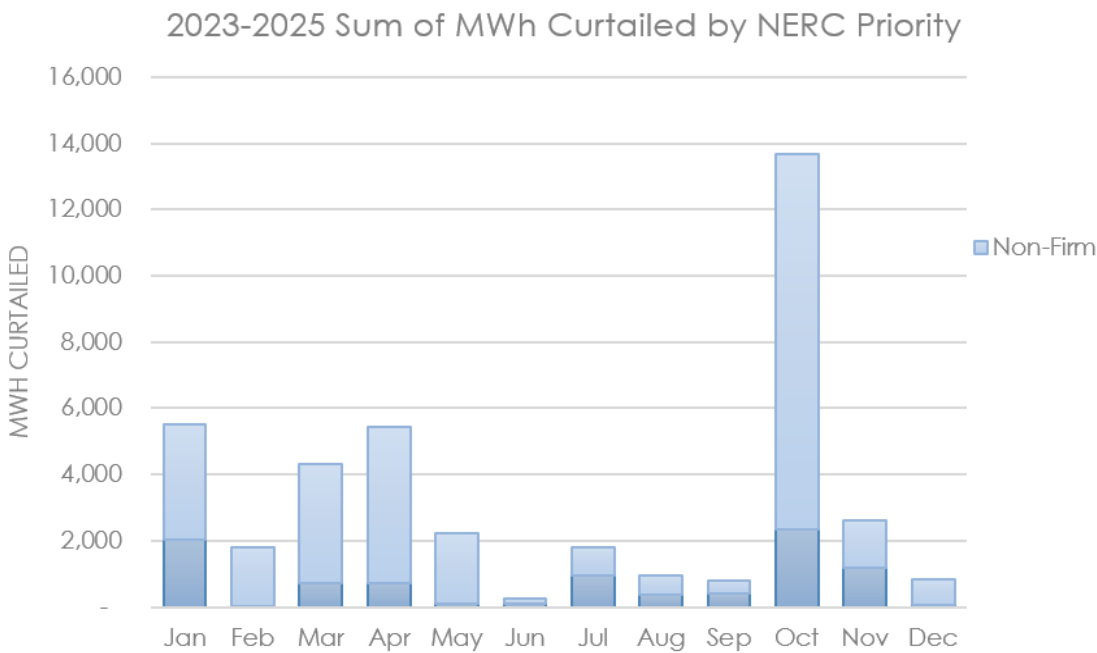
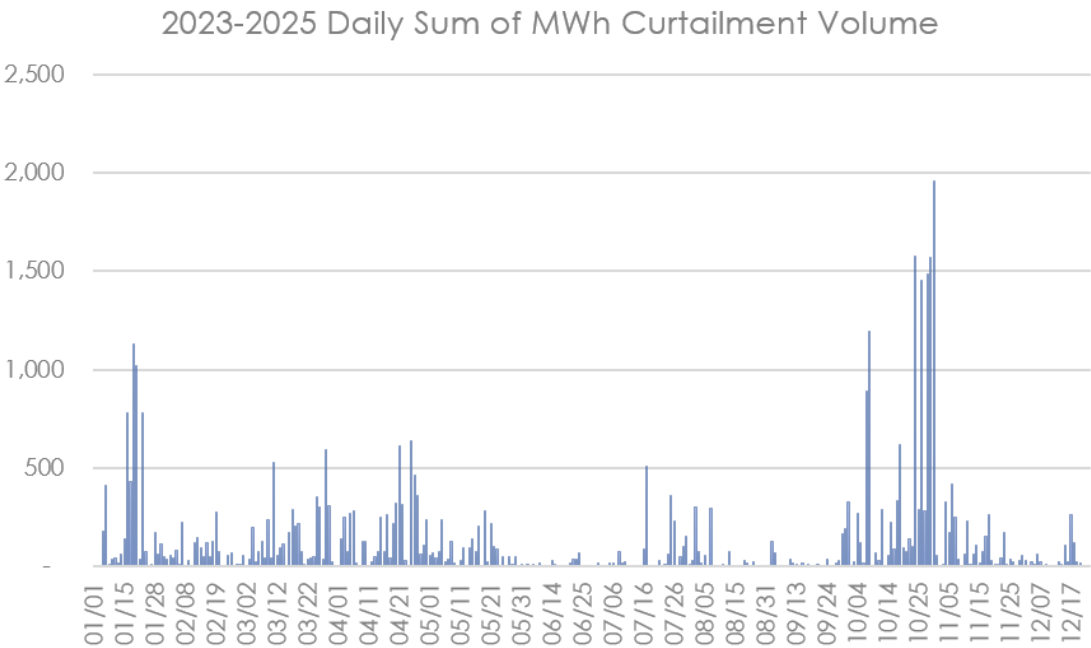
- BPA stopped publishing ATC over internal paths in October 2023
- BPA paused the TSR Study and Evaluation Process (TSEP) in February 2025
- Between 2008 and October 2024, transmission curtailments occurred in only 0.17% of hours, averaging 401 MWh across entire BPA system
- During specific highest demand hour curtailments were less frequent and smaller at 0.14%- and 219 MWh average
- Curtailment statistics on high regional demand days are essentially identical
- Most internal paths saw congestion fewer than 10 hour per year and many saw less than 1 hour per year
- Across all curtailment events between 2008 and 2024, 21.8% of the curtailed energy had Priority 7 firm transmission rights
- On days with high regional loads, during capacity critical hours 89.9% of curtailed energy had Priority 7 firm transmission rights
- Securing firm transmission service does not guarantee that a resource will be unaffected by curtailments when they do occur

