

Western Power Pool
Board of Directors Quarterly Meeting Agenda

June 25th, 2025, 9:00 AM – 12:00 PM PST

Location: WPP Office, Portland, OR, Virtual Attendance Via Microsoft Teams

Invited Attendees:

Board: Bill Drummond, Doug Howe, Michelle Bertolino, Susan Ackerman, Andy Ott

Staff and Guests: Sarah Edmonds, Lisa Hardie, Rebecca Sexton, Ryan Roy, Eric Campbell, Carla Hudson, Charles Hendrix

<u>Time</u>	<u>Topic</u>	<u>Presenters</u>
08:45 AM	Pastries & Coffee Served	
09:00 AM	Meeting Opening <ul style="list-style-type: none">• Call to Order• Determination of a Quorum• Approval of the Agenda• Approval of Meeting Minutes	<i>Bill, Susan</i>
09:05 AM	Public Comment	<i>Bill</i>
09:15 PM	Updates/Reports <ul style="list-style-type: none">• CEO Report• Finance Committee Report	<i>Sarah, Michelle</i>
09:25 AM	WRAP Proposals <ul style="list-style-type: none">• Approve 2025/2026 PRC Workplan• Review Winter 2026-2027, Winter 2029-2030 (advisory) Advance Assessment Results Presentation• Approve Winter 2026-2027 Planning Reserve Margins Memo• Approve Authorization to Renegotiate SPP Payment	<i>Rebecca, Charles Hendrix</i>



10:30 AM Finance

- Approve WPP Budget

11:30 AM Governance

Lisa H

- Approve Corporate Compliance Policy
- Approve Bylaw Calendar Year Changes

12:00 PM Adjourn

Bill

Western Power Pool (WPP) Board of Directors Meeting

Meeting Minutes – Open Session

March 13th, 2025, 9:01 – 9:48 AM PT

Location: In-Person at the NV Energy Office at 7155 S Lindell Rd, Las Vegas, NV 89118 with Virtual Microsoft Teams Participants (as noted)

Attendees:

Board of Directors:	Bill Drummond (Chair), Doug Howe, Susan Ackerman, Michelle Bertolino, Andy Ott
Board Advisors:	Mary Ann Pease (virtual), Scott Waples (virtual)
Staff and Invited Presenters:	Sarah Edmonds, Rebecca Sexton, Lisa Hardie, Carla Hudson, Eric Campbell, Ryan Roy, Michael O'Brien (virtual), Beau Beljean (virtual), Elise Mousseau (virtual), Maya McNichol (virtual)
Other Attendees:	Lindsey Schlekeway, Rodger Manzano, Michael Holland, Bill Goddard (virtual), Christopher Bultsma (virtual), Benjamin Faulkinberry (virtual), Brandon Holmes (virtual), Raj Hundal (virtual), Michael Jang (virtual), Gerald Markey (virtual), Meg Albright (virtual), Tyler Moore (virtual), John Nierenberg (virtual), Shelly-Ann Maye (virtual), Asher Steed (virtual)

1. Call to Order

The regular meeting of the Western Power Pool Board of Directors was called to order at 9:01 AM March 13th, 2025, by Chair Bill Drummond.

2. Determination of a Quorum

Determination of a quorum was established by Secretary Susan Ackerman.

3. Agenda Approval

The agenda was reviewed by the Board.

A motion to approve the agenda was made by Susan Ackerman and seconded by Michelle Bertolino. The motion passed unanimously.

4. Approval of Meeting Minutes

The previous meetings' minutes were reviewed by the Board.

A motion to approve the meeting minutes was made by Susan Ackerman and seconded by Andy Ott. The motion passed unanimously.

5. Public Comment

Bill Drummond asked for any public comments. None were provided.

6. CEO Report

Sarah Edmonds reviewed the agenda for the day.

7. Financial Report

Michelle Bertolino reported that the finance committee met in January and February and at both meetings the comparative Balance Sheet, Income Statement, and A/R Aging reports were reviewed. She also shared that they received updates on the CFO transition plan and the development of a reserve policy.

8. WRAP Proposals

a. NTFP-2

Rebecca Sexton described Non-Task Force Proposal (NTFP)-2, changes to Business Practice Manuals (BPMs) that reflect the changes to the Transition Plan that were filed and endorsed by FERC. She noted that the approval being sought is to approve the redlines of the six changed BPMs and described the substantial changes as including adding a year onto the end of the transition period and adding the concept of critical mass. She shared that this proposal had been unanimously endorsed by the WRAP committees and that all comments received were positive. Bill Drummond asked for any feedback from the public and received no comments.

A motion to approve the redlines to the business practices that are contained in Non-Task Force Proposal-2 was made by Doug Howe and seconded by Susan Ackerman. The motion passed unanimously.

b. NTFP-4

Rebecca Sexton described NTFP-4, noting that it is focused on adjusting an existing policy for transferring load between portfolios that needed amendment to be more functional and was sponsored by Snohomish, TEA, and BPA. She shared that this

proposal had been unanimously endorsed by the WRAP committees and was reviewed by COSR, and that the only comment was a positive comment from BPA. Bill asked for additional comments from the Board and the public and received no comments.

A motion to approve the redlines to the business practice(s) that are contained in Non-Task Force Proposal-4 was made by Susan Ackerman and seconded by Andy Ott. The motion passed unanimously.

9. Governance

a. Nominate and Approve Nominating Committee Board Liaison

Bill Drummond described the Nominating Committee Liaison role and shared that Doug Howe has served in this role but is now up for renomination to the Board and cannot continue to be the Liaison. He shared that Susan Ackerman has graciously volunteered to serve in this role.

A motion to approve the nomination of Susan Ackerman as the new Board Liaison to the WPP Nominating Committee was made by Doug Howe and seconded by Michelle Bertolino. The motion passed unanimously.

b. Approve Signing Authority Policy

Sarah Edmonds explained the policy which sets the signing authority limits for distinct roles at WPP. Eric Campbell added that this sets a limit of \$500K for the CEO and anything above that amount would need to be approved by the Board. He added that this was established to improve financial integrity and recommended that the Board vote to approve as is.

A motion to approve the Signing Authority Policy was made by Susan Ackerman and seconded by Andy Ott. The motion passed unanimously.

c. Approve Line of Credit Resolution

Sarah Edmonds reported that the team had identified a need for a line of credit for cash flow timing efficiencies and that since the amount of this is more than the CEO signing authority limit that the WPP is seeking Board approval through a Line of Credit Resolution. She also noted that if in the future WPP were to wish to draw on this Line of Credit more than the \$500K CEO signing authority limit that the team

would return to the Board for additional approval. Lisa Hardie added that this is the first time that the company has sought credit since we became FERC jurisdictional, and that WPP will also file with FERC for approval of this Line of Credit.

A motion to approve the Line of Credit Resolution was made by Michelle Bertolino and seconded by Doug Howe. The motion passed unanimously.

d. Approve Information Security Policy

Sarah Edmonds and Ryan Roy introduced the Information Security Policy emphasizing that it is to protect WPP member's data. He reviewed the objectives as outlined in the policy and the responsibilities section and asked the Board for their endorsement. Andy Ott commented that there is a tension between how much process is in a policy vs how much it costs and that he believed that there was an appropriate balance in this policy.

A motion to approve the Information Security Policy was made by Susan Ackerman and seconded by Andy Ott. The motion passed unanimously.

10. Other Comments

Susan Ackerman asked about the current engagement with The Committee of State Representatives (COSR), a standing committee of the Western Resource Adequacy Program (WRAP). Sarah Redmonds responded that they have been very busy with business practice reviews, and that they receive staff support from the Western Interstate Energy Board and WPP. Rebecca Sexton added that in the fall COSR asked what public-level performance information could be provided and that WPP has been working with SPP to provide aggregated information to them. The Board had further discussion around changes to the COSR members, integrating COSR into WPP processes, and the possibility of sharing aggregated WRAP data publicly in the future.

11. Adjourn

Sarah Edmonds thanked NV Energy and their team for hosting the meeting today. The regular meeting of the Western Power Pool Board of Directors was adjourned at 9:48 AM by Chair Bill Drummond.

Susan Ackerman, Secretary

Date Approved by the Board of Directors

WESTERN RESOURCE ADEQUACY PROGRAM

Review of preliminary, non-binding WRAP regional data for the current participating footprint for the Winter 2026-2027 Season

June 25, 2025

TODAY'S OBJECTIVES

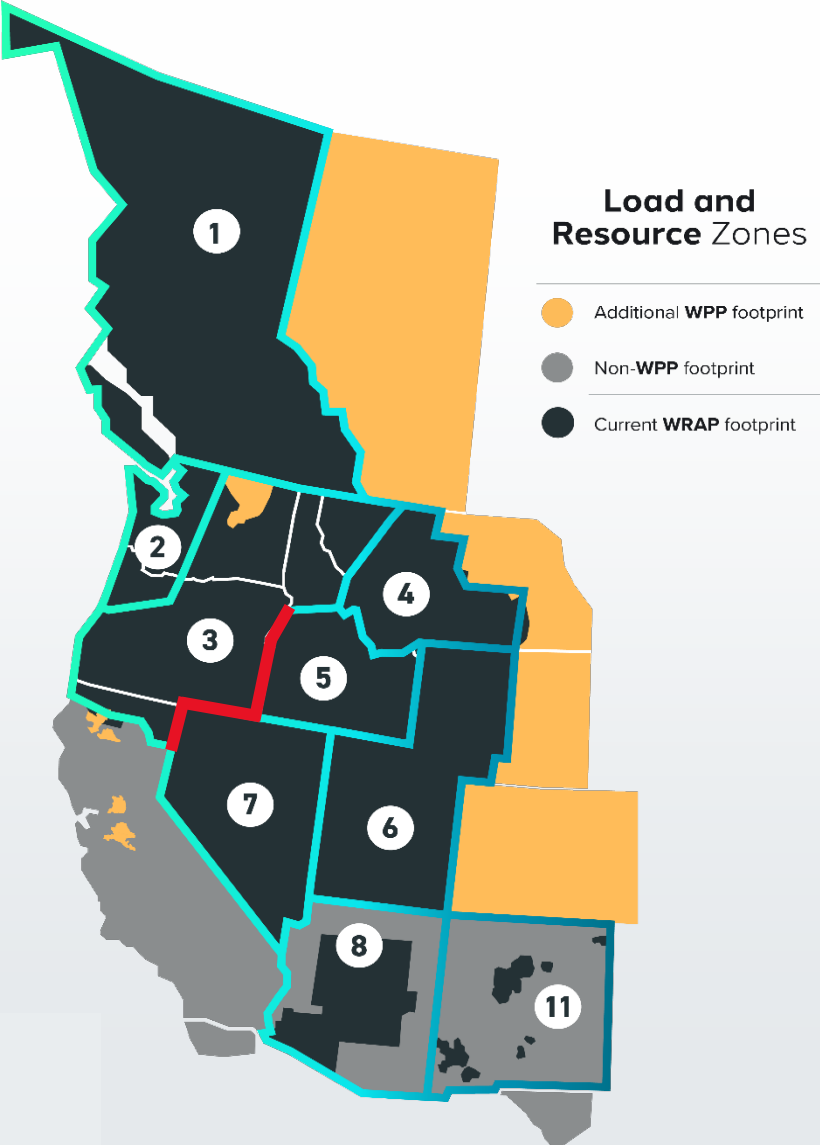
» Provide an overview of:

- the loads and resources in the WRAP Region
- installations and nameplate for wind and solar
- the Qualifying Capacity Contributions (QCC) and Effective Load Carrying Capability (ELCC) values for each resource type
- Forward Showing Planning Reserve Margin (FSPRM) values

REMINDERS

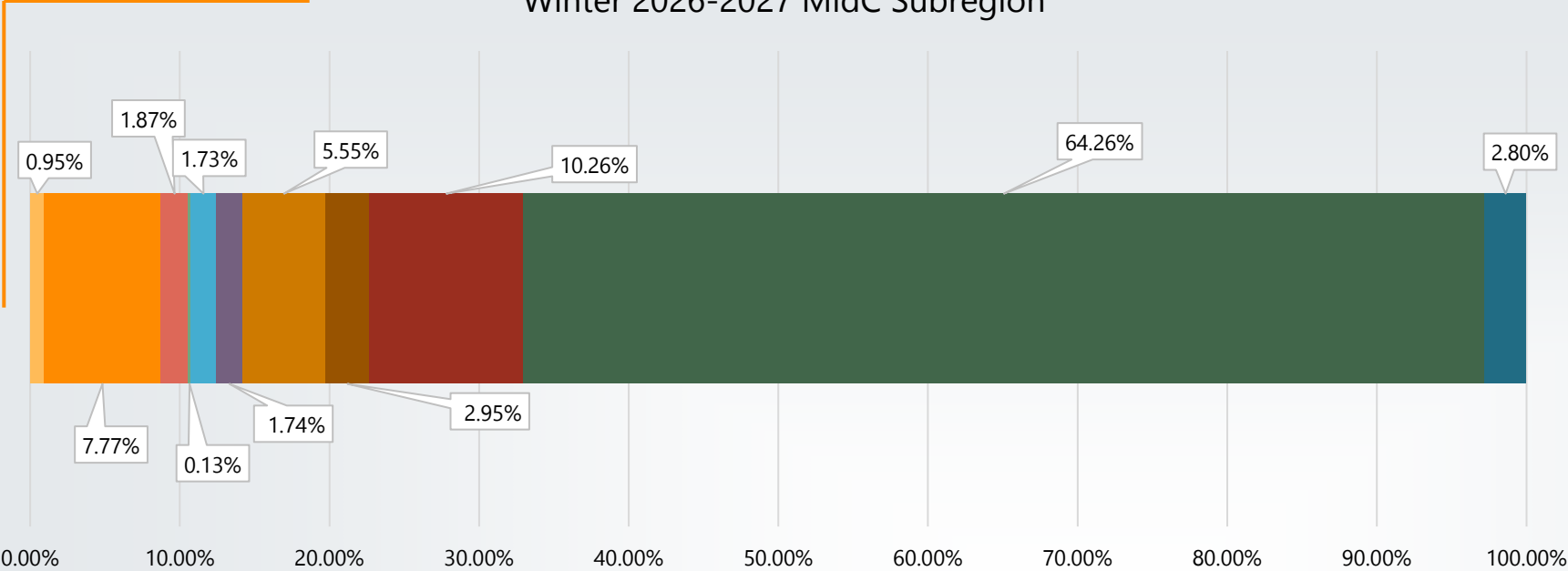
- » Modeling assumes full binding implementation of the WRAP design
 - Metrics assume diversity benefit and a level of forward procurement on aggregate that is not presently expected without binding implementation of the WRAP
- » Modeling was performed based on the WRAP Region in early 2024
 - These assessments cannot account for adequacy needs or activities of non-participating load or resources
- » Be aware of the limits of drawing regional conclusions from aggregate information
 - Information is best applied at the level of individual LREs; WRAP's scope does not include matching LREs in need of additional forward procurement with available resources
 - It cannot be assumed that all resources modeled in the loss of load expectation (LOLE) study will be available to the WRAP Region
 - Planned outages are not considered; they will be managed by LREs from any surplus

LOAD AND RESOURCE ZONES

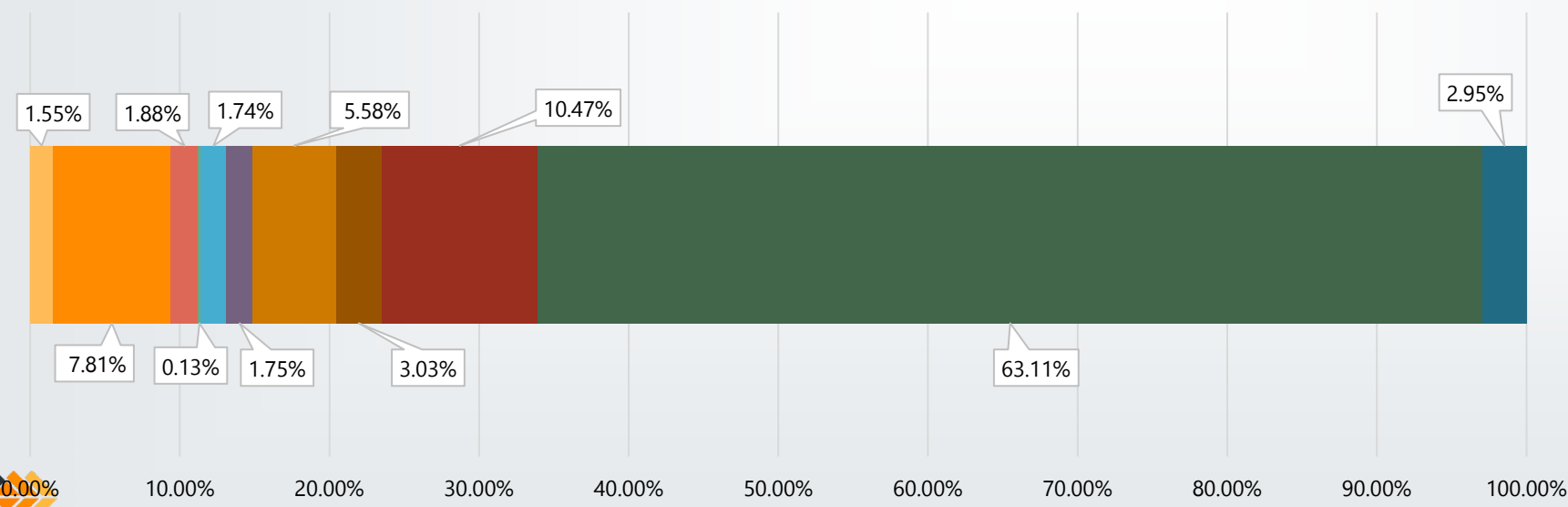


Subregion	Zone	Geographical Description
MidC	Zone 1	British Columbia
	Zone 2	West of Cascades
	Zone 3	East of Cascades
	Zone 4	NorthWestern
SWEDE	Zone 5	Idaho Power
	Zone 6	PacifiCorp East
	Zone 7	Nevada
	Zone 8	Arizona
	Zone 11	New Mexico

Winter 2026-2027 MidC Subregion



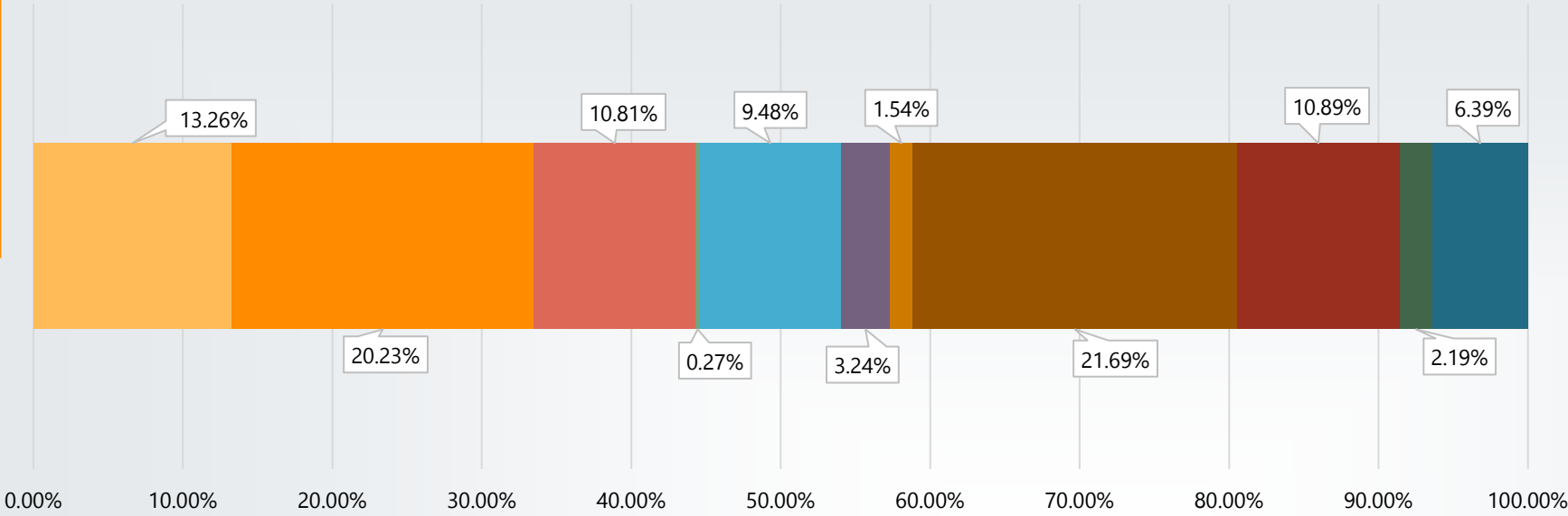
Winter 2029-2030 MidC Subregion



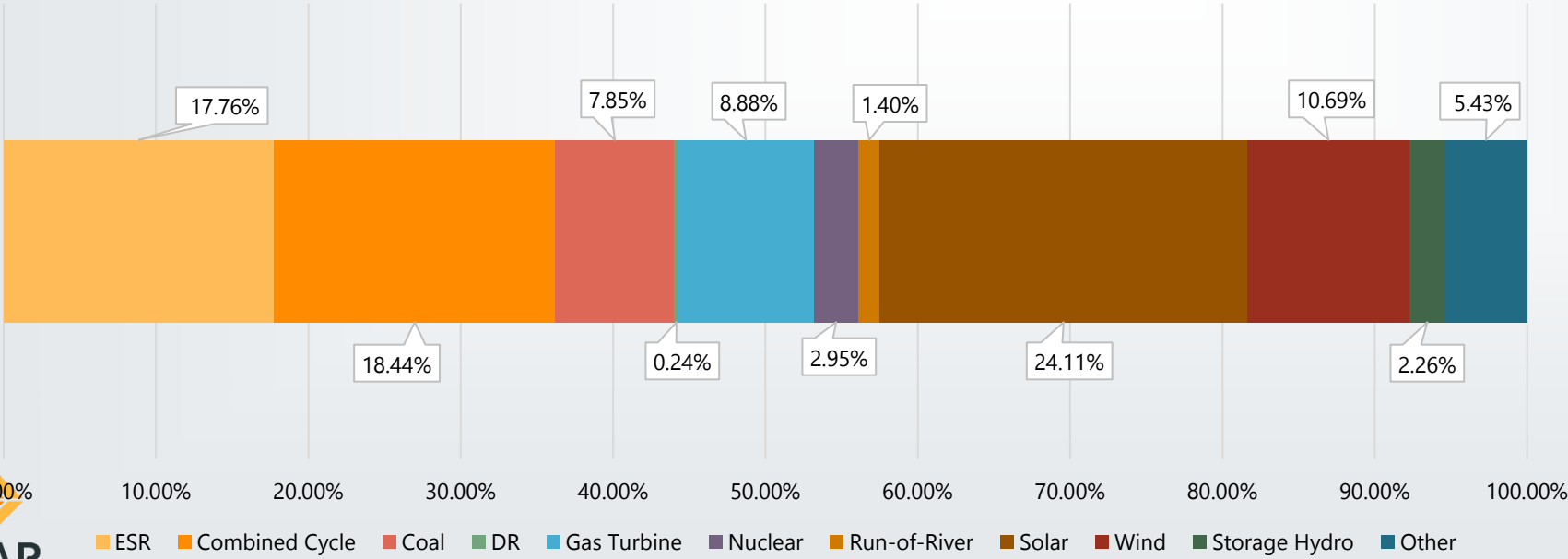
MIDC SUBREGION WINTERS

Percentage

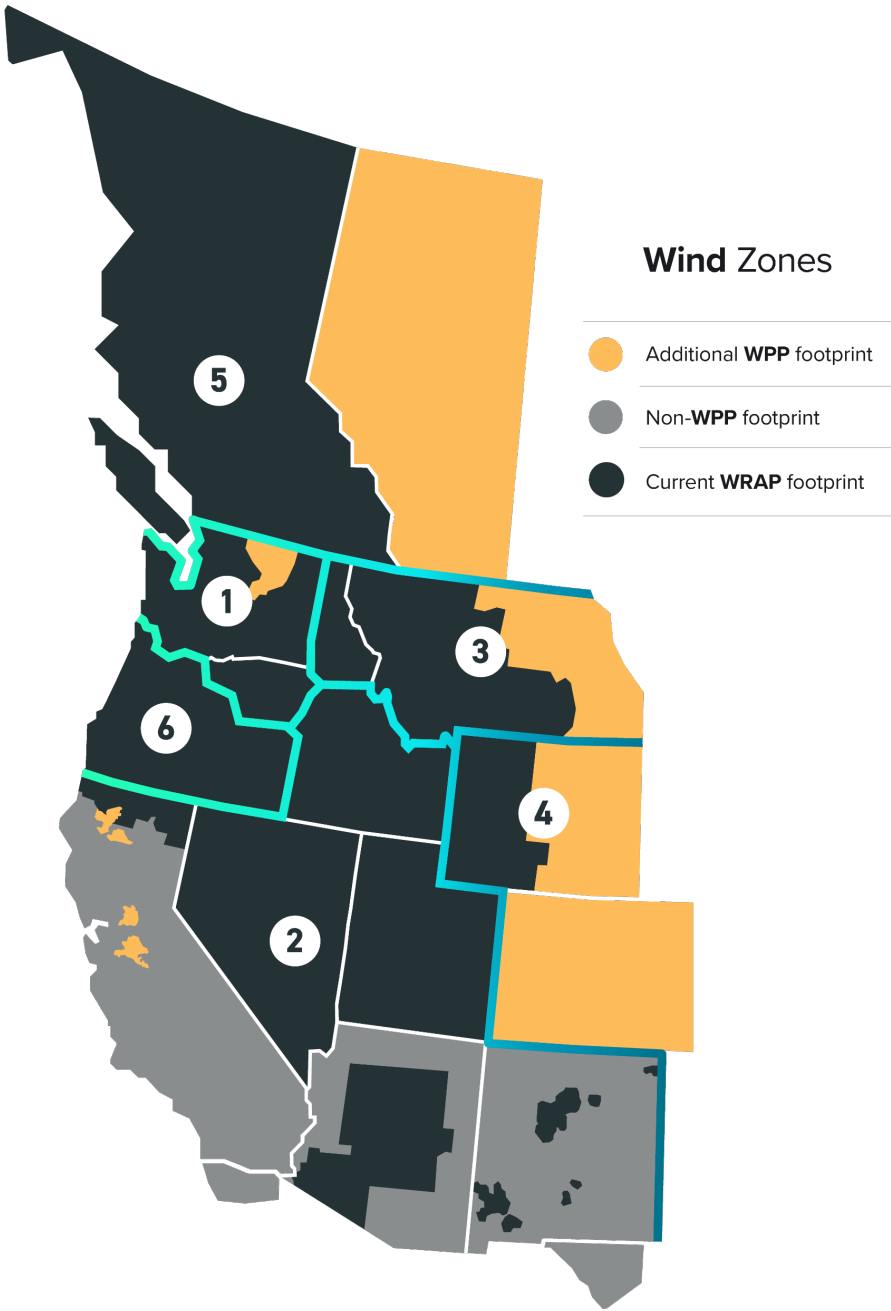
Winter 2026-2027 SWEDE Subregion



Winter 2029-2030 SWEDE Subregion



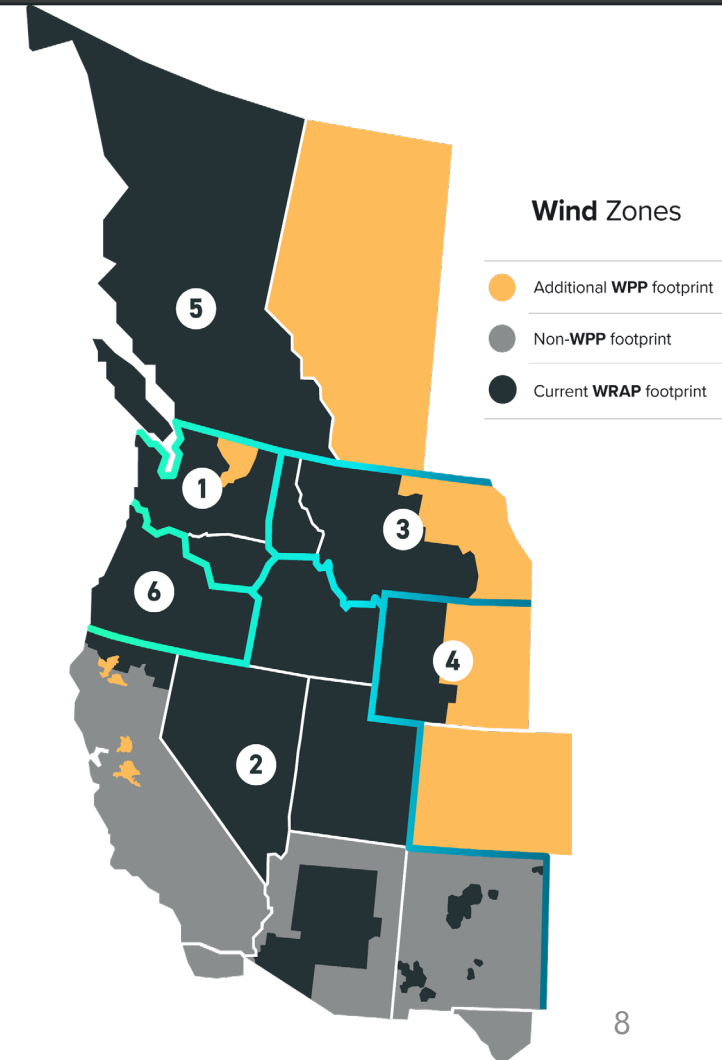
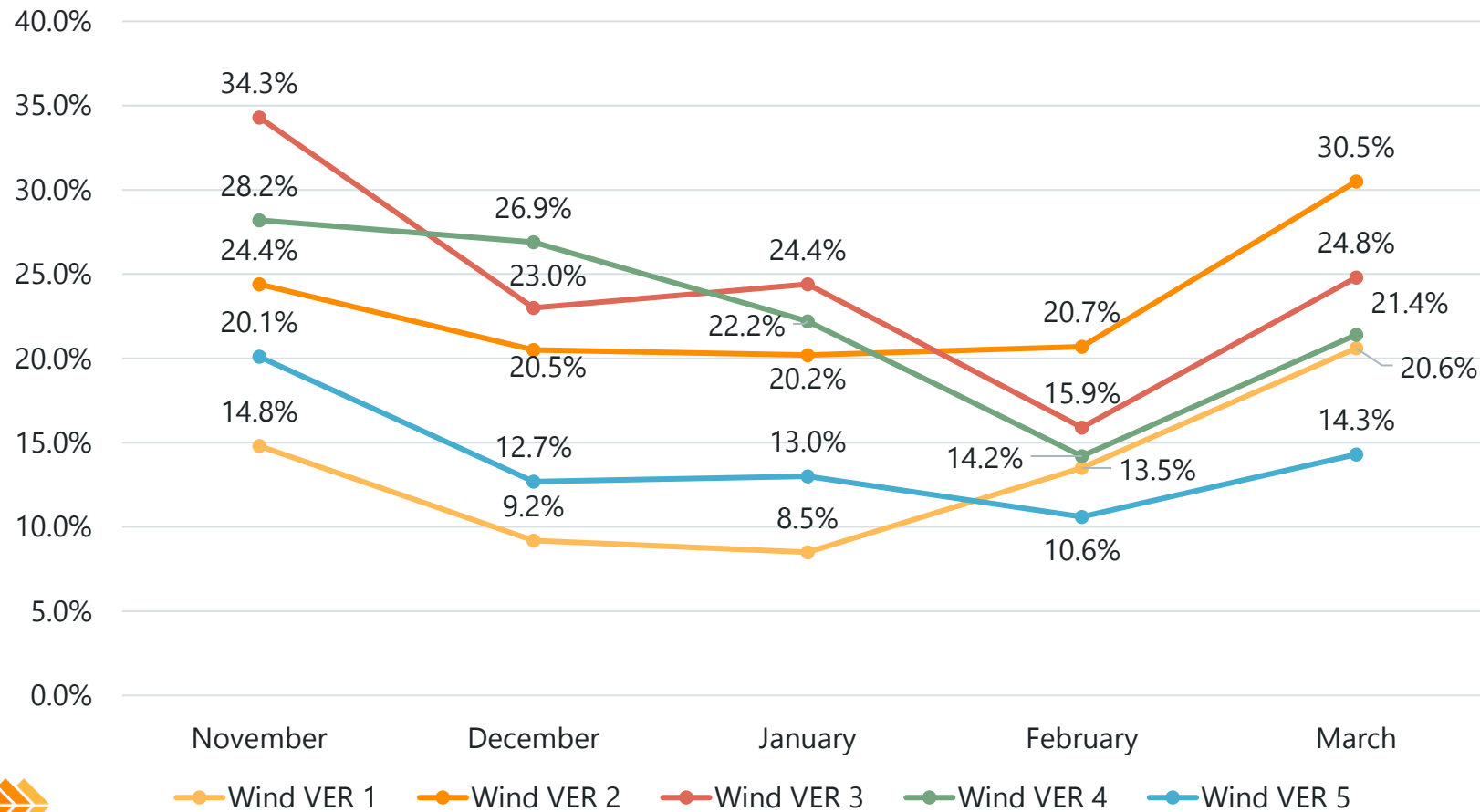
SWEDE SUBREGION WINTERS *Percentage*



WIND ZONES

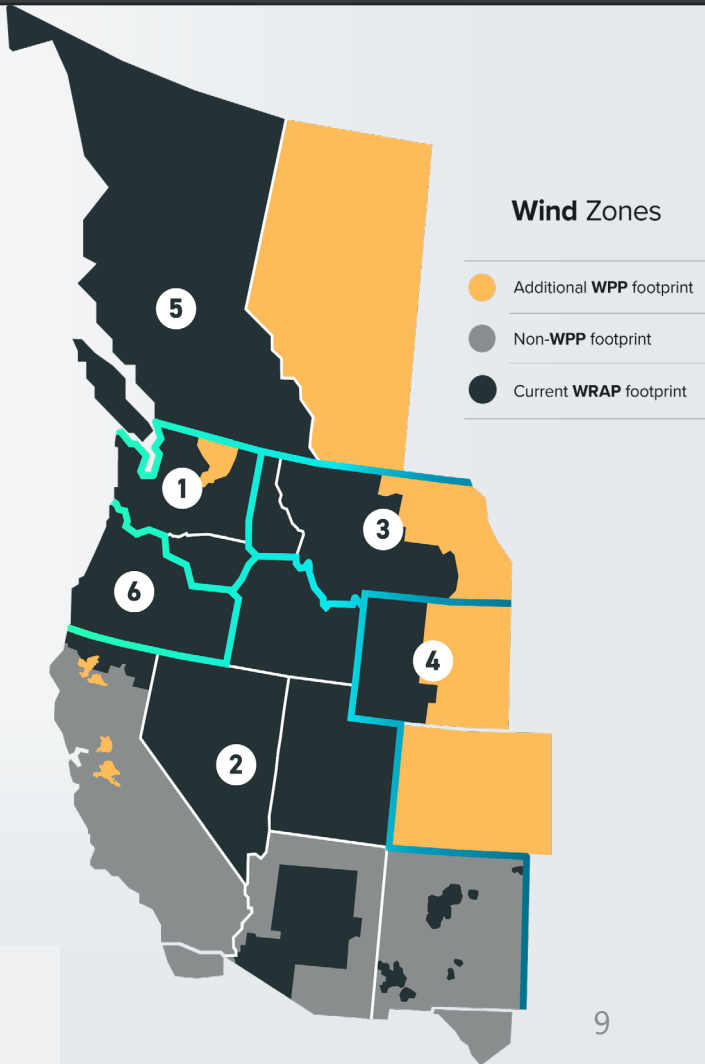
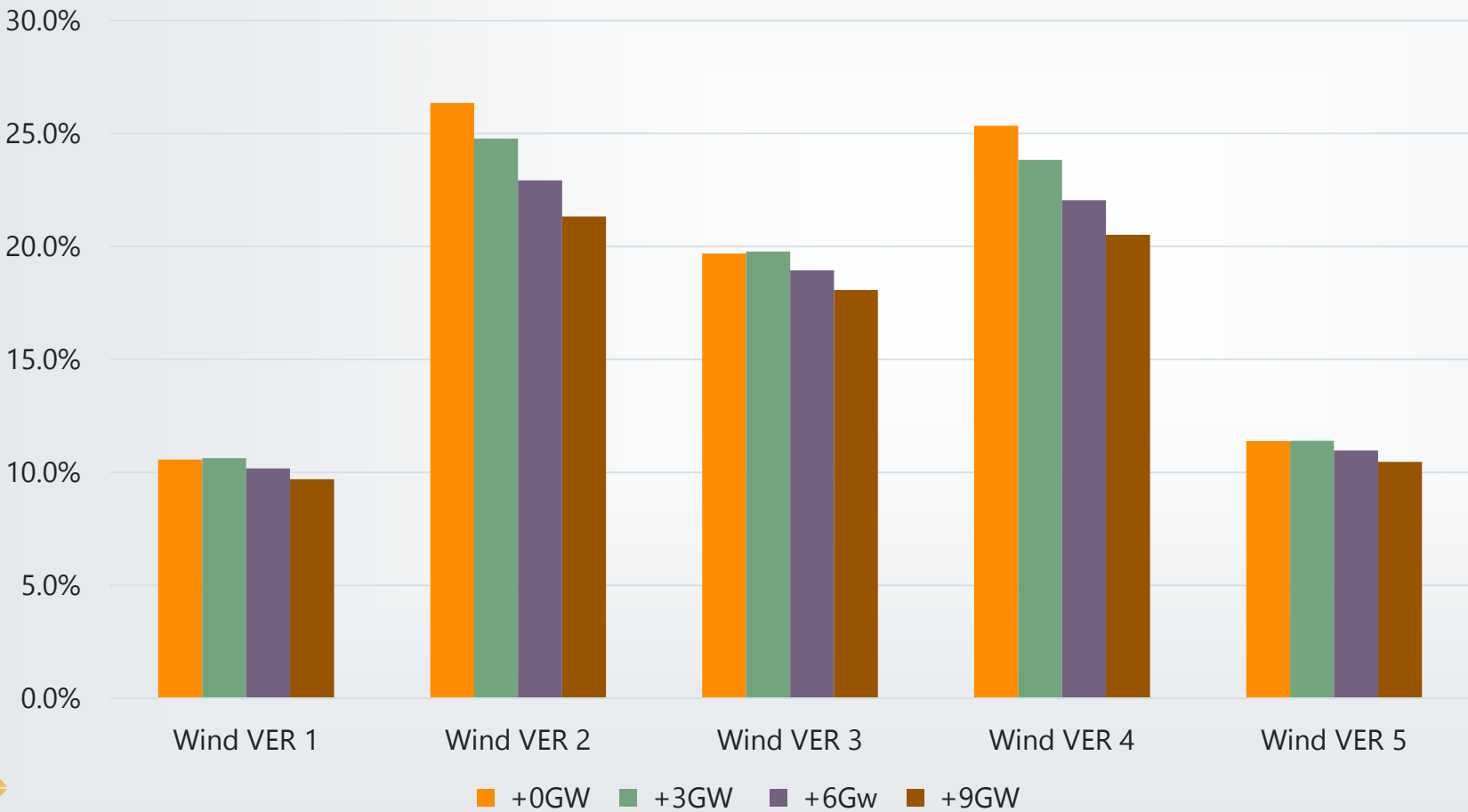
Zone	Nameplate Capacity (MW)
Wind VER1	4,825
Wind VER2	3,454
Wind VER3	1,544
Wind VER4	4,120
Wind VER5	747
Wind VER6	No wind
Total	14,690

