



Western Resource Adequacy Program

RAPC Meeting

March 28th, 2024; 9am-2pm PPT

Participant	Name	Participant	Name
APS	Todd Komaromy, Kent Walter, Tyler Moore	PacifiCorp	Mike Wilding, Ben Faulkinberry
Avista	Scott Kinney, Kevin Holland	PGE	Tiffany Emerson
BPA	Steve Bellcoff, Rachel Dibble	Powerex	Mark Holman, Mike Goodenough
Calpine	Bill Goddard	PSE	Philip Haines
Chelan		PNM	Steve Maestas, John Mayhew
Clatskanie	Chris Roden	SRP	Grant Smedley, Michael Reynolds
EWEB	Kevin Cardoza	SCL	Siobhan Doherty
Grant	Lisa Stites	Shell	Ian White
Idaho	Ben Brandt	Snohomish PUD	
NorthWestern	Tom Michelotti	Tacoma	Leah Marquez Glynn, Ray Johnson
NV Energy	Ryan Atkins, Lindsey Schlekeway	TEA	Ed Mount

Objectives

1. Provide the RAPC with updates on project progress
2. Seek RAPC input on progress and any administrative actions

Meeting Agenda

Call to Order	
9:00	<ol style="list-style-type: none"> 1. Attendance 2. Anti-trust Statement 3. Approve Agenda <i>Shell moves and SCL seconds to approve the agenda. Agenda is approved unanimously at 9:15 AM.</i> 4. Approve Minutes from last meeting <i>PSE moves and APS seconds to approve the minutes. Minutes are approved unanimously at 9:16 AM.</i>
PA/PO Report	
9:10	<ol style="list-style-type: none"> 5. PA/PO Update – WRAP Timeline/Upcoming Items



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	<p><i>WPP presents a high-level overview of WRAP milestones (slides attached). September Business Practices coming with Tariff redlines - redlines and BPMs should be first available starting in May and June. The concept suggestion period will tentatively open after the September Board meeting and close on December 31. In discussion, Shell asks for clarification on who can suggest changes in this concept period – any member of the public can come with a variety of proposals, those more fleshed out and those more conceptual. SRP asks if WPP is first focusing on approving BPMs and then allowing for changes; WPP’s goal is to set a baseline with all BPMs adopted, and then entertain changes to BPMs and the Tariff. September timeframe for filing Tariff changes necessary to adopt the 6 BPMs requiring Tariff updates (limited to those necessary to correct the Tariff relative to past agreements or actual implementation), with BPMs approved contingent upon FERC approval. Tariff changes are likely to be effective by mid-November (assuming smooth FERC process).</i></p> <p><i>For FS and Ops – WPP describes dates of key milestones (slides attached). Tentative EDST (FS technology solution) Training and Testing in July and August – intent to use for Summer showing Oct 31. Board to approve W25-26 PRMs in June. In discussion, clarification on EDST – no intention to use EDST and FS Workbook simultaneously. SPP provides a brief update on Participation in the Ops program – currently putting together an assessment to distribute to Participants. PAC asks if a collective confidential report can be created – coming to the next RAPC with individual assessments. BPA asks about assessment of data – WPP/SPP coming up with a way to self-assess data quality and gaps.</i></p>
<p>Ongoing Business</p>	
<p>9:42</p>	<p>6. Workgroup Updates</p> <ul style="list-style-type: none"> – Forward Showing Workgroup – <i>Beau B.</i> <i>Updated version of the workbook sent out this week – request for Participants to submit updated workbook if possible. Meeting Tuesday to cover metrics W25/26. In discussion, Steve Bellcoff requests that files include Season Year with Season in file name.</i> – Operations Workgroup – <i>Beau B.</i> <i>Relatively steady participation through this season. Report coming soon. Testing and Production environment open.</i> – Storage Hydro User group – <i>Steve B.</i> <i>Avista poses a question about January Cold Spell data and resource performance – BPA interested in continued review. PWX concurs that review would be helpful – analysis will inform Participants on the status of different resource technologies, but likely will need to be performed by Participants. BPA points out that January is a good example: low water conditions had effects on the entire system that may not be correctly accounted for (noting Participants will need to assess hydro systems – cannot assess singular plants). PAC asks whether WPP could do this</i>