BPA Curtailment Data - Summary 2023 - 2025

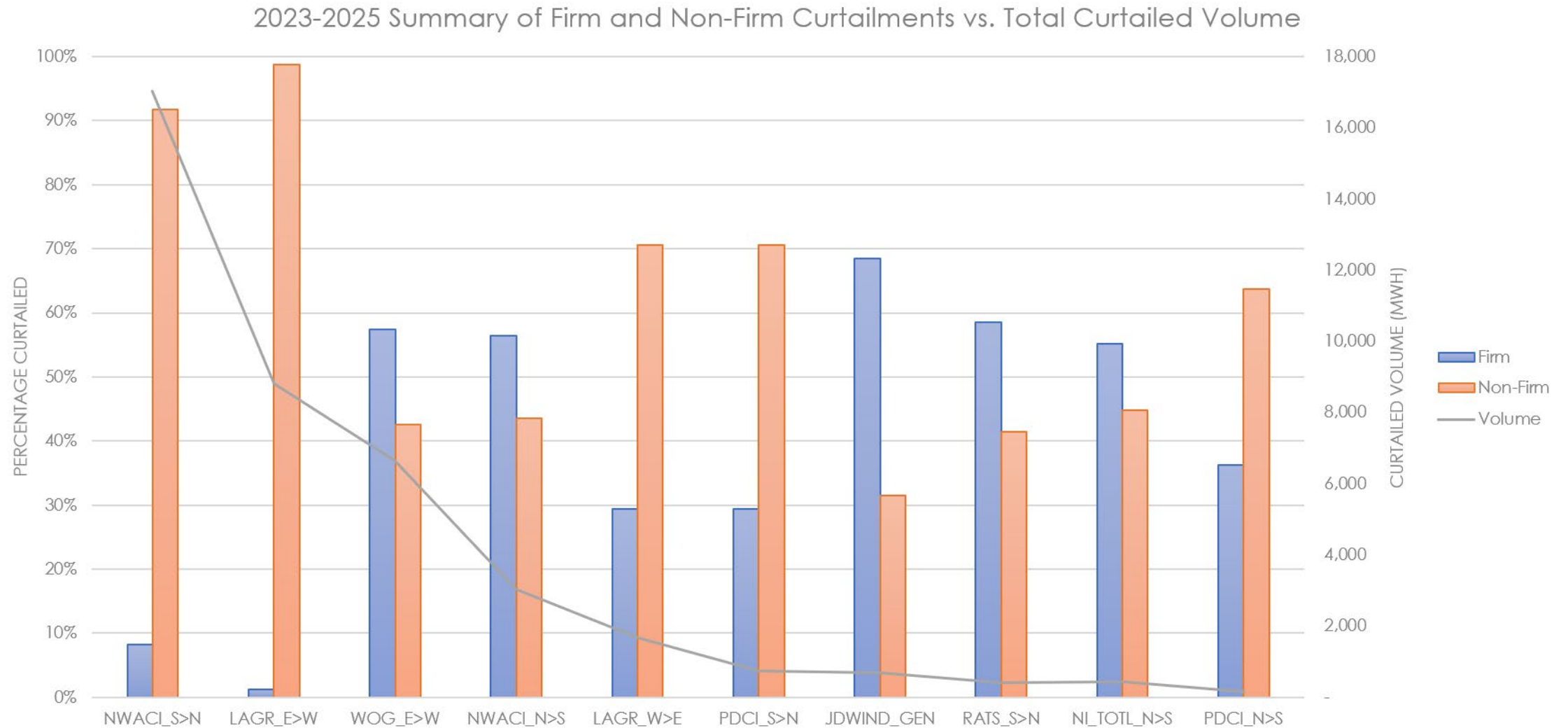
The following tables provide a summary of BPA curtailment data which can be found here:

- [BPA - Hourly Firm Data Monitoring & Evaluation](#)
- Data set contains 3 years of data and 5,048 curtailment events
- 40,204 MWh of curtailed tags of which 22.4% were NERC priority 6/7
- From Q4 2022 though Q4 2023 355 million MWs were tagged on BPA system
 - 29% tagged on non-firm transmission
 - 71% tagged on firm transmission

	E-TAG PRIORITY	PTP TRANSMISSION RIGHTS
Non-Firm	1	Non-firm (NF) Secondary Hourly
	2	NF Hourly
	3	NF Daily
	4	NF Weekly
	5	NF Monthly
Firm	6	Conditional Firm (CF) (not "firmed up")
	7	All Firm PTP products, including "firmed up" CF