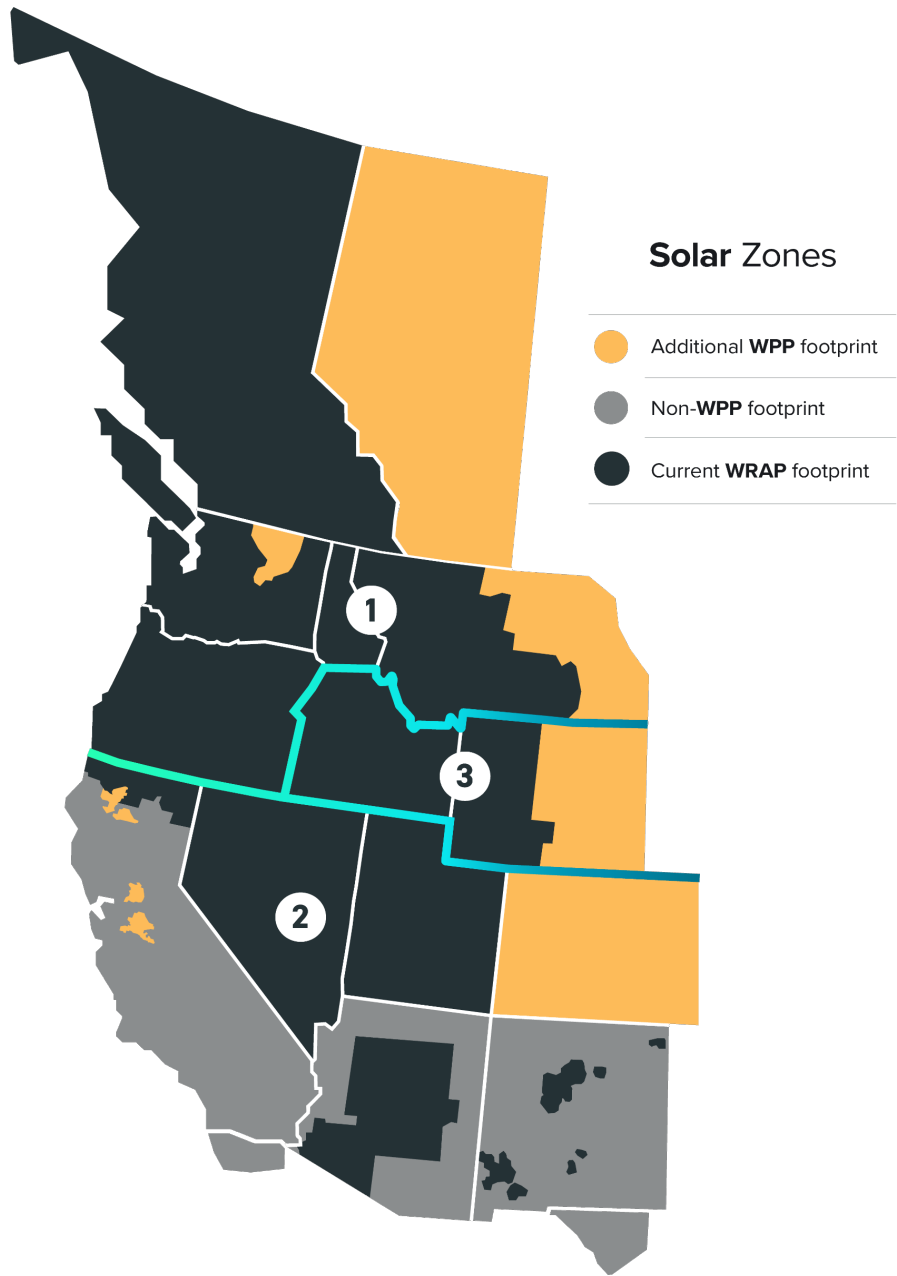
WIND ELCC - WINTER



WIND ELCC

WIND AT INCREMENTAL GW INSTALLATIONS

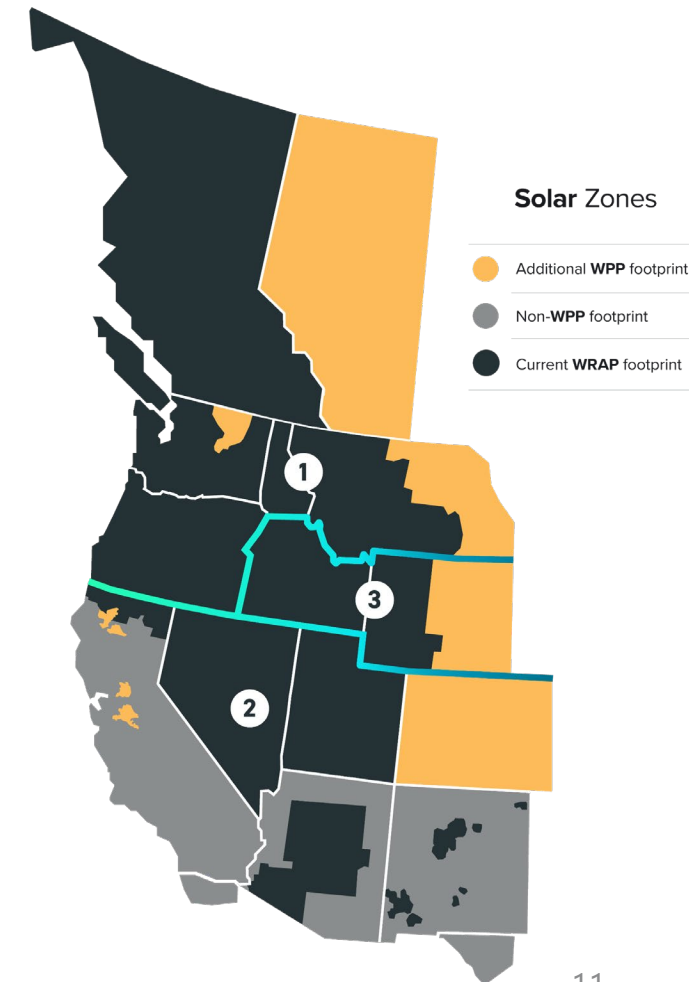
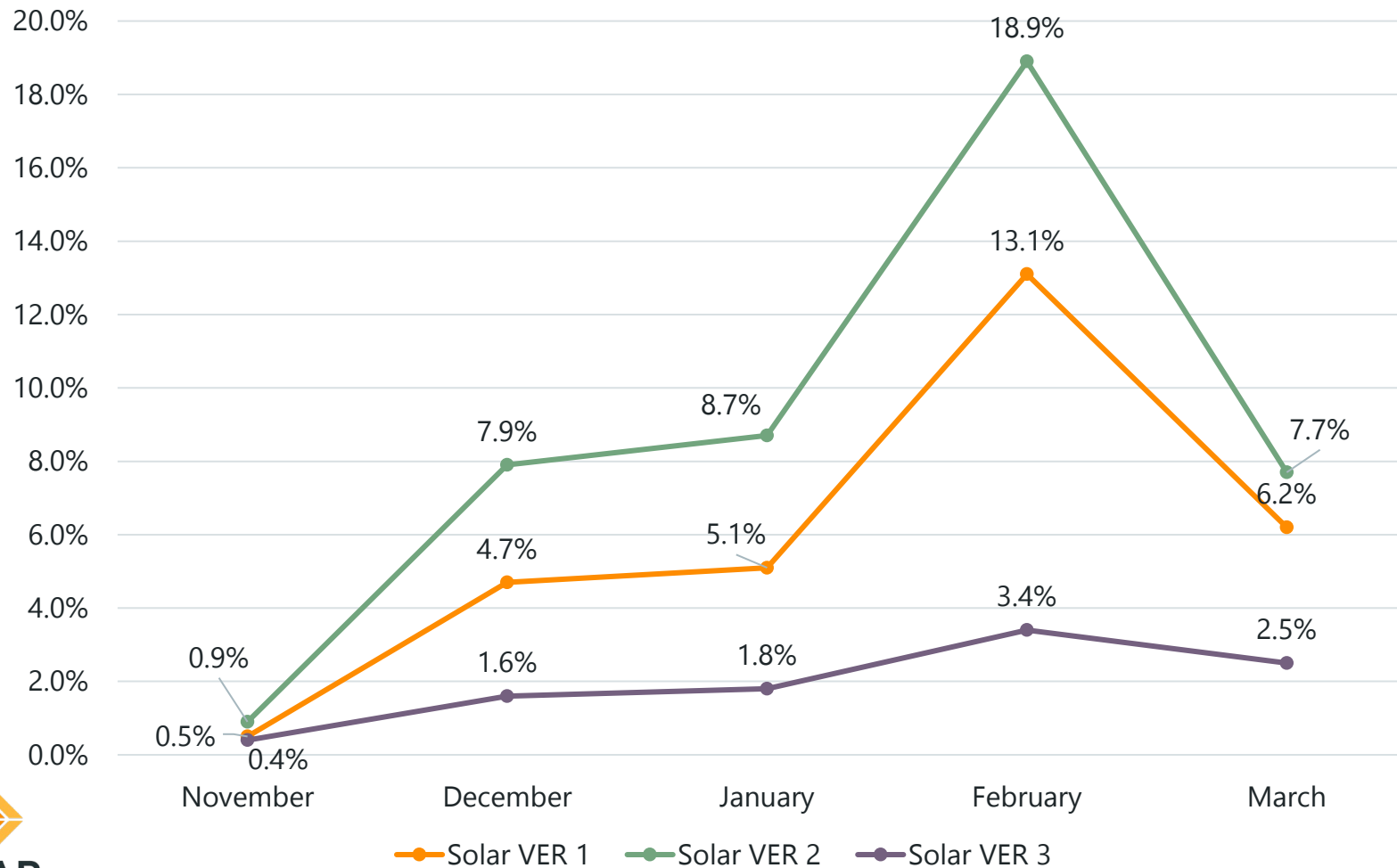




SOLAR ZONES

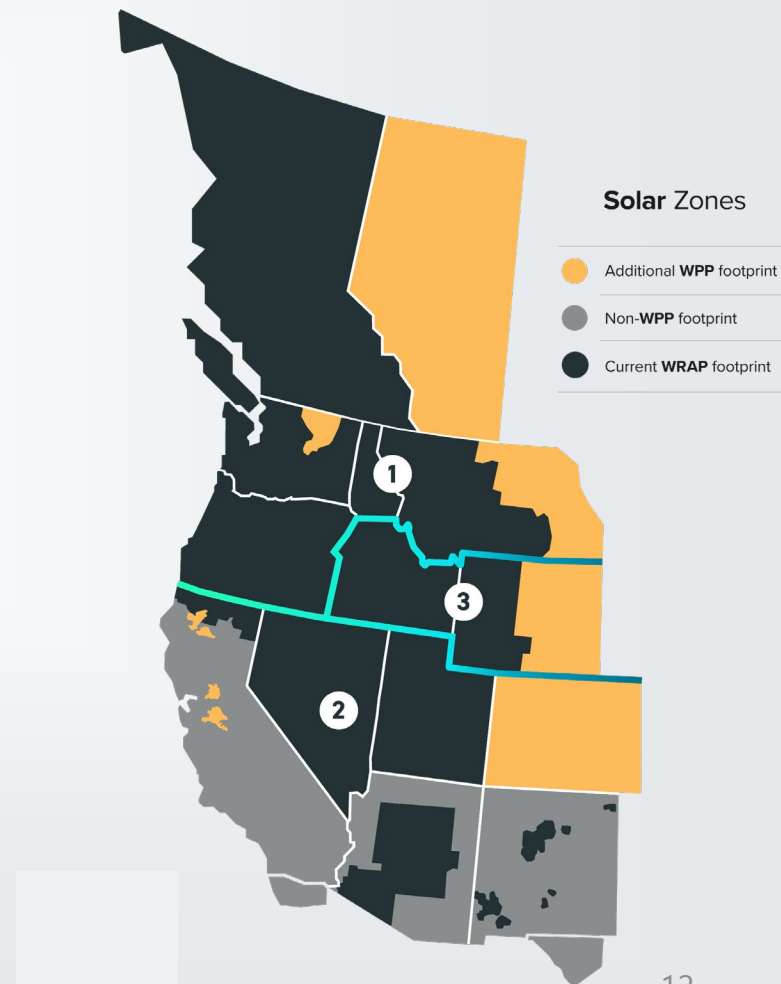
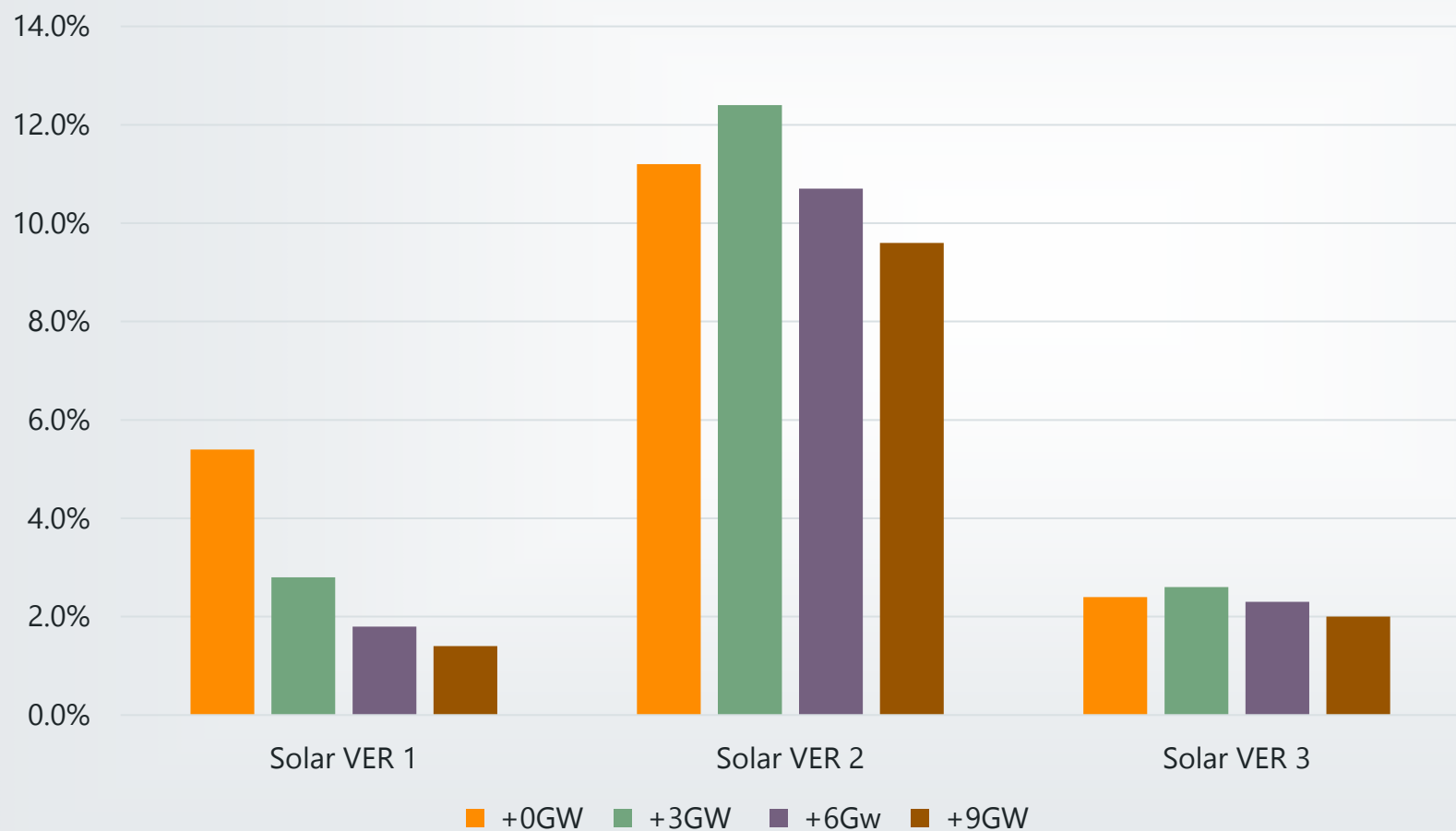
Zone	Nameplate Capacity (MW)
Solar VER1	2,046
Solar VER2	14,111
Solar VER3	969
Total	17,126

SOLAR ELCC - WINTER

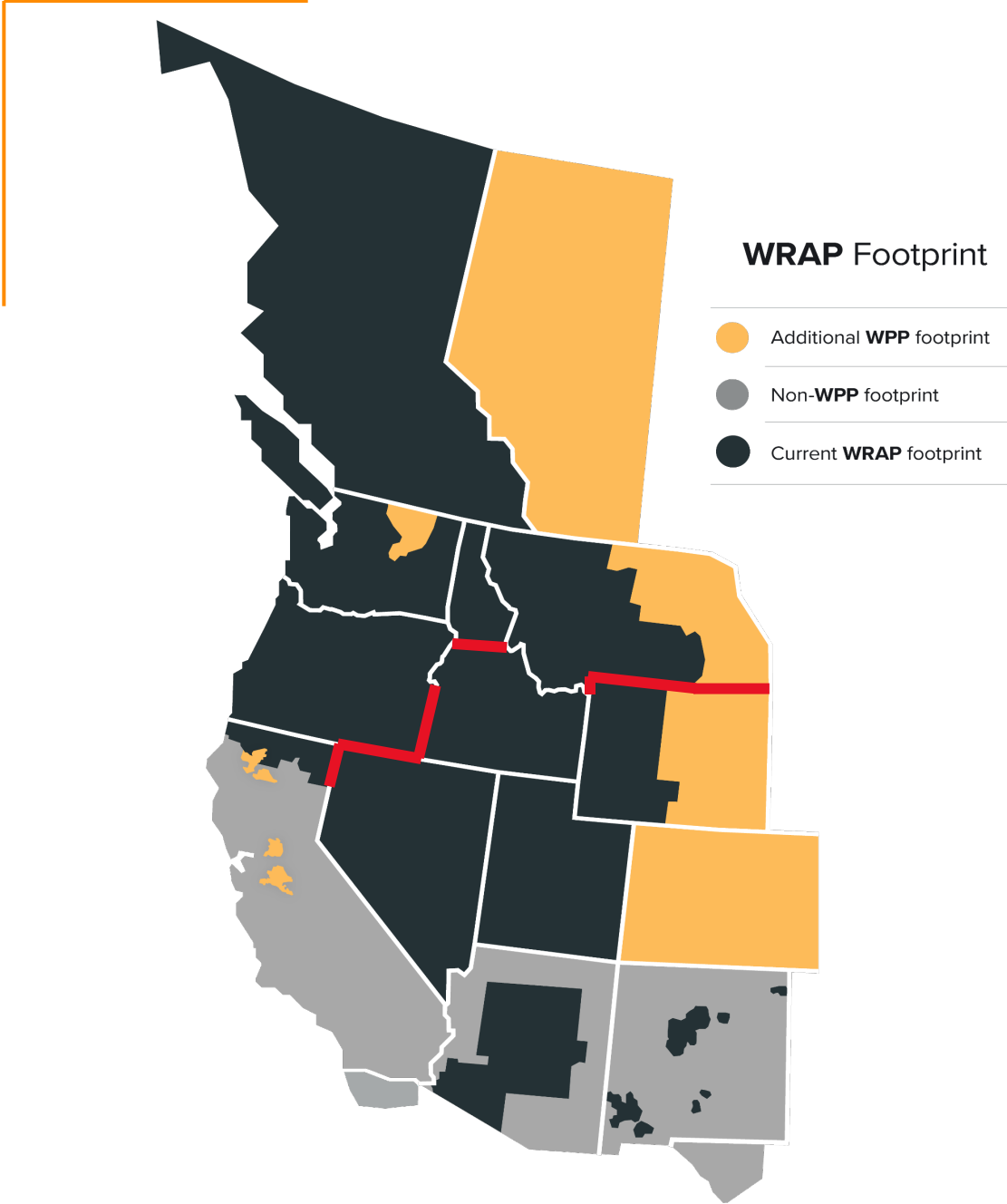


SOLAR ELCC

SOLAR AT INCREMENTAL GW INSTALLATIONS

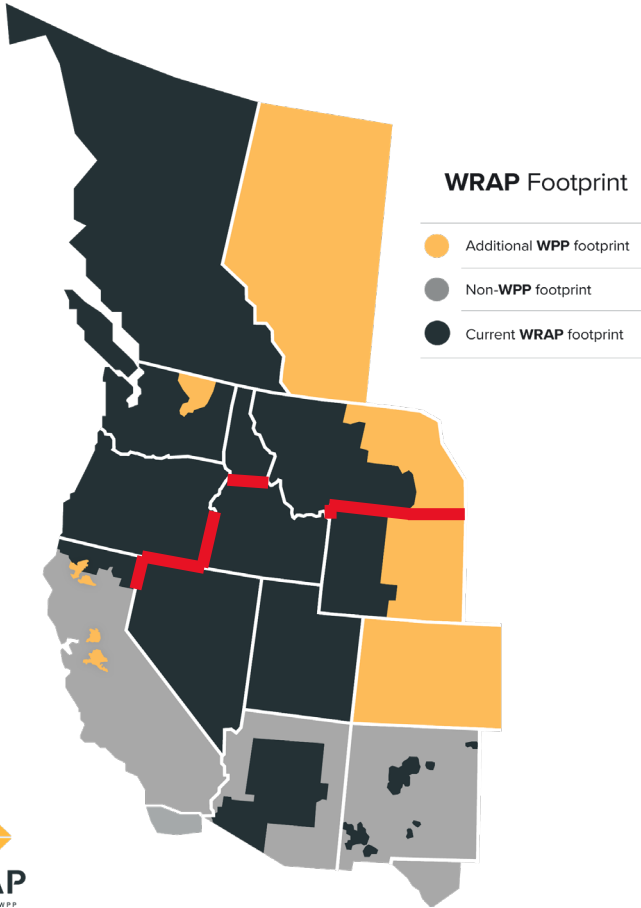
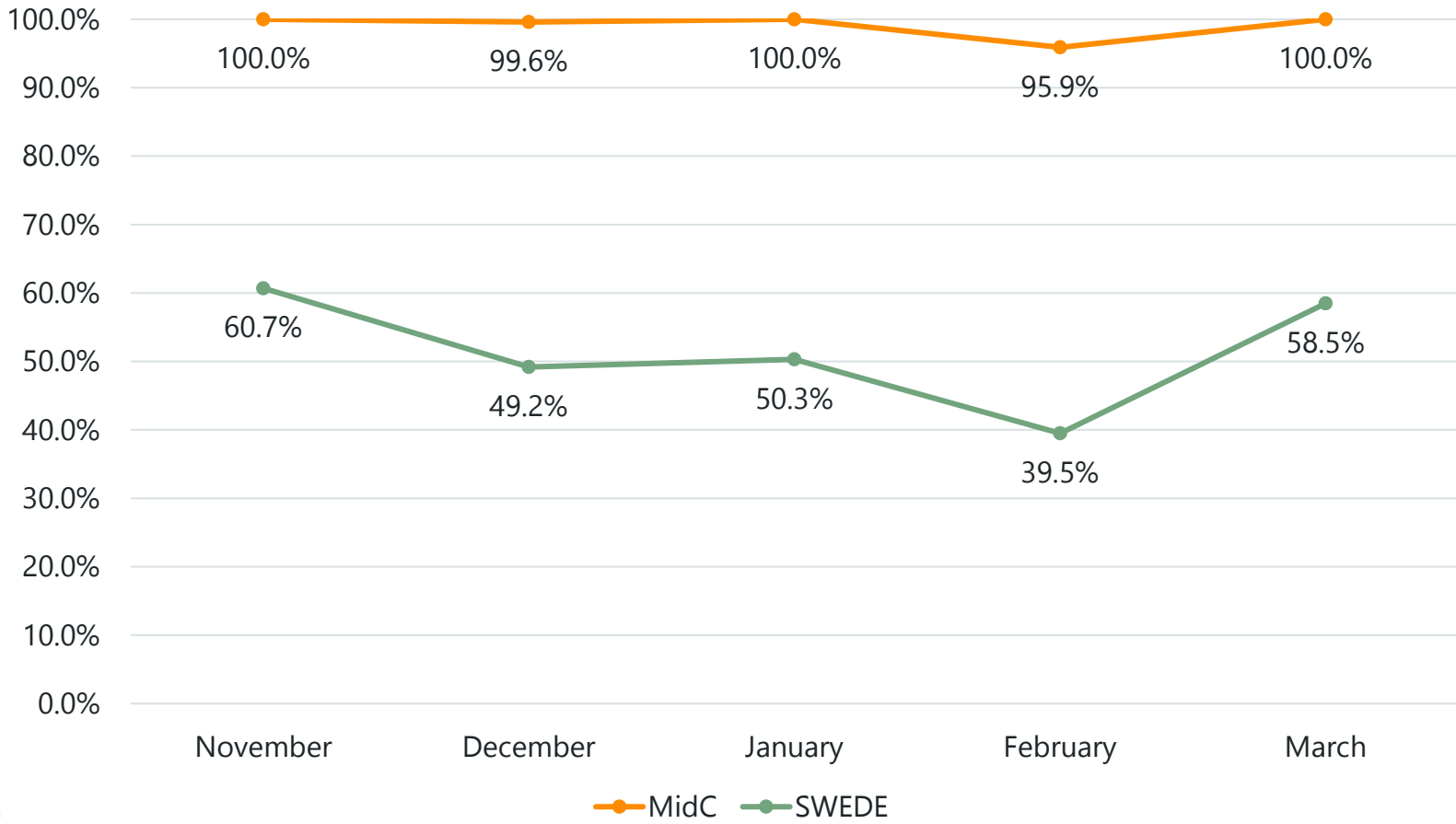


ENERGY STORAGE RESOURCE (ESR) ZONES



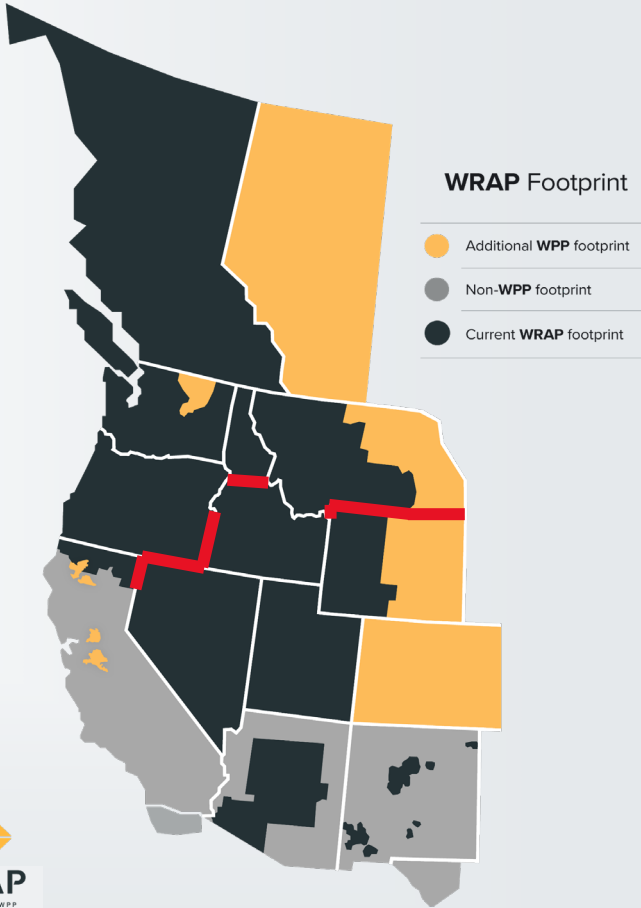
Subregion	Nameplate Capacity (MW)
MidC	658
SWEDE	9,220
Total	9,878

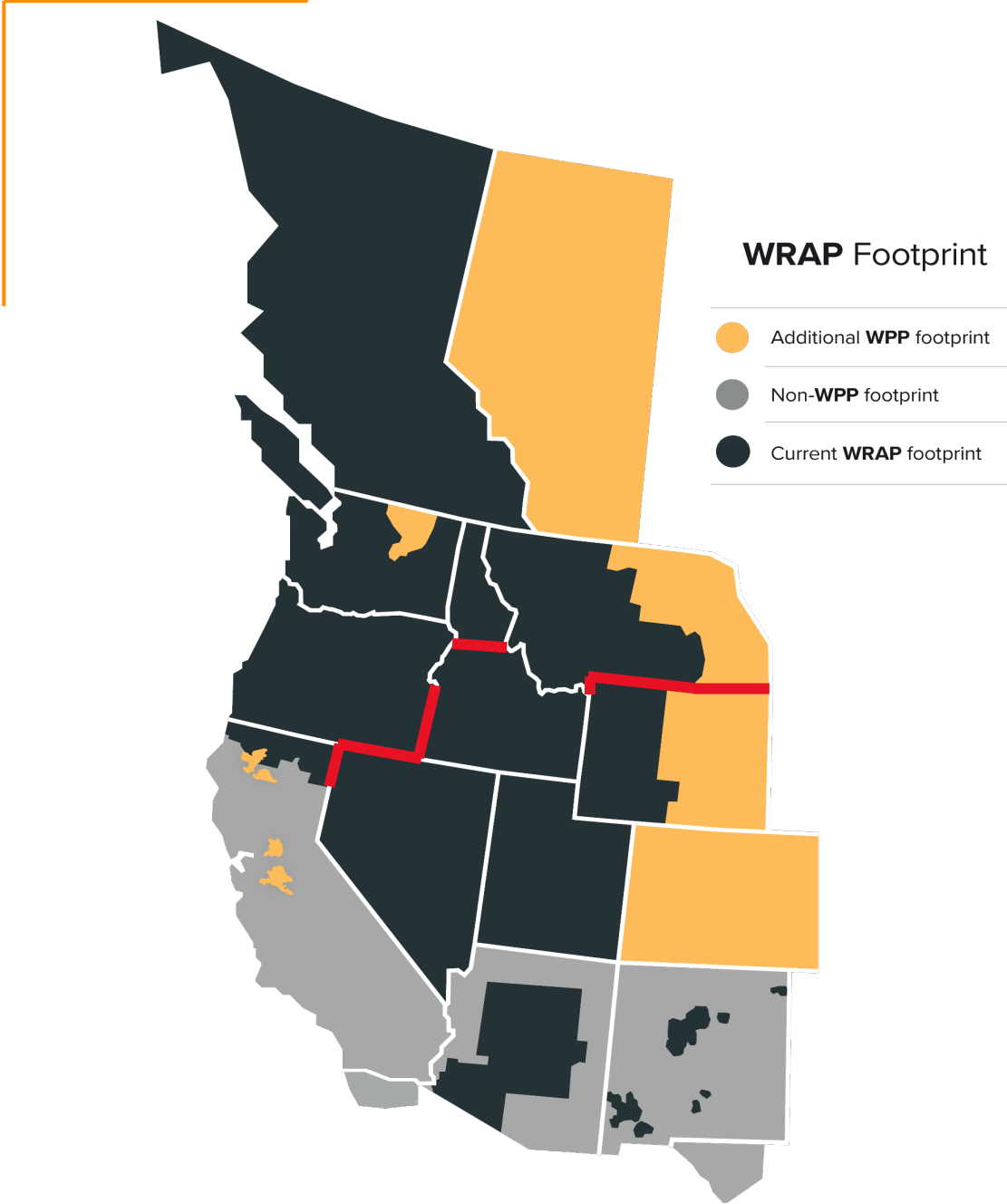
ESR ELCC - WINTER



ESR ELCC

ESR AT INCREMENTAL GW INSTALLATIONS

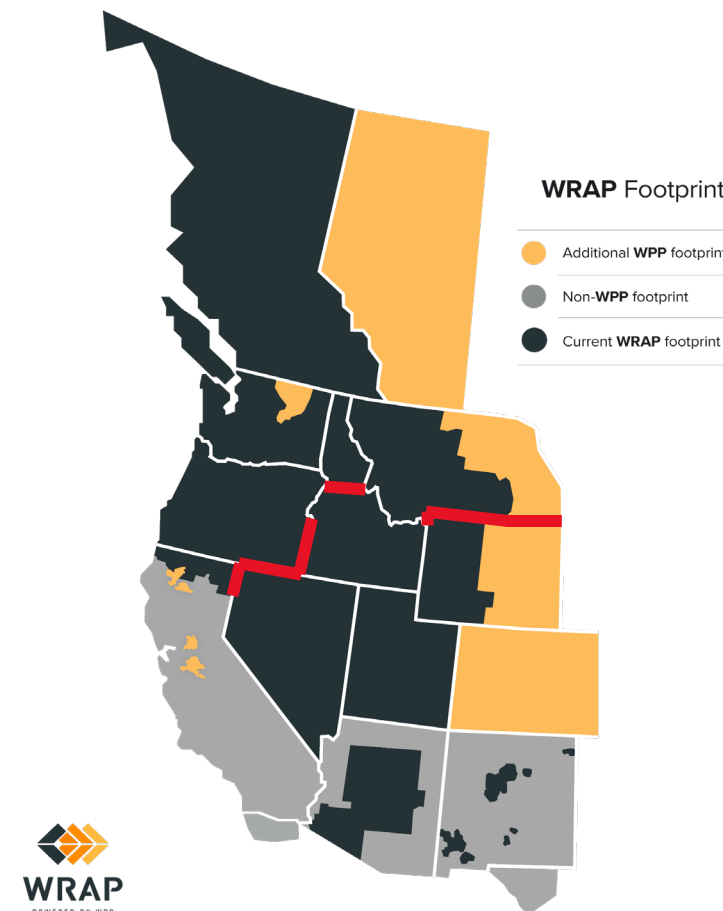
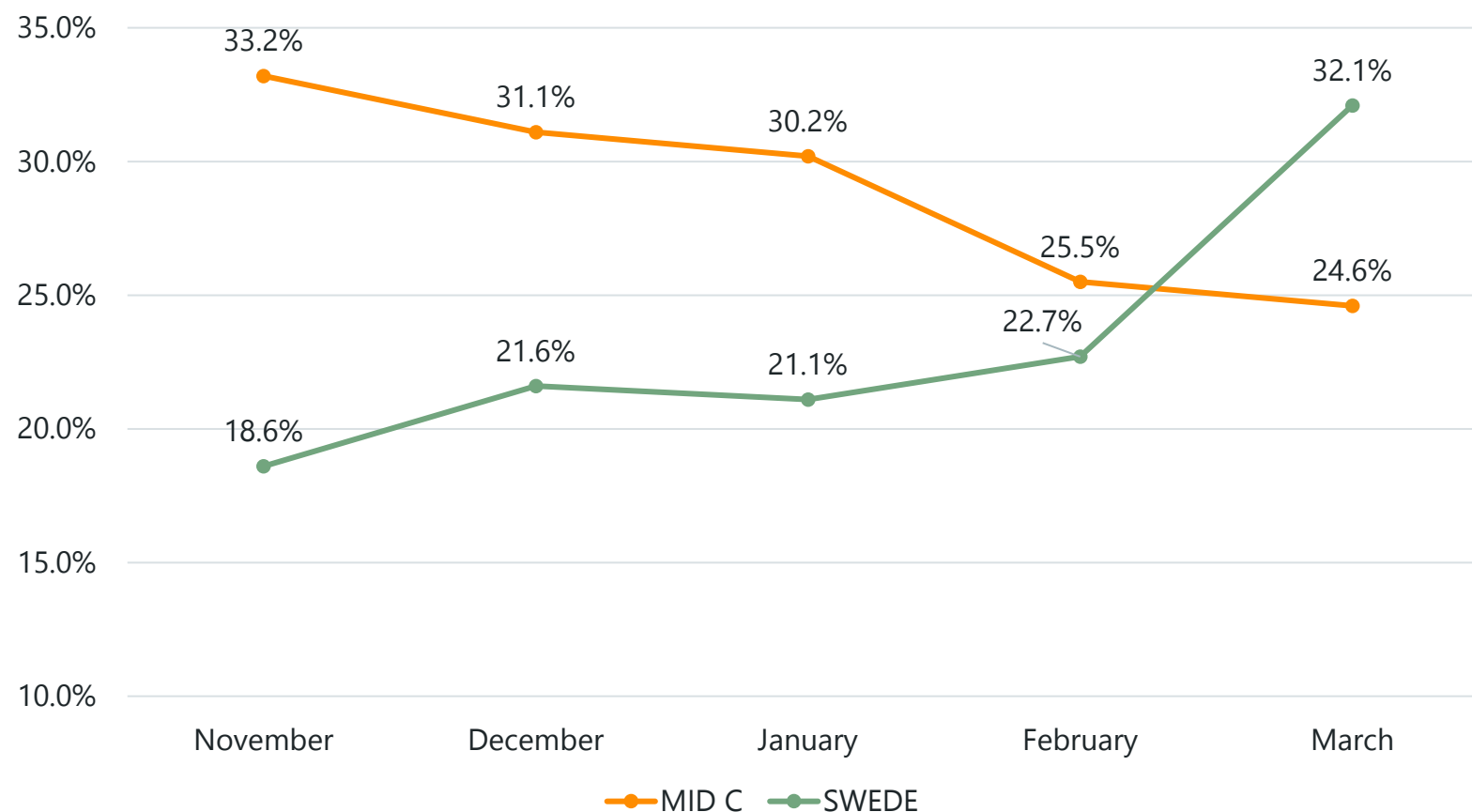