analysis with accurate data – data WPP receives from Participants in Ops is significantly aggregated – even when operational quality data is provided, WPP would not be able to use Ops data to perform event analysis on resource performance. WPP could facilitate Participants completing such an exercise or providing additional data to Ops (or both). PWX suggests creating a 5-day workbook to list all resources by hour for similar events – Participants learn their gaps and workbooks can be aggregated for the footprint. WPP will put together a data request and example workbook, then seek explicit support for completing such an exercise from Participants at a future RAPC meeting.

– MBR Workgroup - Mike W.

7. Business Practice Manual Q&A

WPP provides an update on the BPM review process. Slides attached describe the status of each bpm.

– June Board Meeting (June 13)

– [BPM 203 Sharing Calculation Inputs](#)

Question from Participants on how percentages were decided upon. WPP received data from Participants, analyzed, and discussed with workgroup. Because of gaps in information, the workgroup decided to set 10% baseline for generation and walk it down as a place to start. Load was consistently 3%.

– [BPM 207 Settlement Process](#)

BPA – question on what gets posted in the pricing and confidentiality – any issues with posting from Powerdex. If WPP posts a calculated price, have been told there is no issue, something to consider.

– BPM 209 Energy Delivery Failure Charge

No questions raised by Participants.

– BPM 401 New Participant Onboarding

No questions raised by Participants.

– BPM 402 Confidentiality

BPA does this BPM only address release of data? Go into curing? WPP has been considering this and will return to this conversation.

– September Board Meeting (Sept 19)

No questions were posed about the following Business Practice Manuals

– BPM 102 Reliability Metric Setting

– BPM 103 Participant FS Capacity Req.

– [BPM 106 Qualifying Contracts](#)

Out for comment, ending April 11.

– BPM 202 Participant Sharing Calculations

– BPM 204 Holdback Requirement

– BPM 205 Energy Deployment



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New Business	
10:37	<p>8. Non-Task Force Proposals</p> <p><i>WPP provided a high-level overview of the Tariff changes required to move final BPMs forward. Working on redlines – to come in mid-May. Redlines will come with a Proposal based on the template created by PRC and be subsequently put through the review process. The goal is to align the Tariff with actual program implementation. BPA asks about the process – does RAPC get a chance to review? RAPC will get an opportunity to comment (public comment) and to endorse the proposal. The first step will be WPP asking the PRC if the Proposal is indeed discrete and whether a solution is adequately described to go through the Non-Task Force Proposal process. This is a process question (not an approval of policy) and is delegated to PRC. RAPC and other stakeholders will have the opportunity to review, even in the Non-Task Force Proposal process.</i></p>
External Affairs	
	[None]
Good of the Order	
10:47	<p>9. Participant topics requests for next meeting</p> <p><i>Request to discuss the event analysis tool at the next meeting.</i></p>
Closed RAPC	
10:52	10. Closed RAPC Meeting
Upcoming	
2:00	11. Next meeting: April 11 th
Meeting is adjourned at 2:18 PM.	

Current Participants: APS, Avista; BPA; Calpine; Chelan; Clatskanie; EWEB; Grant; Idaho Power; NorthWestern; NV Energy; PacifiCorp; PGE; Powerex; PNM; PSE; SRP; SCL; Shell; Snohomish PUD; Tacoma Power, The Energy Authority

WPP forums will not foster or allow communications or practices that violate antitrust laws. Please avoid discussion of topics that would result in anti-competitive behavior, including but not limited to: availability of or terms of services and sales, design of products, price setting, or any other activity that might unreasonably restrain competition.