Curtailment Rates on Select Paths 2023-2025



BPAT.PGE – Average MWh Curtailment 2023-2025

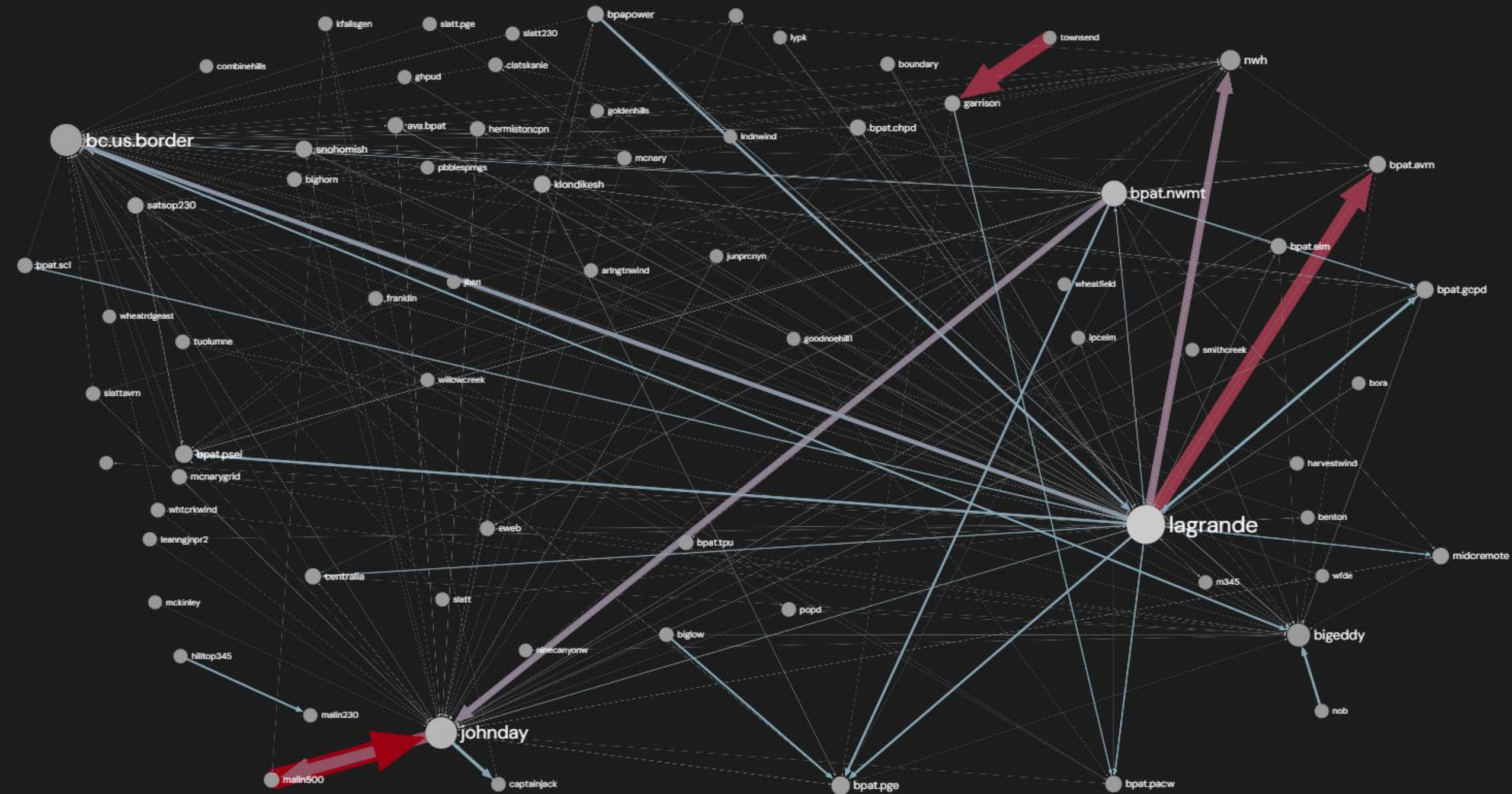
Row Labels	Sum of Avg MWh Curtailed
Firm	150
Biglow-BPAT.PGE	131
BPAT.NWMT-BPAT.PGE	2
KlondikeSH-BPAT.PGE	17
Non-Firm	347
Biglow-BPAT.PGE	12
BPAT.NWMT-BPAT.PGE	161
KlondikeSH-BPAT.PGE	12
LaGrande-BPAT.PGE	162
Grand Total	497

- From 2023 through 2025 there was an average yearly total of 497 MWh of tag curtailments across firm and non-firm point to point transmission from various PORs to BPAT.PGE

BPAT.PACW - Average MWh Curtailment 2023-2025

Row Labels	Sum of Avg MWh Curtailed
Firm	88
Garrison-BPAT.PACW	88
GOODNOEHILL1-BPAT.PACW	-
LaGrande-BPAT.PACW	0
Non-Firm	105
BPAT.NWMT-BPAT.PACW	1
LaGrande-BPAT.PACW	102
Satsop230-BPAT.PACW	1
Grand Total	193

- From 2023 through 2025 there was an average yearly total of 193 MWh of tag curtailments across firm and non-firm point to point transmission from various PORs to BPAT.PACW