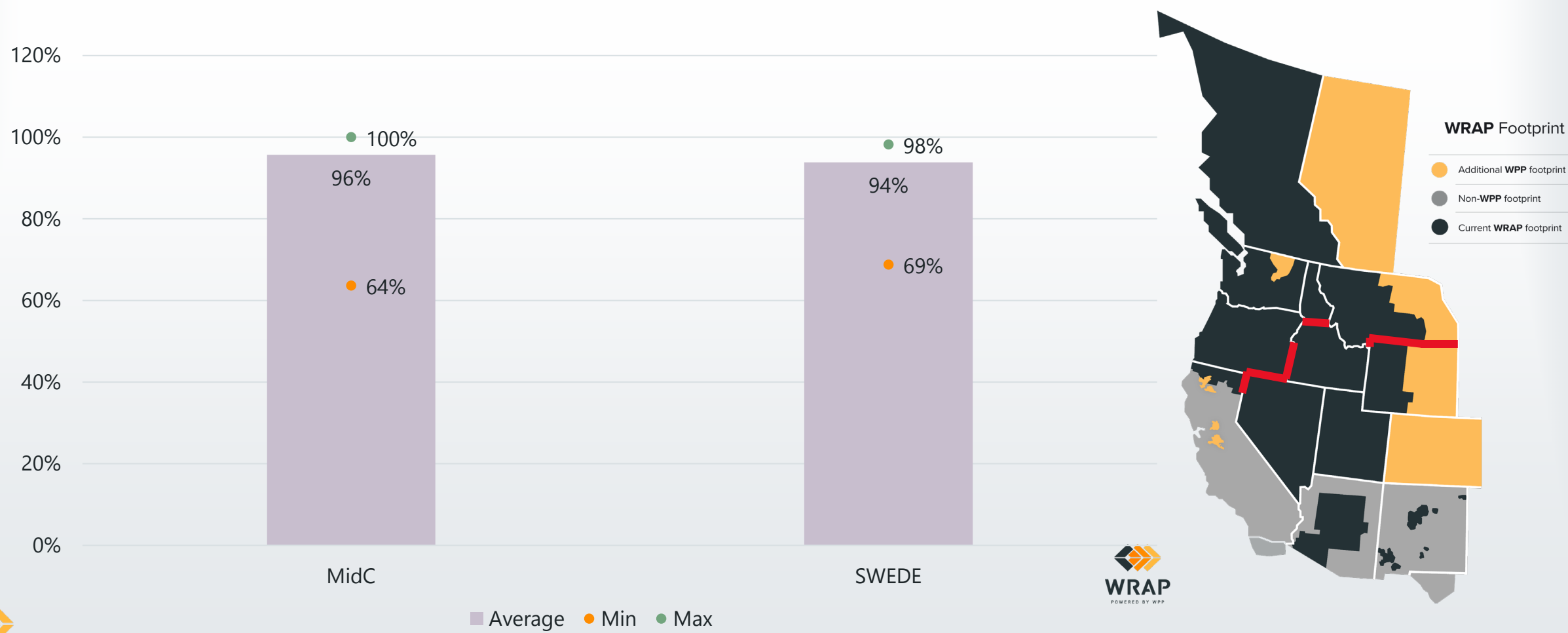
RUN OF RIVER (RoR) ZONES

Subregion	Nameplate Capacity (MW)
MidC	3,847
SWEDE	1,067
Total	4,920

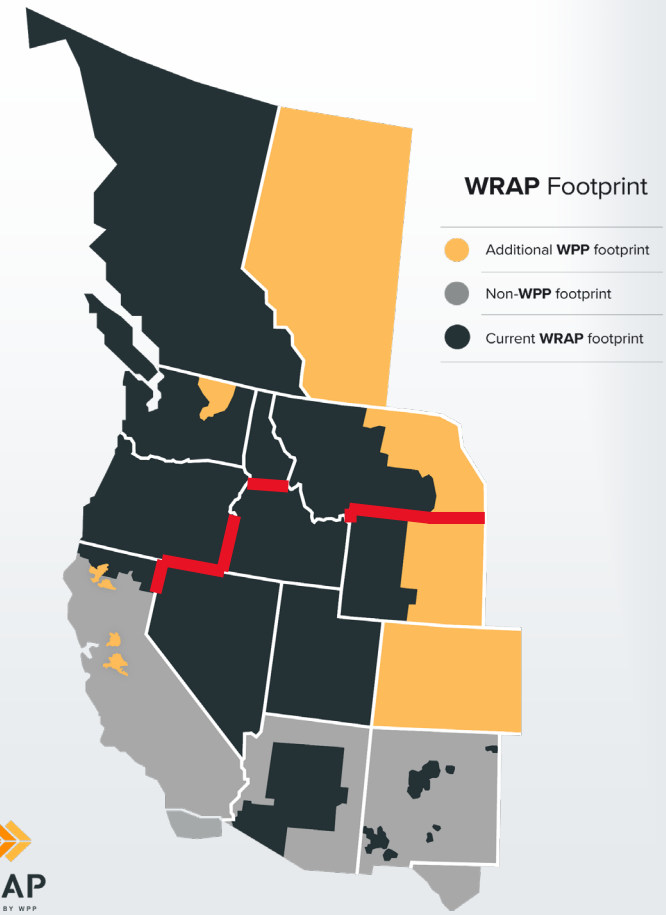
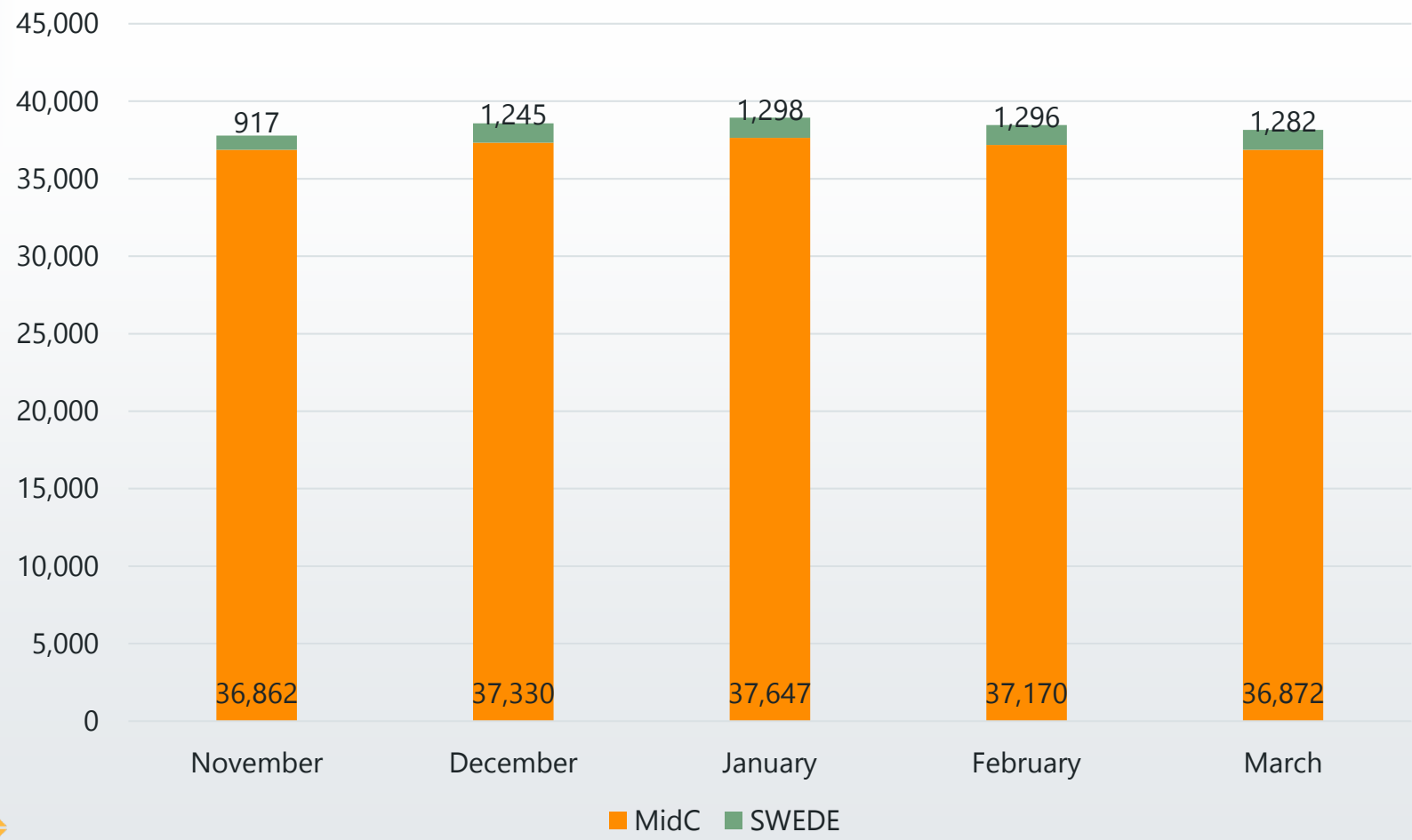
RoR QCC - WINTER



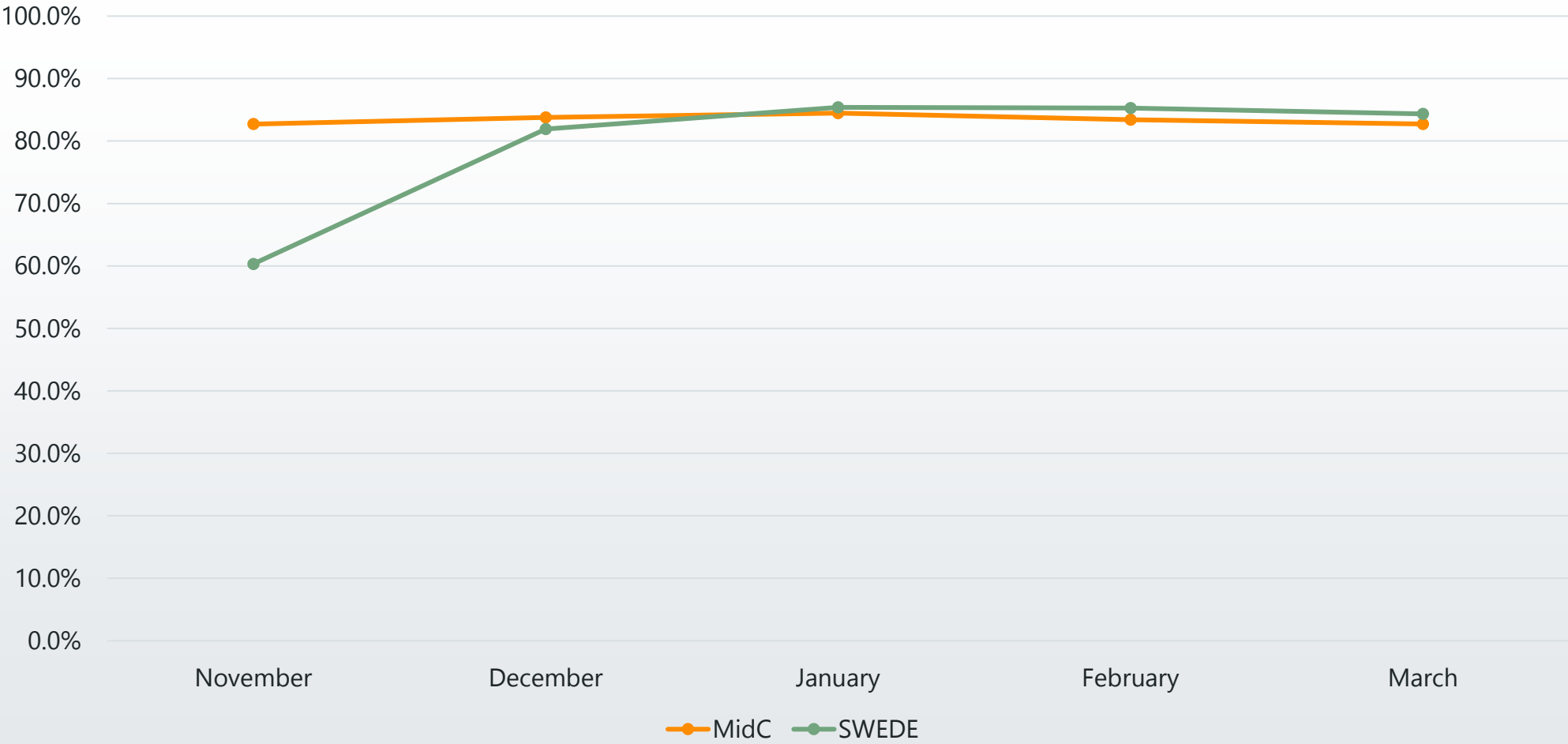
THERMAL QCC



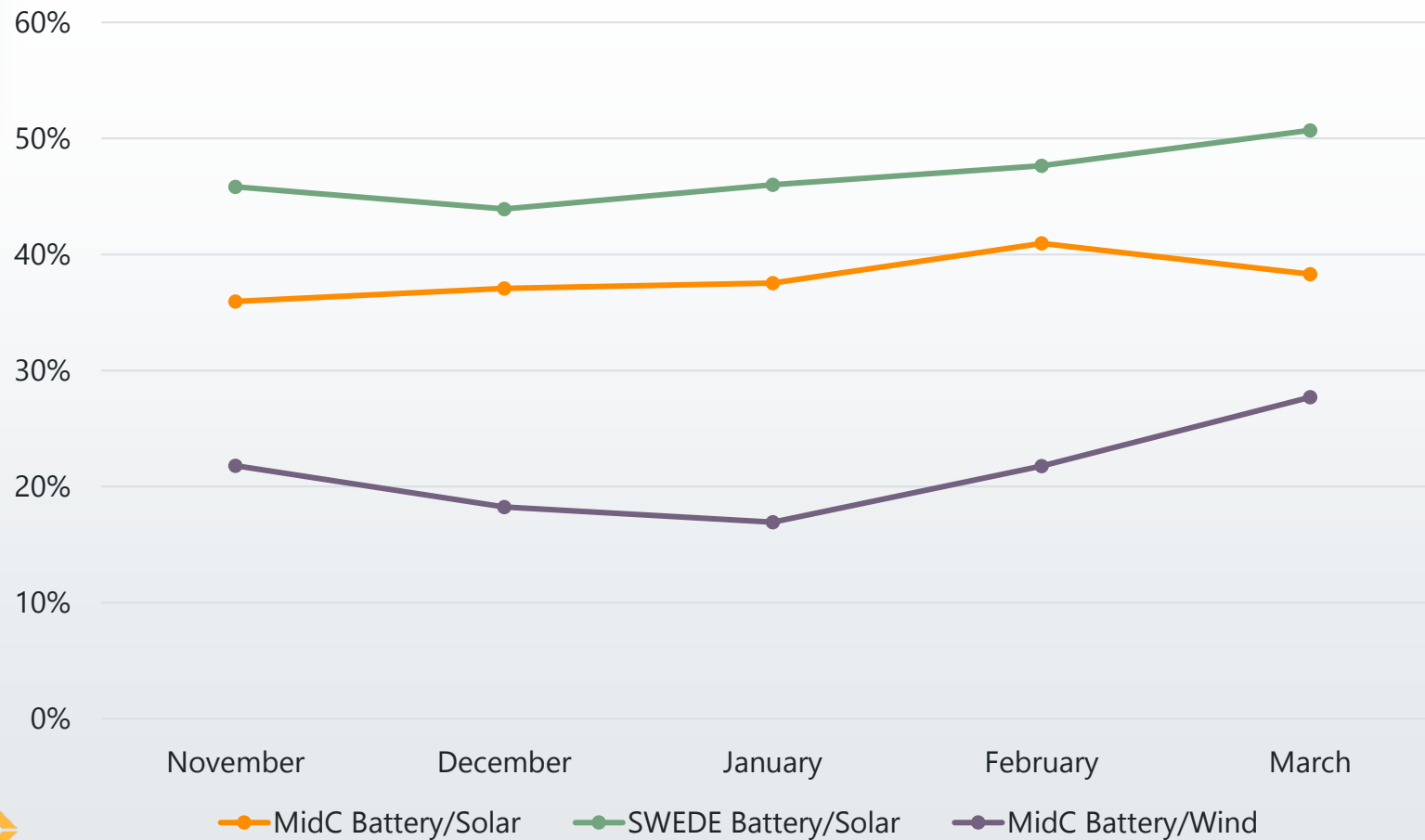
STORAGE HYDRO QCC MW



AVERAGE STORAGE HYDRO QCC



HYBRID RESOURCE QCC



Number of installed pairings

	MidC	SWEDE
Battery/ Solar	4	48
Battery/ Wind	1	0

PRM CONSIDERATIONS

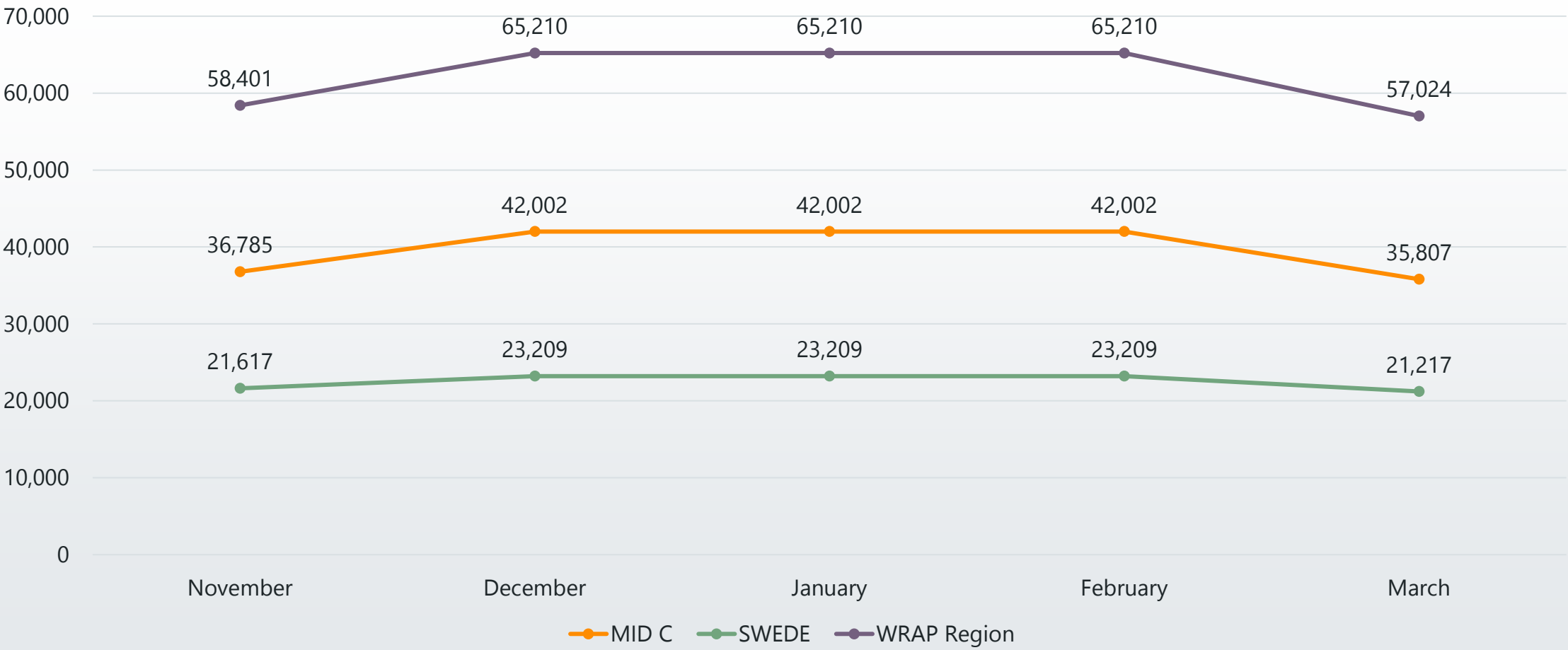
PRM Methodology

- » Maintain 0.1 LOLE across the season
- » Minimum of 0.01 LOLE in each individual month
- » NCP load for a given month a significant factor in calculation of PRM (lower load months will have higher PRM value)

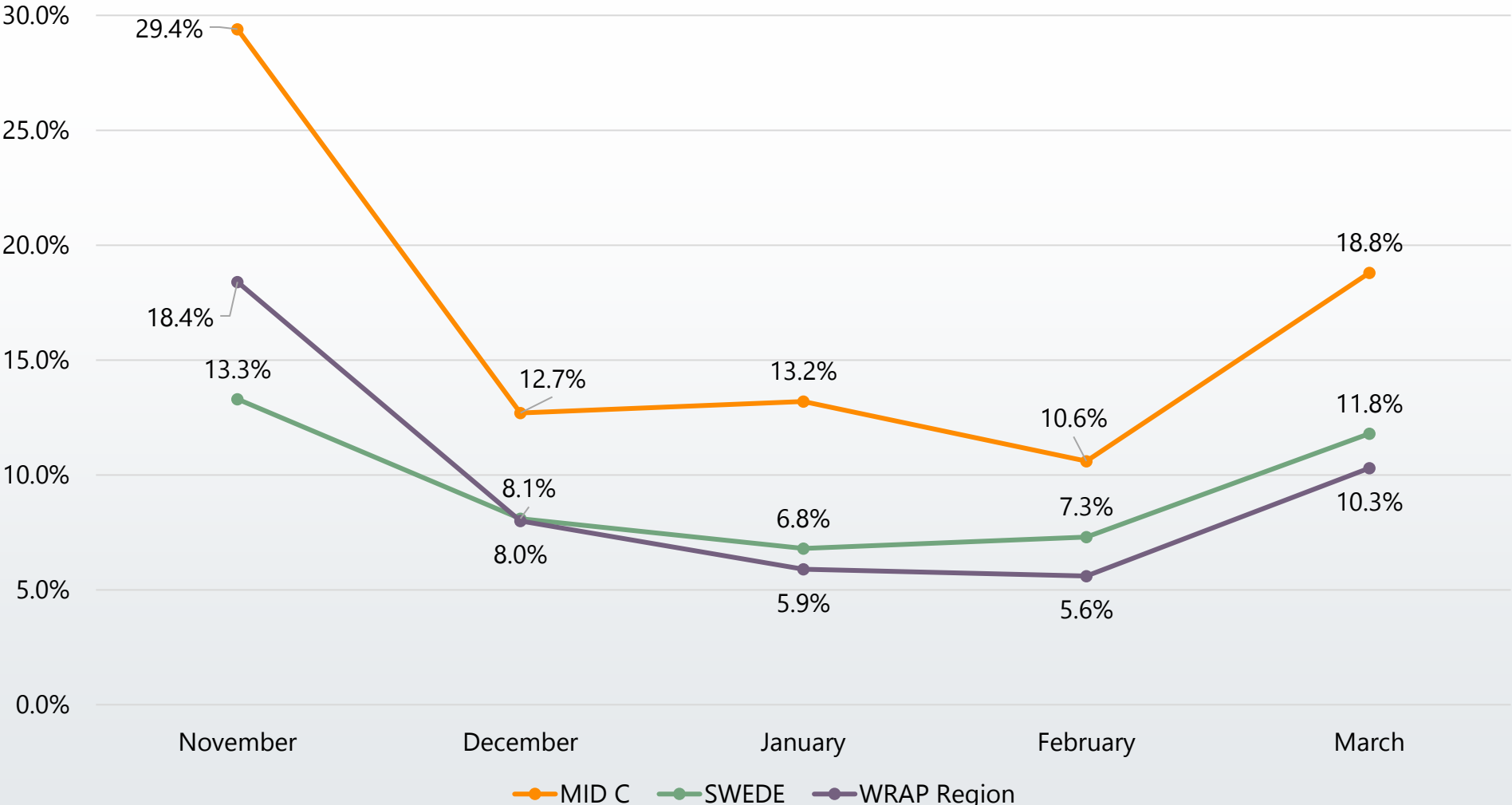
Based on Revised Transition Plan approved by Board Sept 19, 2024

- » PRM calculation includes 500 MW of diversity sharing between Subregions **benefitting NW in Winter** (*SW in Summer*)

PEAK LOAD

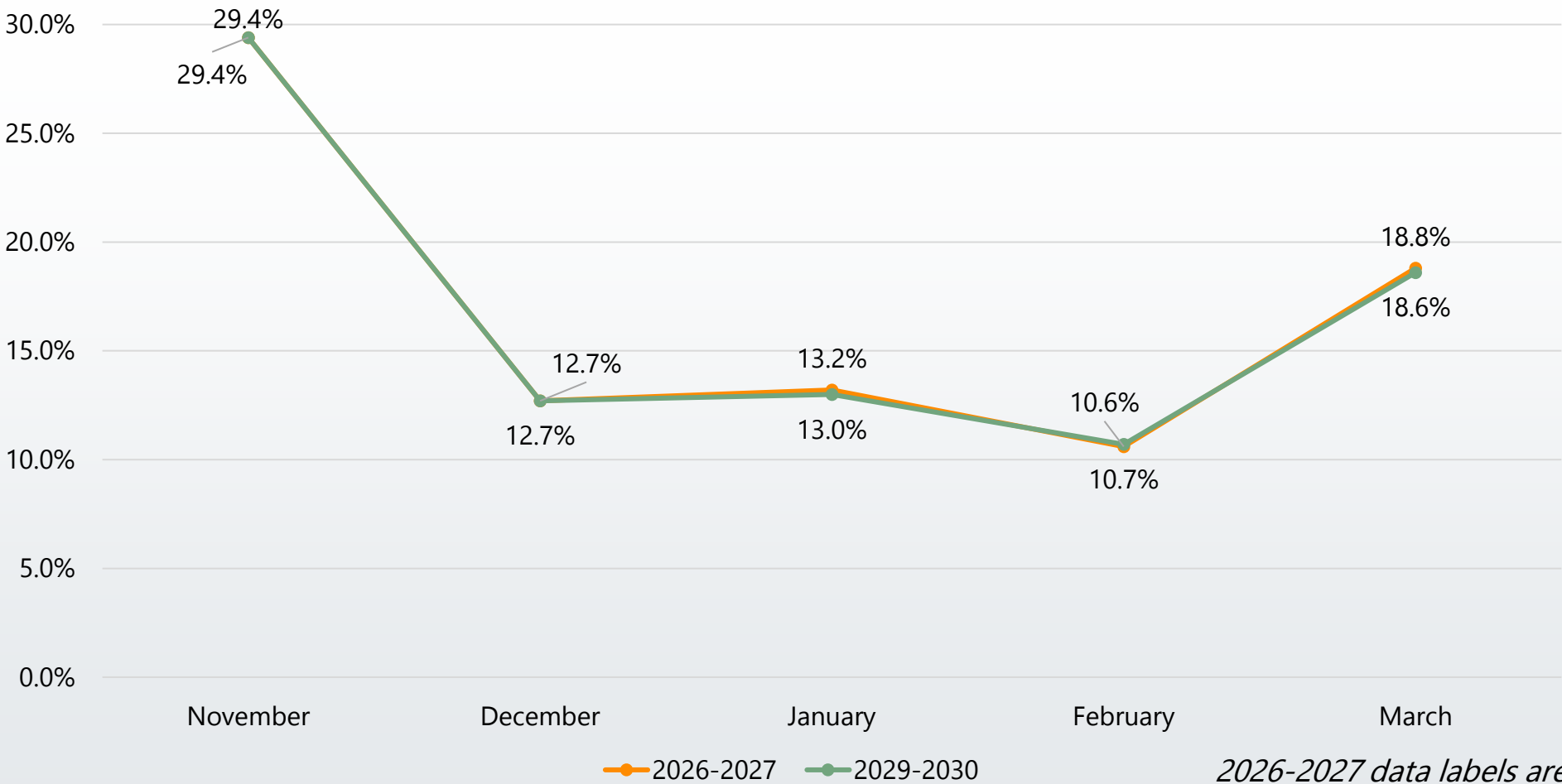


PRM – WINTER 2026-2027



PRM – MIDC WINTER

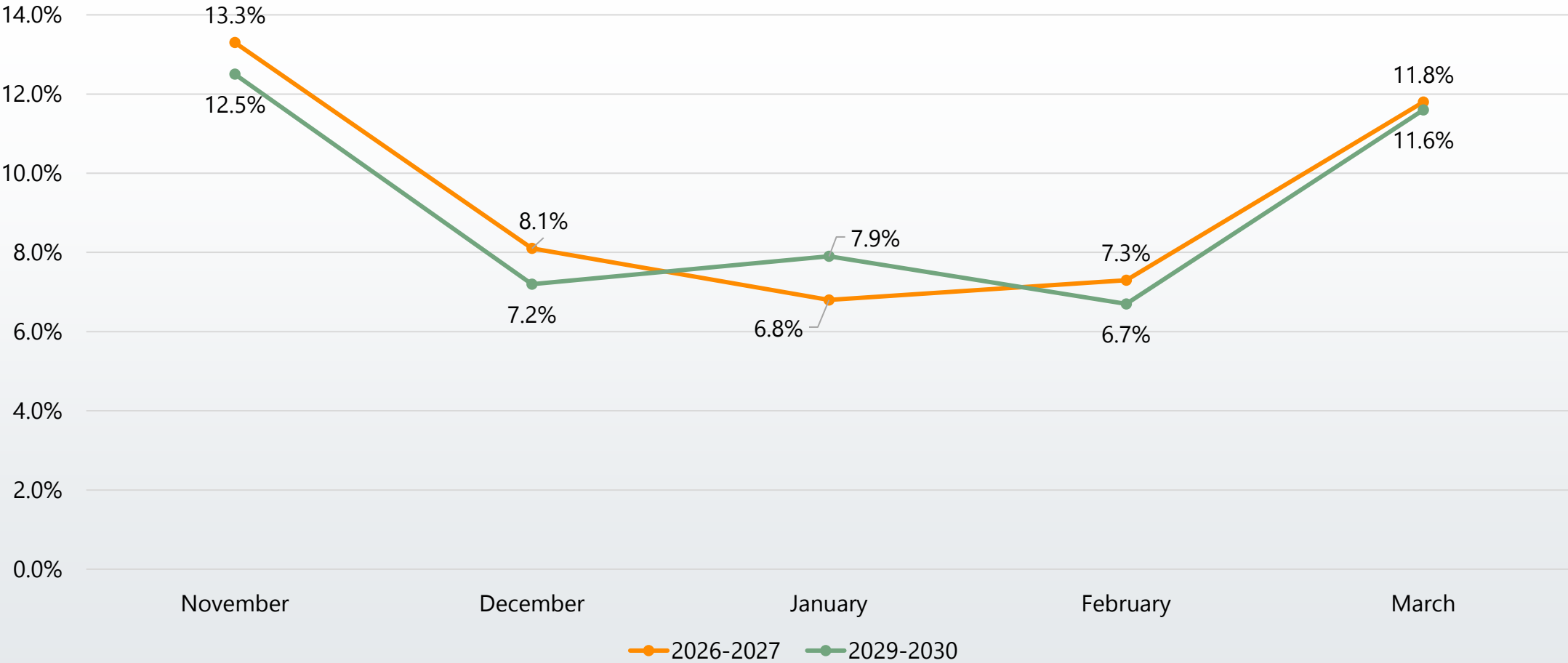
2026-2027 AND 2029-2030



2026-2027 data labels are above the lines and
2029-2030 data labels are below

PRM – SWEDE WINTER

2026-2027 AND 2029-2030



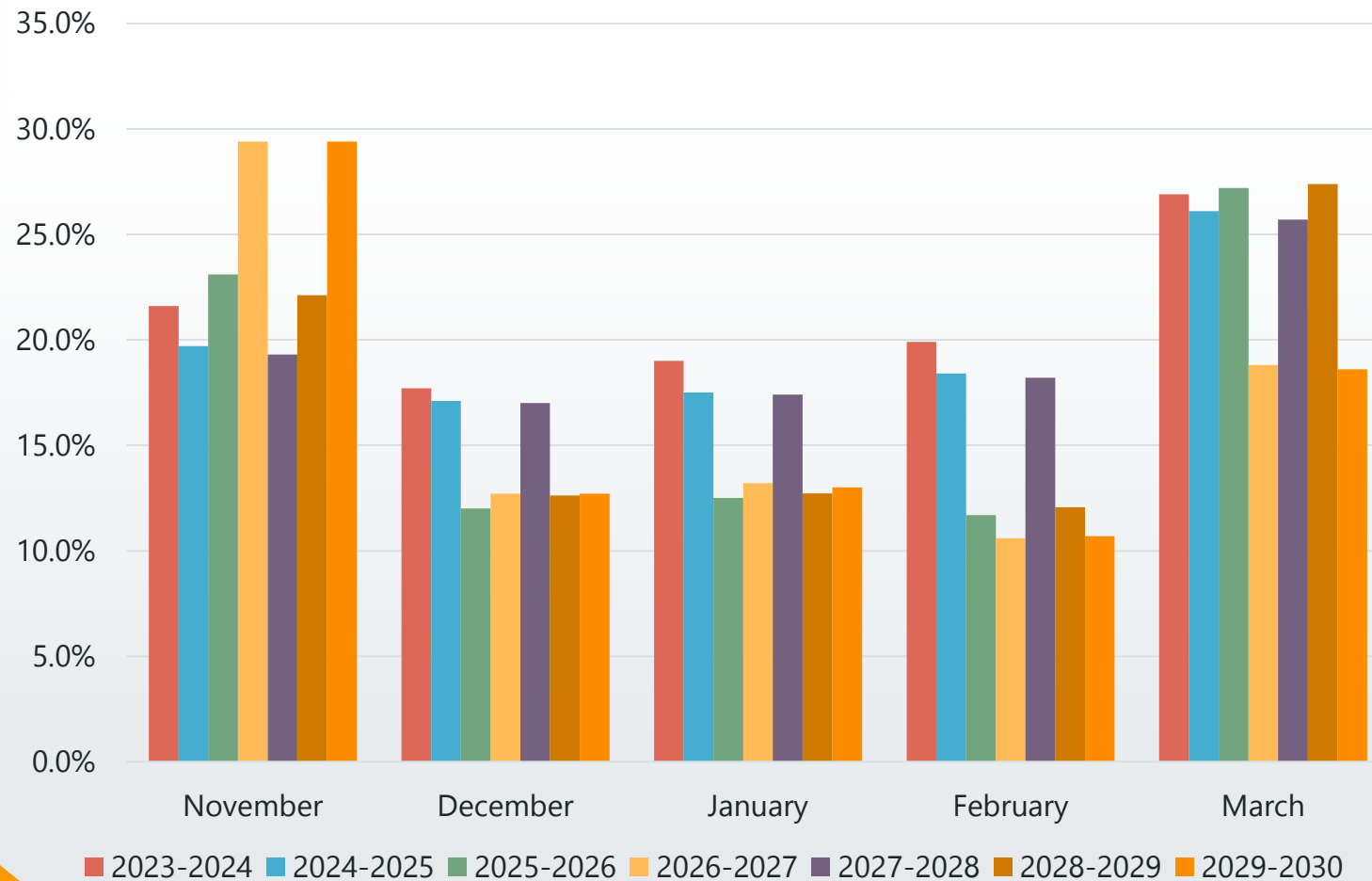


THANK YOU

For general inquiries, email wrap@westernpowerpool.org

PRMs FROM PREVIOUS WINTER SEASONS

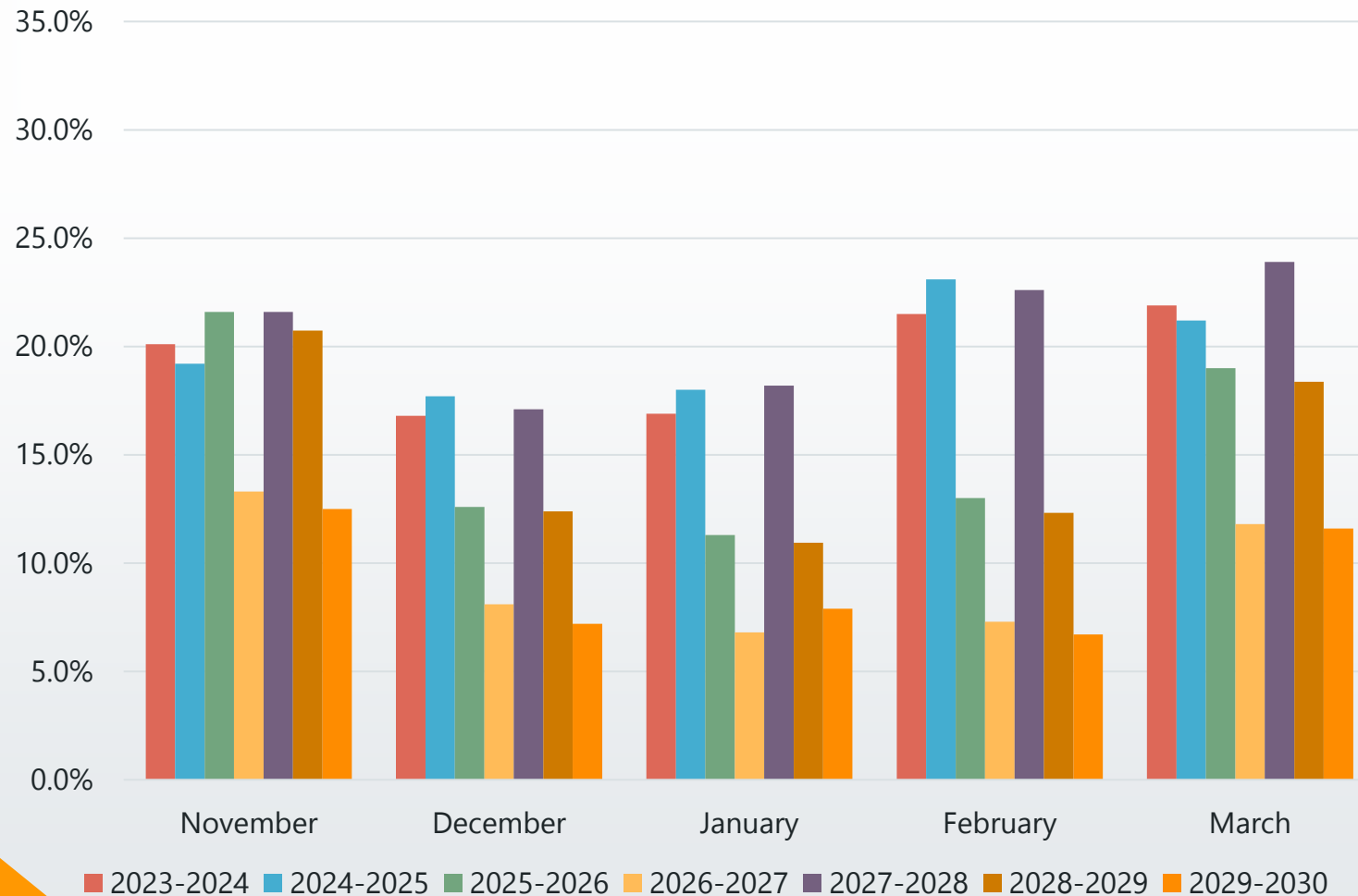
PRMs – MIDC



» 2025-2026, 2026-2028, 2028-2029, and 2029-2030 studies were performed the updated methodology discussed on previous slides

» 2027-2028, 2028-2029, and 2029-2030 are advisory only

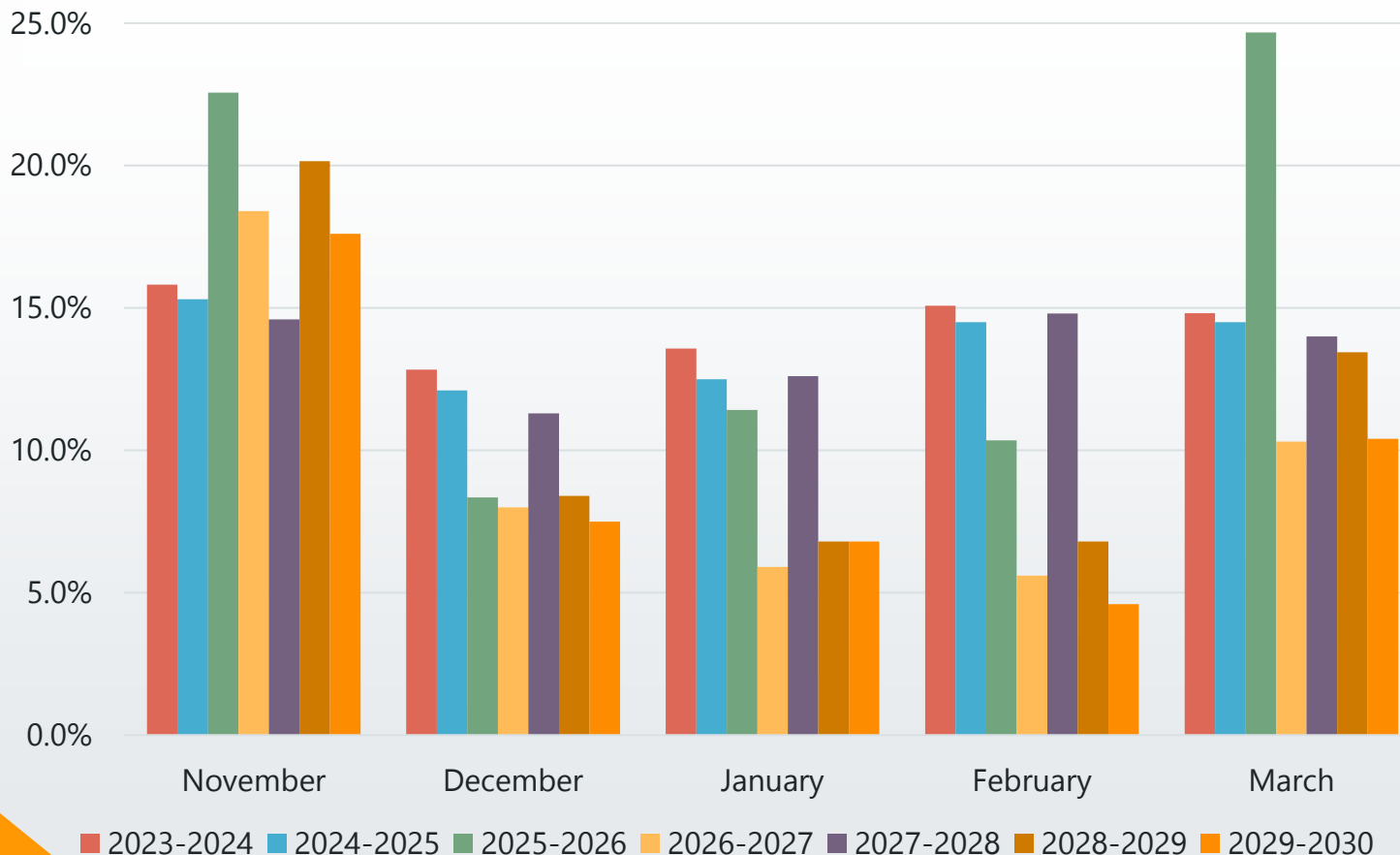
PRMs – SWEDE



» 2025-2026, 2026-2028, 2028-2029, and 2029-2030 studies were performed the updated methodology discussed on previous slides

» 2027-2028, 2028-2029, and 2029-2030 are advisory only

PRMs – WRAP REGION



» 2025-2026, 2026-2028, 2028-2029, and 2029-2030 studies were performed the updated methodology discussed on previous slides

» 2027-2028, 2028-2029, and 2029-2030 are advisory only



Program Review Committee

2025 Workplan

(Revised Draft for Board Consideration)

May 15, 2025

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Executive Summary

Western Power Pool's (WPP) Western Resource Adequacy Program (WRAP) Tariff was approved by the Federal Energy Regulatory Commission (FERC) in February 2023. The WRAP's Program Review Committee (PRC) then worked with the Resource Adequacy Participant Committee (RAPC), Committee of State Representatives (COSR) and other interested stakeholders to draft Business Practice Manuals (BPMs) providing additional policy details and guidance on WRAP participation. Following the completion of all BPMs in September 2024, the online WRAP Change Request Portal opened in October for stakeholders to submit ideas for changes (known as Concepts) to the Tariff or BPMs via Change Request Forms (CRFs). Concepts are high-level ideas that need to be developed into full Proposals ready to go out for comment before being considered for approval by WPP's Board of Directors (Board). The final day for stakeholders to submit complete CRFs to be considered for the PRC's 2025 Workplan was December 31st, 2024. A compilation of CRFs submitted in 2024 can be found in Appendix A - Change Request Form Compilation.