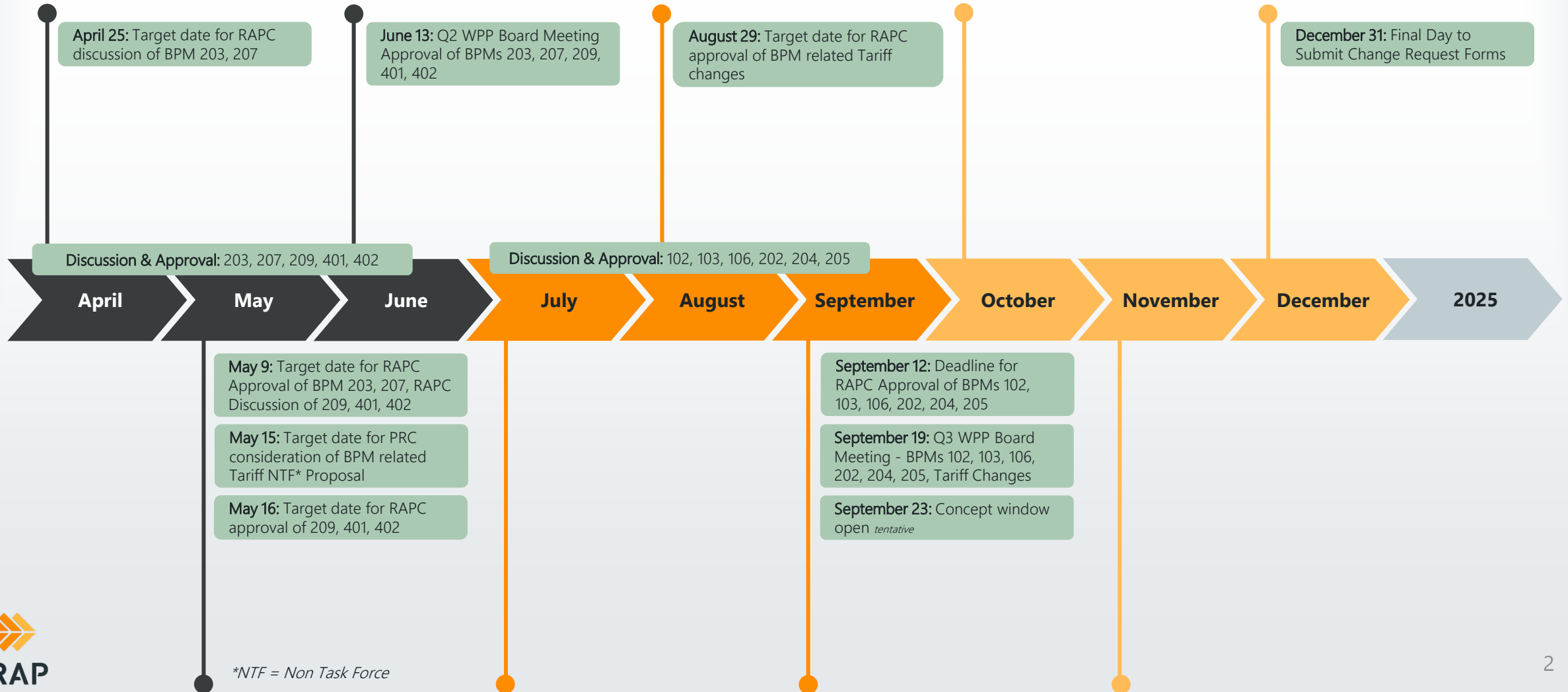


WESTERN RESOURCE ADEQUACY PROGRAM

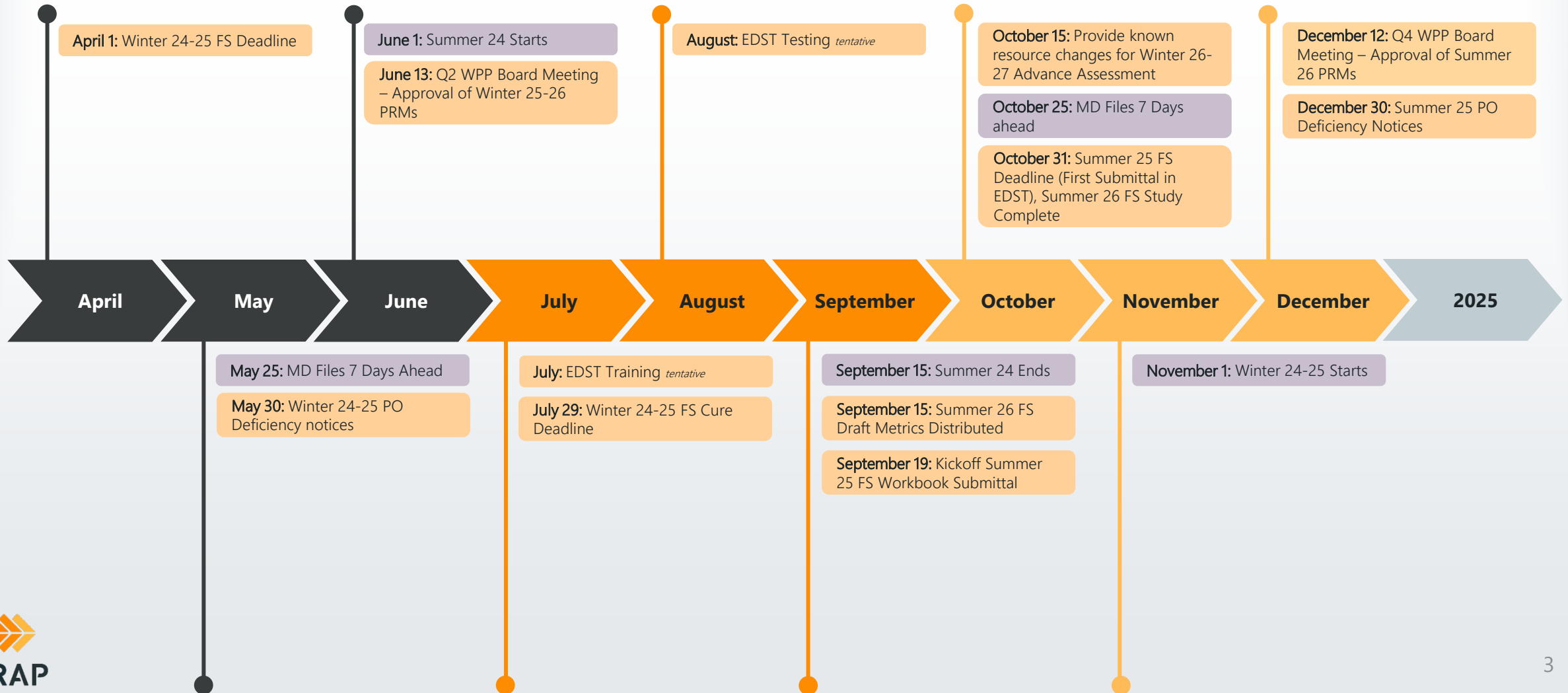
March 28, 2024

WRAP Timeline of Events

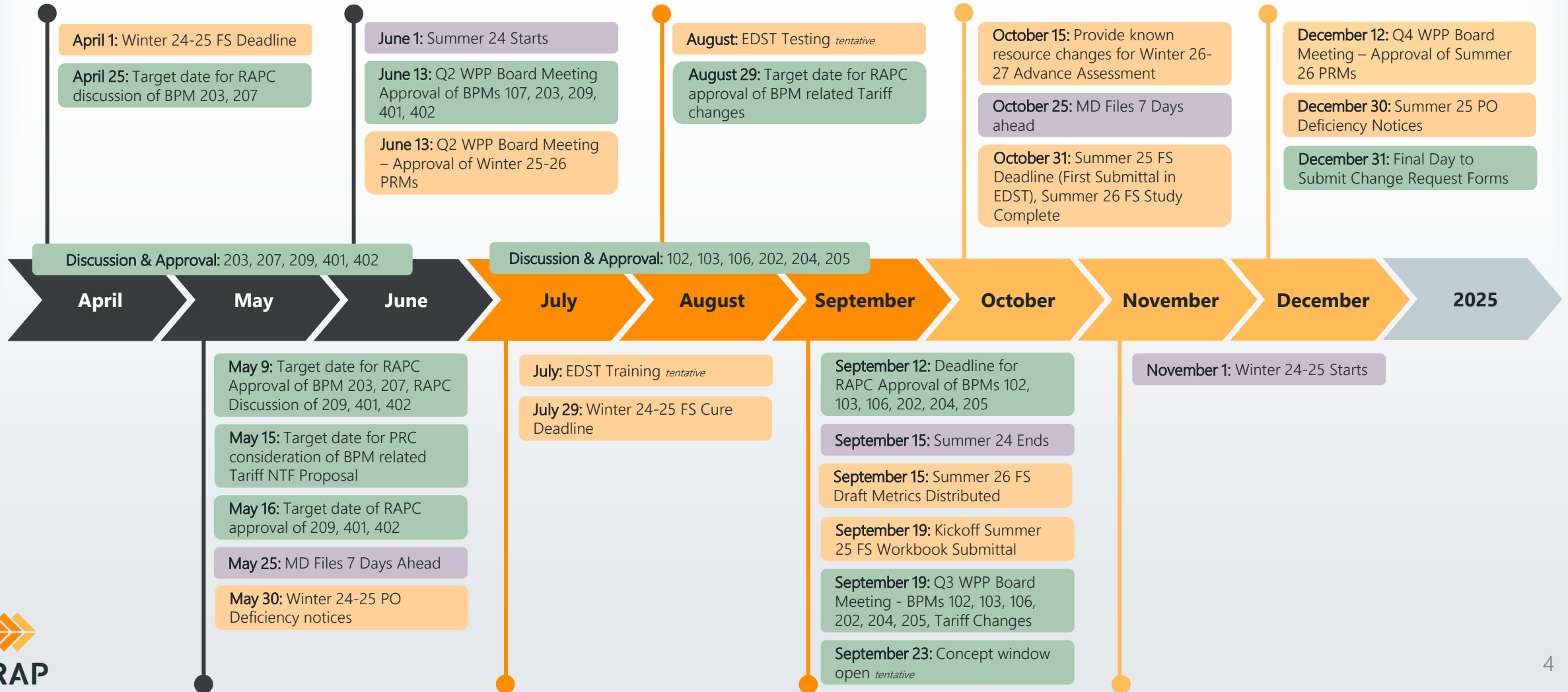
BPM & STAKEHOLDER ENGAGEMENT TIMELINE



OPERATIONS & FS TIMELINE



WRAP 2024 TIMELINE

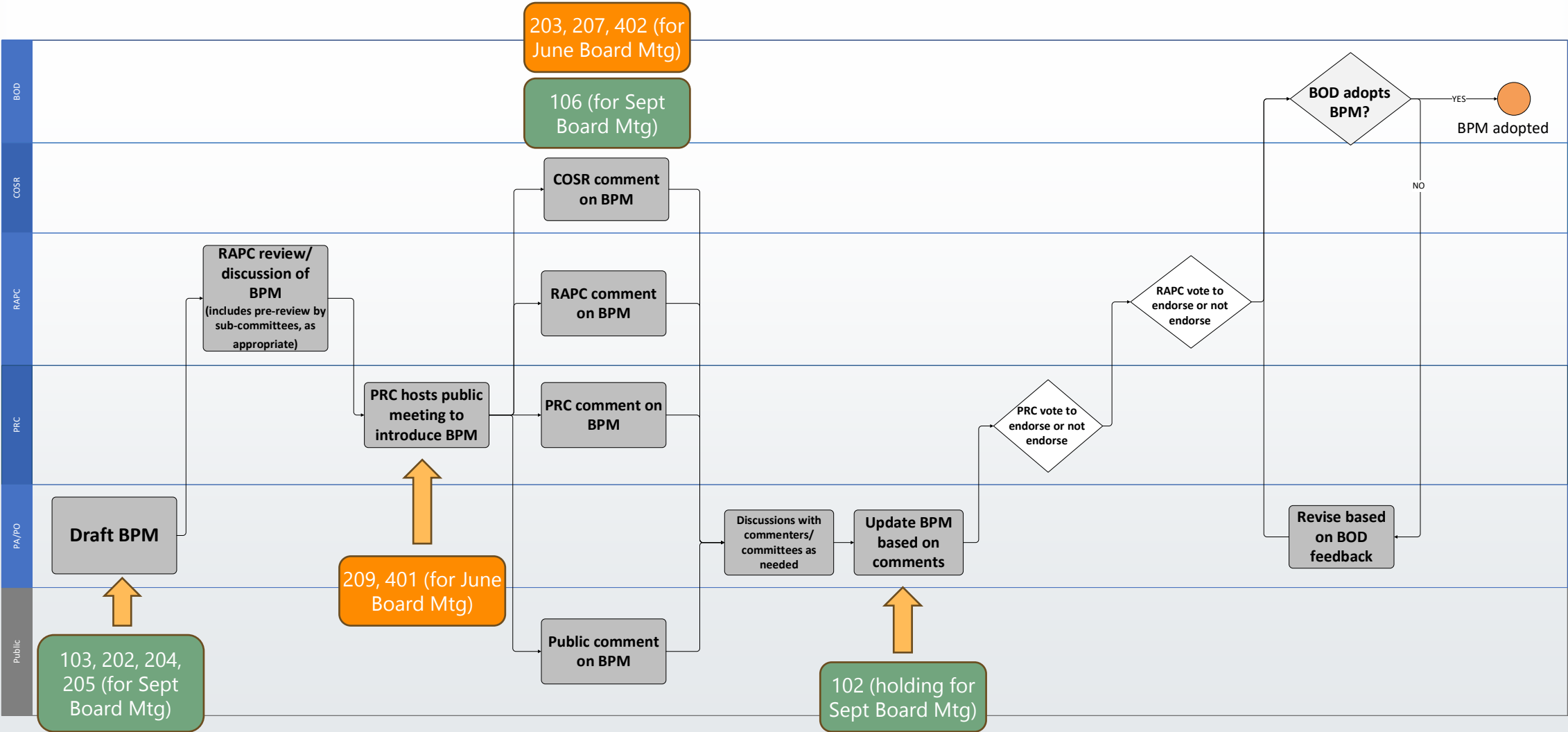