NV Energy Transmission

Tonopah Nevada - Then and Now

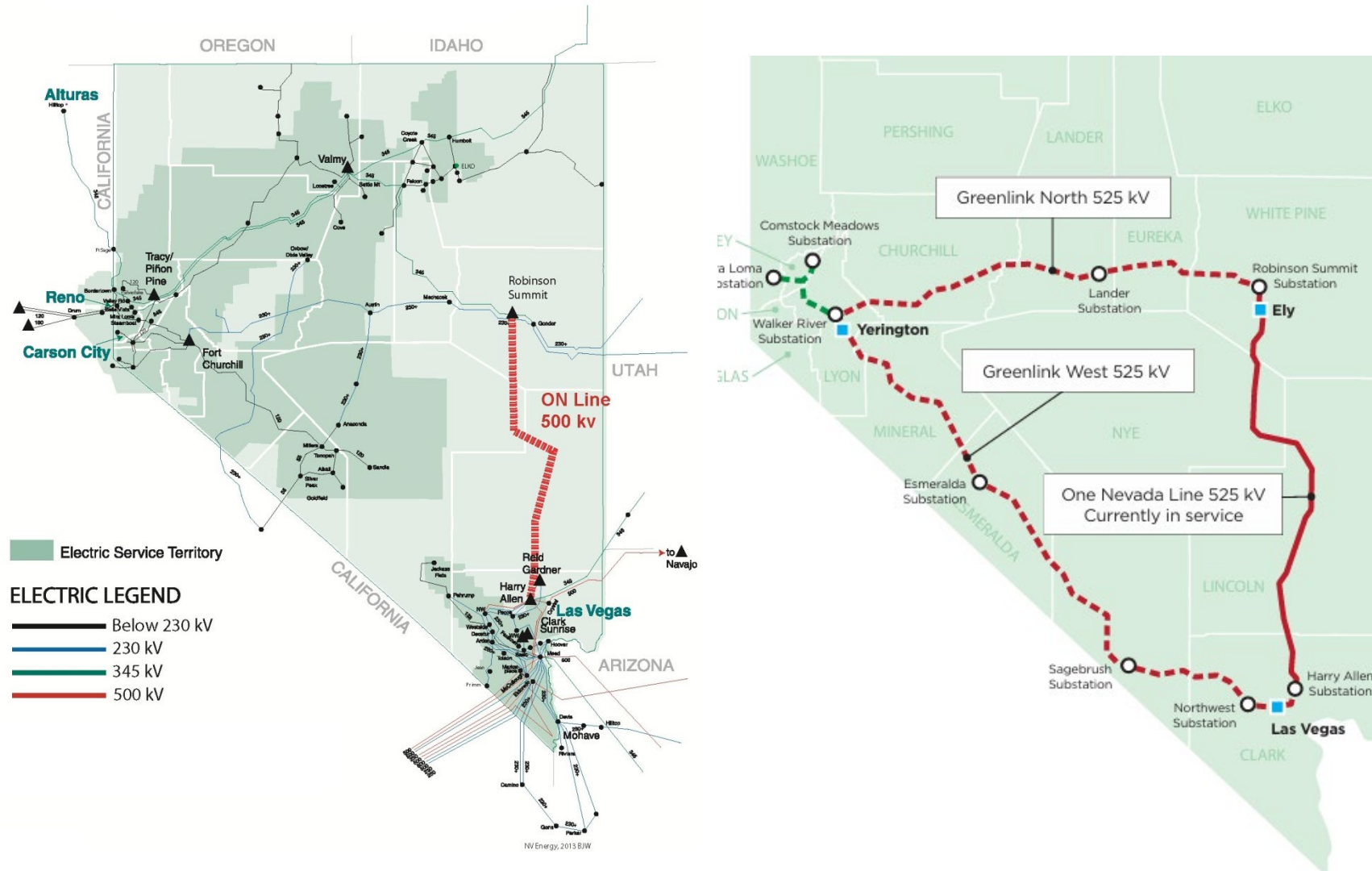


Wyatt Earp's
Northern Saloon
1902



Crescent Dunes
solar thermal

NV Energy Transmission System



NV Energy's Transmission Reservations and Service are Based on the FERC Pro Forma OATT



- **Order No. 888 issued April 1996**

- *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities* , Order No. 888, 61 FR 21540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh'g* , Order No. 888-A, 62 FR 12274 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g* , Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g* , Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC* (D.C. Cir. 2000) , *aff'd sub nom.* (2002). *New York v. FERC* , 225 F.3d 667 , 535 U.S.1 (2002),.

- **Order No. 890 issued February 2007**

- *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 FR 12266 (March 15, 2007), FERC Stats. & Regs. ¶ 31,241, at P 808 (2007), *order on reh'g*, Order No. 890-A, 73 FR 2984 (January 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228 (2009), *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

New Designated Network Resources



- **30.2 Designation of New Network Resources:** The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable...This request must include a statement that the new network resource satisfies the following conditions:
 - The Network Customer **owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service** under Part III of the Tariff; and
 - The Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third-party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a **non-interruptible basis**, except for purposes of fulfilling obligations under a reserve sharing program.
 - **Commitment to purchase means agreement on material terms (quantity, price, duration) so only contingency is transmission availability**