This 2025 Workplan contains a schedule and plan of action for Task Forces to develop Concepts into Proposals. As part of the development of this Workplan the PRC prioritized the Concepts received in 2024 at a meeting in January 2025 (see Section 2), taking into account stakeholder input in support of the continued development of the WRAP. Following a level of effort review (see Section 3), WPP presented the PRC with a Task Force schedule for the period July 2025 through June 2026 along with a plan of action for progressing through the list of prioritized Concepts (see Section 4). While Concept prioritization will remain the foundation of the Workplan, the Committee sought to ensure scheduling flexibility to address special circumstances and respond to rapidly evolving issues.

A draft of this 2025 Workplan was published for comment March 15th – April 15th, 2025. WPP compiled the comments received and distributed them to the PRC (see Appendix E – 2025 Workplan Stakeholder Review Comments). The PRC then had the opportunity to revise the draft 2025 Workplan as the Committee saw fit (see the discussion of changes made in Section 5 as well as the updated Task Force schedule in Figure 5) and distributed it to the Board and RAPC on May 15th. The Board will consider and act on the 2025 Workplan in public session no later than its next quarterly meeting on June 25th, 2025, during which RAPC and other stakeholders will have the opportunity to comment (see Section 7). Board approval of the 2025 Workplan will trigger implementation of the Task Force schedule, launching the process of developing prioritized Concepts into Proposals ready for stakeholder comment before consideration by the Board.

1. Background

The Western Power Pool (WPP) Western Resource Adequacy Program (WRAP) Program Review Committee (PRC) is a multi-sector representative group charged with receiving, considering, and proposing design changes to the WRAP Tariff (Tariff) and Business Practice Manuals (BPMs). The PRC (or Committee) is the main clearing house for recommended design changes to the WRAP. These recommended changes may originate with WRAP Participants, the Committee of State Representatives (COSR), the Board of Directors (BOD), other committees, stakeholders, or the public.

When a Concept (a suggested change to the Tariff and/or BPMs) is requested, the processes and criteria for review by the PRC are implemented as established in *BPM 301 PRC Workplan Development and Approval*.¹ Change Request Forms (CRFs) describing a Concept may be submitted at any point during a year through the online Change Request Portal.² The final day for stakeholders to submit complete CRFs to be considered for the PRC's 2025 Workplan was December 31st, 2024. This 2025 Workplan assigns and schedules Task Forces to develop prioritized Concepts into Proposals ready for comment. WPP, as Program Administrator, compiled the completed CRFs submitted in 2024 to facilitate the PRC's development of this Workplan (see Appendix A - Change Request Form Compilation).

The PRC was required to prioritize the Concepts submitted in 2024 by February 1st, 2025, using a PRC-determined method and criteria. The prioritization exercise took place in Tempe, Arizona, on January 23rd, 2025 (see Section 2). By February 15th, 2025, the Program Administrator and the Program Operator (Southwest Power Pool or SPP) were required to provide the PRC with a level of effort review, proposing a schedule for Task Forces to develop the prioritized Concepts into Proposals ready for comment (see Section 3) along with a plan of action to work through any unscheduled prioritized concepts should time become available (see Section 4).

A draft of this 2025 Workplan was made available for stakeholder review between March 15th and April 15th, 2025. WPP compiled all comments received for the PRC to consider and revise the draft Workplan as the committee saw fit by May 15th, 2025 (see Section 5). The revised draft Workplan and a summary of comments received was distributed to the Board and the Resource Adequacy Participant Committee (RAPC) and made available publicly on May 15.

¹ All WRAP BPMs can be found at: https://www.westernpowerpool.org/resources/wrap_bpms/

² WRAP Change Request Portal: https://www.westernpowerpool.org/comments/change_requests/western-resource-adequacy-program

The Board will consider and act on the Workplan in public session no later than its next quarterly Board meeting (June), during which RAPC and other stakeholders will have the opportunity to express any opinions (see Section 6). The final Workplan approved by the Board will identify Concepts to be developed into full Proposals by Task Forces that will then be distributed for comment and potential adoption per *BPM 302 Proposal Development and Consideration*.

2. PRC Prioritization Exercise

The compiled list of concepts (CRF Compilation) was presented to the PRC on January 8th, 2025, for consideration at its meeting on January 15th, 2025 (see Appendix A - Change Request Form Compilation). Thirty-five CRFs were submitted in 2024, of which four were requests for Non-Task Force Proposals (NTFPs) that do not need to be considered for inclusion in a Workplan. Through a combination of consolidations and withdrawals the number of Concepts in the CRF Compilation was reduced to 22.

As part of the CRF Compilation, and at the direction of the PRC, WPP undertook a high-level level of effort review with the aim of assisting the committee in its next steps in Workplan Development: Concept prioritization. As part of this high-level level of effort review each Concept was tagged according to the Wrap Area impacted and given an estimated Time Score. For the 2025 Workplan the Concepts were categorized according to the following WRAP Areas: Forward Showing (FS) Capacity Requirement, FS Transmission Requirement, FS Demonstration, Resource Accreditation, and Operations Program. The Time Score was an estimate of approximately how many months a potential Task Force would need to develop a Concept into a Proposal ready for comment: Short/S (two months), Medium/M (four months), Long/L (six months).

In terms of guidance for reviewing Concepts, Section 3.4.2 of the Tariff states that, “[t]he PRC shall establish a process and criteria for receiving and reviewing proposed amendments to this Tariff and the Business Practice Manuals. Such review will include procedures for stakeholder comment.” BPM 301 then provides further details on Concept prioritization and the stakeholder comment process:

The PRC will prioritize Concepts received in the compiled list according to a PRC-determined method involving established criteria. The PRC will aim to reach agreement on prioritization via consensus, however, given a situation where consensus is not

achieved, the PRC will vote on a prioritized slate of Concepts. This prioritization process will be complete by February 1.³

Concept prioritization criteria were proposed to the PRC at the Committee's meeting on December 18th, 2024. The draft prioritization method sought to divide the Concepts into higher and lower priority, then rank the Concepts within those categories, leading to a fully prioritized list of Concepts. The PRC agreed to move forward with the proposed process without having a formal vote, allowing for future flexibility (see Appendix B – PRC Minutes Dec. 18th, 2024; 9-10am PT).

The PRC held a meeting to formally prioritize Concepts for the 2025 Workplan on January 23rd, 2025 (see Appendix C – PRC Minutes Jan. 23rd, 2025; 9-12pm AZ). The initial Phase 0 of the prioritization exercise saw the Committee further consolidate the 22 Concepts in the CRF Compilation down to 17 by combining:

- CRF-011 (SRP, Load Growth Factor) into CRF-005 (APS, Load Growth Factor);
- CRF-013 (IPC, Capability Testing Off-Season) into CRF-010 (SRP, Capability Testing Off-Season);
- CRF-017 (IPC, Monthly Planning Reserve Margin [PRM] Volatility) into CRF-02 (NVE, Earlier Forward Showing [FS] Metrics);
- CRF-026 (Form Energy, Indicative Qualifying Capacity Contribution [QCC]) into CRF-012 (APS, ELCC by Vintage); and
- CRF-004 (Day-Ahead Market [DAM] Optimization and CRF-001 SWEDE Transmission Limits).

³ BPM 301 §3.4 pp 7-8

The PRC then proceeded to Phase A, dividing the 17 consolidated Concepts into higher and lower priority using an online polling tool, the results of which are shown in Figure 1.

HIGHER PRIORITY



LOWER PRIORITY



WRAP AREA



Figure 1- Results of PRC Prioritization Phase A

During Phases B-I and B-II the PRC used an online tool to rank the higher and lower priority concepts respectively. These rankings were then combined into a single prioritized list of Concepts (Phase C) as shown in Figure 2.



Figure 2 - Full Prioritized List of Concepts (Phase C)

Regarding how many of these Concepts could potentially be included in the PRC's 2025 Workplan, WPP estimated it was feasible for three Task Forces streams to run simultaneously for the 12-month period July 2025 through June 2026. Taking into account the Time Score assigned to each Concept – Short/S (two months), Medium/M (four months), Long/L (six months) - this would allow the top seven Concepts to be fully captured by the 2025 Workplan (i.e. CRF-005 through CRF-010).

To avoid Long Concepts delaying or preventing any progress being made on shorter Concepts, the PRC directed WPP to develop an initial draft schedule that dedicated two of the three Task Force streams to Long Concepts, while the remaining Task Force stream

sought to work through as many shorter Concepts as could be accommodated. The PRC then motioned to move forward with the prioritized list of Concepts as determined at the January 23rd, 2025.

3. Detailed Level of Effort Review

BPM 301 states that following the prioritization of Concepts:

“[...] the Program Administrator will work with the Program Operator to give each Concept in the list a level of effort ranking. This level of effort ranking will include a description of the requirements for addressing each Concept (Program Administrator and Program Operator support, Participant engagement, etc.) as well as the anticipated timeline. The PRC will be supplied with the criteria used to determine the level of effort ranking. The level of effort review will be completed by February 15.”

The detailed level of effort review (to distinguish the process from the high-level level of effort review conducted as part of the CRF Compilation) was provided to the PRC on February 14th, 2025, ahead of the Committee’s meeting on February 19th, 2025.

WPP began the level of effort review with a draft schedule that took the prioritized Concepts and scheduled them into the three Task Force streams – two for Long Concepts, one for shorter Concepts – in the order the Concepts were ranked. WPP then explored re-arranging the schedule according to the following criteria: minimizing Lead Sponsor overlap (Phase 1); minimizing WRAP Area overlap as a proxy for the composition of the Task Forces in terms of WPP and SPP Staff, interested Participants, and other stakeholders (Phase 2); and, investigating any benefits to mirroring the schedule (Phase 3). The level of effort review showed the initial draft schedule based on the ranking of Concepts to be optimal, as presented in Figure 3. While CRF-24 (PAC, Flat Load and PRMs) was the next highest ranked Concept after CRF-10 (SRP/IPC, Capability Testing Off-Season), no room remained in the two Long Task Force streams, allowing the CRFs 14 (IPC, Joint Owner

Flexibility) and 15 (PNM, Planned Outage Clarification) to enter the Task Force Stream dedicated to shorter Concepts.



Figure 3 - Level of Effort Review Draft Task Force Schedule

The results of the level of effort review were presented to the PRC on February 19th, 2025 (see Appendix D – PRC Minutes Feb. 19th, 2025; 8:30-10am PT) and subsequently incorporated into this Workplan.

4. Proposed Schedule and Plan of Action

At the Committee's meeting on February 19th, 2025, the PRC sought to include flexibility in implementation of the 2025 Workplan's schedule (shown in Figure 3). While Concept prioritization should remain the foundation of the Workplan, the Committee sought flexibility to address special circumstances such as changes in a Concept's priority, staffing shifts at WPP, SPP, or in Task Force leadership; or the PRC endorsing a direct Task Force Proposal that a Concept should be withdrawn and cease further development.

Per BPM 301 Table 1, the Lead Sponsor is responsible for a Concept up until December 31st of the year before the Workplan, which is the final day to submit a complete Change Request Form. As described in BPM 302, the Lead Sponsor will participate as a member of any Task Force set up to develop the Concept, but it is up to the Task Force as a whole to decide its own procedures pertaining to decision making processes, including leadership structure. If the Task Force decides it is unnecessary to develop a Concept any further, the Task Force will make such a Proposal directly to the PRC, and the Committee will consider endorsing withdrawal of the Concept via consensus or voting.

Additionally, Task Forces may develop Concepts into Proposals ready for comment swifter than estimated in their Time Rank scores: Short/S (two months), Medium/M (four months), Long/L (six months). Under such a scenario, the PRC needs to have a policy for progressing through the remaining unscheduled prioritized Concepts (shown in Figure 4) while ensuring the Committee has the flexibility to adapt to special circumstances.



WRAP AREA



Figure 4 - Remaining Prioritized Concepts

If the priority of a Concept changes during the implementation of the Workplan, the PRC will work with WPP to see if and how the Concept could be accommodated. If such accommodation requires potentially pushing a Concept out of the 2025 Workplan, the PRC shall inform WPP's Board of Directors, RAPC, and COSR.

Should time become available in one of the two Long Task Force streams, the PRC will evaluate whether another Long Concept should be accommodated, noting that any Concept whose development extends beyond the 2025 Workplan (July 2025 - June 2026) could lead to fewer Concepts being accommodated in the PRC's 2026 Workplan. If a Long Concept is not accommodated, the PRC will consider whether a shorter Concept can be assigned a Task Force, working through Concepts as ranked in Figure 4 subject to special circumstances.

Should time become available in the Task Force Stream dedicated to shorter Concepts the PRC will attempt to assign a Task Force to a Short or Medium Concept if the time available is deemed sufficient, working through Concepts as ranked in Figure 4 subject to special circumstances.

A draft of this 2025 Workplan was published for comment March 15th – April 15th, 2025, and the PRC then had the opportunity to revise the Workplan as it saw fit (see Section 5).

5. Changes in Response to Comments

A draft of this 2025 Workplan was made available for stakeholder comment March 15th – April 15th, 2025. Appendix E includes all twelve sets of comments received by the PRC. In response to those comments, the PRC made edit to the following sections between April 15th and May 15th, as well as updating the Task Force schedule (see Figure 5), before distributing the Workplan to WPP’s Board of Directors (Board) and RAPC on May 15th.

- **Executive Summary**

- Language was included noting the prioritization of Concepts in the Workplan reflected stakeholder input undertaken in support of the continued development of the WRAP, as discussed in more detail in Section 2 (Appendix E – SRP).
- A statement was added reflecting the need for the Workplan to remain flexible in response to rapidly evolving issues (Appendix E – BPA).

- **Section 4 – Proposed Schedule and Plan of Action / Figure 3 – Draft Task Force Schedule**

- The majority of comments submitted proposed prioritizing CRF-02 (Earlier FS Metrics /Monthly Volatility) in 2025 instead of waiting until 2025 to begin developing the idea into a Proposal ready for comment (see Appendix E – PAC, TPWR, NVE, TEA, SCL, PWX, IDP, PGE, SRP, BPA). The common theme among proponents of this change was the need to reduce uncertainty.
- A plurality of stakeholders suggested CRF-02 could be reaccommodated in the Task Force schedule by pushing out CRF-05 (Load Growth Factor) until 2026 (see Appendix E – TPWR, TEA, PWX, PGE, SRP, BPA). These commentors generally agreed that while both CRF-05 and CRF-01 (DAM Optimization /SWEDE Tx Limits) were important Concepts, it was more crucial to increase certainty around the latter (CRF-01) and develop a mutual increased understanding of market interoperabilities.
- In response to these comments, the PRC updated the original draft Task Force schedule (Figure 3) to that shown in Figure 5.

2025

July	August	September	October	November	December
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NVE/IPC **02** EARLIER FS METRICS / MONTHLY VOLATILITY **L**

NVE/APS **01** DAM OPTIMIZATION / SWEDE TX LIMITS **L**

SRP **08** CAISO FIRM TX **S** APS **03** DEMAND RESPONSE QCC **M**

2026

January	February	March	April	May	June
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APS/FORM **12** ELCC BY VINTAGE / INDICATIVE QCC FOR LTS **L**

APS/SRP **05** LOAD GROWTH FACTOR **L**

SRP **10** CAPABILITY TESTING OFF-SEASON **S** IPC **14** JOINT OWNER FLEXIBILITY **S** PNM **15** PLANNED OUTAGE CLARIFICATION **S**

WRAP AREA



Figure 5 - Task Force Schedule Updated in Response to Stakeholder Comments

6. Next Steps

The PRC distributed this Workplan to the WPP Board and RAPC on May 15th. The Board will consider and act on the 2025 Workplan in public session no later than its next quarterly meeting on June 25th, 2025, during which RAPC and other stakeholders will have the

opportunity to comment (See Section 7). Board approval of the 2025 Workplan will trigger implementation of the Task Force schedule, launching the process of developing prioritized Concepts into Proposals ready for stakeholder comment before consideration by the Board.

7. Board Consideration [HOLD]



Program Review Committee
2025 Workplan Development

Appendix A - Change Request Form Compilation
January 2025

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Introduction

The Western Power Pool (WPP) Western Resource Adequacy Program (WRAP) Program Review Committee (PRC) is a multi-sector representative group charged with receiving, considering, and proposing design changes to the WRAP Tariff (“Tariff”) and Business Practice Manuals (BPMs). The PRC is the clearing house for recommended design changes to the WRAP. These recommended changes could come from WRAP Participants, the Committee of State Representatives (COSR), the Board of Directors (BOD), other committees, stakeholders, or the public.

When a Concept (a suggested change to the Tariff and/or BPMs) is requested by a stakeholder, the processes and criteria for review by the PRC are utilized as established in *BPM 301 PRC Workplan Development and Approval* and *BPM 302 Proposal Development and Consideration*. Change Request Forms (CRFs) describing a Concept are submitted at any point during a year. The final day for stakeholders to submit complete CRFs for this cycle was December 31st, 2024. WPP as Program Administrator has compiled all completed CRFs submitted in 2024 in this document to facilitate the PRC’s development of a Workplan (a plan of action that identifies Concepts for development into Proposals) for 2025. The PRC will prioritize Concepts by February 1st, 2025, using a PRC-determined method involving established criteria. The completed Workplan approved by the BOD in June will identify Concepts to be developed into full Proposals by Task Forces. These Proposals will then be distributed for comment.

Blue text in the CRF indicates language added by the Program Administrator to identify the Concept and facilitate the PRC’s prioritization exercise. At the top of each CRF is its number and sponsoring organization followed by a keywords identifier. Below that is the WRAP Area the Concept would impact primarily (Forward Showing [FS] Capacity Requirement, Resource Accreditation, FS Transmission Requirement, FS Demonstration, or Operations Program), an indication of whether a Tariff change would likely be necessary, and a Time Score reflecting the Program Administrator’s estimate of how long it would take a Task Force to develop the Concept into a Proposal ready for comment. The remainder of each table is the CRF as submitted by the Lead Sponsor, except for where relevant Tariff or BPM language has been added in blue.

2024-CRF-001 / NVE / SWEDE Transmission Limits

WRAP Area:

Operations Program

Tariff Change:

Yes

Time Score:

Medium

Lead Sponsor: Lindsey Schlekeway
lindsey.schlekeway@nvenergy.com

Co-Sponsor:

Summary: Change to the current SWEDE Transmission Requirement in Tariff Section 19.4

Description of the issue: The current transmission requirement in the tariff for the SWEDE region requires transmission to be demonstrated no less than the surplus or deficit calculation MW quantity. This requirement may harm Southwest participants and should not be necessary in order for WRAP to succeed.

Proposed solution to the issue described: Remove existing tariff language and add in additional language to be consistent with the current understanding of the transmission requirement for clarity.

Specific document and language you would like changed:

Current Tariff Language: 19.4 Each Participant in any Subregion identified in the Business Practice Manuals as not containing a central transmission hub permitting energy deliveries to that hub from any point within such Subregion, shall, in addition to providing the information required by Section 19.3, identify, on or before the deadline during the Preschedule Day specified in the Business Practice Manuals, for each Hour of the Operating Day each point to which it can deliver energy, each point at which it can take receipt of energy, the quantity it can deliver or receive at each such point, and a numeric factor intended to prioritize use of transmission made available by Participants with positive Sharing Calculations and needed by Participants with negative Sharing Calculations for each such hour. **A Participant with a positive Sharing Calculation for an hour must provide a total quantity for all identified points at which it can deliver that is no less than the amount of its positive Sharing Calculation for such hour (adjusted as necessary for any RA Transfer in accordance with Section 20.1.2). A Participant with a negative Sharing Calculation for an hour must provide a total quantity for all identified points at which it can take receipt that is no less than the amount of its negative Sharing Calculation for such hour (adjusted as necessary for any RA Transfer in accordance with Section 20.1.2).** Participants shall provide this same information for each Operating Day on an expected or preliminary basis on each day of the Multi-Day-Ahead Assessment following, and based on, the expected Holdback Requirement estimates provided on each such day for the Operating Day.

Suggestion for how language could be updated to address issue:

Proposed Change: 19.4 Each Participant in any Subregion identified in the Business Practice Manuals as not containing a central transmission hub permitting energy deliveries to that hub from any point within such Subregion, shall, in addition to providing the information required by Section 19.3, identify, on or before the deadline during the

Preschedule Day specified in the Business Practice Manuals, for each Hour of the Operating Day each point to which it can deliver energy, each point at which it can take receipt of energy, the quantity it can deliver or receive at each such point, and a numeric factor intended to prioritize use of transmission made available by Participants with positive Sharing Calculations and needed by Participants with negative Sharing Calculations for each such hour. **A Participant with a positive Sharing Calculation or a negative Sharing Calculation for an hour must provide a total quantity for all identified points that is either available per OASIS or reserved by the participant. at which it can deliver that is no less than the amount of its positive Sharing Calculation for such hour (adjusted as necessary for any RA Transfer in accordance with Section 20.1.2). A Participant with a negative Sharing Calculation for an hour must provide a total quantity for all identified points. at which it can take receipt that is no less than the amount of its negative Sharing Calculation for such hour (adjusted as necessary for any RA Transfer in accordance with Section 20.1.2).** Participants shall provide this same information for each Operating Day on an expected or preliminary basis on each day of the Multi-Day-Ahead Assessment following, and based on, the expected Holdback Requirement estimates provided on each such day for the Operating Day.

Describe the benefits that will be realized from this change:

The current tariff requirement did not contemplate the potentially large sharing calculation results that could occur. This requirement could result in harm to a participant that is not necessary for a successful program.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-002 / NVE / Earlier Forward Showing Metrics

WRAP Area:

FS Capacity Requirement

Tariff Change:

Yes

Time Score:

Medium

Lead Sponsor: Lindsey Schlekeway
lindsey.schlekeway@nvenergy.com

Co-Sponsor:

Summary: PRM, QCC, and Load Forecast Timing

Description of the issue: The current timeline for receiving the PRM, resource QCC, and load forecast occur too late for a participant to plan to meet the requirement.

Proposed solution to the issue described:

- PRM should be published no later than T-2 for the applicable binding season. (2 years ahead of the binding season)
- PRM should be approved by the Board no later than 1 month following the published deadline.
- The Resource QCC's should be provided to the participant no later than one or two months following the published PRM.
- The load forecast should be provided to the participant no later than one or two months following the published PRM.

Specific document and language you would like changed:

Tariff section 14.3: The FSPRM values used in the Forward Showing Submittals for a Binding Season shall be those values approved by the Board of Directors as the culmination of an Advance Assessment process. No later than twelve months before the FS Deadline for each Binding Season, WPP will determine and post the recommended FSPRM for each Subregion for each Month of such Binding Season. Participants shall provide their load, resource and other information reasonably required to perform the analyses and calculations required for the Advance Assessment, in accordance with the Advance Assessment information submission details and schedule specified in the Business Practice Manuals. No later than nine months before the FS Deadline for such Binding Season, the Board of Directors shall take its final action regarding approval of the FSPRM values for each Month of such Binding Season.

Suggestion for how language could be updated to address issue:

The FSPRM values used in the Forward Showing Submittals for a Binding Season shall be those values approved by the Board of Directors as the culmination of an Advance Assessment process. No later than ~~twelve~~ **twenty-four** months before the ~~FS-Deadline for each~~ Binding Season, WPP will determine and post the recommended FSPRM for each Subregion for each Month of such Binding Season. Participants shall provide their load, resource and other information reasonably required to perform the analyses and calculations required for the Advance Assessment, in accordance with the Advance Assessment information submission details and schedule specified in the Business Practice Manuals. No later than ~~nine~~ **twenty-three** months before the FS Deadline for such Binding Season, the Board of Directors shall take its final action regarding approval of the FSPRM values for each Month of such Binding Season. **The Program Operator will**

provide the resource QCC and load forecast to the participant no later than twenty-two months before the Binding Season.

Describe the benefits that will be realized from this change:

The change will allow for additional time for a participant to respond to the binding season requirement which reduces the program uncertainty.

Any data/information that would characterize the importance of the issue:

The current timeline does not allow sufficient time for a participant to act to meet the Forward Showing Requirement. Additionally, if any modeling changes occurred then the participant maybe planning to an estimated requirement that maybe completely different than the resulting requirement that ends up being approved by the Board. Furthermore, the QCC and load forecast should be provided to the participant in order for the participant to plan to meet the requirement. Currently, the load forecast in particular is provided too close to the Forward Showing deadline and does not allow sufficient time for a participant to act. This creates additional program uncertainty and risk to the participant. The proposed timeline is still not sufficient for a participant to plan to meet the requirement and longer time horizons should be pursued, however, it is a proposal for a bare minimum that the program should strive to meet to reduce the uncertainty.

2024-CRF-003 / APS / Demand Response QCC

WRAP Area:

Resource Accreditation

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Brandon Holmes
brandon.holmes@aps.com**Co-Sponsor:****Summary:** Incorporation of call limits in calculation of QCC for use-limited resources.**Description of the issue:** Tariff and Protocols cover use-limited resource duration for calculation of QCC, but not in number of seasonal events or calls.**Proposed solution to the issue described:**

Calculation of QCC should be informed by modeling of call limits for use-limited resources.

Specific document and language you would like changed:BPM 105 Section 4.6 **Demand Response**

DR can be utilized as a Qualifying Resource if it is greater than 1 MW in aggregate (see Section 3.3) and can be demonstrated to be controllable and dispatchable by the Participant or host utility. DR programs that register as Qualifying Resources will be assigned a seasonal QCC value (one value for each Binding Season) and will need to meet testing criteria and demonstrate load reduction (see Section 3.4.2.3) for a period of up to five continuous hours. A DR program may be able to demonstrate load reduction for a period beyond five continuous hours, but cannot receive QCC above 100% of what is demonstrated for the five hour duration.¹¹ Programs that are not able to provide five hours of load reduction will have their load reduction prorated over the course of five hours for the determination of QCC value. Participants registering a DR Qualifying Resource must either i) demonstrate that the DR program was not operated historically and has therefore not impacted the Historical Load Data provided by the Participant for determination of their P50 load value, or ii) provide historical information about the operations of the DR program such that the load reduction impacts of the DR program can be removed from the historical data prior to determination of the P50 load value.

The QCC value of the DR Qualified Resource is determined by multiplying the maximum load reduction (in MW) the resource is capable of sustaining by the number of hours the resource can demonstrate such sustained load reduction capability (up to five hours, maximum) divided by five.

A DR Qualifying Resource will be reflected in the FS Submittal as a capacity resource by submitting it as a 'Resource' in the FS Submittal. As with all resources, the QCC value of the DR Qualifying Resource will count toward a Participant meeting its FS Capacity Requirement.

If DR does not meet the criteria of a Qualifying Resource, its contribution to the load reduction may be captured in the historical data used to calculate the P50 load in the FS.

4.6.1 New, Expanded, or Late Registered DR Resources

DR programs intended to be used as Qualifying Resources in the first Year of operation or expansion of an existing program or DR programs not registered at the time of the Advance Assessment will be reported at 50% of the expected capability, unless validated by testing the program to 100% of the claimed capability prior to the Binding Season. See the section related to DR testing requirements (within Section 3.4.2) for more information

Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

More accurate capacity accreditation for use-limited resources.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-004 / APS / Day Ahead Market Optimization		
WRAP Area: Operations Program	Tariff Change: No	Time Score: Short
Lead Sponsor: Brandon Holmes brandon.holmes@aps.com		Co-Sponsor:
Summary: Day Ahead Market Optimization of the Operations Program Holdback		
Description of the issue: Enhancing the Ops Program to be compatible, both in rules and technology (i.e. APIs), with both EDAM and Markets+ as it was originally designed with bilateral day ahead markets in mind.		
Proposed solution to the issue described: Must-offer and holdback optimization in Markets+. Markets+ protocols are drafted in such a way that the Ops Program for Participants who are in Markets+ can be enhanced by coordinating holdback through the Must-Offer and DA Market solution. In EDAM, create the ability for Participants to properly represent Holdback in the DA Resource Sufficiency Evaluation.		
Specific document and language you would like changed: -		
Suggestion for how language could be updated to address issue: -		
Describe the benefits that will be realized from this change: Optimization of WRAP transactions in both EDAM and Markets+.		
Any data/information that would characterize the importance of the issue: Please find the attached protocols for the Must-Offer from Markets+ Section 4.2.1. See Appendix A		

2024-CRF-005 / APS / Load Growth Factor

WRAP Area: FS Capacity Requirement	Tariff Change: No	Time Score: Long
Lead Sponsor: Brandon Holmes brandon.holmes@aps.com		Co-Sponsor: EWEB
Summary: Load Forecast		
Description of the issue: <p>The WRAP-wide established growth rate of 1.1% for the P50 Peak Load Forecast could be enhanced to capture the differences in expected load growth between the various WRAP participants. An inaccurate load growth rate will misinform the actual resource adequacy needs of the region, thereby degrading the effectiveness of the WRAP.</p>		
Proposed solution to the issue described: <p>-</p>		
Specific document and language you would like changed: <p>-</p>		
Suggestion for how language could be updated to address issue: <p>-</p>		
Describe the benefits that will be realized from this change: <p>More accurate P50 load forecasting will better inform the regional and participant-specific resource adequacy needs into the future. Having an objective 3rd party to determine the forecast could alleviate concerns of participant bias while also working towards the most accurate forecast for each participant.</p>		
Any data/information that would characterize the importance of the issue: <p>Naturally any standard growth rate applied to the WRAP footprint or to a specific participant is just a forecast, but there could be hidden issues within sub-regions or individual states that could necessitate having more granular growth rates than footprint wide.</p>		

2024-CRF-008 / SRP / CAISO Firm Transmission

WRAP Area:
FS Transmission Requirement

Tariff Change:
Yes

Time Score:
Short

Lead Sponsor: Jerret Fischer
jerret.fischer@srpnet.com

Co-Sponsor:
Arizona Public Service

Summary: CAISO High-Priority Wheeling Through in WRAP

Description of the issue: CAISO refers to its firm transmission product as “high-priority wheeling through.” However, the current WRAP Tariff does not explicitly recognize this terminology or specify its equivalency to NERC priority 6 or 7. This creates ambiguity as to whether CAISO high-priority wheeling through qualifies as firm transmission under WRAP. This creates uncertainty for participants relying on CAISO high-priority wheeling through transmission to satisfy WRAP requirements. Without clear recognition, participants may experience compliance risks despite securing the highest available firm transmission from CAISO.

Proposed solution to the issue described:

Revise tariff sections 16.2.6.1, 16.2.6.2, and 20.6 to recognize CAISO high-priority wheeling through as equivalent to NERC Priority 6 or 7.

Specific document and language you would like changed:

WRAP Tariff Sections: 16.2.6.1, 16.2.6.2, and 20.6

- 16.2.6.1 – *affirmation of NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource to the point of delivery/load.*
- 16.2.6.2 – *there must be NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource to the point of delivery/load.*
- 20.6 – *Participant shall have in place, prior to the Operating Day, transmission service satisfying NERC priority 6 or 7 for each hour of such Operating Day for which a Sharing Event has been established.*

Suggestion for how language could be updated to address issue:

Introduce language that provides clarity on what qualifies as qualifying transmission to evaluate transmission products that do not explicitly use NERC Priority rating. A general definition of equivalent transmission and/or criteria for validating equivalence for non-NEEC classified transmission products.

Describe the benefits that will be realized from this change:

This change resolves uncertainty around transmission compliance by providing clarity for what qualifies as firm transmission under WRAP. Participants will gain confidence that high-priority transmission products that do not use a NERC Priority rating will satisfy WRAP requirements, which will streamline compliance.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-010 / SRP / Capability Testing Off-Season

WRAP Area:

FS Demonstration

Tariff Change:

No

Time Score:

Medium

Lead Sponsor: Jerret Fischer

jerret.fischer@srpnet.com

Co-Sponsor:**Summary:** Capability Testing Requirements for Seasonal Compliance**Description of the issue:**

The capacity testing requirements outlined in BPM 105 require that thermal resources perform summer capability tests during the summer season under specific temperature conditions. SRP typically conducts tests in off-seasons periods (spring or winter) to avoid operational disruptions during peak demand. This requirement risks penalties for off-season testing and reduces QCC values.

Proposed solution to the issue described:

Permit historical operational data to meet requirements when summer season testing is not feasible. In the event, historical operational data is unavailable, allow off-season test results if adjusted for summer conditions.

Specific document and language you would like changed:

BPM 105 Section 3.4.2.1 Capability Test Requirements for Thermal Resources:

- Summer Capability Tests are to be conducted during a time when the ambient dry-bulb temperature is no more than 10 degrees Fahrenheit below the station ASHRAE Rated Ambient Temperature.

Suggestion for how language could be updated to address issue:

Historical operational data may be submitted to meet summer testing requirements when summer season testing is not feasible. If historical data is unavailable, off-season Capability Tests may be used with adjustments for summer conditions. Penalties for deviations in dry-bulb temperature requirements will not apply if adjustments are applied to align off-season test results with expected summer conditions.

Describe the benefits that will be realized from this change:

Aligns testing requirement with practical operational practices, allowing compliance without disrupting critical summer operations. It also minimizes penalties while ensuring reliable QCC calculations are maintained.

Any data/information that would characterize the importance of the issue:

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2024-CRF-011 / SRP / Load Growth Factor

WRAP Area:
FS Capacity Requirement

Tariff Change:
No

Time Score:
Long

Lead Sponsor: Jerret Fischer
jerret.fischer@srpnet.com

Co-Sponsor:

Summary: Update Process for Load Growth Factor in BPM 103

Description of the issue:

The current 1.1% Load Growth Rate specified in BPM 103 is not reflective of recent trends and does not account for localized and evolving growth trends such as industrial onshoring and data center expansions, which have led to significant increases in demand. Without a mechanism for regular updates, this growth rate may quickly become outdated, leading to inaccurate forward showing requirements and potential resource adequacy challenges.

Proposed solution to the issue described:

Implement a process for annual updates to the Load Growth Factor by incorporating updates based on the latest data and growth patterns.

Specific document and language you would like changed:

BPM 103 Section 5.1 – Established Growth Rate.

The language currently indicates that updates may occur but does not specify a frequency or mechanism for regular reviews.

Suggestion for how language could be updated to address issue:

The 1.1% Load Growth Factor will be reviewed annually to incorporate the latest available data, including regional and sub-regional growth forecasts. Updates will ensure the Load Growth Factor reflects evolving trends and support equitable and accurate resource adequacy calculations across WRAP participants.

Describe the benefits that will be realized from this change:

Regular updates to the Load Growth Factor will ensure that forward showing requirements reflect real-world conditions. Additionally, this process will reduce the risk of underestimating future resource needs, supporting the program's overarching goal of maintaining regional resource adequacy.

Any data/information that would characterize the importance of the issue:

The 2023 Western Assessment of Resource Adequacy report shows a 1.64% compound annual growth rate for peak demand and a 1.74% growth rate for energy from 2024-2033. Additionally, the 2024 Western Assessment of Resource Adequacy report prominently features load growth.

2024-CRF-012 / APS / ELCC by Vintage

WRAP Area:

Resource Accreditation

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Brandon Holmes
brandon.holmes@aps.com**Co-Sponsor:****Summary:** Grouping of resources by vintage in QCC accreditation.**Description of the issue:**

All resources QCC are computed each season resulting in (1) existing resource QCC values being reduced by the addition of new resources and (2) new resources being credited higher QCCs than they incrementally provide to the system. This request is to consider groupings of existing resources by vintage (2 to 5 year windows) in QCC accreditation to better align new resources with their incremental QCC to the system and retain appropriate QCC for existing investments.