WESTERN RESOURCE ADEQUACY PROGRAM

March 28, 2024

RAPC BPM Discussion

BPM PROCESS FLOWCHART



COMPLETED BPMs

BPM	Topic	Board Approval
101	Advance Assessment	12/6/23
104	Capacity Critical Hours	3/7/23
105	Qualifying Resource	8/23/23
107	FS Deficiency Charge	3/7/23
108	FS Submission Process	3/7/23
109	FS Transition Period	12/6/23
201	Operations Timeline	8/23/23
206	Settlement Pricing	8/23/23
210	Operations Transition Period	12/6/23
301	PRC Workplan Development	12/6/23
302	PRC Proposal Development	12/6/23
303	Expedited Review Process	12/6/23
304	WRAPA & Schedule 1 Changes	3/7/23

BPMs To Come

BPM	Topic	Board Approval
102	Reliability Metrics	9/19/24
103	FS Capacity Requirement	9/19/24
106	Qualifying Contracts	9/19/24
202	Sharing Calculation – Participant Inputs	9/19/24
203	Sharing Calculation – Program Inputs	6/13/24
204	Holdback Requirement	9/19/24
205	Energy Deployment	9/19/24
207	Settlement Process	6/13/24
208	Credit [Reserved]	N/A
209	Energy Delivery Failure Charge	6/13/24
401	New Participants	6/13/24
402	Data Release	6/13/24