DNR Applications – OFF-System Resources



- **29.2.3 Completed Application Requirements:** For each off-system Network Resource, such description shall include:
 - Identification of the Network Resource as an off-system resource
 - Amount of power to which the customer has rights
 - Identification of the control area from which the power will originate
 - **Delivery point(s) to the Transmission Provider's Transmission System**
 - **Transmission arrangements on the external transmission system(s)**
 - Operating restrictions, if any
 - Any periods of restricted operations throughout the year
 - Maintenance schedules
 - Minimum loading level of unit
 - Normal operating level of unit
 - Any must-run unit designations required for system reliability or
 - contract reasons
 - Approximate variable generating cost (\$/MWH) for redispatch computations

Order 890-A – Required Firmness of the Import Leg



- 867. In response to Barrick Goldstrike Mines, Morgan Stanley, and Southwestern Utilities, the Commission clarifies that the requirement in section 29.2(v) of the pro forma OATT to identify the transmission arrangements on external systems applies to the transmission leg from the resource being designated to the transmission provider's transmission system. If an off-system power purchase is sufficiently **firm** to satisfy the designation requirements, then the transmission provider need not be concerned with the upstream transmission leg(s) from the generator(s) to the point where the buyer takes title of the firm power. Because the contract itself is the resource being designated, and that contract is **firm** in nature, it is not necessary to demonstrate the **firmness** of the upstream transmission in order to designate the contract as a network resource.
- Accordingly, the customer need to show that they have firm transmission from the point they take title of the energy to NV Energy's border with the expectation that the whole path supports the firmness of the underlying WSPP Schedule C agreement

WSPP Schedule C



- In Order No. 890, FERC found that that the WSPP C agreement at that time would not qualify as a DNR:
 - Although we find that the LD provision contained in the WSPP Schedule C agreement does not impair the firmness of that agreement, we note that the agreement otherwise allows interruptions in generation service “to meet [the] Seller’s public utility or statutory obligations to its customers.” Thus, the WSPP Schedule C agreement appears to allow interruptions for reasons other than reliability and, as a result, would not be eligible for designation as a network resource under the Dynegy or WPPI precedent. Order No. 890 at P. 1460
- To address FERC’s concerns, WSPP filed to a modified Schedule C on March 9, 2007. Specifically, WSPP modified section C-3.8(c) to prohibit interruptions for “reasons other than reliability of service to native load” specifically so that the WSPP Schedule C agreement could be a DNR. Docket No. ER07-624-000, accepted by FERC to be effective as of May 8, 2007

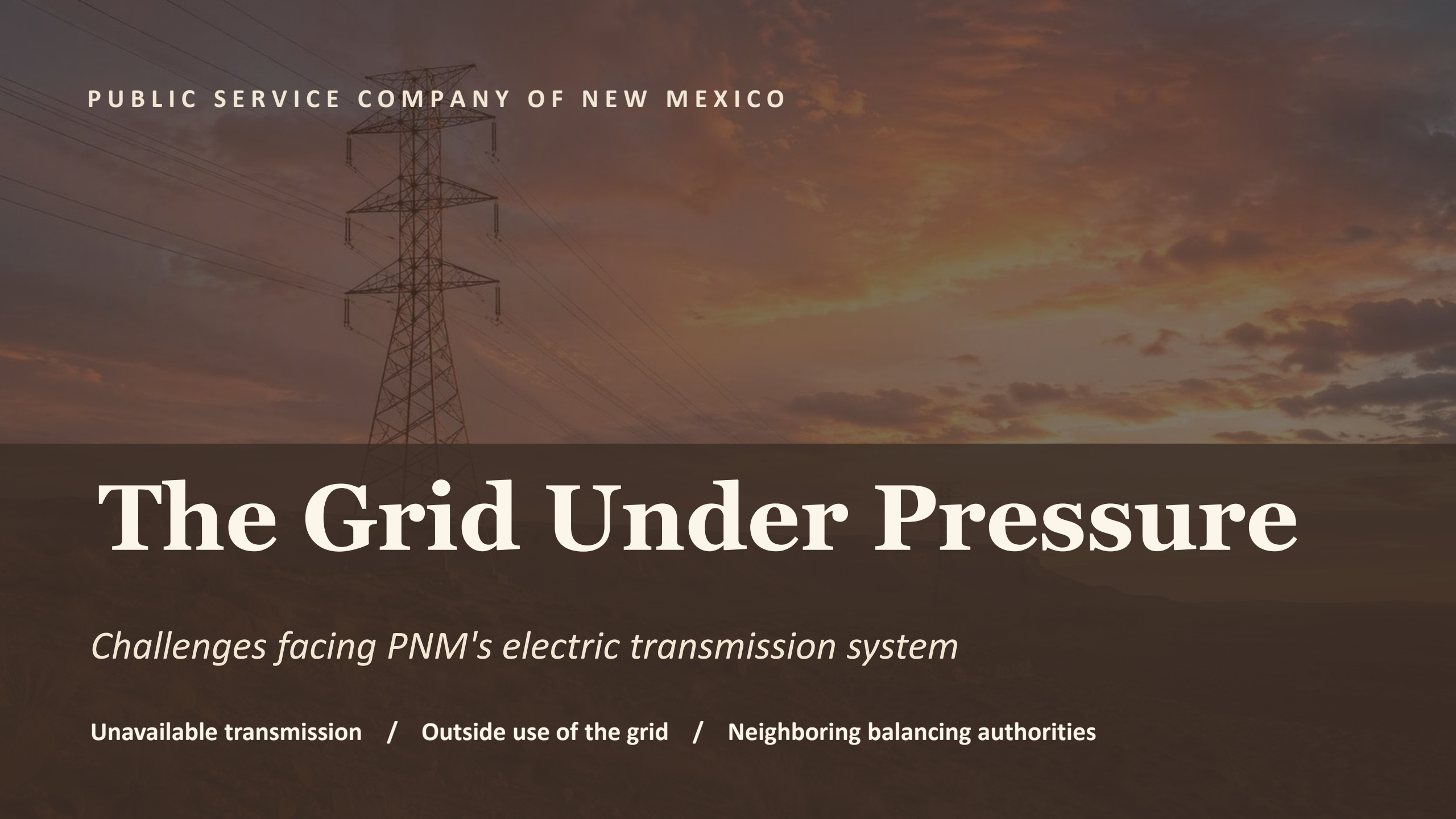
EDAM Transmission Requirements for the Resource Sufficiency Test