Proposed solution to the issue described:

While we remain open to alternate solutions, we understand the impact of the order in which resources are evaluated for QCC accreditation and believe separating vintage-based groupings to be a viable approach to establishing appropriate QCCs for existing resources apart from incremental resources.

Seasonal QCCs would continue to be studied as per the existing program however accreditation would be performed sequentially with older groupings of resources receiving their accreditation first resulting QCCs more consistent with the time of the investment for both older newer resources.

Noting vintage-based groupings should be based on inclusion in the WRAP program/studies and not the in-service date of the resources as resources may come in and out of the program.

Specific document and language you would like changed:

-

Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

More appropriate accreditation for both existing and new resources. Increased certainty in resource adequacy planning by preventing accreditation leakage from over-accrediting new resources. More accurate attainment of reliability goals of the program by reducing over-accreditation new resources. Better insulated parties from impacts of other WRAP participants deployment of the resources that would otherwise diminish the value of existing investments. Align incremental resources with their incremental reliability value.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-013 / IPC / Capability Testing Off-Season

WRAP Area:

FS Demonstration

Tariff Change:

No

Time Score:

Medium

Lead Sponsor: Nicole Blackwell
nblackwell@idahopower.com**Co-Sponsor:****Summary:** Capability Testing Requirements are Restrictive**Description of the issue:**

Capability testing requirements are too restrictive and leads to existing, performing generation, to not receive adequate credit in the Forward Showing. Idaho Power does not typically perform capability tests in the summer due to potential operational issues during peak load conditions.

Proposed solution to the issue described:

BPM 105 should be revised to allow operational data in lieu of a capability test with allowance for unit ambient temperature capacity curves to be applied to data. This approach would still ensure accurate capacity values are reflected in the program, without having to perform capability testing during critical times.

Specific document and language you would like changed:

BPM 105, Section 3.4.2.1 **Capability Test Requirements for Thermal Resources**

Capability Tests conducted for Thermal Resources are used as the base accredited value to which Unforced Capacity (UCAP) calculations are applied (see Section 4.2) to determine final QCC values. A Thermal Resource that is not subject to generator testing requirements (i.e., are not subject to NERC MOD-025 requirements) may have its QCC values determined in accordance with Section 4.2, Option 1, in lieu of performing the Capability Test.

Capability Tests for Thermal Resources will be performed during the Summer Season and must meet the testing requirements specified in BPM 105. A resource may use its Summer Season Capability Test value for both the Summer Season and the Winter Season. If a unit has a greater Net Generating Capability for the Winter Season than for the Summer Season, a separate Capability Test will need to be performed during the Winter Season to claim the higher Net Generating Capability value.

The following requirements must be met for a Thermal Resource Capability Test, documentation of which will be provided to the Program Operator at the time of the FS Submittal Deadline:

- 1) Summer Capability Tests are to be conducted during a time when the ambient dry-bulb temperature is no more than 10 degrees Fahrenheit below the station ASHRAE Rated Ambient Temperature. At the time of testing, the most recent version of the ASHRAE Fundamentals Handbook shall be utilized. If the dry-bulb temperature exceeds 10 degrees below the ASHRAE Rated Ambient Temperature,

<p>a penalty of 5% plus an additional 0.5% per degree for each additional degree below 10 degrees, up to 20 degrees, will be applied to the Capability Test result. A summer Capability Test shall not be performed in excess of 20 degrees below the ASHRAE Rated Ambient Temperature. There is no ambient temperature requirement for Winter Capability Tests.</p> <p>2) The unit shall be brought to the desired test load and allowed to stabilize. Once the test period has begun, only minor changes in unit controls shall be made as required to maintain the unit in normal, steady-state operation.</p> <p>3) The unit capability shall be determined separately for each generating unit in a power plant where the input to the prime mover of the unit is independent of the others. Units that are aggregated into a single Resource Registration and prefer testing aligned with their registered resource and/or are dependent upon common systems (i.e., fuel, steam supply, auxiliary equipment, transmission, etc.) which restrict total output shall be tested simultaneously. Each unit shall be assigned an individual capability by apportioning the combined capability among the units.</p> <p>4) The fuel used during testing shall be the type expected to be used during peak load conditions.</p> <p>5) The capability of a unit or plant obtained through non-typical operation (i.e., bypassing feedwater heaters, varying steam conditions, alternate control mode, etc.) is acceptable.</p>
<p>Suggestion for how language could be updated to address issue:</p> <p>-</p>
<p>Describe the benefits that will be realized from this change:</p> <p>-</p>
<p>Any data/information that would characterize the importance of the issue:</p> <p>-</p>

2024-CRF-014 / IPC / Joint-Owner Flexibility

WRAP Area:

FS Demonstration

Tariff Change:

No

Time Score:

Short

Lead Sponsor: Nicole Blackwell
nblackwell@idahopower.com**Co-Sponsor:****Summary:** Flexibility for Jointly-owned Resources**Description of the issue:**

For jointly-owned resources, if the majority owner/operator does not submit required data on behalf of the resource, there should be an alternative path (documented) for the other owner(s) to receive credit for their share of the resource.

Proposed solution to the issue described:

-

Specific document and language you would like changed:

-

Suggestion for how language could be updated to address issue:

Do not have specific solutions, but it seems that if a participant owner can provide all the same data for their share of the resource as a majority owner/operator can provide for the entire resource, that an exception process or alternative options should be made available in order for minority owners to receive adequate capacity credit. Minority owners should not be beholden to majority owners for compliance.

Describe the benefits that will be realized from this change:

-

Any data/information that would characterize the importance of the issue:

-

2024-CRF-015 / PNM / Planned Outage Clarification

WRAP Area:

FS Demonstration

Tariff Change:

Yes

Time Score:

Short

Lead Sponsor: John Mayhew

john.mayhew@pnm.com

Co-Sponsor:

Arizona Public Service

Summary: Clarification Planned Outages Tariff Language/BPM 108**Description of the issue:**

Fundamentally, we feel there are issues with the tariff language on Planned Outages. The tariff has a very narrowed scope defining specific Planned Outages, and what may qualify for an exemption. Exemptions appear defined as: out from FS to Binding Season, less than a static value of 500MW per participant, and limited to a single resource(s). Second, there appears to be contradictory, or at minimum, confusing language between the Tariff and the BPM defining Planned Outages in the Forward Showing concerning outage exemptions. Lastly, we have concerns around the compressed time frames, in between non-Binding Seasons, in which Participants could inadvertently create resource adequacy issues planning all regular maintenance outages.

Understanding the Focus of the Tariff:

16.2.8 “Participants shall include in their Forward Showing Submittal for a Binding Season information on all Qualifying Resources that are currently out of service with a scheduled return date that falls during the Binding Season. Capacity associated with such resources must be deducted from Participants’ Portfolio QCC as specified in the Business Practice Manuals to ensure no credit is granted for such resources during the planned outage. The aggregate of any additional outages that are planned to occur during the Binding Season but have not yet begun at the time of submission must be within the Participant’s remaining surplus (or replaced with other supply). Participants may provide information on all Qualifying Resources that are planned to be out of service but if such data cannot be supplied with reasonable specificity, a Participant may provide Senior Official Attestation at the time of the submission of its FS Submittal this is expects the sum of planned outages to be equal to or less than the surplus stated in its FS Submittal throughout the Binding Season.”

16.2.8.1 “If a Qualifying Resource is planned to return to service within the first five days of a Binding Season, WPP may approve a qualified acceptance of the FS Submittal, provided the deficiency is less than 500 MW.”

16.2.8.2 “A planned outage shall not justify a waiver of or exception to a Participant’s holdback or energy delivery obligations under Part III or this Tariff. Participants will be expected to procure the necessary capacity or energy to meet the Operations Program requirements, regardless of planned outage schedules or FS Submittal acceptance.”

The Tariff is very specific, and it appears the main concern is Planned Outages out at the time of FS Submittal which will remain out once Binding Season begins. Why is the tariff so narrowly focused?

- There is no mention of a planned outage beginning:
 - After the close of the FS Submittal period
 - During the FS Cure period
 - After the close of the FS Cure Period
- All these other options, are then assumed, to be included in the language, *“The aggregate of any additional outages that are planned to occur during the Binding Season but have not yet begun at the time of submission must be within the Participant’s remaining surplus (or replaced with other supply).”*
- If the Tariff is specifying outages, out at the time of the FS Submittal, and still out once the Binding Season begins, then it is focused on planned outages that are 7+ months in duration. This equates to outages 215+ days in length. We would like to understand this thought process.

Exemptions

16.2.8.1 is very specific as what may qualify for an acceptance.

- Assumption: only applies to outages defined in 16.2.8, out from FS to Binding Season. Thus 7+months or 215+ days.
 - Also assumed it is limited per resource, out for 7+ months or 215+ days.
- Must return within the first 5 days of the Binding Season.
 - Therefore, Summer June 1-5 only?
 - And Winter November 1-5 only?
- Must not be above a static 500MW

Potential Contradiction Tariff/BPM and Need for Clarification

The Tariff does mention in 16.2.8.1 WPP **may** approve a qualified acceptance for the FS Submittal should the planned outage return to service within the first five days of the Binding Season.

However, per BPM 108:

3.1.5.1. *“Any Qualifying Resource that is out of service at the time of the FS Deadline and is planned to remain out of service for the first five or more days of a month in the Binding Season **cannot** have such Qualifying Resource’s QCC counted toward meeting the Participant’s FS Capacity Requirement for that month. To ensure QCC from resources is not utilized to meet a monthly FS Capacity Requirement during the planned outage, the Capacity associated with such resources shall be deducted by identifying the planned outages in the FS Demonstration.”*

- The Tariff language states WPP may approve a qualified acceptance while the BPM specifies it cannot count.
- It's possible the intent was to quantify an outage lasting longer than the first five days of the binding season cannot count; however, the inclusion of "...is planned to remain out of service for the first five or more days of a month..." makes the intent confusing. Specifically, the inclusion of 'or'.

Logistical Issues with Planed Outages

- Participants are limited to a specific number of calendar days for maintenance, should they wish to ensure they get full credit for all available QCC values in FS Submittals.
- Between the end of Winter Binding Season and the beginning of the Summer Binding Season
 - March 16 – May 31st
 - 77 calendar days
- Between the end of Summer Binding Season and the beginning of the Winter Binding Season
 - September 16 – October 31st
 - 46 calendar day
- Total of 123 calendar days for maintenance, should a participant wish to avoid risking losing QCC availability.
 - During these 123 calendar days, 21 WRAP entities (excluding Shell) will be trying to schedule all maintenance
 - This potentially could limit the availability of contractor labor, should all entities be vying for the same 123 calendar days.

This potentially could inadvertently create a resource adequacy issue, outside of the binding season, as all participants could be taking a great deal of capacity out of service at the same time.

Proposed solution to the issue described:

More clearly defined language to the WRAP Tariff, specifically articles 16.2.8 and 16.2.8.1. Also, change to the language for BPM 108, specifically 3.1.5.1. Broaden the definition to planned outages, specify what qualifies for an exception. Provide more flexibilities for WRAP entities to better manage planned outages. Allow for some flexibility for participants to take into consideration of their portfolio size. Not limit to single outages, out for long durations, and limited to a static MW value.

Specific document and language you would like changed:

16.2.8 *"Participants shall include in their Forward Showing Submittal for a Binding Season information on all Qualifying Resources that are currently out of service with a scheduled return date that falls during the Binding Season. Capacity associated with such resources must be deducted from Participants' Portfolio QCC as specified in the Business Practice Manuals to ensure no credit is granted for such resources during the*

planned outage. The aggregate of any additional outages that are planned to occur during the Binding Season but have not yet begun at the time of submission must be within the Participant’s remaining surplus (or replaced with other supply). Participants may provide information on all Qualifying Resources that are planned to be out of service but if such data cannot be supplied with reasonable specificity, a Participant may provide Senior Official Attestation at the time of the submission of its FS Submittal this is expects the sum of planned outages to be equal to or less than the surplus stated in its FS Submittal throughout the Binding Season.”

16.2.8.1 “If a Qualifying Resource is planned to return to service within the first five days of a Binding Season, WPP may approve a qualified acceptance of the FS Submittal, provided the deficiency is less than 500 MW.”

3.1.5.1 “Any Qualifying Resource that is out of service at the time of the FS Deadline and is planned to remain out of service for the first five or more days of a month in the Binding Season cannot have such Qualifying Resource’s QCC counted toward meeting the Participant’s FS Capacity Requirement for that month.

Suggestion for how language could be updated to address issue:

Potential Recommendations to Language Changes to the Tariff and/or BPM

- Adjust the start of the Winter Season from November 1st to December 1st (or a mid-November date)
 - PNM has an “unwritten rule”, per the direction of our generation personnel, that it’s acceptable to schedule planned maintenance up until Thanksgiving week, specifically for contract labor.
 - In the spring the “unwritten rule” is scheduling up until Memorial Day week.
 - Consideration for what may be “Winter” or “Summer” binding seasons for SWEDE may differ for MIDC, allow for some flexibility.
- Remove the language that specifies “...all Qualifying Resources that are currently out of service (at FS) with a scheduled return date that falls during the Binding Season.”
 - Eliminate the specification of outages that are 215+ days in length.
 - Eliminate that it’s limited to a single unit (or units).
- Change Tariff and BPM language that allows for entities to submit a Qualified Acceptance for outages, falling within the Binding Season, provided they are: (just examples, this could be added to)
 - Within the first or last XX days (number TBD) of the Binding Season.
 - Or eliminate this definition all together.
 - The outage is not planned for a duration longer than any 5 days total (or number TBD) within the Binding Season.
 - The outage(s) is(are) a portfolio wide threshold.
 - Eliminate the static value of 500MW for all participants regardless of size

<ul style="list-style-type: none"> ▪ Perhaps make the value a percentage of a participant's P50 Load + PRM (TBD)
<p>Describe the benefits that will be realized from this change:</p> <p>Clarifying the intent of the Tariff and BPM language would be beneficial. Allowing entities to better understand which outages may qualify for an acceptance.</p> <p>Also, these recommendations would provide some flexibility to entities, specifically potentially expanding the overall maintenance window by 60 calendar days.</p> <p>Lastly, it would also ensure all WECC entities can comfortably schedule required maintenance and not be competing with one another for limited resources, or inadvertently creating resource adequacy issues outside of Binding Seasons.</p>
<p>Any data/information that would characterize the importance of the issue:</p> <p>-</p>

2024-CRF-017 / IPC / Monthly PRM Volatility

WRAP Area:

FS Capacity Requirement

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Nicole Blackwell
nblackwell@idahopower.com**Co-Sponsor:****Summary:** PRMs**Description of the issue:****Proposed solution to the issue described:**

The calculation of monthly PRMs should be evaluated to determine whether they are achieving the intended goals and accurately modeling the mitigation of loss of load probability, while also achieving stability and mitigating volatility. Monthly PRMs provide beneficial granularity and flexibility but have exhibited some concerning volatility month-to-month. Idaho Power has seen some shoulder season months with load + PRM total obligation significantly exceeding Idaho Power's own extreme weather load forecasts as well as its own long-term planning load forecasts + Idaho Power's PRMs. Idaho Power is asking for a comprehensive effort to evaluate, review, and consider alternatives to the calculation of the monthly PRMs.

Idaho Power also supports the desire for stability that is reflected in change request 2024-CRF-002.

Specific document and language you would like changed:

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Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

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Any data/information that would characterize the importance of the issue:

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2024-CRF-018 / BPA / PRM out of FS Transmission Requirement		
WRAP Area: FS Transmission Requirement	Tariff Change: Yes	Time Score: Medium
Lead Sponsor: Steve Bellcoff srbellcoff@bpa.gov		Co-Sponsor:
Summary: Remove PRM from Forward Showing 75% Firm Transmission Requirement		
<p>Description of the issue:</p> <p>WRAP Tariff (16.3) requires FS workbook demonstration of firm transmission from source to sink for 75% of the capacity used to serve P50 load +PRM. Demonstration of firm transmission for 25% of the capacity used to serve P50 loads + PRM is not required.</p> <p>When PRMs approach or exceed 25% (March for example) it is possible to completely consume the 25% non-firm transmission buffer with PRM capacity.</p> <p>Consuming the 25% buffer with PRM capacity leaves participants with a requirement to demonstrate that 100% of capacity shown to serve P50 load is accompanied by source to sink firm transmission 7 months in advance of flow. Intent of the 75% transmission requirement was to recognize that at the Forward Showing time frame a participant may not have acquired 100% of the firm transmission needed to serve P50 peak load.</p> <p>Requiring firm transmission 7 months in advance for 100% of P50 peak load is problematic for many loads served by contracts (sourced from a system they qualify as WRAP capacity).</p>		
<p>Proposed solution to the issue described:</p> <p>Remove PRM from the Forward Showing Firm Transmission requirement calculation.</p>		
<p>Specific document and language you would like changed:</p> <p>Tariff section 16.3, FS Capacity Requirement: Exclude PRM from 75% firm source to sink requirement.</p>		
<p>Suggestion for how language could be updated to address issue:</p> <p>-</p>		
<p>Describe the benefits that will be realized from this change:</p> <p>This change would recognize that Firm Transmission is a finite resource and that requiring firm transmission for the PRM causes purchase and holding of that limited transmission capability that is not readily available. Filing for exclusions on transmission requires constant monitoring and submittal to the program which causes an administrative burden. Participants are still responsible for sharing in the Operations period, as a result the program already included the mechanism to incentives participants to be responsible in acquiring the required transmission to serve load and sharing ability.</p>		
<p>Any data/information that would characterize the importance of the issue: -</p>		

2024-CRF-019 / IPC / Resource Aggregation

WRAP Area:

FS Demonstration

Tariff Change:

No

Time Score:

Short

Lead Sponsor: Nicole Blackwell
nblackwell@idahopower.com**Co-Sponsor:****Summary:** Resource Aggregation**Description of the issue:**

Resource aggregation is currently limited to qualifying resources that are less than 1 MW. The cap on the size of individual resources eligible for aggregation should be increased, if not removed, if the aggregation criteria listed in BPM 105 is met. Idaho Power understands some additional criteria may be needed, or perhaps aggregation would be subject to review and approval by SPP/WPP. However, Idaho Power desires more flexibility regarding aggregation.

Proposed solution to the issue described:

Remove or increase the limitation of 1 MW for resource aggregation.

Specific document and language you would like changed:

Section 3.3 of BPM 105 **Qualifying Resource Aggregation (Resources <1 MW)**

Qualifying Resources that are less than 1 MW in size may be aggregated to obtain the minimum 1 MW registration requirement.

Qualifying Resources that are aggregated will need to have a common injection point of capacity to the transmission system. Aggregations of generators at different distribution substations may be allowed provided the generators are in the same BAA, same zone (as applicable by resource type), and are the same resource type.

For Qualifying Resources that are requested to be aggregated, the following information should be provided to the Program Operator.

- For the aggregated facility:
 - o Quantity of generators being aggregated.
 - o Combined nameplate of generators being aggregated.
 - o One-line diagram of the transmission/distribution system at which the generators are located.
- For each generator being aggregated:
 - o Nameplate.
 - o Location of power injection to the transmission system (substation).
 - o Supporting information for QCC evaluation.

This information will be provided to the Program Operator in a form that will be provided with the Advance Assessment Data Request workbook on the WPP website.

Suggestion for how language could be updated to address issue:

Remove or increase the limitation of 1 MW for resource aggregation.

Describe the benefits that will be realized from this change:

Creates ease and consistency in reporting. Idaho Power has a few sets of projects with common POIs and ownership that are aggregated under single CAISO resource IDs for EIM participation and the data for these sets of projects is available on an aggregated basis. It seems reasonable that this would be sufficient for WRAP, and would allow Idaho Power to leverage existing data and create consistency.

Any data/information that would characterize the importance of the issue:

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2024-CRF-020 / BPA / Forward Showing Waiver

WRAP Area:

FS Demonstration

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Steve Bellcoff

srbellcoff@bpa.gov

Co-Sponsor:**Summary:** Waiver for Forward Showing capacity lost/delay**Description of the issue:**

Section 16.2.4 of the Tariff currently only allows participants to seek waivers of FS capacity requirements if capacity lost b/c of catastrophic failure due to Force Majeure. The inability to show sufficient specified source capacity at FS deadline could occur due to no fault of the participant and for credible reasons – aside from Force Majeure. Not having a waiver beyond Force Majeure is an issue other events such as but are not limited to: supply chain constraints, lawsuits, developer failure to perform, appearance of loads not previously forecasted, unable to obtain sellers signature on JCAF, are all true legitimate reasons additional space is needed for a waiver

Proposed solution to the issue described:

Provide opportunity to seek waivers from FS Capacity requirements for legitimate reasons beyond Force Majeure.

Specific document and language you would like changed:

Additional waiver language in 16.2.4.

A Participant may include in its Forward Showing Submittal a request for an exception from its FS Capacity Requirement for an insufficiency of its Portfolio QCC solely due to (i) a catastrophic failure of one or more Qualifying Resources due to an event of Force Majeure as defined by Section 8.1 of this Tariff that (ii) the Participant is unable to replace on commercially reasonable terms prior to the FS Deadline as a result of the timing and magnitude of such catastrophic failure and its consequences. As more fully set forth in the Business Practice Manuals, such exception request shall be supported by a Senior Official Attestation. The exception request must include complete information on the nature, causes and consequences of the catastrophic failure, and must describe the Participant's specific, concrete efforts prior to the FS Deadline to secure replacement Qualifying Resources for the applicable Binding Season. WPP will consider the exception criteria established by this section, the information provided in the exception request, the completeness of the exception request, and other relevant data and information, in determining whether to grant or deny an FS Capacity Requirement exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such FS Capacity Requirement exception request. A Participant granted an exception hereunder must complete a monthly exception check report demonstrating that either the circumstances necessitating the exception have not changed; or that Qualifying Resources have become available, and the Participant has acquired them and no longer requires the exception. Failure to timely submit a required monthly report will result in

assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

Suggestion for how language could be updated to address issue:

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Describe the benefits that will be realized from this change:

Reduces the risk of failure to meet Forward Showing Capacity requirements, due to causes outside the control of a participant. Removes a risk factor for participation in program by having waiver ability when unexpected events happen outside of Force Majeure.

Any data/information that would characterize the importance of the issue:

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2024-CRF-021 / BPA / Delivery Failure Charge Cap

WRAP Area:

Operations Program

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Steve Bellcoff
srbellcoff@bpa.gov**Co-Sponsor:****Summary:** Cap on Non-Delivery Failure charge associated with curtailment of non-firm transmission**Description of the issue:**

There are periods and paths where firm transmission is not available in any time period (Forward Showing, preschedule or RealTime). It follows that there are occasions when scheduling the delivery of energy (from a holdback) on non-firm transmission is the only option. Curtailment of non-firm transmission and ensuing failure to deliver could result in a Failure to Deliver Charges. (Tariff section 20.6).

Section 20.7.3. of the Tariff provides a waiver process for participants who anticipate a failure to deliver. If approved, the participant is not required to deliver holdback. It is not clear if this waiver should apply or be approved for holdback scheduled on non-firm. Of course, there are appropriate situations for a waiver due to lack of firm transmission (de-rates, outages), but if all lines are in service and firm is not available (this scenario) and tags cut w/out advance notice without a waiver a participant is exposed to large penalties. Limiting holdback supply because of a lack of firm transmission may leave the program short capacity in the Operational window and is overly conservative since a large quantity of energy is delivered across non-firm transmission on a regular basis, and in fact WRAP energy delivered through non-firm schedules does not require a waiver.

Aside from the waiver, participants face Failure to Deliver penalties (Section 20.7.4) if non-firm schedules are reduced or cut entirely. The stiffness of the penalty depends on whether another participant can “fully” cover the undelivered energy. If fully covered the first failure is 5-times the higher of DA or RT index, if not covered, the first failure to deliver penalty is 25 times the higher of the DA or RT index. These penalties have a 5-year cumulation period; a single hourly curtailment in year one starts the 5-year clock triggering higher penalties for the duration of the 5-year period. A second curtailment of *a single hour* within the 5-year period could result in a penalty 50 times the higher of DA or RT index if another participant does not “fully” cover for curtailment. (20 times index if another participant fully covers.) Punitive. Especially if participants tried but could not obtain firm transmission to deliver energy assigned by the program from a holdback in the operational window.

Revenues from Failure to Deliver Penalties go to WRAP Schedule 1 costs if holdback fully covered by another participant. If holdback not fully covered by other participants,

revenues go to the entity who had the shortfall which was not covered. The Tariff is not clear what happens if the shortfall is partially covered by another participant.

Finally, there are systems/markets in place today which cover failure to deliver scenarios in WECC: On the physical replacement side we have Merchant Alerts, EIM, WPP reserve sharing group and EEA alerts. Financially we have WPP and EIM settlements, and WSPP LDs. In the absence of negligence or mal-intent, no need for a third WRAP penalty/settlement structure.

Proposed solution to the issue described:

If the participant with the holdback obligation attempted to purchase short term firm in both the preschedule and real time, but only non-firm transmission was available (and secured), or the participant redirected firm PTP on an hourly basis to provide holdback but the child/children were non-firm; then the Failure to Deliver Charges should be capped at higher of DA or RT index (no multiplier) and these events should be excluded from the Cumulative Delivery Failure Period tally.

Specific document and language you would like changed:

Either expressly add the afore-mentioned exemption language provided to Tariff Section 20.7.3 or to both Sections 20.7.4.1 and 20.7.4.2 of the Tariff.

Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

Participant(s) who are long and attempting to provide holdback on firm transmission should not be punished for trying to deliver on firm, but not able to secure. Conversely participants who are short should not be enriched by the revenue associated with penalties forced on participants who are not able to obtain firm transmission.

Any data/information that would characterize the importance of the issue:

Firm transmission is often not available and curtailments are possible. The WRAP program is voluntary; exposing participants to penalty risk (at multipliers of current market value) due to the lack of availability of firm transmission, creates risk situation that will cause participants (and/or potential participants) to have high dollar risk scenarios could/will drive those entities away from the program. Lacking ill intent or negligence, it is sustainable and logical for the WRAP to assign penalties in-line with actual costs when a participant has taken the measure possible to assure delivery even through non-firm transmission when firm simply is not available.

2024-CRF-024 / PAC / Flat Load and PRMs

WRAP Area:

FS Capacity Requirement

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Benjamin Faulkinberry
Benjamin.faulkinberry@pacificorp.com

Co-Sponsor:

Summary: Program Consideration of Data Center Additions and Other Large Non-Conforming Loads

Description of the issue:

A significant amount of utilities' anticipated load growth is attributed to large, non-conforming loads with high load factors such as data centers. WRAP modeling practices and policy may need to adapt as loads of this nature comprise a growing percentage of load within the program footprint. The WRAP will want to ensure it has considered this industry dynamic when establishing individual Participants' Forward Showing capacity requirements. Furthermore, Participants and their regulators will be looking to WRAP to ensure Participants who bring these types of loads online earlier than other Participants, or Participants whose load profiles contain larger percentages of these types of loads are not shouldering an inequitable amount of capacity needed to support a 1-in-10 LOLE regional reliability metric.

Proposed solution to the issue described:

Possible program changes could include:

-Participants with demonstrable significant loads which fit defined parameters may be allowed by the program to bifurcate these loads in their respective FS submittals, and these loads may have a separate PRM or associated capacity requirement. This separate PRM value or capacity requirement would reflect the non-weather-sensitive and high load factor attributes of this load while still supporting a 1-in-10 LOLE regional reliability metric.

-If loads of this nature are kept in the pool of existing program load, the program may adjust an individual Participant's applicable PRM to reflect the proportion of these loads within a Participant's P50 load forecast.

-If customer loads of this nature have curtailment provisions in their respective agreements with their local load-serving entity, some or all of the load may instead be treated as a DR program.

-Customer loads of this nature with behind-the-meter generation which can be called upon by the local utility in a reliability emergency (but cannot be injected into the grid), or, have curtailment provisions in their respective interconnection agreements may be considered "non-firm load" and thus excluded from the WRAP FS P50 load forecast. This

would be similar to a Participant selling non-firm energy or capacity which can be recalled if needed to serve firm obligations.

Discussion and studies may arrive at different solutions not included in this list of possibilities.

Specific document and language you would like changed:

-

Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

The WRAP devoting time and resources to study the effects of load growth associated with this category of customer has multiple potential benefits to Participants as well as the credibility of the program. The WRAP may conclude it can afford a lower capacity requirement associated with these loads without sacrificing regional reliability if a Participant can demonstrate the individual loads meet program-defined parameters.

Even if discussion and studies result in no change in program requirements to accommodate these types of loads, Participants will have public resources to reference in discussions with regulators as well as prospective customers who wish to connect this type of load.

Any data/information that would characterize the importance of the issue:

The Western Electric Coordinating Council's 2024 Assessment of Resource Adequacy is one of a number of public documents and statements from industry groups and utilities which highlight the amount of load growth associated with this category of customer.

2024-CRF-025 / IPC / Qualifying Contract Options and Review		
WRAP Area: Resource Accreditation	Tariff Change: No	Time Score: Long
Lead Sponsor: Nicole Blackwell nblackwell@idahopower.com		Co-Sponsor:
Summary: Qualifying Contracts		
<p>Description of the issue:</p> <p>Idaho Power appreciates the transition plan that participants developed and the flexibility that it contains to allow participants to achieve compliance over a phased approach as resources are built and bilateral market products develop that support WRAP compliance. Idaho Power would like to explore concepts around WRAP-compliant market purchase products and options if such products are not available and there is insufficient time to pursue building a resource instead, even after the transition period is over and the program is in the fully-binding phase.</p> <p>Idaho Power is also possibly interested in a renewed detailed review of the requirements for qualifying contracts, including in BPM 106, and to the extent necessary, BPM 105, to ensure WRAP participants have a common understanding of the requirements for qualifying contracts, and to consider whether changes to BPM 106 or the tariff could be appropriate to reflect participants' intent, provide additional clarity, or resolve outstanding questions or inconsistencies.</p>		
Proposed solution to the issue described: -		
Specific document and language you would like changed: -		
Suggestion for how language could be updated to address issue: -		
Describe the benefits that will be realized from this change: -		
Any data/information that would characterize the importance of the issue: -		

2024-CRF-026 / Form Energy / Indicative QCCs

WRAP Area:

Resource Accreditation

Tariff Change:

Yes

Time Score:

Medium

Lead Sponsor: Mark Thompson

mthompson@formenergy.com

Co-Sponsor:**Summary:** Establish a process for providing indicative accreditations to new resource types.**Description of the issue:**

As utilities determine optimal resources to add to their portfolio to ensure reliability, affordability, and to serve loads in accordance with state policies, it seems likely that emerging resource technologies will be considered. This could include geothermal, hydrogen, long-duration energy storage, multi-day energy storage, or a variety of other technologies. The ability of such resources to bolster resource adequacy, and to count toward compliance with required resource adequacy showings under the WRAP is a significant portion of the value of such resources to utilities.

Under the current WRAP practices, it appears that resource types will not be accredited (i.e. receive a QCC value) until a participant utility shows it owns or has contracted for the resource. (See BPM 105, Section 3.1). With respect to emerging resource technologies, this means that the QCC value of the resource, an important piece of the value of the resource to the utility, cannot be known until the resource has been acquired. And, because the resource is an emerging technology, there may be heightened uncertainty about how an accreditation for a QCC will play out. In short, the accreditation process for emerging resource technologies may lead to a “chicken and egg” scenario, where utilities are hesitant to acquire emerging resources before knowing their QCC, and yet they will not know their QCC until they have acquired the resources. Even though many emerging technologies are focused on trying to solve future challenges of the grid (including resource adequacy and reliability), this conundrum could lead to a situation where beneficial new technologies are not brought to the region’s grid or, at the least, such progress may be unnecessarily slowed.

Proposed solution to the issue described:

The WRAP could include a process for emerging resources to be given an “indicative accreditation.” Such an accreditation could be provided for emerging technologies where requested by a participant utility, or some number of participants or stakeholders. This indicative accreditation would give participant utilities guidance about the resource adequacy value that would be expected from a resource, which could assist them in evaluating the overall business case for emerging technologies. In order to receive an indicative value, a utility would not have to show ownership or rights to the resource.

Specific document and language you would like changed:

Section 3.1 of BPM 105 sets forth the process by which resource registration occurs, and describes how that leads to an accreditation under the WRAP. This language could be modified to describe that emerging technologies are able to receive an indicative accreditation. Or, it could refer to a new subsection that describes the process for an indicative accreditation.

Suggestion for how language could be updated to address issue:

Section 3.1 could be modified to say, after the first full paragraph, “A Participant may request that a resource receive an indicative accreditation in order to give more clarity to the expected accreditation, or a range of potential accreditations, that such a resource would receive under the program, upon a showing that the resource is an emerging technology, for which the QCC value may be unclear. An indicative accreditation will be provided in accordance with subsection XX.XX.”

A new section could then describe the process and conditions for receiving an indicative accreditation. This description could include:

- Requiring a description of why an indicative accreditation is appropriate and beneficial;
- A requirement to provide available information about the resource to allow for a reasonable assessment, along the lines of the information provided for resources that are owned or contracted;
- The conditions under which an indicative accreditation will be granted; and
- An explanation that the accreditation is indicative only, and not binding or necessarily an accurate assessment of any future accreditation of QCC.

Describe the benefits that will be realized from this change:

1. An indicative accreditation will allow Participant utilities to better understand the value proposition associated with emerging technologies, and would make the process of deploying beneficial new technologies in the region more efficient. Given that many new emerging technologies are intended to benefit reliability and resource adequacy in new and important ways, this will benefit customers and provide utilities with more clarity around their choices as they evaluate what resource to acquire.
2. Providing an indicative accreditation for emerging technologies will also benefit the WRAP program by allowing a process whereby ambiguities or uncertainties can be worked through prior to the time an actual, final QCC must be determined for new resource types.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-027 / BPA / Load Responsibility Transfer

WRAP Area:

FS Demonstration & Operations Program

Tariff Change:

Yes

Time Score:

Long

Lead Sponsor: Steve Bellcoff
srbellcoff@bpa.gov

Co-Sponsor:

Summary: Loads Transfer between Forwards Showing and Operations

Description of the issue:

In real life, entities have made contractual agreements with other parties to serve load outside LRE's home BAA (and any changes to that load) in the operating day. That means that the Load Responsible Entity (LRE) has put in place a contract with another entity to serve the load, and any and all fluctuations in that load after an established scheduling deadline (typically preschedule). The LRE does all the planning for load service. Generally, the LRE, through an agreed upon schedule and forecast, arranges for a transfer schedule of energy to the second entity on the preschedule day, the second party takes that transfer schedule and then meets the end use load as it actually appears.

WRAP methodology and calculations hold the LRE responsible for this load from Forward Showing through the Operations program time frame until the hour of delivery, which is different than how these loads are served real life due to afore-mentioned agreements that have been put in place between parties.

WRAP needs a mechanism that allows the shifting of responsibility for loads (Transfer) between Forward Showing and the Operations program time periods, when and where contractual mechanisms are in place, outside of WRAP, for real time load serves by another party

Proposed solution to the issue described:

WRAP methodology that allows the LRE to hold responsibility in the Forward Showing, but shift the load to a second party during the Operations program. This 'Transfer' of load would align Load Service Responsibility with what has been contracted for in real operations.

Without this shift the LRE (FS planning participant) continues to see this load as part of it sharing calculation all the way through the Operations Program to the T-120 sharing calculations, while in fact that load shifted from one participant to another entity. Embedded in the sharing calculation is the uncertainty calculation, when that load is 'Transferred' from one entity to another, the uncertainty in the sharing calculation would also shift as well, aligning that uncertainty with the actual delivery.

When the LRE established a schedule at the defined contractual time (say preschedule), that is the delivery schedule – no uncertainty exists for the LRE related to that load, it is

now a fixed scheduled, however the second entity now has all the uncertainty related to that load from the scheduling time to deliver hour. Allowing a load Transfer between Forward Showing and Operations Program, would put all Forward Showing planning and load responsibility with the LRE, then through the ‘transfer’ realign that operational responsibility (and uncertainty) to the entity who is contractual serving the load on the Operating hour.

*Note – Transfer concept may require a link to NT transmission service.

Specific document and language you would like changed:

-

Suggestion for how language could be updated to address issue:

-

Describe the benefits that will be realized from this change:

More accurate reflection of how loads are served in reality. Allowing a Transfer of load, would align WRAP Operations Program calculations with real operations for participants who have these contracts in place (both party and counter party to these agreements). This would allow Operations Program uncertainty to align with the party serving the load on the operating hour, while still holding the LRE responsible in WRAP for all forward planning requirements that are their responsibility in the real world.

Any data/information that would characterize the importance of the issue:

-

2024-CRF-031 / EWEB / Bilateral Contracts

WRAP Area: Resource Accreditation	Tariff Change: No	Time Score: Medium
Lead Sponsor: Jonathan Hart Jonathan.hart@eweb.org		Co-Sponsor:
Summary: Bilateral Contract Support		
Description of the issue: EWEB is seeking support for development of a bilateral, WRAP compliant legal framework for capacity contracts where financial damages for non-performance under the program can be appropriately conveyed to an upstream party who failed to perform, thus shielding a WRAP participant from FS and Ops penalties for inadequacy and non-performance.		
Proposed solution to the issue described: No suggested solution other than to engage with legal staff to determine/standardize a set of edits that could be applied to an bilateral contract to make it WRAP compliant. This could include edits to a standard WSPP agreement, though the intent is not to work through the WSPP contract revision process.		
Specific document and language you would like changed: -		
Suggestion for how language could be updated to address issue: -		
Describe the benefits that will be realized from this change: The WRAP tariff defines penalties for inadequacy and non-performance which are assessed to participants. For the program to be successful, participants need to be able to efficiently develop commercial arrangements to support trade liquidity for capacity products. Standardization of commercial terms and trade liquidity supports the cost effectiveness of the program as it simplifies the ways in which participant and non-participants can work together to solve form program capacity needs. At times, this will mean that one party needs to be able to effectively take on the financial liability on non-performance from another party.		
Any data/information that would characterize the importance of the issue: -		

Appendix A

Markets+ Must-Off Protocols

DATE: 08/06/2024

IMPACTED WG/TF: MRATF

SUBJECT AREA: DESIGN

MARKETS+ TARIFF

- **Attachment A:** 5.1.1 & 5.1.2

MARKETS+ PROTOCOLS

- 4.2.1

MARKETS+ TARIFF

5.1.1 Day-Ahead Market and Reliability Unit Commitment

Market Participants are required to offer a minimum amount of Resource capacity to the Day-Ahead Market. Market Participants must make available that same minimum amount of Resource capacity to the initial RUC process after the Day-Ahead Market closes. A Market Participant's Resource capacity is the sum of the offered capacities of Resources with a commitment status of Market, Self, or Reliability Must Run as described in Attachment A, Section 4.1. After satisfying the must offer obligation, a Market Participant may offer any remaining Energy or capacity to the market at its discretion. Market Participants satisfy this Day-Ahead must offer requirement by meeting the criteria set forth below (A) during non-binding seasons, and the lesser of (A) or (B) below in binding seasons, as defined in the Resource Adequacy Program. During the binding season, in the event that the calculation of (A) exceeds (B), the capacity amount determined under (B) will act as a ceiling on the Market Participant's must offer requirement, as (B) represents the maximum amount the Market Participant is required to offer to Markets+.