- **EAM Filing letter at footnote 247** - The balancing authority **must also procure firm, conditional firm or network integration transmission service to deliver the supply to its balancing area** (new tariff section 33.18.2.1)
- **33.18.2.1 Transmission to Support Resource Sufficiency Provided by the EDAM Entity** - An EDAM Transfer from the source Balancing Authority Area to the sink Balancing Authority Area to support the EDAM Resource Sufficiency Evaluation for the sink Balancing Authority Area must be supported by firm or conditional firm point-to-point transmission service or network integration transmission service across an EDAM Internal Intertie. An EDAM Entity may also account for delivery of Supply external to its Balancing Authority Area in the EDAM Resource Sufficiency Evaluation under Section 33.30.8; however, the transmission that may ultimately support delivery of the Supply is not known before the Day-Ahead Market and will not be available to support EDAM Transfers
- **33.30.8.3 Non-Source Specific E-Tag Requirements.**
 - All Energy scheduled from non-resource-specific forward supply contracts under Section 33.30.8.2 must have a submitted E-Tag within three hours following publication of the Day-Ahead Market results. The CAISO will publish an EDAM Entity Balancing Authority Area's quantity of import Supply that does not have a Day-Ahead E-Tag for situational awareness. An EDAM Entity Scheduling Coordinator will have until 5 hours before the start of the Operating Hour to submit E-Tags and/or replace the capacity with other firm schedules or physical resources for schedules that lack a valid Day-Ahead E-Tag within the timeframe.
 - If the EDAM Entity Scheduling Coordinator does not E-Tag the outstanding import schedules, including import EDAM Transfers, and fails to resupply by submitting additional incremental Energy Bids from internal supply EDAM Resources above the resource's Day-Ahead Schedule not encumbered by Day-Ahead capacity awards to cover the E-Tag insufficiency prior to the deadline, the CAISO will remove the EDAM Entity Balancing Authority Area from the group of Balancing Authority Areas that comprise the EDAM Upward Pool in accordance with Section 33.31.1.4



 **NV***Energy*



PUBLIC SERVICE COMPANY OF NEW MEXICO

The Grid Under Pressure

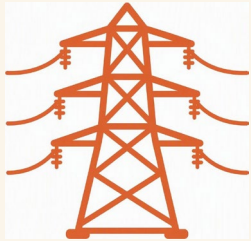
Challenges facing PNM's electric transmission system

Unavailable transmission / Outside use of the grid / Neighboring balancing authorities

THE CHALLENGE IN BRIEF

Three pressures, one shared grid

PNM moves power across hundreds of miles of high desert to homes and businesses. Much of that transmission network is fully subscribed, heavily used by parties other than PNM, and tightly linked to the neighboring balancing authorities around it.



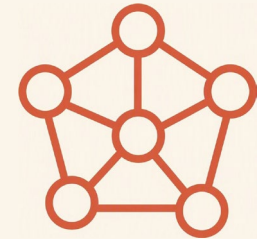
Unavailable Lines

Key corridors are fully subscribed, leaving little transmission available for new demand.



Used by Others

A large share of PNM's transmission is reserved by non-PNM parties under open-access rules.



Grid Neighbors

PNM interconnects with and utilizes adjacent balancing authorities to move power.

The lines are full

Many corridors on PNM's system are already fully subscribed. Power struggles to reach the northern New Mexico load center, and Southern New Mexico must be served over transmission PNM does not own.

- **Fully subscribed corridors**

Existing lines carry near their limits, leaving little headroom for new demand.

- **Constrained delivery**

Bottlenecks between regions restrict where power can actually flow.

- **Little left to reserve**

With corridors booked, new requests face limited available capacity.



Who actually uses the grid



Reserved by others

- Under PNM's open-access transmission tariff, outside wholesale customers can reserve firm and non-firm capacity on PNM lines.
- Those reservations commit a large share of the system to power that never serves PNM's own customers.
- When corridors are booked, little transmission is left for new PNM load.