(A) Each Market Participant will satisfy the must offer obligation by offering resource capacity greater than or equal to the sum of that Market Participant's (1) load and (2) Flexibility Reserve Products obligations, adjusted by (3) obligations to supply to or rights to receive from the Resource Adequacy Program and adjusted by (4) net position for each Operating Hour based on the following criteria:

- (1) A Market Participant's load for purposes of this section will be equal to the hourly load forecast for the Market Participant for use in the RUC processes and RTBM, as described in Attachment A, Section 7.5.

(2) A Market Participant's hourly Flexibility Reserve Products obligation will be equal to the sum of that Market Participant's Short-Term Flex Up and Mid-Term Flex Up obligations as estimated by the Market Operator in accordance with Attachment A, Section 7.4.

(3) A Market Participant's obligation to supply to or right to receive energy from the Resource Adequacy Program is described in the Markets+ Protocols.

(4) A Market Participant's net position is forward purchases minus forward sales impacting an LRE's load obligation, as described in the Markets+ Protocols.

(5) The Resource capacity for a Market Participant is reduced by the total Self-Charging MWs of all MSRs registered to that Market Participant for the Operating Hour.

(B) Each Market Participant will satisfy the maximum must offer obligation by offering Resource capacity greater than or equal to the Market Participant's (1) Resource Adequacy Program forward showing requirement during a binding season as defined by the Resource Adequacy Program, adjusted by (2) any obligations to further supply to or rights to receive energy from the Resource Adequacy Program, adjusted by (3) net position, and adjusted for (4) day-ahead forecasted fleet performance based on the following criteria:

(1) A Market Participant's forward showing requirement is the quantity of capacity required to demonstrate adequacy for the Resource Adequacy Program for each Operating Day during a binding season.

(2) A Market Participant's obligation to supply or rights to receive energy from the Resource Adequacy Program, is described in the Markets+ Protocols.

(3) A Market Participant's net position is forward purchases minus forward sales impacting an LRE's load obligation, as described in the Markets+ Protocols.

(4) A Market Participant's adjustment for forecasted day ahead fleet performance is the sum of any forced outages, unplanned unavailability and unplanned change of capacity of Resources registered to the Market Participant for the Operating Hour, and further described in the Markets+ Protocols.

(C) To the extent that a Market Participant does not meet the conditions described in Sections 5.1.1(A) or (B), the Market Participant will be deemed noncompliant with the must offer obligation for that hour. The Market Operator will assess a penalty amount equal to the product of the shortfall capacity and the associated Day-Ahead Market LMP as described below.

(1) A Market Participant's shortfall capacity for an Operating Hour is equal to the lesser of the difference between the resource capacity and Day-Ahead Market must offer obligation, as described above in Section 5.1.1(A) and (B).

(2) The Must Offer Penalty LMP is calculated as the average of the Day-Ahead LMP for the Market Participant's Resources in the Operating Hour with the shortfall. If a Market Participant has no registered Resources, then the Markets+ Marginal Energy Component will be used. In no case will the penalty be less than \$0.00.

(3) The Market Operator will distribute any collected Day-Ahead must offer penalties for an Operating Hour as detailed in Attachment A, Section 9.2.17.

5.1.2 Real-Time Balancing Market

Market Participants are required to offer Resource capacity to the RTBM as described below. A Market Participant's Resource capacity is the sum of Resources offered with a commitment status of Market, Self, or Reliability Must Run as described in Attachment A, Section 4.1. After satisfying the must offer obligation, a Market Participant may offer any remaining Energy or capacity to the market at its discretion. Market Participants satisfy this requirement by meeting the lesser of the criteria set forth in (A) or (B) below:

(A) Each Market Participant will satisfy the must offer obligation in an Operating Hour by offering Resource capacity greater than or equal to the sum of (1) cleared Day-Ahead Market Energy, (2) cleared Flexibility Reserve Products, and (3) incremental Market Commitments from the RUC process, adjusted by (4) obligations to supply to or rights to receive from the Resource Adequacy Program and adjusted by (5) deviation in net position for each Operating Hour based on the following criteria:

(1) A Market Participant's cleared Day-Ahead Market Energy is the sum of Energy cleared in the Day-Ahead Market for all Resources registered to the Market Participant for the Operating Hour.

(2) A Market Participant's cleared Day-Ahead Market Flexibility Reserve Products is the sum of Short-Term Flex Up and Mid-Term Flex Up cleared in the Day-Ahead Market for all Resources registered to the Market Participant for the Operating Hour.

(3) A Market Participant's incremental commitments from the RUC process is the sum of energy dispatch associated with incremental commitments from the initial RUC process for all Resources registered to the Market Participant for the Operating Hour, further described in the Markets+ Protocols.

(4) A Market Participant's obligation to supply energy to or right to receive energy from the Resource Adequacy Program is described in the Markets+ Protocols.

(5) A Market Participant's deviation in net position is determined by comparing the final net position to the net position that cleared in the Day-Ahead Market for the Operating Hour and further described in the Markets+ Protocols.

(6) The resource capacity of a Market Participant is reduced by the total Self- Charging MWs of all MSRs registered to that Market Participant for the Operating Hour.

(B) During the binding season each Market Participant will satisfy the must offer obligation by offering Resources greater than or equal to the higher of the Day-Ahead compliance amount described in Section 5.1.1(B) and the Real-Time must offer amount described in Section 5.1.2(A) (1, 2 & 3), adjusted by (1) further obligation to supply energy to or receive energy from the Resource Adequacy Program not accounted for in the Day- Ahead Market, adjusted by (2) net position not accounted for in the Day-Ahead Market and adjusted by (3) fleet performance changes not accounted for in the Day-Ahead Market.

During a non-binding season each Market Participant will satisfy the must offer obligation by offering Resources during the non-binding season greater than or equal to the Real-Time must offer amount described in Section 5.1.2(A) (1, 2 & 3), adjusted by

(2) net position not accounted for in the Day-Ahead Market and adjusted by three (3) fleet performance changes not accounted for in the Day-Ahead Market.

(1) A Market Participant's obligation to supply or rights to receive energy from the Resource Adequacy Program, is described in the Markets+ Protocols.

(2) A Market Participant's net position not accounted for in the Day-Ahead Market are further described in the Markets+ Protocols.

(3) A Market Participant's adjustment for fleet performance changes not accounted for in the Day-Ahead Market is the sum of unplanned unavailability or reduction of capacity of Resources registered to the Market Participant for the Operating Hour compared to the unplanned unavailability or reduction of capacity of the Market Participant for the Operating Hour offered into the Day-Ahead Market and further described in the Markets+ Protocols.

(C) A Market Participant not meeting the conditions described in Sections 5.1.2(A) or (B), the Market Participant will be deemed noncompliant with the must offer obligation for that Operating Hour. The Market Operator will assess a penalty amount equal to the product of the shortfall capacity and the associated RTBM LMP as described below.

(1) A Market Participant's shortfall capacity for the Operating Hour is equal to the lesser of the difference between the resource capacity and Real Time Balancing Market must offer obligation, as described above in Section 5.1.2 (A) and (B).

(2) The Must Offer Penalty LMP is calculated as the average of the RTBM LMP for the Market Participant's Resources in the Operating Hour with the shortfall. If a Market Participant has no registered Resources, then the Markets+ Marginal Energy Component will be used. In no case will the penalty be less than \$0.00.

(3) The Market Operator will distribute any collected Real-Time must offer penalties for an Operating Hour as detailed in Attachment A, Section 9.3.26.

MARKETS+ PROTOCOLS

1. Must Offer Obligation

1.1 Definitions to be included in the Protocols Glossary

(NOTE: Certain defined terms below come from the M+ tariff and will NOT be reproduced within the Protocols so inconsistency can be best avoided).

Binding Seasons: Summer (June 1st through September 15th) and Winter (November 1st through March 15th). Note that WRAP Holdback Requirement as defined below is applicable only during these Binding Seasons.

Ceiling: The maximum quantity required for a Market Participant's Must Offer Obligation. The source of the Ceiling is the table in section 1.3 below and provided by the Market Participant.

CROW: Control Room Outage Window, the reporting tool used for outage coordination; required for Resources that are contributed to the market. See Section 4.1.6 Outage Scheduling and Reporting.

Forward Showing Submission: The Submission, in the form of a workbook or other systematic or electronic means, used by a WRAP participant to convey sufficiency and

compliance with the capacity and transmission requirements in the Resource Adequacy Program Forward Showing Program.

WRAP Operations Program Hourly Holdback: A MW quantity, as determined on a Preschedule Day, that has been issued by the WRAP and is capable of converting into an Energy Deployment on a given hour of the succeeding Operating Day. A Market Participant with an obligation to provide a WRAP holdback will include the MW value as a positive value to represent an increase to a Market Participant's Must Offer Obligation. A Market Participant receiving a WRAP holdback will include the MW value as a negative value to represent a decrease to a Market Participant's Must Offer Obligation.

WRAP Operations Program Hourly Sharing Result: The result of WRAP sharing calculation in MW Qty, for an entity in a given hour of a succeeding Operating Day as determined on a Preschedule Day. If an entity's WRAP Operations Program Sharing Result is a positive quantity, this indicates a surplus and if an entity's WRAP Operations Program Sharing Result is negative, this indicates a deficit. If the Sharing Result is equal to zero (0) MW, this indicates a neutral position that is neither a surplus nor a deficit.

Net Position: Net position includes contracts for the sale or purchase of Energy or capacity outside of the day-ahead and or real time markets; on these transactions a sale is represented as a positive value and purchase as a negative. For transactions that import into or export from the Markets+ Footprint, net position only includes high priority imports and exports. If a Market Participant wishes to include a High Priority Transaction in its net position, that transaction must meet the requirements of a qualifying e-tag, as detailed in Section [High Priority Transactions] of the Protocols.

Non-Binding Season: Any calendar date that is outside of the dates in the Binding Seasons.

Must Offer Obligation: The minimum amount of Resource capacity which a Market Participant is required to offer into the Day-Ahead Market, RUC, or RTBM.

1.2 Must-Offer Obligation

For each Operating Day, Market Participants are required to offer available Resources to the Day-Ahead Market, initial Reliability Unit Commitment process, and Real-Time Balancing Market as detailed in this section.

If a Market Participant is a Load Responsible Entity (LRE) or has a contractual obligation to supply a load that is within the Markets+ Footprint, that Market Participant will be subject to the Must Offer Obligation. If a Resource within the Markets+ Footprint has a high priority export to serve

load outside the footprint, the Market Participant to whom that Resource is registered will have the Must Offer Obligation.

1.3 Data and Information

A Market Participant must provide to the Market Operator the relevant Resource and load data for loads in the Markets+ footprint for the next upcoming Binding Season that are summarized within its Forward Showing Submission, which is approved by the Program Operator of the Resource Adequacy Program.

Sample Format for Forward Showing Data that will be used for the Must Offer Ceiling Submission

Forward Showing (FS) Capacity Requirement for All Loads Registered in Markets +	Month / Year	Month / Year	Month / Year	Month / Year	Month / Year
LRE 1	X MW	X MW	X MW	X MW	X MW
LRE 2 (if more than one LRE is represented by a MP)	X MW	X MW	X MW	X MW	X MW

A Market Participant may, but is not required to, provide the Forward Showing Submission to the Market Operator. The inputs to the Day-Ahead Market and Real Time Balancing Market must be based on the factual and truthfully reported characteristics that are used to support the Submission.

1.4 Day Ahead and initial Reliability Unit Commitment Obligation

1.4.1 Must Offer Obligation

Market Participants must offer a minimum amount of Resource capacity for the Day-Ahead Market and the same minimum amount for the first RUC process to allow the market to evaluate all subsequent operating intervals within all hours for a given Operating Day. The Must Offer Obligation can be met by self-schedule energy only, a combination of self-schedule energy and economic offer range, or economic offer range only, by submitting Resource Offers with a Commitment Status of Market, Self, or Reliability Must Run in the Day-Ahead Market. The Maximum Economic Capacity Operating Limit of such Resources will be used by the Market

Operator to assess compliance with the Must Offer Obligation. After satisfying the Day-Ahead and RUC Must Offer Obligation, a Market Participant may offer any remaining Energy or capacity to the market at its discretion for purposes of its Must Offer Obligation.

(A) For Each Operating Hour in the Day-Ahead Market, the amount of Resource capacity that a Market Participant must offer to Markets+ consists of the sum of sections 1 through 5 below:

- (1) The Hourly Mid-Term Load Forecast represents the quantity, expressed on an hourly basis, that the Market Operator forecasts in accordance with Section 4.1.2 that is attributed to that Market Participant.
- (2) The Flexibility Reserve Product Obligation represents the Short-Term Flex Up and Mid-Term Flex Up obligation amount, expressed on an hourly basis, that the Market Operator forecasts for each Asset Owner in accordance with Section 4.1.3(2). The Asset Owner obligations are then summed by Market Participant.
- (3) WRAP Operations Program Hourly Holdback: the hourly quantity issued by the WRAP Operations program. A Market Participant providing a WRAP holdback will include the MW value as a positive value to represent an increase to a Market Participant's Must Offer Obligation. A Market Participant receiving a WRAP holdback will include the MW value as a negative value to represent a decrease to a Market Participant's Must Offer Obligation. For WRAP holdback transactions that both source and sink within the Markets+ footprint, this requirement may be deployed closer to the start of the Real Time Balancing Market but is issued prior to the Day Ahead Market. For WRAP holdback that has a source or a sink external to the Markets+ footprint, the holdback quantity is equal to the amount of Energy deployed for the Operating Hour between the parties as represented by a confirmed etag; if the MW Qty on the e-tag is less than the confirmed MW Qty, the MW Qty on the e-tag will be used. This data will be provided by the Market Participant, including any WRAP Operations Program Hourly Holdback Requirement that is converted to an energy deployment on the Operating Day.
- (4) Net Position. The sum of each Market Participant's power purchases and sales Contracts and Transfers as represented by qualifying e-tags or other established process of communication. This data will be provided by the Market Participant. The net position includes High Priority Transactions representing interchange import transactions and export transactions from the Markets + Footprint. If a Market Participant wishes to include a High Priority Transaction in its net position, that transaction must meet the requirements detailed in Section [High Priority Transactions]. For clarity, any energy deployed via the WRAP holdback will not

count towards the Net Position. High Priority Transactions that are WRAP holdback, or energy deployed under the WRAP Operations program are not considered Net Position and instead are contemplated in (3) WRAP Operations Program Hourly Holdback above.

- (5) MSRs self-charge schedule represented hourly in Resource Offer.

Day Ahead Must Offer Obligation as summarized in the Table below:

	Day-Ahead Must Offer Components	Hourly MW Amount
1	Hourly Mid-Term Load Forecast	
2	Hourly Flexibility Reserve Products obligations.	
3	Hourly WRAP Operations Holdback	
4	Hourly Net Position	
5	Hourly MSR Self Charge	
	Minimum Required Resource capacity (SUM of 1.4.1 A (1-5) =	

- (B) Day Ahead Must Offer Ceiling, Binding Season: Each Market Participant is required to offer Resources no greater than the approved Forward Showing Capacity Requirement value as provided by the Market Participant, adjusted as described below. This value informs the ceiling for the Day Ahead Must Offer and is used to determine the ceiling during the Binding Season as defined by the Resource Adequacy Program. During the Binding Season, in the event that the calculation of (A) exceeds (B), the capacity amount determined under (B) will act as a ceiling on the Market Participant's Must Offer Obligation, as (B) represents the maximum amount the Market Participant is required to offer to Markets+ during the Binding Season. The Day-Ahead Must Offer Ceiling is calculated as the sum of the following:

- (1) A Market Participant's Forward Showing Capacity Requirement is the amount of capacity required for the Market Participant to demonstrate adequacy for the Resource Adequacy Program for each Month during a Binding Season. The Monthly value serves as the maximum quantity for the relevant Operating Day, within the corresponding Operating Month. If a Market Participant does not meet the Forward Showing Capacity Requirement the maximum quantity for the relevant Operating Day within the corresponding Operating Month is adjusted down by the deficit capacity amount.

- (2) WRAP Operations Program Hourly Adjustment. For an entity with a negative WRAP Operations Program Hourly Sharing Result, the WRAP Operations Program Hourly Adjustment is equal to the absolute value of the negative Qty (MW) of the WRAP Operations Program Hourly Sharing Result minus the positive Qty (MW) of WRAP Operations Program Hourly Holdback. If the source of the WRAP Operations Program Hourly Holdback is external to the Markets+ footprint, the source and MW quantity must be represented by a confirmed e-tag between the parties. For an entity with a positive or zero value WRAP Operations Program Hourly Sharing Result, the value of the WRAP Operations Program Hourly Adjustment will be zero (0) MW.
- (3) Net Position. The Net Position is the sum of each Market Participant's power purchase and sales Contracts and Transfers as represented by qualifying e-tags or other established process of communication. This data will be provided by the Market Participant. The Net Position includes High Priority Transactions representing interchange import transactions and export transactions to or from the Markets + Footprint. If a Market Participant wishes to include a High Priority Transaction in its net position, that transaction must meet the requirements of a qualifying e-tag, detailed in Section [High Priority Transactions]. For clarity, any energy deployed via the WRAP holdback will not count towards the Net Position for the purpose of calculation the DA Must Offer Ceiling. High Priority Transactions that are WRAP holdback, or energy deployed under the WRAP Operations program are not considered Net Position and instead are contemplated in (2) WRAP holdback above.
- (4) Fleet Performance. A Market Participant's adjustment for forecasted day ahead fleet performance is, for all Resource other than VERs, the sum of any forced outages, unplanned availability, and unplanned change of capacity of Resources registered to the Market Participant for the Operating Hour as reflected in the CROW system compared against the forced outages, unplanned availability and unplanned change in capacity as represented in the Resource Adequacy program. For VERCs the Market Operator's forecast output will be compared against the QCC Qualified Capacity Contribution of the VERs as calculated by the Resource Adequacy program and provided by the Market Participant. Any improvement in performance will increase the Market Participant's Must-Offer Obligation and any reduction in performance will reduce the Market Participant's Must-Offer Obligation. For example, for non-VERs, if the total CROW unplanned outages for an hour is 300 MW and the WRAP unplanned outage assumption is 200 MW, then the Market Participant's Must-Offer Obligation is reduced by 100 MW. For VERs, if the total VER ELCC from WRAP is 400 MW and the VER forecast amount is 700 MW, then the Market Participant's Must-Offer Obligation is increased by 300 MW.

During the non-Binding Season, Section 1.4.1(A) provides the minimum required to satisfy the Day Ahead Must Offer obligation and does not have a Day Ahead Must Offer Ceiling as the non-Binding Season does not have data from the Resource Adequacy Program.

1.4.2 Must Offer Compliance

- (A) During the Binding Season: Market Participants are required to offer Resources into the Day-Ahead Market greater or equal to the lesser of either the Day-Ahead Must Offer Obligation described under Section 1.4.1(A) or the Day Ahead Must Offer Ceiling as described under Section 1.4.1(B) for that Operating Hour.
 - (1) The shortfall will be calculated as positive value of the difference between the lesser of the Resource capacity required for each Hour detailed in 1.4.1(A) or 1.4.1(B), and the total offered Resource capacity for each Operating Hour. Any shortfall by a Market Participant will be assessed a penalty charge calculated as the MW shortfall times the penalty rate as further detailed in Section 4.5.7.17.
- (B) During the Non-Binding Season: Market Participants are required to offer Resources into the Day-Ahead Market greater than or equal to the Day-Ahead Must Offer Obligation described under Section of 1.4.1(A).
 - (1) The shortfall will be calculated as positive value of the difference between the Resource capacity required for each Hour detailed in 1.4.1(A), and the total offered Resource capacity for each Operating Hour. Any shortfall by a Market Participant will be assessed a penalty charge calculated as the MW shortfall times the penalty rate as further detailed in Section 4.5.7.17.

1.5 RTBM

1.5.1 Must Offer Obligation

For the Real Time Balancing Market, Market Participants must offer the same minimum amount of Resource capacity awarded for the Day-Ahead Market and for the first RUC process to allow the market to solve from a baseline point to evaluate all subsequent Dispatch Intervals within Operating Hours for that Operating Day. The Must-Offer Obligation can be met by self-schedule energy only, a combination of self-schedule energy and economic offer range, or economic offer range only, by offering Resources with a Commitment Status of Market, Self, or Reliability Must Run.

After satisfying the RTBM Must-Offer Obligation, a Market Participant may offer any remaining Energy or capacity to the market at its discretion for purposes of its Must Offer Obligation. A

Market Participant's Must-Offer Obligation is the lesser of the amount described in 1.5.1(A) or the amount described in 1.5.1(B).

(A) **RTBM Must Offer Obligation:** The hourly obligation for each participant is met by offering sufficient resources, as follows.

- (1) **Cleared Day-Ahead Market Resource Awards.** Hourly Resource awards will be posted for Resources that cleared in the Day-Ahead Market.; these results will be posted for consumption by the Market Operator to the Market Participants following the timeline in Section 4.3.1. The MW sum of these hourly Energy awards serve as the basis for Real-Time Must Offer Obligation compliance.
- (2) **Day-Ahead Flexibility Reserve Product Award Obligations.** The Day-Ahead Market will produce hourly Flexibility Reserve Product awards, both Short-Term Flex Up and Mid-Term Flex Up, and will be posted by the Market Operator to the Market Participants. These hourly Flexibility Reserve awards serve as the basis for Real-Time Must Offer Obligation compliance. For Must Offer Obligation purposes, Asset Owners' Flexibility Reserve Product obligations will be summed and assessed at the Market Participant level. Flexibility Reserve Products will be calculated on a Markets+ Footprint basis and Reserve Zone basis.
- (3) **Reliability Unit Commitment Awards.** Any incremental MW quantity associated with Energy or Flexibility Reserve Product commitments resulting from the first RUC process after the Day-Ahead Market closes will serve as the basis for the real-time Must-Offer Obligation compliance.
- (4) **WRAP Operations Program Hourly Holdback Change.** For WRAP holdback transactions with a source or a sink external to the Markets+ footprint, the holdback change is equal to the quantity (MW) of deployed holdback energy not already accounted for in the Day-Ahead Market. For the RTBM, deployed holdback energy must be tagged and delivered in accordance with the requirements of the WRAP Operations Program. For WRAP holdback transactions that both source and sink within the Markets+ footprint this quantity is equal to Zero MW. This term is only applicable during the binding season.
- (5) **Net Position Change.** The Net Position change is the sum of each Market Participant's purchases and sales Contracts and Transfers not accounted for in the Day-Ahead Market as represented by e-tags; this data will be provided by the Market Participant. The Net Position change includes High Priority Transactions representing interchange import transactions and export transactions to or from the Markets + Footprint not accounted for in the Day-Ahead Market. If a Market Participant wishes to include a High Priority Transaction in its net position, that

transaction must meet the requirements of a qualifying e-tag, detailed in Section [High Priority Transactions]. For clarity, any energy deployed via the WRAP holdback will not count towards the Net Position Change for the purpose of calculating the RTBM Must Offer Obligation.

- (6) **MSRs Self-Charge Schedule Change.** The Real-Time MSR self-schedule must be represented hourly in the Resource Offer. The MSR self-charge change is the difference between the Real-Time MSR self-charge amount and the Day-Ahead Market self-charge amount.

Hourly Real Time balancing Market Must Offer Obligations. For Each Operating Hour in the Real Time Balancing Market, the amount of Resource capacity that a Market Participant must offer to Markets+ consists of the sum of 1 through 6 below:

Real-Time Balancing Market Must Offer Components	Hourly MW Amount
(1) Hourly Cleared Day-Ahead Market Energy schedules.	
(2) Hourly Day-Ahead Flexibility Reserve Product award obligations	
(3) Hourly Reliability Unit Commitment awards	
(4) Hourly WRAP Operations Program Hourly Holdback number	
(5) Hourly Net Position Change	
(6) Hourly MSRs self-charge schedule must be represented hourly in Resource Offer	
Minimum Required Resource capacity (SUM of 1.5.1 A (1 – 6) =	

- (B) **RTBM Must Offer Ceiling:** A Market Participant's must offer ceiling during the binding season is higher of the Day-Ahead compliance amount described in Section 1.4.1(B), as adjusted by (1)-(3) below, or the sum of 1.5.1(A)(1-3), as adjusted by (1)-(3) below. During the non-binding season a Market Participant's must offer ceiling is the sum of 1.5.1(A)(1-3), as adjusted by (2)-(3) below.

- (1) **WRAP Operations Program Hourly Holdback Change.** For WRAP holdback transactions with source or a sink external to the Markets+ footprint, the holdback quantity

is equal to the quantity (MW) of deployed energy not already accounted for in the Day-Ahead Market. For WRAP holdback transactions that both source and sink within the Markets+ footprint this quantity is equal to Zero MW. This adjustment always applies to 1.5.1(A)(1-3) and only to 1.4.1(B) when the source is external to the Markets+ footprint and the sink is internal to the Markets+ footprint.

- (2) **Net Position Change.** The Net Position change is the sum of each Market Participant's purchases and sales Contracts and Transfers not accounted for in the Day-Ahead Market as represented by e-tags; this data will be provided by the Market Participant. The Net Position change includes High Priority Transactions representing interchange import transactions and export transactions to or from the Markets + Footprint not accounted for in the Day-Ahead Market. If a Market Participant wishes to include a High Priority Transaction in its net position, that transaction must meet the requirements of a qualifying e-tag, detailed in Section [High Priority Transactions]. For clarity, any energy deployed via the WRAP holdback will not count towards the Net Position Change for the purpose of calculating the RTBM Must Offer Ceiling. This adjustment applies to both 1.4.1(B) and 1.5.1 (A)(1-3).
- (3) **Fleet Performance.** A Market Participant's Real-Time Fleet Adjustment is the difference in Real-Time fleet performance from forecasted Day-Ahead Fleet Performance. A Market Participant's adjustment for RTBM fleet performance is, for all Resource other than VERs, the sum of any forced outages, unplanned availability, and unplanned change of capacity of Resources registered to the Market Participant for the upcoming RTBM Operating Hour as reflected in the CROW system compared against the sum of any forced outages, unplanned availability, and unplanned change of capacity of Resources registered to the Market Participant for the corresponding Day-Ahead Market Operating Hour as reflected in the CROW system and in each MP's Day-Ahead Market Offer. For VERS the Market Operator's forecast VER output for the RTBM will be compared against the Market Operator's VER forecast output for the Day-Ahead Market. Any improvement in performance as compared to the value calculated for the Day-Ahead Market will increase the Market Participant's Must-Offer Obligation and any reduction in performance as compared to the value calculated for the Day-Ahead Market will reduce the Market Participant's Must-Offer Obligation. This adjustment applies to both 1.4.1(B) and 1.5.1 (A)(1-3). For example, for non-VERs if the Day-Ahead Market CROW unplanned outages is 300 MW for an hour and the RTBM CROW unplanned outages for an hour is 200 MW, then the Market Participant's RTBM Must-Offer Obligation is reduced by 100 MW. For VERs, if the Day-Ahead Market VER forecast amount for an hour is 700 MW and the RTBM VER forecast amount for an hour is 750 MW, then the Market Participant's RTBM Must-Offer Obligation is increased by 50 MW.

1.5.2 Must Offer Compliance

- (1) In real time, Market Participants are required to offer Resources greater or equal to the lesser of the RTBM Must Offer Ceiling described under Section 1.5.1(B) or the RTBM must offer requirement defined under Section 1.5.1(A).
- (2) The shortfall will be calculated as positive value of the difference between the Resource capacity required for each Hour, and the total offered Resource capacity for each Operating Hour. Any shortfall by a Market Participant will be assessed a penalty charge calculated as the MW shortfall times the penalty rate as further detailed in Section 4.5.8.25.

Appendix B – PRC Minutes Dec. 18th, 2024; 9-10am PT

Sector	Representatives (bold in attendance)
RAPC/Participant Investor-owned Utilities (IOUs)	<ul style="list-style-type: none"> • Phil Haines (Sachi Begur as alternate) • Camille Christen • Lindsey Schlekeway (Rodger Manzano as proxy) • Mike Goodenough
RAPC/Participant Publicly-owned utilities (POUs)	<ul style="list-style-type: none"> • Michael Reynolds (Jerret Fischer as proxy) • Ray Johnson (Leah Marquez-Glynn as proxy) • Garrison Marr • Mike Bradshaw
RAPC/Participant Retail Competition Load Responsible Entity (LRE)	<ul style="list-style-type: none"> • Ian White • Bill Goddard
Federal Power Marketing Administration	<ul style="list-style-type: none"> • Jeff Cook (Rachel Dribble as proxy) • Rachel Dibble
Independent power producers/marketers	<ul style="list-style-type: none"> • John Cooper (Benjamin Fitch Fleischmann as proxy) • Benjamin Fitch Fleischmann
Public interest organizations	<ul style="list-style-type: none"> • Fred Huette (Max Greene as proxy) • Max Greene
Retail customer advocacy group	<ul style="list-style-type: none"> • Bela Vastag
Industrial customer advocacy group	<ul style="list-style-type: none"> • Sommer Moser (Tyler Pepper as proxy)
Load Serving Entity (LSE) (or representative) with loads in the WRAP represented by another LRE and otherwise not eligible for any other sector	<ul style="list-style-type: none"> • Chris Allen
COSR	<ul style="list-style-type: none"> • Chris Parker (Gia Anguiano as alternate)

Meeting Objectives

1. Provide Updates on Next Steps and Change Control Process

Discussion Topics

(I) **Agenda Overview**

(II) **COSR Representative Introduction**

Chris Parker is the Director of Utah's Utilities and is the Vice Chair of the Community of State Representatives (COSR). He is looking forward to working with everyone.

(III) **PRC Charter Finalization**

The committee discussed the adjustments in the PRC Charter. Shifting focus from BPMs to Change Request Form (CRF) considerations, including workplan and proposal development, CRF compilation, prioritization, and board approval processes. The cadence for future meetings and minimum terms were also reviewed. Snohomish moved to approve the charter, seconded by NWECC. The motion passed, finalizing the PRC Charter.

(IV) **NTFP Update**

The meeting focused on two considerations: whether the submitted ideas, along with their proposed solutions, are ready for public and COSR comments, as well as PRC, RAPC, and board review. The focus is on readiness for comment, rather than subjective evaluation of the ideas themselves.

I. **Consideration of [2024-CRF-006](#) (aka 2024-NTFP-04) Status**

i. **Load Transfer and BPM 103 P50 Peak Load Forecast Methodology**

The Lead Sponsor: Garrison Marr (Snohomish County PUD)
Co-sponsors: BPA and TEA

The proposal addresses the need for a revised load forecast methodology to better reflect forward-looking load responsibilities, particularly with changes to BPA power products in 2025. The current methodology is based on historical data, but the update seeks to align with future load share responsibilities. It allows for the addition or removal of load, improving accuracy in forecasting. The proposal would fix the BPM 103 methodology to accommodate load transfers and new loads.

Outcome: SRP moved to advance 2024-CRF-006 through the NTFP process for comment. Powerex seconded. The motion passed, and the proposal will move to comment.

b. Consideration of [2024-CRF-009](#) Status

i. Definition of Generation and Transmission Facilities in BPM 209

Lead Sponsor: Michael Reynolds (SRP)

The discussion focused on two terms in BPM 209 Section 7.3: "generation facility" and "transmission facility," which may benefit from formal definitions. The concern is that participants could expect automatic approval for a waiver in case of a generation or transmission facility outage or derate. The proposal aims to clarify that waivers would only apply when an outage or derate is relevant to meeting WRAP obligations, rather than being a general exemption. It was suggested that ownership of the asset is less important than whether the participant has the right to use it to meet WRAP obligations.

The proposal recommends capitalizing "generation facility" and "transmission facility" and adding definitions for each.

Outcome: Tacoma moved to approve the proposal for comment, seconded by Calpine. The motion passed with no opposition.

(V) Change Control Process

Please reference PowerPoint "PRC Concept Prioritization & LOE." The PowerPoint will act as a reference for the change Control Process moving forward.

a. Draft Methodologies

i. High-level PA Level of Effort Review (Pre-PRC Prioritization)

See slide 4, 5, 6 in PowerPoint "PRC Concept Prioritization & LOE"

ii. PRC Prioritization of Concepts for Workplan consideration

See slide 7 in PowerPoint "PRC Concept Prioritization & LOE"

iii. Detailed PA/PO Level of Effort Review (Post-PRC Prioritization)

See slide 8 in PowerPoint "PRC Concept Prioritization & LOE"

The goal is to prioritize submissions, focusing on those that are straightforward or critical with larger effort. Due to limited resources, some CRFs may not be addressed. As task forces continue developing proposals into next year, the PRC will need to

consider what resources are already committed to these efforts when working on 2026.

Co-Chairs Ray Johnson and Max Green propose to move forward with the process and allow for flexibility without having a formal vote.

Important to note, the concept of membership within WPP was formalized last year with the adoption of new bylaws, and participants in reliability programs like WRAP are already considered members. To formalize this, members will be asked to provide a point of contact. Carla Hudson from WPP will send an email requesting contact information. A similar process will be followed for allied partners, requiring them to sign an agreement to abide by WPP policies.

Upcoming Events: The PRC meeting is on the 23rd, followed by pickleball. The annual member meeting will be on the 24th. There are no fees, and the events are open to anyone interested in becoming a stakeholder.

b. Concept & NTFP Submissions Update

There are 35 Change Requests, with all but one from participants. The exception is Form, an external entity developing new 100-hour batteries. WPP is assisting all sponsors with their NTFP submissions and coordinating where duplicate ideas have been submitted, encouraging co-sponsorship or withdrawal of one to remove duplication of efforts. While Change Request forms can still be submitted until year-end, we appreciate those who submitted by the 15th, allowing time to make necessary edits. The meeting on 1/23 will review at least 30 submissions, possibly more.

(VI) Next Steps

a. Meeting 1/15 9am PT

WPP will determine if there are more NTFP to consider on 1/15, and will get ready for the meeting on 1/23 and what to expect there.

b. (In-Person) Meeting 1/23 9am-12pm, Salt River Project's Pera Club, Tempe, AZ

Meeting is adjourned at 9:55 AM.

Appendix C – PRC Minutes Jan. 23rd, 2025; 9-12pm AZ

Sector	Representatives (bold in attendance)
RAPC/Participant Investor-owned Utilities (IOUs)	<ul style="list-style-type: none"> • Phil Haines (Sachi Begur as alternate) • Camille Christen • Lindsey Schlekeway (Rodger Manzano as proxy) • Mike Goodenough
RAPC/Participant Publicly-owned utilities (POUs)	<ul style="list-style-type: none"> • Michael Reynolds (Jerret Fischer as proxy) • Ray Johnson (Leah Marquez-Glynn as proxy) • Garrison Marr • Mike Bradshaw
RAPC/Participant Retail Competition Load Responsible Entity (LRE)	<ul style="list-style-type: none"> • Ian White • Bill Goddard
Federal Power Marketing Administration	<ul style="list-style-type: none"> • Jeff Cook (Rachel Dribble as proxy) • Rachel Dibble
Independent power producers/marketers	<ul style="list-style-type: none"> • John Cooper (Benjamin Fitch Fleischmann as proxy) • Benjamin Fitch Fleischmann
Public interest organizations	<ul style="list-style-type: none"> • Fred Huette (Max Greene as proxy) • Max Greene
Retail customer advocacy group	<ul style="list-style-type: none"> • Bela Vastag
Industrial customer advocacy group	<ul style="list-style-type: none"> • Sommer Moser (Tyler Pepper as proxy)
Load Serving Entity (LSE) (or representative) with loads in the WRAP represented by another LRE and otherwise not eligible for any other sector	<ul style="list-style-type: none"> • Chris Allen
COSR	<ul style="list-style-type: none"> • Chris Parker (Gia Anguiano as alternate)

Meeting Objectives

1. Prioritization of Concepts submitted in 2024
2. Initial discussion of which Concepts become part of the draft 2025 Workplan

Discussion Topics

- I. 9:00-9:05 (5 mins) - Agenda Overview
- II. 9:05-9:10 (5 mins) - PRC Introductions
- III. 9:10-9:20 (10 mins) - Process Summary
 - a. *WPP provided an overview of the process via PowerPoint (see slides below)*
- IV. 9:20-11:20 (2 hours) - Concept Prioritization
 - Phase 0 – Concept consolidation
 - i. **CRF005 (Load Growth Factor) and CRF011:**
 1. Both SRP and APS agreed to combine.
 - ii. **SRP CRF-10 and CRF-13:**
 1. SRP and Idaho agreed to combine.

- iii. **CRF-02 (Earlier FS Metrics) and CRF-017 (Monthly PRM Volatility):**
 - 1. Both Idaho and NVE agreed to combine.
- iv. **CRF-025 (Qualifying Contract Options & Review) and CRF-031 (Bilateral Contracts):**
 - 1. Idaho initially did not see these CRFs as related. After discussion, it was determined that they will not consolidate these CRFs.
- v. **CRF-012 (ELCC by Vintage) and CRF-026 (Indicative QCCS):**
 - 1. Idaho proposed combining these two CRFs. APS and Form are supportive of the consolidation, provided they offer their approval. This proposal was approved, and CRF-026 will be struck and incorporated into CRF-012.
- vi. **CRF-004 (Day-Ahead Market Optimization) and CRF-01 (SWEDE Transmission Limits):**
 - 1. The proposal to combine these two CRFs was discussed and agreed upon.

With consolidated CRFs, sponsors will have to decide who will be the lead chair/sponsor and you can do co-sponsors

- **Phase A – Divide Concepts into higher or lower priority**
 - i. PRC spent a few minutes prioritizing the CRFs through Slido and created the list below:

CRF Number	Topic	Sponsor	Priority
2024-CRF-05	Load growth factor	APS	Top Half
2024-CRF-01	DAM Optimization/SWEDE TX Limits	NVE	
2024-CRF-08	CAISO Firm Tx	SRP	
2024-CRF- 12	ELCC by Vintage/ Indicative QCC for LTS	APS	
2024-CRF-02	Earlier FS Metrics/ Monthly Volatility	NVE	
2024-CRF-24	Flat Load an PRMs	PAC	
2024-CRF-03	Demand Response QCC	APS	
2024-CRF-14	Joint Owner Flexibility	IPC	
2024-CRF-15	Planned Outage Clarification	PNM	
2024-CRF-18	PRM Out of TX Requirement	BPA	Bottom Half
2024-CRF-19	Resource Aggregation	IPC	
2024-CRF-20	FS Waiver	FS Waiver	
2024-CRF-21	Delivery Failure Charge Cap	BPA	
2024-CRF-25	Qualifying Contract Options & Reviews	IPC	
2024-CRF-27	Load Responsibility Transfer	BPA	
2024-CRF-31	Bilateral Contracts	EWEB	

Discussion: *WPP mentions the top 9 CRFs will be ranked in order from 1 to 9. The bottom half will be ranked from 1 to 8. If any of the lower-priority CRFs do not make it through the top priority list, there is an option to submit an NTFP (Non-Tactical Field Proposal).*

In terms of time planning, we have tentatively allocated 2 chips for short-term tasks, as these may take approximately 2 months to complete, 4 chips for medium-term tasks, and 6 chips for long-term tasks. We will need to

reassess the estimated timeframes now that we have consolidated some tasks.