Serving load over others' lines

- Southern New Mexico load is separated from PNM generation by non-PNM transmission lines.
- To serve it, PNM must buy transmission from neighboring balancing authorities.
- PNM's own customers depend on lines that other parties own and control.

PNM's existing transmission system

Long-distance lines built to import base-load coal and nuclear power, now shared across regional markets.

Purpose & strengths

- Built largely to import base-load coal and nuclear resources over long distances.
- Strength — multiple interconnected systems across the West.
- Weakness — limited connectivity to wind, geothermal, and CAES.

How capacity is used

- Retail load uses about 45% of capacity — roughly 2,100 MW.
- Transmission service takes 55% — network customers, point-to-point wheeling, and other.
- Announced addition — Rio Puerco to Pajarito / Prosperity.

Interconnections

- Arizona — APS, SRP, TEP, WAPA.
- Colorado — Xcel, WAPA.
- Texas — EPE.
- SPP regional transmission organization.

The authorities we connect to

PNM's grid ties directly into four neighboring balancing authorities, plus DC links to two more regions.

1

Arizona Public Service (APS)

Ties at Four Corners, at 345 kV and 230 kV.

2

Western Area Power Administration (WAPA)

Connects at Shiprock, at 345 kV.

3

El Paso Electric (EPE)

Connects at West Mesa, at 345 kV.

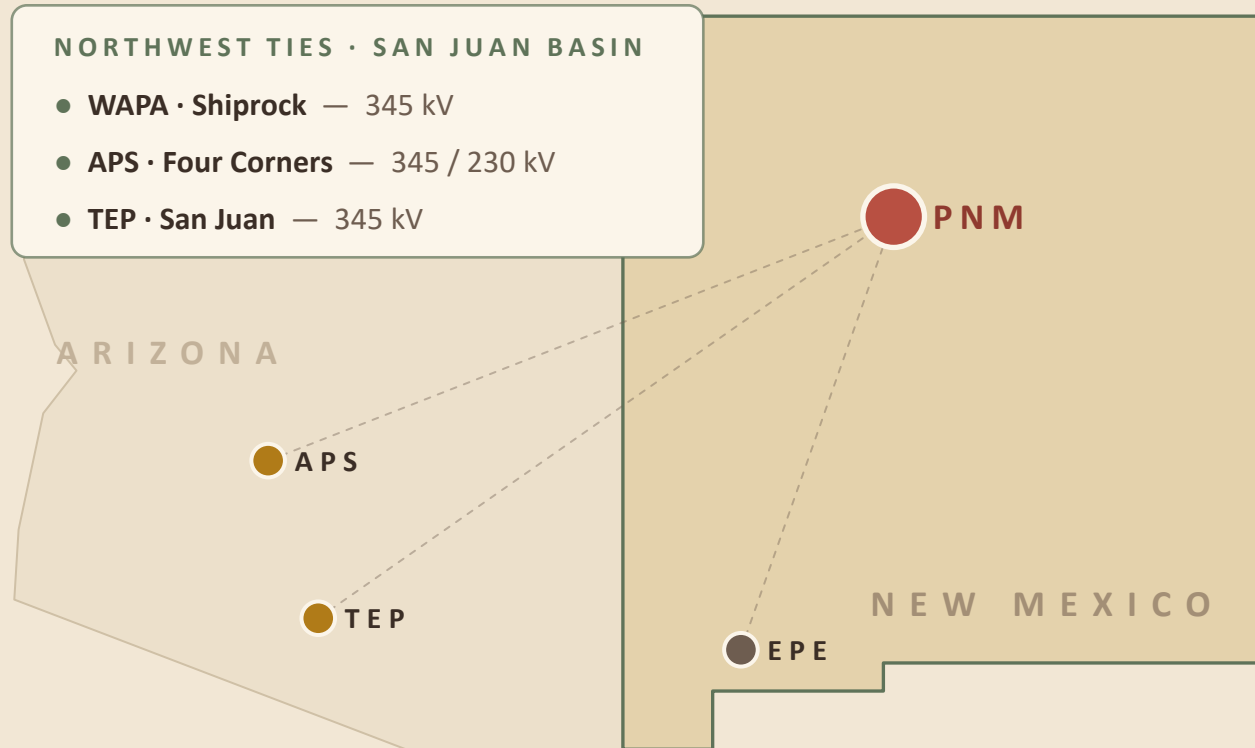
4

Tucson Electric Power (TEP)

Connects at San Juan, at 345 kV.



Our ties, and the market they chose



• EDAM · CAISO • Markets+ · SPP • No election yet

DAY-AHEAD MARKET ELECTIONS

EDAM · CAISO

- PNM — joining 2027 · host
- WAPA · Sierra Nevada — pursuing

Markets+ · SPP

- Arizona Public Service
- Salt River Project
- Tucson Electric Power
- UniSource Energy
- Public Service Co. of Colorado
- Tri-State G&T

No election yet

- El Paso Electric — WEIM real-time

How regional RA and seams affect PNM

PNM joins **EDAM in 2027** while its closest neighbors join **Markets+** — putting PNM on a market seam just as two regional resource-adequacy regimes take shape.