We have also discussed the feasibility of managing three task forces simultaneously. This would allow for a total of 36 chips to be allocated. A cutoff will be identified, with remaining tasks either scheduled for next year or submitted as NTFPs. It's important to consider whether taking on three task forces at once is manageable, as this may require further evaluation.

- **Phase B - Rank Concepts within i) higher and ii) lower priority categories**
 - i. PRC spent a few minutes ranking the CRFs through Slido and created the below prioritization list:

Rank	CRF Number	Topic	Org.	Priority
1	2024-CRF-05	Load Growth Factor	APS	Top Half
2	2024-CRF-08	CAISO Firm Tx	SRP	
3	2024-CRF-01	DAM Optimization/SWEDE TX Limits	NVE	
4	2024-CRF-12	ELCC by Vintage/ Indicative QCC for LTS	APS	
5	2024-CRF-03	Demand Response QCC	APS	
6	2024-CRF-02	Earlier FS Metrics/ Monthly Volatility	NVE	
7	2024- CRF-10	Capability Testing Off Season	SRP	
8	2024-CRF-24	Flat Load and PRMs	PAC	
9	2024-CRF-14	Joint Owner Flexibility	IPC	
10	2024-CRF-15	Planned Outage Clarification	PNM	Bottom Half
11	2024-CRF-25	Qualifying Contract Options & Reviews	IPC	
12	2024-CRF-19	Resource Aggregation	IPC	
13	2024-CRF-18	PRM Out of TX Requirement	BPA	
14	2024-CRF-27	Load Responsibility Transfer	BPA	
15	2024-CRF-20	FS Waiver	BPA	
16	2024-CRF-31	Bilateral Contracts	EWEB	
17	2024-CRF-21	Delivery Failure Charge Cap	BPA	

- **Phase C - Combine into prioritized slate of Concepts**
 - v. 11:20 – 11:45 (25 mins) - Discussion of draft 2025 Workplan

Task Force Management:

BPA expressed concern about balancing the number of long, medium, and short task forces. Focusing too heavily on long-term tasks may delay progress on shorter items. A mix of short and long tasks could ensure

continuous progress. For long tasks, multiple teams could work on the same issue with different leads.

WPP emphasized the need for flexibility in the work plan and suggested that short tasks might be more suitable for NTFPs. Re-arranging tasks could help manage workload across task forces. Some long tasks could be split across multiple task forces to avoid overburdening any one group.

Scheduling and Task Force Leadership:

Concerns were raised about sponsors being involved in potentially too many task forces (APS for example). APS proposed sharing leadership duties for certain task forces to distribute the workload more effectively. WPP mentioned that sponsors could lead on their own or co-lead task forces, with the flexibility to adjust schedules if needed.

Prioritization and Ranking:

The PRC discussed to structure the work plan with two “longer term CRF” lanes and one “medium/short CRF” lane. The long lanes will include tasks like the Load Growth Factor and Day-Ahead Optimization, with a medium/short lane focusing on tasks like CAISO and Demand Response.

This would allow for the PRC to work through multiple long-term and short-term concepts simultaneously. These tasks will be scheduled over the next year, and adjustments will be made as needed. No decision was officially made on this structure but was viewed positively by most representatives.

It was also highlighted by WPP that the work plan should identify the necessary task force members, and the PRC is responsible for determining the appropriate task force composition.

Motion: *As determined on meeting of 1/23, NWEA motions to approve the prioritization list. SRP seconds the motion. No discussion. The motion passed unanimously.*

VI. 11:45-11:55 (10 mins) - Lessons Learned:

- 1. A potential in-person meeting should be scheduled to review CRF submissions, consolidate similar concepts, and create a priority list. If not all in one session, discussing all submissions as a group before determining priorities would be beneficial.*
- 2. For the initial Top 9 prioritization, the process should potentially remain with PRC Representatives. While we value open voting, assessing vote distribution can be challenging, particularly when multiple votes come from the same organization.*

PRC Representatives: *Please email your feedback on what was helpful and any suggestions for improvement.*

VII. 11:55-12:00 (5 mins) - Next Steps

- a. 2025 Workplan Development
 - i. February 1st - February 15th: WPP/SPP detailed Concept Level of Effort Review
 - ii. February 15th - March 15th: Completion of draft 2025 Workplan
 - iii. March 15th - April 15th: Stakeholder Comment Period

- iv. April 15th – May 15th: Revision of draft 2025 Workplan
 - v. May 15th : Distribution of draft 2025 Workplan to Board
 - vi. June: Board Approval of 2025 Workplan
- b. Next PRC Meeting February 5th

Appendix D – PRC Minutes Feb. 19th, 2025; 8:30-10am PT

Sector	Representatives (bold in Attendance)
RAPC/Participant Investor-owned Utilities (IOUs)	<ul style="list-style-type: none"> Phil Haines (Sachi Begur as alternate) Camille Christen Lindsey Schlekeway (Rodger Manzano as proxy) Mike Goodenough
RAPC/Participant Publicly-owned utilities (POUs)	<ul style="list-style-type: none"> Michael Reynolds (Jerret Fischer as proxy) Ray Johnson (Leah Marquez-Glynn as proxy) Garrison Marr Mike Bradshaw
RAPC/Participant Retail Competition Load Responsible Entity (LRE)	<ul style="list-style-type: none"> Ian White Bill Goddard
Federal Power Marketing Administration	<ul style="list-style-type: none"> Meg Albright Rachel Dibble (Meg Albright as proxy)
Independent power producers/marketers	<ul style="list-style-type: none"> John Cooper (Benjamin Fitch Fleischmann as proxy) Benjamin Fitch Fleischmann
Public interest organizations	<ul style="list-style-type: none"> Fred Huette (Max Greene as proxy) Max Greene
Retail customer advocacy group	<ul style="list-style-type: none"> Bela Vastag
Industrial customer advocacy group	<ul style="list-style-type: none"> Sommer Moser (Tyler Pepper as proxy)
Load Serving Entity (LSE) (or representative) with loads in the WRAP represented by another LRE and otherwise not eligible for any other sector	<ul style="list-style-type: none"> Chris Allen
COSR	<ul style="list-style-type: none"> Chris Parker (Gia Anguiano as alternate)

Meeting Objectives

- Discuss Level of Effort Review/Draft Schedule ahead of Draft Workplan development
- Consider endorsement of 2024-NTFP-2 (BPM Changes due to 2024-EP-1/Revised Transition Plan) to the RAPC

Discussion Topics

VIII. Agenda Overview

IX. Non-Task Force Proposals Endorsement & Updates

- Update on 2024-NTFP-05 (BPM 209: Definitions for Generation and Transmission Facility):

- *SRP, the lead sponsor, withdrew 2024-NTFP-05.*
 - *Agree with BPA's comment submitted and need to do some re-thinking before moving forward.*
 - *SRP may reach out to some participants to see if can determine language that works for all interested parties.*
 - *Will likely revisit and resubmit as an NTFP or submit for next year as a concept.*
- b. Endorsement of 2024-NTFP-02 (BPM Changes due to 2024-EP-1/Revised Transition Plan):

- Lead Sponsor: WPP
- Status Update:
 - *On January 15th, the PRC decided was ready to go out to public comment (1/15 – 1/29).*
 - *Following public comment, sent to COSR who not to comment on it (2/3 – 2/14).*

2024-NTFP -2 impacts the below BPMs:

- *BPM 107 Forward Showing Deficiency Charge*
- *BPM 109 Forward Showing Transition Period*
- *BPM 206 Settlement Pricing*
- *BPM 210 Operations Program Transition Period*
- *BPM 301 Workplan Development and Approval*
- *BPM 401 New Participant Onboarding*

If endorsed, below are the next steps:

- *2/27: RAPC will review*
 - *3/6: CSOR to review if significant changes are made and oppose*
 - *3/6: Final version sent to the Board to review*
 - *3/13: Targeted Board Approval*
- Edit to BPM 109, Section 3, page 5.
 - *PRC determined for WPP to investigate and change the language:*
 - *“WRAPA effective by September 15th” to;*
 - *“WRAPA effective date on September 15th”*
 - Endorsement:

- *NWEC makes a motion to approve NTFP-2 with cleaned up language in BPM 109, Section 3, Page 5 to "WRAPA effective date on September 15th". SRP seconds the motion and 2024-NTFP-2 is endorsed by the PRC.*

c. 2024-NTFP-04 (BPM 103, P50 Peak Load Forecasting) Update:

- *Endorsed last PRC meeting on February 5th.*
- *RAPC endorsed NTFP-04 last week on February 13th.*
- *Currently in two weeks phase to give COSR time to review and comment.*

X. **Level of Effort Review (See PowerPoint Below)**

a. Discuss initial draft schedule (balancing Task Force/Sponsor overlaps and priorities):

○ Context:

- *BPM 301 requires the draft workplan by mid-March.*
- *The focus is on balancing Task Force and Sponsor overlaps while aligning with the committee's concept prioritization.*
- *Task Forces will convert concepts into proposals; non-participants can still provide feedback during proposal circulation.*
- *Groundwork was laid during the change request compilation in January 2025*

○ Level of Effort Process:

- *PRC directed WPP to conduct a high-level effort review.*
- *Concept Evaluation: Each concept was assigned a time rank (L = 6 months, M = 4 months, S = 2 months) and identified WRAP areas.*
- *WRAP areas serve as proxies for the Task Force participants, including WPP/SPP staff and stakeholders.*

○ Development of Draft Workplan:

PRC Request: A draft 2025 workplan with two lanes for long concepts and a dedicated lane for short concepts, structured in four phases.

▪ **Phase 1 – Minimize Sponsor Overlap:**

- *Estimated durations (L ~ 6 months, M ~ 4 months, S ~ 2 months).*
- *Initial schedule developed to reduce sponsor overlap.*

▪ **Phase 2 – Minimize WRAP Area Overlap:**

- *Task forces are structured to minimize overlap in WRAP areas, factoring in expertise needed for specific concepts.*
- **Phase 3 – Benefits of Mirroring:**
 - *Consideration of potential benefits from mirroring the schedule, though not significantly impactful.*
- **Phase 4 – Progression through List:**
 - *Focus on prioritizing short concepts and assessing progress as long concepts are completed.*
- Remaining Considerations:
 - **Short Trench Flexibility:** *Consider opening the short trench for faster proposals when needed, with potential adjustments based on progress.*
 - **Long term Flexibility:** *Allow for language flexibility in the workplan if prioritization order should change due to timing, minimizing overlap, etc. Likely will use wording “Committee Discretion”*
 - **Future Work Plan Transition:** *Balance between completing the 2025 work plan and starting the 2026 work plan, especially regarding proposals that might roll over.*
 - **Honor Initial Prioritization:** *Goal is to honor the initial prioritization as much as possible, and include language to allow for flexibility if PRC determines minor changes are necessary.*
 - **The rollover policy** *must avoid flooding future work plans with unresolved proposals.*
- Additional Observations:
 - *If a concept isn’t scheduled to be worked on by a task force until Spring 2026, and the sponsors think it would be a quick change, they can work with appropriate stake holders to submit a Non-Task Force Proposal to implement it faster.*
 - *Consider when putting together the next workplan (2026) we consider those that had been submitted for that year and can resubmit knowing if things are resolved they can withdraw.*
- Next Steps:
 - *Solicit feedback on the proposed schedule and possible changes.*
 - *Draft the 2025 work plan considering flexibility and prioritization exercises.*

- b. Discuss process for handling additional Concepts if Workplan time becomes available:
 - *PRC supports the basic prioritization foundation but wants to make sure the language in the Draft 2025 Workplan allows for flexibility in case a proposal ends up being more important than anticipated, or if there are staffing challenges that weren't anticipated, or in case some proposals get pulled, etc.*
 - *There was a question pertaining to re-evaluating the Level of Effort assigned to each concept. It was determined that the PRC will not spend more time reviewing the Level of Effort, and if a participant thinks a concept can be completed faster than the effort assigned, they can consider working with their stakeholders and submit it as a Non-Task Force Proposal (NTFP).*
- c. Agree on schedule next steps to enable Draft PRC 2025 Workplan to be made available for public comment by March 15th
 - *2025 PRC Workplan might be bigger than you think because it will also be a Compliance document, documenting what the PRC says, what the Tariff and BPMS say, how we complied, what we asked people to for, what we ended up doing. Appendices will have a lot of meeting minutes. This will be the heart of it, but do not be surprised if you see a lot of other materials.*

XI. Next Steps

- a. 2025 Draft Workplan Development
 - *Michael will have a Draft Workplan for the PRC by Thursday, February 27th.*
 - *During the PRC meeting on Wednesday, March 5th will gather comments and suggestions.*
 - *Update Draft with suggestions and send to the Board by Friday, March 14th.*
- b. Next PRC Meeting March 5th

Appendix E – 2025 Workplan Stakeholder Review

Comments

Comment Prompts

01. Please supply any comments on the draft Task Force Schedule found in Figure 3
02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP
03. Please supply any comments on the Executive Summary
04. Please supply any comments on Section 1. Background
05. Please supply any comments on Section 2. PRC Prioritization Exercise
06. Please supply any comments on Section 3. Detailed Level of Effort Review
07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action
08. Please supply any comments on Section 6. Next Steps
09. Please supply any comments on Appendix A - Change Request Form Compilation
10. Please supply any comments on Appendix B - PRC Minutes Dec. 18th, 2024
11. Please supply any comments on Appendix C - PRC Minutes Jan. 23rd, 2025
12. Please supply any comments on Appendix D - PRC Minutes Feb. 19th, 2025

APS (Brandon Holms - brandon.holmes@aps.com)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

APS is supportive of the Task Force Schedule as outlined in Figure 3. This schedule is aligned to the prioritization ordered by stakeholders during the January 2025 PRC.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

APS supports the current prioritization as a reflection of the January PRC meeting but has heard that the CRF 2 on Earlier Forward Showing Metrics may be something other WRAP participants are looking at as a potential deciding factor for participation. APS would like WPP and the PRC to consider if this is accurate before re-arranging. From APS' perspective the proposal wouldn't be implemented in time to make a difference for a Summer 2027 binding decision in January of 2026. APS isn't opposed to the Concept but is unsure if changing the prioritization would be warranted at this juncture and would prefer to keep the DA Optimization effort as a higher priority based on current understanding. APS supports CRF 5 on Load Growth Factor being addressed in 2025 as proper load forecasting is critical to understanding how many resources are necessary to maintain adequacy, as well as the equitable treatment of entities within the program.

06. Please supply any comments on Section 3. Detailed Level of Effort Review

APS participated in the PRC Prioritization Exercise in January. We appreciate all the thought and work that went into that exercise. Something that the PRC and WPP may consider for this exercise next year would be to provide some time for each of the concepts to be presented at a high level to the stakeholders prior to the voting exercise.

07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action

APS supports the approach for implementation of the 2025 Workplan's schedule, which balances the Concept prioritization as the foundation of the Workplan while allowing for flexibility to address special circumstances.

PAC (Benjamin Faulkinberry - benjamin.faulkinberry@pacificorp.com)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

PacifiCorp appreciates the time and robust collaboration amongst PRC stakeholders to arrive at the 2025 PRC workplan and values the opportunity to comment. PacifiCorp views binding WRAP Participation as a serious commitment with significant repercussions associated with non-compliance. Program efforts to reduce uncertainty of the FS Capacity Requirement should be prioritized as current Participants approach a financially binding phase. Addressing uncertainty and volatility associated with core elements of the program, such as those outlined in 2024-CRF-002 should take priority in 2025. PacifiCorp acknowledges not all uncertainty can be addressed in this round of changes, and certainly not entirely within 2025. With the resources available to the program, and given the Workplan Development and Approval timeline as provided in BPM 301, PacifiCorp views the remainder of the current schedule to be reasonable.

TPWR (Thad LeVar - tlevar@cityoftacoma.org)

05. Please supply any comments on Section 2. PRC Prioritization Exercise

Electricity demand is rapidly increasing, driven by emerging loads such as electric vehicles (EVs), data centers, and widespread electrification. However, the pace of supply growth is not keeping up—slowed by interconnection queue backlogs, transmission build-out challenges, and other systemic bottlenecks. Utilities are caught in the middle, working hard to scale up power infrastructure to meet this accelerating demand. In light of these unprecedented pressures, it is essential that utilities are given greater certainty to plan effectively for future needs. To that end, Tacoma Power proposes a modest yet important adjustment to the PRC workplan: 1. Prioritize and expedite the task force workstream focused on Forward Showing stability and monthly planning reserve margin volatility. This work should begin as soon as possible. 2. To allocate resources effectively, the load growth factor task force workstream should be postponed until 2026, allowing focus on the more urgent Forward Showing and PRM volatility efforts.

General Comment

These comments are submitted on behalf of Ray Johnson, Deputy General Manager, Tacoma Power.

NVE (Lindsey Schlekeway - lindsey.schlekeway@nvenergy.com)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

NV Energy appreciates the opportunity to comment on the 2025 Draft PRC Workplan and offers the following comments for consideration. NV Energy recommends that the PRC revise the Task Force Schedule to prioritize change requests that address uncertainty in the Forward Showing program before other high priority change requests. WRAP has yet to achieve binding program participation and should strive to provide more certainty towards the Forward Showing Metrics before prioritizing changes to the load forecast metrics. Forward Showing Metrics and Monthly PRMs have dramatically varied with every new calculation. Change request #2 “Earlier FS Metrics/ Monthly PRM Volatility” addresses the current Forward Showing uncertainty regarding PRM volatility and metric timing and provides participants with more confidence when planning for future seasons. Therefore, NV Energy recommends that change request #2 be moved into the schedule for 2025.

TEA (Ed Mount - emount@teainc.org)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

TEA is in favor of re-prioritizing CONCEPT 02 – EARLIER FS METRICS / MONTHLY VOLATILITY (PRM) from the 2026 Task Force workstream to the to 2025 Task Force workstream. To accommodate this re-prioritization, TEA would be in favor of moving CONCEPT 05 – LOAD GROWTH FACTOR to the 2026 Task Force workstream. Alternatively, depending on the expected go-live of SPP’s Markets+ day-ahead market (M+), work on CONCEPT 01 – DAM OPTIMIZATION as it specifically relates to M+ could potentially be pushed out to the 2026 workstream. TEA’s main driver for this re-prioritization is that the monthly PRM volatility that currently exists in the non-binding program is making it difficult to secure sufficient qualifying capacity to meet program requirements, particularly for shoulder months. Ensuring that TEA is resource adequate is the top concern for TEA and its participating utilities when it comes to participation in the binding program.

09. Please supply any comments on Appendix A - Change Request Form Compilation

With respect to 2024-CRF-017 / IPC / Monthly PRM Volatility, TEA agrees with the issue description provided by Idaho Power Company. TEA is similarly concerned that the monthly PRMs calculated during this current non-binding phase of the program have exhibited some concerning volatility month-to-month. As with Idaho Power, participating utilities in the TEA LRE have also seen some shoulder season months where the P50 load + monthly PRM significantly exceeds the utility’s own extreme weather load forecasts as well as its own long-term planning load forecasts. TEA also supports the desire for participants to receive forward showing metrics on an earlier timeline as described in change request 2024-CRF-002 / NVE / Earlier Forward Showing Metrics.

General Comment

The Energy Authority, Inc. (TEA) is a public power-owned, not-for-profit corporation providing utilities with energy scheduling, marketing, and power supply portfolio management services. TEA is currently participating in WRAP as a Load Responsible Entity (LRE) for five Northwest public power utilities in the states of Washington and Oregon (Clark Public Utilities, Cowlitz Public Utility District, Emerald People’s Utility District, Franklin Public Utility District, and Lewis Public Utility District).

SCL (Mara Kontos - mara.kontos@seattle.gov)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

Seattle appreciates the opportunity to comment on the Draft PRC Workplan, Task Force Schedule found in Figure 3 – Level of Effort Review Draft Task Force Schedule and understands that there needed to be a balance of staff's time between, the PA (WPP), PO (SPP), plus participant involvement in each concept's timeline. Although these were ranked using an online tool, Seattle feels like the DAM Optimization/SWEDE TX Limits, should be moved out of the 2025 schedule and replaced with number 24 Flat load and PRMs and/or number 02 Earlier FS Metrics/ Monthly volatility. Optimization in the DAM market is an indirect variable of the WRAP program where Flat Load and PRMs and Earlier FS Metrics/ Monthly PRM Volatility are directly related to how the WRAP program operates and functions and WRAP should prioritize issues that deal first with WRAP directly like the PRMs, FS metrics, and so on vs DAM optimization work as this may not pertain to all participants. Resource adequacy and reliability are two focus areas for WRAP, not DA optimization.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

Prioritizing issues that are indirectly related to the WRAP program could impact participants binding commitments, non-participants from joining, and cause participants to flee WRAP, if WRAP places a lot of emphasis on external Day Ahead market integration/optimization, before we have the WRAP program ironed out and up and running.

04. Please supply any comments on Section 1. Background

Seattle wishes the Concepts and Change Request Forms (CRFs) were shared with in person participants before the prioritization exercise began to better understand and weigh in on the grouping/narrowing down of the Concepts during the exercise. It would have been nice to hear from each participant that submitted a Concept, to better understand the participants asking and be able to ask questions of the participants.

05. Please supply any comments on Section 2. PRC Prioritization Exercise

Seattle is curious if there will be a call out to current participants to help with moving the Concepts along in a timelier manner. The draft work plan looks to go into potential binding seasons, it would be good to expedite these Concepts and proposals before any binding season happens. Would having additional participants contribute to this effort make it go faster?

06. Please supply any comments on Section 3. Detailed Level of Effort Review

Seattle would like to see the PRC and WPP prioritize the concepts that directly relate to the WRAP program first before prioritizing external market integration concepts that are not applicable to everyone in the WRAP program.

09. Please supply any comments on Appendix A - Change Request Form Compilation

Seattle would like to see a check box on the CRF to identify if the Concept being brought up directly relates to the WRAP program and all its participants or if it is an indirect Concept that indirectly ties the WRAP program to other potential markets or products, like CAISO EDAM or SPP Markets +. Seattle believes that this delineation will help the PRC better prioritize the Concepts, prioritizing WRAP issues first.

1. Please supply any comments on the draft Task Force Schedule found in Figure 3

PSE recommends establishing an arbitration process or dedicated task force to efficiently resolve matters like those outlined in 2024-CRF-014 regarding the Flexibility of Jointly-owned Resources. Rather than requiring a lengthy multi-year review cycle, many of these issues could be addressed through a streamlined process where a specialized task force reviews the matter and recommends appropriate documentation updates. This approach would not only expedite resolution of such issues but would also help manage the workplan more effectively by allowing more urgent matters to be prioritized for active consideration.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

PSE proposes consolidating the task force items currently listed under 2024-CRF-002, 2024-CRF-005, and 2024-CRF-24 into a single comprehensive long-term workplan item, given their closely interrelated nature. This consolidation would allow for a more coordinated and efficient approach to addressing these interconnected matters. We would like to take this opportunity to recognize the importance of developing a comprehensive regional load and resource forecasting practice to enhance long-term regional planning standards. In order to expedite and avoid delays in getting a binding program up and running, we recommend utilizing existing historical P50 calculations without load growth adjustments, particularly as these relate to seasonal planning just three months from the cure period deadline. We propose that a task force is setup for accomplishing the long-term load and resource forecasting objectives and standards. Therefore, we recommend reclassifying these CRF items to the "Long" Time Score category. This would allow prioritizing more urgent items that directly impact compliance for the upcoming binding season, rather than focusing on longer-term planning elements at this time.

05. Please supply any comments on Section 2. PRC Prioritization Exercise

PSE has comments specific to each of the CRF workplan items as follows: 2024-CRF-003, DR QCC PSE supports the development of enhanced Effective Load Carrying Capability (ELCC) calculations for Demand Response (DR) programs. Currently, participants engage in various Demand Response, Virtual Power Plant (VPP), and similar programs, making it challenging to determine WRAP eligibility. The establishment of clearer and more comprehensive guidelines would greatly assist participants in evaluating and qualifying their potential programs. 2024-CRF-004, Day Ahead Market Optimization of the Operations

Program Holdback PSE fully endorses the optimization of Western Resource Adequacy Program (WRAP) deployments through Day-Ahead (DA) and Real-Time (RT) market re-dispatch processes. 2024-CRF-010, Capability Testing Requirements for Seasonal Compliance We recommend that both the Tariff and Business Practice Manual (BPM) explicitly clarify the permissibility of using historical data for Operations and Capability testing requirements. It is important to recognize that thermal resources in the Pacific Northwest region typically demonstrate higher capability during winter months compared to summer due to ambient temperature variations. We strongly advocate that capability testing should be based on demonstrated data and established standards, rather than relying on isolated in-person inspections conducted at arbitrary times throughout the year. If these changes primarily involve BPM or Tariff modifications, we suggest this item could be reclassified to the "Short" time category. 2024-CRF-008, CAISO High-Priority Wheeling Through in WRAP We support efforts to resolve ambiguities and to clearly identify acceptable transmission categories for both WRAP forward showing and operational requirements. Specifically, we advocate for explicit clarification regarding all wheel-through and wheel-out transmission and products, including the California Independent System Operator (CAISO) High-Priority Wheel-through transmission and generation Wheel-out e-tags such as the CAISO Generation-Firm Provisional (GF-P).

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

As WRAP Participants gain more experience from multiple non-binding seasons, it has become clear that the volatile nature of the monthly Planning Reserve Margins has created challenges for entities to anticipate the program requirements for the purposes of their resource plans. Further, many (if not most) Participants need to begin their resource planning processes before the PRMs for the planning period have been finalized. As such, Powerex would recommend that the PRC consider swapping topic 02: Earlier FS Metric/Monthly Volatility, and topic 05: Load Growth Factor, such that Topic 02: Earlier FS Metrics can be addressed earlier in the work schedule. We would note that we still see the Load Growth Factor as an important topic. However, based on conversations with other participants, it seems that looking into the stabilization of the PRMs merits being moved ahead in the work plan.

06. Please supply any comments on Section 3. Detailed Level of Effort Review

Powerex participated in the PRC prioritization discussion and very much appreciates the efforts by WPP to conduct the review and develop the work plan.

07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action

With the recent progress being made in the two Day Ahead Market initiatives (EDAM and Markets+), it seems highly likely that the WPP and WRAP membership may soon have to focus significant effort on the integration of the WRAP program into the new market paradigms. The market designs will represent both a substantial change to the way trading and scheduling occur, as well as a potential opportunity to further improve upon the WRAP by availing the program to the dispatch and delivery optimization enhancements that the market designs will bring. As such, Powerex feels that the PRC has appropriately prioritized topic 01: DAM Optimization to begin this year, as progress on Topic 1 will provide Participants valuable details in the coming months. But further to that, given that the development of the specific market design details may come rapidly and soon, other PRC Workplan topics may be identified during this year that could require workstreams to be created and prioritized over those identified in the draft workplan schedule. With that in mind, Powerex would encourage the PRC to be ready to modify the proposed workplan, if required, to ensure that the focus of the WPP and the Participants can be put on the integration of the WRAP into the new market designs.

IPC (Nicole Blackwell - nblackwell@idahopower.com)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

Idaho Power supports prioritizing Concept 02, the NVE/IPC-sponsored concept on earlier FS metrics and monthly PRM volatility, such that it is addressed in 2025, rather than waiting until 2026. Idaho Power believes this is a high-priority need for resolution that, if not timely resolved, could create hurdles for program implementation. Idaho Power believes that Concept 02 should be prioritized above or at least equal to any of the concepts currently slated for 2025. In Idaho Power's view, the highest priority should be placed on concepts that mitigate unnecessary hurdles to program implementation. The goal of Concept 02 is to do just that: introduce stability and consistency into program metrics, including PRMs, and mitigate the monthly volatility that can occur with the current monthly PRM calculations. Both these issues can have a significant impact on participants' forward showing demonstrations and ability to comply. While the concepts slated for 2025 are important and could provide benefit, Idaho Power believes Concept 02 could significantly mitigate implementation hurdles and should be addressed this year.

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

PGE supports all proposed changes and appreciates the opportunity to provide comments. While all proposed changes are important and PGE expects that they will enhance the program's design, PGE considers Concept 02 to be crucial to be implemented as soon as possible and proposes moving it up to the 2025 work plan. Additionally, PGE finds Concept 12 very important and believes it should be completed well before the first WRAP binding season to ensure the contribution of existing VERs is accurately reflected. Therefore, PGE would propose that Concept 12 is also moved up to 2025. To accommodate for these changes, PGE suggests switching Concepts 05 and 03 to the 2026 workplan. PGE also expresses its concerns regarding the impacts that emerging day-ahead markets, such as EDAM, scheduled to go live in 2026, will have on WRAP. Addressing these impacts in an accelerated manner is essential, as there may be inconsistencies between the setup of these markets and the design of WRAP that need to be resolved before the WRAP first binding season.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

Consolidated Concept 02 (Earlier FS Metrics / Monthly Volatility): The draft PRC Workplan proposes a timeline for completing this concept by June 2026. This timeline addresses the issue after October 2025, the deadline for changing the first binding season, and does not provide sufficient assurance that the PRMs applied to Winter and Summer shoulder months (i.e., June, September, November, March) will be reasonable when the program becomes binding. Runaway PRMs of up to nearly 30% during WRAP shoulder months and the PRM volatility between Advance Assessments pose significant risks to PGE's ability to plan adequately and meet WRAP capacity requirements during those months. The monthly PRM volatility can also lead to financial exposure from either a WRAP deficiency charges, or term capacity contracts needed to cover oversized peak load forecasts during WRAP seasons shoulder months that we would not expect in operations. The PRM uncertainty is an important factor in PGE's decision to maintain the first binding season as Winter 2027-2028. To resolve this issue, along with the consolidated Concept 15 – Planned Outage Clarification, the program could consider reducing the number of days or entirely removing the shoulder months (i.e., June and September, and November and March, respectively) from the Summer and Winter WRAP seasons. Consolidated Concept 12 (ELCC by Vintage, Indicative QCC for LTS): PGE strongly supports the proposed changes in this concept, emphasizing their critical importance for implementation before the first binding season. Similar to Concept 02, the draft PRC workplan aims to complete this change by June 2026.

However, this timeline does not align with the decision to maintain the first binding season due in October 2025. PGE advocates for the design change to ensure that the capacity contribution of existing variable energy resources (VERs) remains unaffected by the penetration of other VERs. Instead, only the capacity contribution of new VERs should be impacted. The current WRAP design can lead to QCC variations for existing resources, potentially reducing participants' resource supply QCCs even if their portfolios remain unchanged. Consolidated Concept 01 (DAM Consolidation/SWEDE TX Limits): WRAP design needs to align with day-ahead market (DAM) requirements. Therefore, any DAM-related enhancements should be prioritized, and WRAP design should remain flexible to accommodate potential changes as day-ahead markets come online as early as 2026. Unresolved design inconsistencies between WRAP and day-ahead markets before the first binding season could impact PGE's decision to participate. Consolidated Concept 15 (Planned Outage Clarification): Utilities typically schedule planned outages during months with lower expected loads, including WRAP shoulder months such as June, September, November, and March. The combination of these planned outages and the extremely high PRMs calculated for these months often results in a deficit position in the WRAP Forward Showing, leading to potential significant deficiency charges. PGE emphasizes the importance of resolving and implementing this proposed change well in advance of the first binding season FS submittal.

07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action

PGE is proposing that Concepts 02 and 12 be moved up to the 2025 workplan. To accommodate for these changes, PGE suggests switching Concepts 05 and 03 to the 2026 workplan.

SRP (Jerret Fischer - jerret.fischer@srpnet.com)

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

Salt River Project Agricultural Improvement and Power District (SRP) appreciates the clarity and structure of the Task Force schedule and the opportunity it provides to make meaningful progress on the identified concepts. SRP supports the flexibility built into the schedule and encourages the WPP to continue to monitor whether the pace of work aligns with the needs of WRAP participants as they prepare for binding participation. SRP also encourages early confirmation of Task Force participants to promote engagement and help participants plan accordingly.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

SRP encourages the WPP to continue evaluating whether any concepts could affect participants ability or confidence to commit to binding participation. SRP appreciates the WPP's willingness to remain open to accelerated or modified scheduling if needed to address unforeseen items that may require resolution(s). SRP recognizes comments from others that request prioritization of Concept 02. We believe that the PRC should strongly consider these requests and demonstrate flexibility and responsiveness to concerns as they emerge and become more urgent. SRP understands that some stakeholder comments request that this proposal be prioritized above Concept 05 (an item built from SRP request). SRP does not object to the PRC adjusting the prioritization in a way that resolves other concerns prior to Concept 05. In harmony with the results of the prioritization exercise in January, SRP advocates for Concept 05 to be included in this Workplan, as SRP believes that the consideration of this concept will be highly valuable in preserving WRAP integrity. SRP also recognizes comments discussing the prioritization of Concept 01, and SRP also sees value in maintaining this item as a priority, as resolution of several concerns may influence Participant comfort with Binding operations. While SRP has submitted Concepts that are included in the Workplan, SRP's commitment to go Binding and continued participation in WRAP are not contingent on implementation of proposed changes.

03. Please supply any comments on the Executive Summary

SRP appreciates the executive summary. SRP recommends including a brief reference that the prioritization of the concepts in the Workplan reflects stakeholder input and supports the continued development of WRAP.

04. Please supply any comments on Section 1. Background

SRP supports the explanation of the Change Request Form/Concept and Workplan development process.

06. Please supply any comments on Section 3. Detailed Level of Effort Review

SRP appreciates the effort applied in the level of effort review. SRP recommends the WPP monitor the workload and staffing constraints for participants involved in multiple concepts.

07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action

SRP supports the inclusion of flexibility in the proposed schedule. SRP recommends the WPP ensure task forces leverage the monthly reporting mentioned in BPM 302 Section 3.2, to identify any risks, delays, and/or support needs. This may help the WPP and Program Review Committee maintain visibility of task force efforts.

08. Please supply any comments on Section 6. Next Steps

SRP supports the proposed next steps and appreciates the WPP's clear communication throughout the Workplan process. SRP encourages prompt communication of task force kickoff dates, which will support participants readiness and organization of internal resources.

General Comment

SRP appreciates the WPP's ongoing efforts to develop the WRAP through a structured and collaborative process. SRP supports the current prioritization of the concepts and values the transparency and flexibility built into the 2025 Workplan, but SRP would also support reprioritization to incorporate the collective interests of WRAP participants. SRP looks forward to actively participating in the upcoming task forces and contributing to the continued development of the WRAP.

01. Please supply any comments on the draft Task Force Schedule found in Figure 3

The Draft Task Force Schedule identified in figure 3 was created by the PRC as a prioritization of concepts submitted through Change Request Forms in December 2024. Bonneville appreciates the Western Power Pool's leadership in this process and has participated in and continues to support WRAP in general and this PRC prioritization process specifically. Bonneville also recognizes that the industry is in a period of significant change with the ongoing development of Day Ahead Markets (DAM). Both priorities and concepts addressed by WRAP will at times need to be adjusted accordingly. Bonneville proposes the program should work toward providing as much certainty as possible by October of this year on how the program will interact with organized markets and operate in binding seasons. Bonneville encourages the PRC to be flexible enough to adjust the annual plan as issues become priorities or new issues overtake those that have been identified and prioritized in the plan. Since this workplan was approved, the timeline associated with certain EDAM participants has become clear for a start in 2026. In addition, Bonneville's scoping of future market implementation with the very real possibility that portions of our generation and load will be in different markets has revealed it is imperative to make sure WRAP integrates well with DAMs (regardless of which market a WRAP participant plans to join). WRAP must provide clarity of how its participants meet program compliance requirements (holdback and energy deployments) when load and generation are in different markets. This will require adjustments to the WRAP program. Bonneville believes the PRC work plan identifies many of the known issues and appropriately prioritizes them. We want to highlight the importance of Concept 01 that directly takes on some of the organized market issues and encourage the PRC to expand this concept's scope, so as to address several other DAM/WRAP interface concerns beyond WRAP holdbacks and SWEDE transmission limits. Bonneville also wants to call attention to Concept 02, which deals with FS metrics (PRM) and the extreme volatility this is causing from month to month in the program. We recognize that both are prioritized below Concept 05 that deals with Load Growth Factors. As issues have evolved in Bonneville's scoping of DAM implementation since the January PRC approval of this plan, we see these both as having greater effects on participants continuing to be able to participate in the program. While Concept 05 is highly important, we view it as something that must be updated but may be a lower priority when considering the decision points that are coming for participants in October 2025 and January 2026. Bonneville asks that Concept 01 be expanded, Concept 02 be moved up to July of 2025 and Concept 05 be delayed into 2026.

02. Please supply any comments on Concepts that could impact a commitment to go Binding or remaining in the WRAP

October is a key decision point for current participants as it is the deadline to notify the program if a participant intends to exit before the program becomes binding. Many issues remain to be resolved in the WRAP design which is illustrated by the number of Concepts submitted in December. For very practical reasons, many Concepts were not prioritized for the 2025 workplan, including how a participant operates in the Operations program when it has load in both regions of the program. Bonneville believes participants need clarity on how WRAP will work with DAMs to provide the Resource Adequacy services that the program was designed to provide. The design was based on a bi-lateral construct and must be adjusted to work with organized markets that will dispatch resources to meet all load. In addition, participants also need a clear understanding of what the Operations program looks like when a participant has loads and generation in both regions. This needs to be addressed by October for example by clarifying dual region operations, or by revising the program so that all entities operate in a single region. The October deadline (for the 2-year exit provision) will be the point participants are evaluating financial risks for Winter 2027/2028. It is important that WRAP has addressed or mapped a path forward on the key issues at that decision point to give participants confidence that those future risks can be mitigated, while also recognizing much more can be addressed and resolved in the two-year period before the first binding season starts.

03. Please supply any comments on the Executive Summary

Bonneville would like to see a statement included in the executive summary reflecting the need for the Workplan to remain flexible in addressing rapidly evolving issues.

07. Please supply any comments on Section 4. Proposed Schedule and Plan of Action

Section 4 addresses concepts that have been prioritized and states that the PRC as a whole has the responsibility for a concept after it is part of the workplan. Section 4 also states that the PRC will move on to other items if time allows. Bonneville supports an addition to this section to identify that the PRC has the flexibility to shift priorities, workplan purpose, or schedule if the PRC were presented with a concept that was considered urgent. Such flexibility could be enacted as an immediate request to BOD for a change. We do recognize that the Governance process has other paths for changes to be made, however we want to recognize this PRC process as being the most complete and collaborative process. The program is strengthened by significant issues being addressed by the broadest coalition of WRAP members possible.

General Comment

Bonneville thanks the WPP, the PRC, and WRAP members for all the hard work that has gone into developing the CRF workplan structure.

Bonneville remains very committed to WRAP's mission and success. To support the program's success, we propose the above adjustments to the current workplan structure to allow for resolution of these and other issues. Working to maximize clarity on the program's future operations will allow members to be confident in a decision to continue past October in this extremely important program.



To: WPP Board
From: WPP Staff
Date: June 12, 2025
Meeting Date: June 25, 2025

Subject: Winter 2026-2027 WRAP Forward Showing Planning Reserve Margins

Recommended Action:

Staff recommends the Board of Directors approve the proposed Forward Showing (FS) Planning Reserve Margin (FSPRM) values for the Western Resource Adequacy Program (WRAP) for the Winter 2026-2027 Season.