DEVELOPMENT TIMELINE

- 
- 2026**
EDAM day-ahead market goes live
 - Jan 2026**
WRAP binding-intent notice due
 - 2027**
PNM joins EDAM · Markets+ launches
 - Winter 2027/28**
WRAP binding operations begin
 - In design**
EDAM-footprint RA program forming

WHAT IT MEANS FOR PNM

-  **Desert Southwest will have two RA regimes to satisfy**
WRAP entities may hold firm transmission capacity as binding deficiency charges begin in Winter 2027/28 — alongside the forming EDAM-footprint RA program with its own transmission requirements.
-  **A seam through our ties**
Day-ahead trades with APS, TEP and SRP now cross the EDAM–Markets+ divide, adding hurdle and congestion costs and looser scheduling than a single market.
-  **Thinner diversity in extremes**
A split West narrows the resource sharing PNM can lean on across the seam during summer heat waves and winter storms.
-  **Compliance on a tight clock**
Overlapping 2026–2028 milestones push capacity procurement and a clear seams strategy to now, not later.

THE RISKS AHEAD

The risks PNM must manage

A fully subscribed grid, capacity controlled by others, and a new market seam leave PNM exposed on cost, reliability, and its ability to serve rising demand.

No room to grow

Key corridors are fully subscribed, leaving little headroom to serve rising demand.

On others' lines

Outside parties reserve much of the system, and southern load rides on lines PNM does not own.

Stranded on a seam

Joining EDAM while neighbors pick Markets+ adds seam costs and dual RA considerations.

Compliance: Stakeholder Feedback

Areas of stakeholder alignment:

- Monthly showings should be binding
- Cost causation should govern penalties and backstop costs
- Participants should have opportunities to cure deficiencies
- Compliance should encourage forward procurement
- Transmission shortfalls and capacity shortfalls may need different treatment

Compliance: Stakeholder Feedback

Stakeholder split: firmness of penalties

- Less firm penalties could cause reliability issues and reduce procurement incentives
- Overly punitive penalties could discourage participation and increase costs without improving reliability

Compliance: Stakeholder Suggestions

Firm Penalty Options	Less Firm Penalty Options
• Phased-in penalty firmness and deficiency charges	• Explore incentives such as access to pooled resources for compliant entities rather than relying solely on penalties
• Backstop and administrative costs should only fall on deficient participants	• Focus on creating operational incentives that convert forward capacity commitments into real reliability
	• Compliance mechanisms only for binding requirements; no penalties on informational annual showings; focus on non-punitive enforcement
	• Bulletin boards, trading mechanisms, and compliance assistance tools before punitive penalties

What should a Compliance framework accomplish?

- Incentivize participants to stay in the Program
- Incent and justify investment in the grid
- Reward and incentivize “good” participant behavior
- Achieve Program goals
- Create a mechanism to hold program participants accountable
- Create trust in the Program and support Program credibility

Program Tools to Achieve Compliance

- Program should leverage both carrots and sticks by using a combination of possible:
 - **Incentives**
 - Financial and non-financial
 - **Opportunities to cure**
 - **Charges**
 - Ability to buy your way into a benefit in the event of non-compliance
 - **Penalties**
 - Punitive in nature
 - Consider tiered or progressive penalty structure (time and repeat non-compliance)
 - Need to consider how penalty structure could influence market prices
 - Consider consistency of penalties in other programs- if the gravity of penalties is much higher or lower than other programs, that will drive who may be willing to participate/sell to which program.

Concepts for Initial Feedback

- **Capacity/compliance credits**- if a participant brings additional capacity to the pool then a possible credit could be issued to be redeemed against a charge if at some point that entity was non-compliant
- **Good behavior lesser charge/penalty**- if an entity hasn't been subject to a charge or penalty over a certain timeframe and something happens resulting in non-compliance, possibility of a lesser/reduced charge or penalty
- **Deficiency charge**
- To help realize the data element of the value proposition, a penalty could attach for **failure to submit data or submittal of inaccurate data** in both the binding and non-binding periods
- Penalties could apply to **repeat offenders** in forward showing (consistently coming up short); **non-delivery that impacts reliability** of the system
 - Received penalty funds would be distributed to compliant entities

Timeline: 2026

To allow for more collaboration with the goal of developing an Initial Proposal with broad support, the following schedule is proposed:



Timeline: 2027

Dates are approximate; feedback from Initial ROWE Board may result in changes to timeline



Summer/Fall Workshops

July

***Comments on July workshops due 8/6**

August

- Workshop #10, August 11: Technical Design
- Workshop #11, August 20: Transmission and Governance

***Comments on August workshops due 9/3**

September

- Workshop #12, September 10: Technical Design
- Workshop #13, September 17: Updates on Governance, Technical Design, Transmission, Compliance, and Data

***Comments on September workshops due 10/1**

The issue of how to address data will be included in workshops but the Work Group is still determining timing and where to best incorporate these discussions

Where to find materials



All workshop dates, **zoom links**, and materials are located at:

<https://rowesternenergy.org/regional-resource-adequacy/>



Reach out with questions or comments by emailing:

resourceadequacy@rowesternenergy.org

The ROWE is not a sponsor of the initiative or the initial stakeholder process, but is lending the use of its website for hosting materials.

Open Forum for Discussion



- Please raise your hand to be unmuted
- Announce your affiliation/entity you represent