Background

The FERC approved WRAP Tariff allows for Forward Showing Planning Reserve Margins (FSPRMs) for a Season to be approved by the Board of Directors following an Advance Assessment of reliability metrics. Per Section 14.3 of the WRAP Tariff “[n]o later than nine months before the FS Deadline for such Binding Season, the Board of Directors shall take its final action regarding approval of the FSPRM values for each Month of such Binding Season.” Nine months before the Winter 2026-2027 FS Deadline of March 31, 2026, is July 1, 2025.

To comply with the Tariff, Staff recommends the Board of Directors approve the FSPRM values as proposed.

Winter 2026-2027 is in the WRAP Transition Period (Summer Season 2025 through Winter 2028-2029), however no WRAP Participants have elected Winter 2026-2027 as their initial Binding Season (i.e. Deficiency Charges and/or Delivery Failure Charges will not be assessed). WRAP will run in a non-Binding manner for Winter 2026-2027.

As designed, the WRAP is intended to focus on two distinct operating seasons: Summer and Winter. As such, a separate PRM is calculated for each Binding Season based on a LOLE metric that is calculated separately for each season. In Sections 16.1.2.1, 16.1.2.3, 16.2.5.2.2, concerning the FSPRM, the Tariff revisions that went into effect January 27, 2025 revise the references to “annual LOLE” to “Seasonal LOLE” and provide other related changes to clarify how this reliability metric will be calculated. Because there is a Summer Season and Winter Season in each year (and, indeed, the Winter Season spans into the next calendar year) the current tariff reference to “annual LOLE” was unclear as to how this metric would be calculated. Therefore, the change from “annual” to “Seasonal” LOLE clarifies that the Program Operator will calculate this metric on a seasonal basis for the Forward Showing Program. In other words, the Tariff revisions clarify that the FSPRM is intended to ensure the LOLE for the applicable year does not exceed one event for the Summer Season and Winter Season, but not one LOLE across both seasons. The LOLE used to

determine the FSPRMs in this memorandum were calculated using the seasonal LOLE methodology, in accordance with intended design and the FERC-approved revised Tariff.

Stakeholder Process

Consistent with the approved WRAP stakeholder process, the Study Scope of the Advance Assessment for Winter 2026-2027 was presented and discussed at the September 12, 2024 Resource Adequacy Participant Committee (RAPC) public meeting and at the September 19, 2024 WPP Board of Directors public meeting. There were no public comments made on the Study Scope of the Advance Assessment at either meeting when the opportunity was provided.

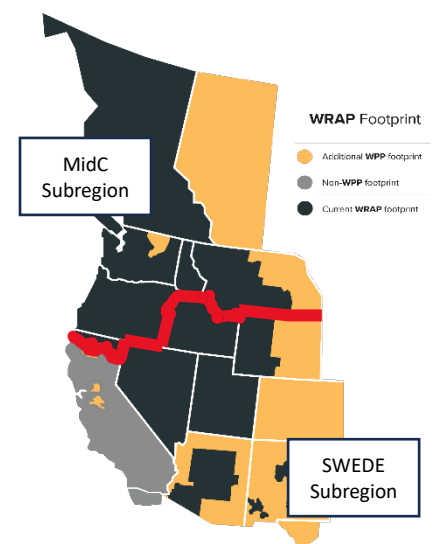
Per Section 14.3 of the Tariff, “[no] later than twelve months before the FS Deadline for each Binding Season, WPP will determine and post the recommended FSPRM for each Subregion for each Month of such Binding Season” for Participants to discuss. Results were provided to participants and discussed at the April 1, 2025 Forward Showing Workgroup meeting.

The FSPRMs up for approval employ the diversity sharing between Subregions (on transmission between Subregions) included in the Revised Transition Plan Expedited Proposal (2024-EP-1) that was approved by RAPC on August 29, 2025, the Board of Directors on September 19, 2024, and FERC on January 24, 2025. The diversity sharing assumes 500 MW from the Southwest and East Subregion (“SWEDE”) is available to the Northwest Subregion (“MidC”) in each Winter Season, where any reduction to a FSPRM will not fall below the corresponding FSPRM calculated for the WRAP Region as a whole.

FSPRMs

Staff has included a table of the FSPRMs for Winter 2026-2027 Season.

Subregion	November	December	January	February	March
Mid Columbia (MidC)	29.4%	12.7%	13.2%	10.6%	18.8%
Southwest and East Diversity Exchange (SWEDE)	13.3%	8.1%	6.8%	7.3%	11.8%



At the time of the FS Deadline (March 31, 2026 for Winter 2026-2027), FSPRM values are applied to Participants’ forecast 1-in-2 peak load for each month of the Binding Season

(monthly P50 Peak Load Forecast values) to arrive at a Participant's FS Capacity Requirement, in accordance with the Tariff and supporting documentation.

Conclusion

Staff recommends the Board of Directors approve the proposed FSPRM values for the WRAP Winter 2026-2027 Season on June 25, 2025, based on:

- a. the Tariff requirement of Board of Director approval nine months before the Winter 2026-2027 FS Deadline of March 31, 2026;
- b. the public presentation of the Winter 2026-2027 Advanced Assessment study scope in September 2024; and
- c. the Program Operator's execution of the established Winter 2026-2027 Advance Assessment Study Scope to derive the FSPRM values provided.

**RESOLUTION OF THE BOARD OF DIRECTORS OF
WESTERN POWER POOL APPROVING
MODIFIED PAYMENT TO WRAP PROGRAM OPERATOR**

WHEREAS WPP seeks to update costs and resources for Southwest Power Pool's (SPP) work as contractual Program Operator for the Western Resource Adequacy Program (WRAP) through mutually agreed-upon modifications and augmentations to SPP's Work Order for Program Operator Services;

WHEREAS WPP's Agreement for Program Operator Services with SPP dated 2021 (PO Agreement) contemplates that that Program Operator costs will drop from \$4,567,000 in 2025 to \$3,200,000 in 2026, but also contemplates that these costs may be adjusted if appropriate;

WHEREAS WPP now seeks to hold Program Operator costs steady in 2026 (\$4,500,00 with a four percent annual escalator through 2030), to more accurately reflect the costs of the Program Operator Services being performed;

WHEREAS WPP staff has determined that these cost adjustments are reasonable and reflective of the cost of Program Operator services;

WHEREAS these intended modifications require near-term amendments to the current WRAP Work Order #2 (2023-2026) with SPP to allow WPP to begin collecting costs in October 2025, consistent with WPP's obligations under the PO Agreement; and

WHEREAS the signature authority policy of the Western Power Pool (WPP) requires the Board of Directors to approve any contractual commitments by WPP over \$500,000;

NOW THEREFORE, BE IT:

RESOLVED that the Board of Directors hereby authorizes WPP staff to take all actions necessary to renegotiate and finalize payment terms with SPP as described in this resolution for mutually agreed updates to Program Operator costs and services.

Susan Ackerman, Secretary

Date Approved by Board of Directors: June __, 2025

To: WPP Board
From: WPP Staff
Date: June 17, 2025
Meeting Date: June 25, 2025

Subject: Western Power Pool 2025-2026 Budget

Recommended Action:

Staff recommends the Board of Directors approve the proposed 2025-2026 Western Power Pool (WPP) for the 18 month period of July 1, 2025 – December 31, 2026.

Background

WPP is transitioning from a fiscal year to a calendar year for financial reporting and tax compliance. The proposed budget includes 18 months beginning July 1, 2025, and ending December 31, 2026, to facilitate this transition. This alignment will simplify budgeting, financial reporting, tax compliance, and better aligns with the majority of WPP membership who report on a calendar year basis.

The proposed 18 month budget totals \$27.3 million and represents a \$2.9 million increase over the original approved 2024-2025 Budget. In December 2024, the original approved 2024-2025 Budget was subsequently increased by more than \$2.6 million primarily associated with the addition of WestTEC .

For comparability, the proposed 2025-2026 annualized budget totals \$18.2 million and represents a \$757 thousand or 4.3% increase over the 2024-2025 December 2024 Budget Update. The year-over-year increase is primarily driven by budgeting positions for the full 12 months and a reduction in outsidess services.

WPP leadership presented the proposed budget, the drivers for the increased costs, and the impacts to program costs, and took questions from member committees. The Transmission Planning Committee, Operating Committee, Reserve Sharing Group Committee, Western Frequency Response Group Committee, PNCA Coordinating Group, and the WRAP Resource Adequacy Participants Committee all reviewed and endorsed the portion of the proposed budget allocated to their respective member committees.

Budget Summary

Program	BOD Approved Budget 2024-2025	December 2024 BOD Approved Budget 2024-2025	Proposed Budget 12-Month Jul 2025 - Jun 2026	Budget Change (\$) Dec 2024-25 vs Proposed Jul 2025- Jun 2026		Proposed Budget 18-Month Jul 2025 - Dec 2026
Operating Programs	4,432,996	4,111,565	4,685,239	573,674	14.0%	7,027,858
Transmission Planning Services	1,269,532	4,175,119	3,956,564	(218,555)	-5.2%	5,934,846
WRAP Total	9,567,601	9,153,000	9,554,866	401,866	4.4%	14,332,299
WPP TOTAL	<u>15,270,128</u>	<u>17,439,684</u>	<u>18,196,669</u>	<u>756,985</u>	<u>4.3%</u>	<u>27,295,003</u>

WPP Corporate Compliance Policy

Oregon-Based 501(c)(6) Nonprofit Organization

1. Purpose

WPP's Corporate Compliance Policy is designed to ensure that Northwest Power Pool, d/b/a Western Power Pool operates in accordance with all applicable federal, state, and local laws, including IRS regulations, Oregon nonprofit law (ORS Chapter 65), and ethical standards relevant to a 501(c)(6) organization.¹

2. Governance and Oversight

A. Board of Directors

- The Board is responsible for general oversight of WPP's corporate compliance efforts.
- The Board reviews WPP's corporate compliance policy at least every two years.

B. Chief Compliance Officer

- WPP's Chief Compliance Officer oversees implementation of compliance measures.
- The CCO reports to the Chief Executive Officer and directly to the Board where appropriate.

3. Code of Conduct and Ethics

A. Code of Conduct

- WPP's code of conduct outlines expectations for ethical behavior for WPP's Board and staff.

B. Conflict of Interest and Independence Policies

- WPP's conflict of interest and independence policies require annual disclosures.
- WPP staff will review annual disclosures and bring issues to the Board for resolution as appropriate.

C. Whistleblower Policy

- WPP's whistleblower policy protects individuals who report unethical or illegal behavior.
- WPP makes confidential reporting mechanisms available to potential whistleblowers.

4. Training and Communication

A. Board and Staff Training

- WPP will conduct annual training with the Board and WPP staff on fiduciary duties, whistleblowing, and ethics, as applicable.

B. Documentation

- WPP will maintain attendance records and training materials from annual training sessions.

¹ Compliance requirements specific to programs regulated by the Federal Energy Regulatory Commission or NERC/WECC are addressed separately in more detailed program-specific compliance plans.

5. Risk Assessment and Internal Controls

A. Risk Identification

- WPP will identify legal and operational risks annually.

B. Monitoring

- WPP will monitor risks through financial audits and internal policy compliance checks.

C. Recordkeeping

- WPP will maintain meeting minutes, Form 990s, and core corporate documents consistent with state and federal law.

D. Program Compliance

- WPP will develop and implement program-specific compliance programs for regulated programs.

6. Compliance Reporting & Investigations

A. Reporting Channels

- WPP will provide confidential ways for staff to report compliance issues or concerns.

B. Investigation Process

- An investigation will be initiated within 5 business days of a report.
- The results of an investigation will include documentation and resolution plan.

7. Corrective Action

- WPP will implement progressive discipline policy for staff compliance violations.
- WPP will report severe breaches to regulatory authorities when required.

8. Compliance Calendar

Timing	Task
February (2-year cycle, even years)	Resubmit d/b/a
April (annual)	File Oregon Annual Report / Registration
May (annual)	IRS Form 990
Q1 (annual)	Update conflict of interest forms/disclosures
Biennial	Board review of Compliance Plan

9. Review and Updates

This policy should be reviewed at least every two years by the Board of Directors.

[Approval date]



WESTERN
POWERPOOL



WESTERN POWERPOOL

Resolution No _____

RESOLUTION OF THE BOARD OF DIRECTORS OF NORTHWEST POWER POOL REGARDING RESTATED BYLAWS

WHEREAS Northwest Power Pool, d/b/a Western Power Pool (WPP) is an Oregon nonprofit mutual benefit corporation recognized as an organization exempt from federal income tax under Section 501(c)(6) of the Internal Revenue Code; and

WHEREAS the Board of Directors of WPP periodically reviews WPP's governing documents and endeavors to be not only in compliance with state, Internal Revenue Service (IRS) and regulations of the Federal Energy Regulatory Commission, but also to effectuate best practices and good governance;

WHEREAS the Bylaws being updated to achieve the aforementioned goals are not intended to change any rights or obligations currently established through WPP program documentation or agreements; and

WHEREAS the Board intends through restated bylaws to streamline and simplify WPP's operations and regulatory filings by adopting a January to December fiscal year;

NOW THEREFORE, BE IT RESOLVED:

That the form of Restated Bylaws reviewed and discussed at this meeting be adopted as the Bylaws of WPP;

That the staff of WPP be authorized to notify any appropriate governmental entities or third parties of the adoption of the Restated Bylaws as needed; and

That the staff of WPP be authorized to take all such further actions as they, or any of them, may deem necessary or appropriate to carry out the intention of the foregoing resolutions.

Secretary

Date Approved by Board of Directors: _____, 2025

RESTATED BYLAWS
OF
NORTHWEST POWER POOL
(d/b/a WESTERN POWER POOL)

SECTION 1 MISSION AND PURPOSE

NORTHWEST POWER POOL (NWPP, the corporation) is a nonprofit mutual benefit corporation organized and operated to engage in any lawful activity permitted by Section 501(c)(6) of the Internal Revenue Code. The mission of NWPP is to help coordinate electric grid operations for the western United States and Canada. NWPP supports the activities of major utilities, generators, and energy managers who together work for increased grid efficiency and reliability, including regional transmission planning, contingency reserves and frequency response sharing programs, grid operator training, and hydro modeling and analysis. NWPP, d/b/a WPP, also administers the Western Resource Adequacy Program (WRAP), which operates under a FERC-approved tariff and seeks to enhance and increase resource adequacy and reliability for entities across the Western footprint.

SECTION 2 CORPORATE MEMBERSHIP

2.1 Qualifications. Corporate membership in NWPP may be granted to a corporation, utility or agency that (i) submits an application or submits an intake form, as applicable; (ii) meets the criteria set forth in a category of corporate membership in NWPP; (iii) shares interest in and supports the purposes of NWPP; (iv) abides by these bylaws and other such policies, rules, and regulations as NWPP may adopt; and (v) meets such additional criteria established by NWPP. Except as otherwise provided by resolution of the board of directors, admission of corporate members shall be made by the President/CEO upon a determination by the President/CEO that the applicant meets the qualifications established for corporate membership as set forth in these bylaws. In cases of questions regarding eligibility, or if there is no President/CEO, the decision shall be referred to the board of directors.

2.2 Classes. The corporation shall have two classes of corporate members, whose requirements, rights and obligations with respect to corporate governance are as follows:



(a) **Program Signatories.** Program Signatory membership may be granted to any load-responsible entity participating in a NWPP-facilitated reliability program. Each Program Signatory shall have the following rights and privileges under ORS 65.144: (i) the right to vote on an action or amendment to the articles of incorporation or bylaws if the action or amendment would reduce or eliminate the member's right to vote; (ii) the right to vote to dissolve the corporation; (iii) the right to vote on mergers; and (iii) the right to inspect the corporation's accounting records and corporate membership list, as provided in ORS 65.774.

(b) **Allied Partners.** Allied partnership status may be granted to companies, utilities, agencies, groups and stakeholders involved or associated with the mission and purpose of NWPP. Allied Partners shall be non-voting, shall not be counted for purposes of determining whether a quorum is present at a meeting of the corporate members and shall not be entitled to vote on any matter. An Allied Partner may participate in discussions of the corporate members at the discretion of the chair.

Additional types of corporate memberships and the qualifications and rights of each type of corporate member may be established by amendment to these bylaws. All corporate members may participate in the activities and programs of NWPP pursuant to those program criteria and agreements, may be appointed to serve on committees per their charters or these bylaws, and shall pay dues as may be set forth by the board of directors from time to time.

2.3 Official Representatives. Each corporate member shall appoint one official representative, who shall have the power to act on behalf of such corporate member without further showing of authority, and all actions taken by such representative shall be binding upon the appointing corporate member. The names of the representative shall be filed with the secretary and may be changed from time to time by filing a new designation of representative. Each corporate member may invite other corporate member employees, officers or directors to attend NWPP meetings and events, but only the single designated corporate member representative shall have the ability to act on behalf of the corporate member.

2.4 Dues and Assessments. Dues payable by corporate members shall be established by the board of directors in such amount and on such terms as the board of directors may determine. The board of directors also may levy assessments to be paid by corporate members from time to time to cover reasonable expenses incurred or expected to be incurred by the association in excess of its then current reserves.



2.5 Transfers. Corporate memberships are nontransferable and not assignable, and shall terminate upon the resignation or termination of the corporate membership.

2.6 Resignation. A corporate member may resign at any time by delivering written notice to the chair and/or the secretary, but such resignation shall not relieve the resigning corporate member from the payment of dues or assessments already levied or otherwise committed by that corporate member. A resignation is effective when notice is effective under ORS 65.034 unless the notice specifies a later effective date. Once delivered, a notice of resignation is irrevocable unless revocation is permitted by the corporate members.

2.7 Termination, Suspension and Expulsion. The board shall adopt a policy regarding termination, suspension or expulsion. The procedure for suspension and expulsion must be fair and reasonable and carried out in good faith and provide 15 days' notice stating the reasons for suspension or expulsion and providing an opportunity not less than five days before the effective date of the suspension or expulsion for the member to be heard orally or in writing by the persons authorized to withdraw the proposed suspension or expulsion.

SECTION 3 MEETINGS OF THE CORPORATE MEMBERS

3.1 Annual Meeting. An annual meeting of the corporate members shall be held during the first quarter of the year or at a time and place designated by the board. Failure to hold an annual meeting on the stated date shall not affect the validity of any corporate action. At the annual meeting the chair or other director shall report on the activities and financial condition of the corporation and the corporate members shall consider any matter that is consistent with description of issues to be considered in the notice for the annual meeting. Annual corporate member meetings may be held in or out of the State of Oregon.

3.2 Regular and Special Meetings. The corporation may hold regularly scheduled corporate member meetings. A special meeting of corporate members shall be held upon the call of the board of directors or if thirty percent of the Voting Members deliver to the secretary one or more written demands for the meeting describing the purpose or purposes for which it is to be held. Only matters within the purpose or purposes described in the meeting notice may be conducted at a special meeting of corporate members.

3.3 Participation. The board may permit any or all of the corporate members to participate in any meeting by using a means of communication by which each corporate member participating in the meeting can communicate with all of the other corporate members concurrently. A corporate member participating in the meeting by this means is deemed present at the meeting.

3.4 Proxies. Every corporate member entitled to vote or to execute any waiver or consent may do so either by its official representative or by written proxy duly executed and filed with the secretary. No proxy shall be valid after 11 months from the date of its execution, unless otherwise provided in the proxy.

3.5 Notice of Meetings. The corporation shall provide seven days' notice for all corporate member meetings, if given by first-class mail or private carrier, or if delivered orally or electronically. All notices must give the date, time, and place of the meeting and a description of any matters that the corporate members must approve. Notice for a special meeting must also include a description of the purposes for which the meeting was called.

3.6 Waiver of Notice. A corporate member may at any time waive any notice required by these bylaws. Except as provided in the preceding sentence, any waiver must be signed and in writing and may be a document that is transmitted electronically. A corporate member's attendance at or participation in a meeting waives any objection to lack of or defective notice, unless the corporate member, at the beginning of the meeting objects to holding the meeting or transacting business at the meeting.

3.7 Quorum. At any corporate member meeting of the corporation, Program Signatories having at least fifty percent of the voting rights entitled to be cast at such meeting present by official representative or by proxy shall constitute a quorum.

3.8 Voting. Unless the articles of incorporation or bylaws require a greater vote, if a quorum is present when a vote is taken, the affirmative vote of a majority of the votes represented and voting is an act of the corporate members.

3.9 Action Without Meeting: Unanimous Written Consent by Program Signatories. Any action required or permitted to be taken at a corporate members' meeting may be taken without a meeting if the action is taken unanimously by all corporate members entitled to vote on the matter. The action shall be evidenced by one or more written consents describing the action taken, signed by each corporate member, and included in the minutes or filed with the corporate records reflecting the action taken. Action taken under this section is effective when the last corporate member entitled to



vote on the matter signs the consent, unless the consent specifies an earlier or later effective date. For purposes of this section, an affirmative email sent by a corporate member in response to a written consent is deemed to be a writing by the corporate member. A unanimous written consent under this section has the effect of a meeting vote and may be described as such in any document.

3.10 Action by Ballot. Any action required or permitted to be taken at a corporate member meeting may be taken without a meeting if the corporation delivers a written ballot to every corporate member entitled to vote. The written ballot must set forth each proposed action and provide an opportunity to vote. Approval by ballot occurs when the number of ballots returned exceeds the quorum requirements and the number of approvals equals or exceeds the number of votes required to take action. All ballot solicitations must indicate the number of responses needed to approve each matter and specify the time in which the ballot must be received by the corporation.

SECTION 4 DIRECTORS

4.1 Powers. The board of directors (the “board”) shall exercise, or delegate, or otherwise authorize the exercise of, all corporate powers and shall direct the management of the corporation’s affairs, subject to any limitation set forth in the Articles of Incorporation, these bylaws and Oregon law. The board shall retain authority over an exercise of corporate powers that the board delegates or authorizes under this section.

4.2 Qualifications. All directors must be individuals 18 years of age or older. Directors need not be residents or citizens of the State of Oregon or of the United States of America. The board, in collaboration with the Nominating Committee, may establish written policies that include additional criteria for qualifications of directors and composition of the board.

4.3 Number. The board shall consist of a minimum of three and a maximum of seven persons. The number of directors may be fixed or changed periodically within the minimum and maximum by the board.

4.4 Nomination. The Nominating Committee shall facilitate the board nomination process according to written policies and procedures established by the board.

4.5 Election. The board shall elect directors at its annual meeting, except as necessary to fill vacancies. The term of a director elected at an annual meeting shall begin



on January 1 of the following year. The term of a director elected during the year to fill a vacancy shall begin as of the date specified in the resolution to elect the director.

4.6 Tenure of Office. Directors shall serve for terms of three years. Directors may, if reelected, serve for a maximum of two consecutive terms. By resolution, the board may divide the total number of directors into groups and otherwise arrange for terms to be staggered such that not all of the directors' terms expire in the same year. The board may waive the maximum term limit of any director for good cause.

4.7 Resignation. A director may resign at any time by delivering written notice to the chair or the secretary. A resignation is effective when notice is effective under ORS 65.034 unless the notice specifies a later effective date. Once delivered, a notice of resignation is irrevocable unless revocation is approved by the board.

4.8 Removal. A director may be removed, either with or without cause, at any time by vote of all directors (other than the director whose removal is proposed) in office at the time the vote is taken.

4.9 Vacancies. A vacancy on the board shall exist in the event of a director's resignation, removal, incapacity, or death. A vacancy shall exist if the number of directors in office is less than the maximum number or the number fixed by the board. In case of a vacancy, the Nomination Committee shall facilitate the board nomination process and the board may fill a vacancy according to written policies and procedures established by the board. The term of a director elected during the year to fill a vacancy shall begin as of the date specified in the resolution to elect the director. Each director so elected shall hold office for an initial term specified in the resolution to elect the director, in order to arrange for terms to be staggered. If the board accepts the resignation of a director tendered to take effect at a future time, a successor may be elected to take office when the resignation becomes effective.

4.10 Board Committees. The board may create one or more board committees that exercise the authority of the board. The creation of a board committee and either the appointment of directors to the board committee or the designation of a method of selecting board committee members must be approved by the board. Each board committee must consist of two or more directors, who serve at the pleasure of the board. Only a director may serve as a voting member of a board committee. Except as may be contemplated by resolution of the board, the provisions of these bylaws governing meetings, action without meetings, notice and waiver of notice, and quorum and voting requirements of the board shall apply to committees and their members as well. The

board may delegate the authority of the board to a board committee; provided, however, no committee may:

- (a) Authorize distributions, provided that this restriction does not apply to payment of reasonable value for property received or services performed or payment of benefits that furthers the corporation's purposes;
- (b) Approve dissolution, merger, or the sale, pledge, or transfer of all or substantially all of the corporation's assets;
- (c) Elect, appoint, or remove directors or fill vacancies on the board or on any board committees;
- (d) Adopt, amend, or repeal the Articles of Incorporation or bylaws; or
- (e) Appoint or remove officers.

4.11 Advisory Committees. The board may create one or more advisory committees. The board may appoint individuals to serve on an advisory committee or specify a method for selecting members. Members of these committees need not be members of the board, but at least one director shall serve on each such committee. Advisory committees shall have no power to act on behalf of, or to exercise the authority of, the board, but may make recommendations to the board or to board committees and may implement board or board committee decisions and policies under the supervision and control of the board or a board committee.

4.12 Nominating Committee. The Nominating Committee will be an advisory committee comprised of fourteen individuals from the corporation's stakeholder sectors as follows:

- (a) **Investor-Owned Utilities.** Investor-owned utilities that participate in the WRAP and serve on the Resource Adequacy Participants' Committee (RAPC) may, as a class, select two representatives to serve on the Nominating Committee;
- (b) **Consumer-Owned Utilities.** Consumer-owned utilities that participate in the WRAP and serve on the RAPC may, as a class, select two representatives to serve on the Nominating Committee;
- (c) **Retail Competition Load Responsible Entities.** Retail competition load responsible entities that participate in the WRAP and serve on the RAPC may, as a class, select one representative to serve on the Nominating Committee;

(d) Federal Power Marketing Administrations. Federal power marketing administrations that participate in the WRAP and serve on the RAPC may, as a class, select one representative to serve on the Nominating Committee;

(e) NWPP Agreement Signatories. Companies that are party to the NWPP Agreement, and are not on the WRAP RAPC, and are not a market operator may, as a class, select one representative to serve on the Nominating Committee;

(f) Independent Power Producer/Marketer. Independent power producers/marketers that are NWPP Allied Partners and have operations within the Western Interconnection may, as a class, select one representative to serve on the Nomination Committee;

(g) Public Interest Organization. Public interest organizations that are NWPP Allied Partners and conduct activities within the Western Interconnection may, as a class, select one representative to serve on the Nomination Committee;

(h) Retail Customer Advocacy Group. Retail customer advocacy groups that are NWPP Allied Partners and conduct activities within the Western Interconnection may, as a class, select one representative to serve on the Nomination Committee;

(i) Industrial Customer Advocacy Group. Industrial customer advocacy groups that are NWPP Allied Partners and conduct activities within the Western Interconnection may, as a class, select one representative to serve on the Nomination Committee;

(j) Load Serving Entities. Load serving entities that are NWPP Allied Partners, and serve loads in the WRAP represented by another load responsible entity, and are otherwise not eligible for any other above-named sectors, may, as a class, select one representative to serve on the Nomination Committee;

(k) A NWPP director; and

(l) The chair or vice chair of the Committee of State Representatives.

In collaboration with the board, the Nominating Committee will identify potential candidates for open board positions to ensure the overall composition of the board reflects a diversity of expertise and experience, and will recommend a slate of candidates to the board for election as further detailed in a Board Governance Manual.

4.13 Compensation. Directors may receive reasonable compensation for service in their capacity as directors or officers. A director may receive reimbursement of actual reasonable expenses incurred in carrying out their duties as a director.

4.14 Director Conflict of Interest. A conflict-of-interest transaction is a transaction with the corporation in which a director of the corporation has a direct or indirect interest, as defined in ORS 65.361. The board shall adopt a policy that (a) requires directors and officers to disclose any interest that constitutes or could result in a conflict of interest and (b) sets out procedures for reviewing and resolving such matters in accordance with law. The policy will also ensure the directors are financially independent from WRAP participants.

SECTION 5 OFFICERS

5.1 Designation. The officers of the corporation shall be a chair, a secretary, a treasurer, and may include a vice chair, president/chief executive officer and such other officers as may be elected, appointed or approved by the board, or appointed by the president/chief executive officer, pursuant to the provisions of this section. The same individual may not serve simultaneously as chair, secretary, and treasurer.

5.2 Election; Term of Office. The board shall elect officers at its annual meeting. Officers shall serve for a term of one year to begin on January 1 and end on December 30 (or such other term as the members may designate) unless sooner removed by the board, and may be elected to any number of consecutive terms. The board shall appoint the president/chief executive officer, who shall serve in such office for as long as they are employed by the corporation as president/chief executive officer.

5.3 Removal. An elected officer may be removed, either with or without cause, at any time by vote of all directors (unless the officer is also a director, in which case that director will not be included in the vote) in office at the time the vote is taken.

5.4 Resignation. An officer may resign at any time by delivering notice to the board, the chair, or the secretary. A resignation is effective when the notice is effective under ORS 65.034 unless the notice specifies a later effective date. If a resignation specifies a later effective date and the corporation accepts the later effective date, the board may fill the pending vacancy before the effective date if the board provides that the successor does not take office until the effective date. Once delivered, a notice of resignation is irrevocable unless revocation is approved by the board.



5.5 Chair. The chair shall preside at meetings of the board and meetings of the members, shall ensure that the board is advised on all significant matters of the corporation's business, shall oversee member communications, and shall be responsible for overseeing the plans and directives of the board. The chair also shall have such other powers and perform such other duties as may be prescribed by the board.

5.6 Vice Chair. The vice chair, if any, shall preside at meetings of the board at which the chair is absent and in the absence of the chair shall have the other powers and perform the other duties of the chair. The vice chair also shall have such other powers and duties as may be prescribed by the board.

5.7 Secretary. The secretary shall oversee the preparation of minutes of meetings of the board and authenticate records of the corporation. The secretary shall keep or cause to be kept at the principal office or such other place as the board may order, the minutes of all board meetings. The secretary also shall have such other powers and perform such other duties as may be prescribed by the board. The board may appoint or authorize the appointment of an assistant secretary who may perform such duties as are prescribed by secretary or the board. The assistant secretary, if any, need not be a member of the board.

5.8 Treasurer. The treasurer shall lead the board's oversight of the corporation's budgeting and planning process, financial performance, and financial condition. The treasurer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the assets and transactions of the corporation. The treasurer shall have such other powers and duties as may be prescribed by the board. The board may appoint or authorize the appointment of an assistant treasurer who may perform such duties as are prescribed by treasurer or the board. The assistant treasurer, if any, need not be a member of the board.

5.9 President/Chief Executive Officer. The president/chief executive officer shall be hired by and serve at the pleasure of the board and shall, subject to the oversight of the board, have general supervision, direction and control of the business and affairs of the corporation, with the executive powers and duties of management usually vested in the office of president and chief executive officer of a corporation. The president/chief executive officer shall not, by virtue solely of their employment as president/chief executive officer, be considered a member of the board, although they shall attend all board meetings unless excused by the chair.

5.10 Senior Officers. To assist the president/chief executive officer in the exercise of their office, the president/chief executive officer may appoint such

corporation vice presidents as senior officers (collectively “senior officers”) as the president/chief executive officer may deem appropriate, delegating to such senior officers such duties and responsibilities as the president/chief executive officer shall determine. Senior officers need not be selected from among the directors and shall not, by virtue solely of their appointment and approval, be considered members of the board, ex officio or otherwise. Should any senior officer leave the employment of the corporation or be removed as a senior officer by the president/chief executive officer, the board shall be notified and that person removed from the list of senior officers.

5.11 Compensation. Directors may receive reasonable compensation for service in their capacity as officers. The president/chief executive officer, senior officers and other employees who serve as officers may receive reasonable compensation for service in their role as employees of the corporation. The board shall review and approve on an annual basis the compensation of the president/chief executive officer.

SECTION 6 MEETINGS OF THE BOARD

6.1 Meetings. An annual meeting of the board shall be held during the fourth quarter of the year or at a time and place designated by the board. If the time and place of any other directors’ meeting is regularly scheduled by the board in a manner that informs all directors of the time and place without additional notice, the meeting is a regular meeting. All other meetings are special meetings.

6.2 Virtual Participation. The board may permit any or all of the directors to participate in any meeting by using a means of communication by which each director participating in the meeting can communicate with all of the other directors simultaneously. A director participating in a meeting in accordance with this section is deemed present at the meeting.

6.3 Call and Notice of Meetings. Notice of regular meetings may be made by providing each director with the adopted schedule of regular meetings for the ensuing year, and without further notice of the date, time, place, or purpose of the meeting. The annual meeting must be preceded by at least ten days’ notice, if given by first-class mail or private carrier, or 48 hours’ notice, if delivered orally or electronically. Special meetings of the board must be preceded by at least 24 hours’ notice and must be delivered orally or electronically. All notices must give the date, time, and place of the meeting. Except as specifically provided in these bylaws or applicable law, the notice

need not describe the purposes of any meeting. The chair, the secretary, or one-third of the directors then in office may call and give notice of a meeting of the board.

6.4 Waiver of Notice. A director may at any time waive any notice required by these bylaws. A director's attendance at or participation in a meeting waives any required notice to the director of the meeting unless the director, at the beginning of the meeting or promptly upon the director's arrival, objects to holding the meeting or transacting business at the meeting and does not thereafter vote for or assent to any action taken at the meeting. A written waiver must be signed and may be transmitted electronically. The waiver must specify the meeting for which the notice is waived and must be filed with the minutes or the corporate records.

6.5 Quorum. A quorum of the board shall consist of two-thirds of the number of directors in office immediately before the meeting begins. A director is considered present regardless of whether the director votes or abstains from voting.

6.6 Voting. If a quorum is present when a vote is taken, the affirmative vote of a majority of the directors present when the action is taken is the act of the board except to the extent that the Articles of Incorporation, these bylaws, or applicable law require the vote of a greater number of directors. Each director has one vote and may not vote by proxy.

6.7 Presumption of Assent. A director who is present at a meeting of the board is deemed to have assented to an action taken unless the director (a) dissents or abstains from the action and it is recorded in the minutes; (b) objects to holding or transacting business at the beginning of the meeting or promptly upon the director's arrival; or (c) delivers written notice of dissent or abstention to the presiding officer of the meeting before the meeting's adjournment or to the corporation immediately after the meeting adjourns. The right of dissent or abstention is not available to a director who votes in favor of the action taken.

6.8 Action Without Meeting: ~~Vote~~ by Email. The board may, without a meeting, use email or other electronic means to take action required or permitted to be taken at a board meeting if:

- (a) The corporation has a record of an email address for each director;
- (b) The corporation sends to the email address of each director an announcement that the board will take action, a description of the matter on which the

board will take action, and a deadline of not less than 48 hours after the time the corporation sends the announcement in which a director may vote; and

(c) The majority of directors who hold office at the time vote in the affirmative, except to the extent that the Articles of Incorporation, these bylaws, or applicable law require the vote of a greater number of directors.

A director may change their vote at any time before the deadline set forth in the email announcement. The board's action is effective on the deadline specified in the email announcement unless the announcement specifies a different effective date or time. The corporation shall include the email announcement and a record of the directors' votes in corporate records reflecting the action that the board took.

6.9 Action Without Meeting: Unanimous Written Consent. Any action required or permitted to be taken at a board meeting may be taken without a meeting if the action is taken unanimously by all directors. The action must be evidenced by one or more written consents describing the action taken, signed by each director, and included in the minutes or filed with the corporate records reflecting the action taken. Action taken under this section is effective when the last director signs the consent unless the consent specifies an earlier or later effective date. For purposes of this section, an affirmative email sent by a director in response to a written consent is deemed to be a writing by the director. A unanimous written consent under this section has the effect of a meeting vote and may be described as a meeting vote in any document.

SECTION 7 NONDISCRIMINATION

The corporation shall not discriminate in providing services, hiring employees, or otherwise, upon the basis of gender, gender identity, race, creed, marital status, sexual orientation, religion, color, age, national origin, veteran status, or disability.

SECTION 8 GENERAL PROVISIONS

8.1 Amendment or Restatement of Bylaws. The board may amend or restate these bylaws by vote of a majority of the directors then in office, provided, however, that any amendment of these bylaws relating to the qualifications or classes of members, election or removal of directors, or affecting the rights of the members must be approved



by the Program Signatories. The date of approval of any amendment to the bylaws or a restatement of the bylaws shall be noted in the corporate records.

8.2 Board Governance Manual. The board shall adopt and regularly review a manual that includes written governance policies and procedures, such as committee charters, any additional criteria for qualifications of directors and nomination process and composition of the board, and board policies. Any changes to the governance manual must be approved by the board.

8.3 Inspection of Books and Records. All books, records, and accounts of the corporation shall be open to inspection by the directors and members in the manner and to the extent required by law.

8.4 Disbursements. All checks or other orders for payment of money shall be signed or endorsed by such person or persons and in such manner as the board may determine by resolution or policy.

8.5 Deposits. All funds of the corporation shall be deposited to the credit of the corporation in such banks, trust companies, or other depositories as the Board may authorize.

8.6 Loans or Guarantees. The corporation shall not borrow or lend money unless authorized by the board by resolution or policy. This authority may be general or confined to specific instances. Except as explicitly permitted by ORS 65.364, the corporation shall not make a loan, guarantee an obligation, or modify a pre-existing loan or guarantee to or for the benefit of a director or officer of the corporation.

8.7 Execution of Documents. The board may authorize any officer or agent to enter into any contract or execute any instrument in the name of and on behalf of the corporation. Such authority may be general or confined to specific instances. Unless so authorized by the board, no officer, agent, or employee shall have any power or authority to bind the corporation by any contract or engagement, or to pledge its credit, or to render it liable for any purpose or for any amount.

8.8 Insurance. The corporation may purchase and maintain insurance on behalf of an individual against liability asserted against or incurred by the individual who is or was a director, officer, employee, or agent of the corporation, or who, while a director, officer, employee, or agent of the corporation, is or was serving at the request of the corporation as a director, officer, partner, trustee, employee, or agent of another foreign or domestic business or nonprofit corporation, partnership, joint venture, trust,



employee benefit plan, or other enterprise; provided, however, that the corporation may not purchase or maintain such insurance to indemnify any director, officer, or agent of the corporation in connection with any proceeding charging improper personal benefit to the director, officer, or agent in which the director, officer, or agent was adjudged liable on the basis that personal benefit was improperly received by the director, officer, or agent.

8.9 Fiscal Year. The fiscal year of the corporation shall begin on the first day of ~~July~~ January and end on the last day of ~~June~~ December in each year.

8.10 Severability. A determination that any provision of these bylaws is for any reason inapplicable, invalid, illegal, or otherwise ineffective shall not affect or invalidate any other provision of these bylaws.

(Approved by Resolution No 202~~53-06~~ 53-06, ~~May 31, 2023~~ June 25, 2025)