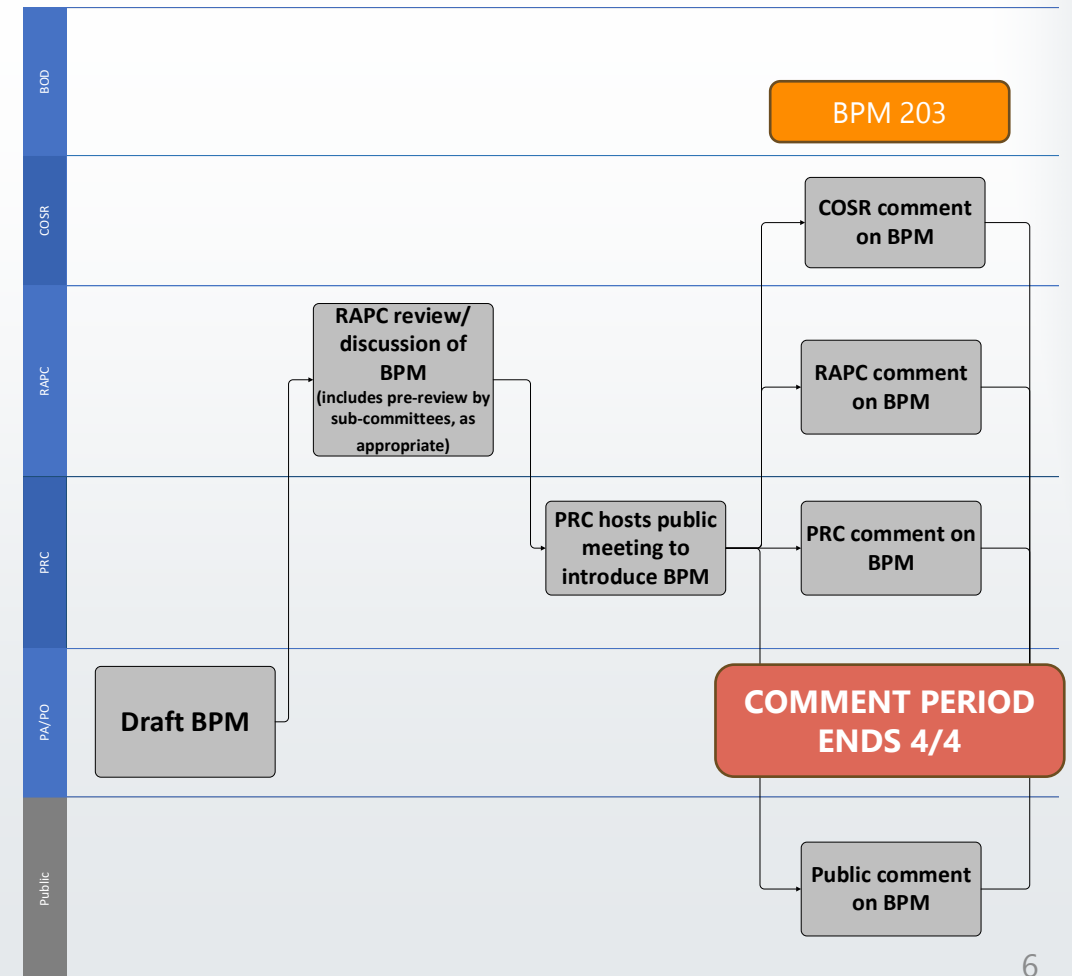
Q2 BOARD MEETING

June 13 – BPM 203, 207, 209, 401, 402

BPM 203 SUMMARY

OPERATIONS PROGRAM – PROGRAM SHARING CALCULATION INPUTS

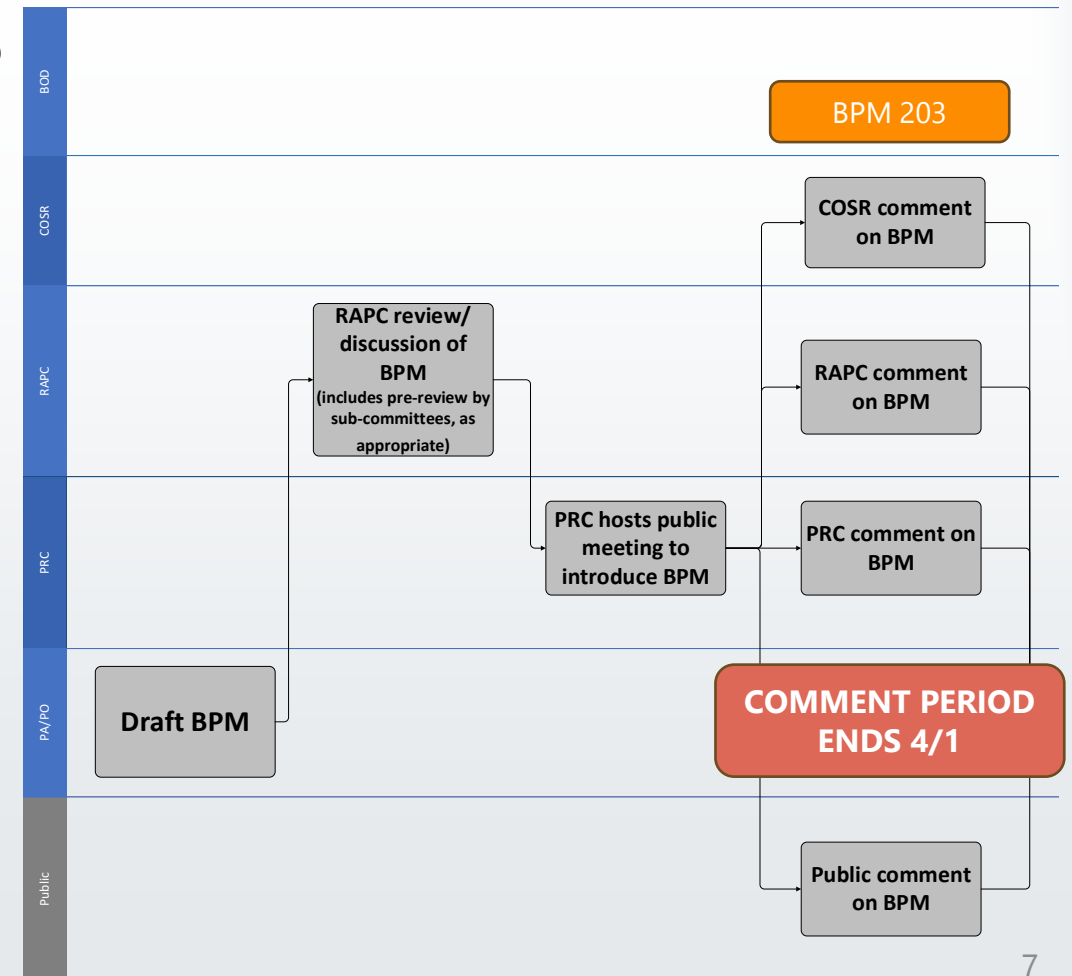
- » Describes the Uncertainty Factor used in the Sharing Calculation of the Operations Program
 - Sharing Calculation input determined by the Program Operator
 - Represents a reasonable margin to account for near-term forecast error
- » Describes how the Program Operator may decrease the Uncertainty Factor by 0.5% in cases when a Subregion is deficient
- » *Updated language at the end of Section 3 since last discussion*



BPM 207 SUMMARY

OPERATIONS PROGRAM – SETTLEMENT PROCESS

- » BPM 207 Settlement Process is the counterpart to BPM 206 Settlement Pricing
- » Settlement information that will be posted
 - Needed for transaction: counterparty, month, dollar amount
 - Additional sufficient detail for a Participant to validate and verify the Final Settlement Revenue and any Make Whole Adjustment
- » How settlement information is accessed – via API
- » Timeline for calculations including process for missing and changing data
- » Dispute resolution process – referenced WRAP Tariff Section 9



BPM 209 SUMMARY

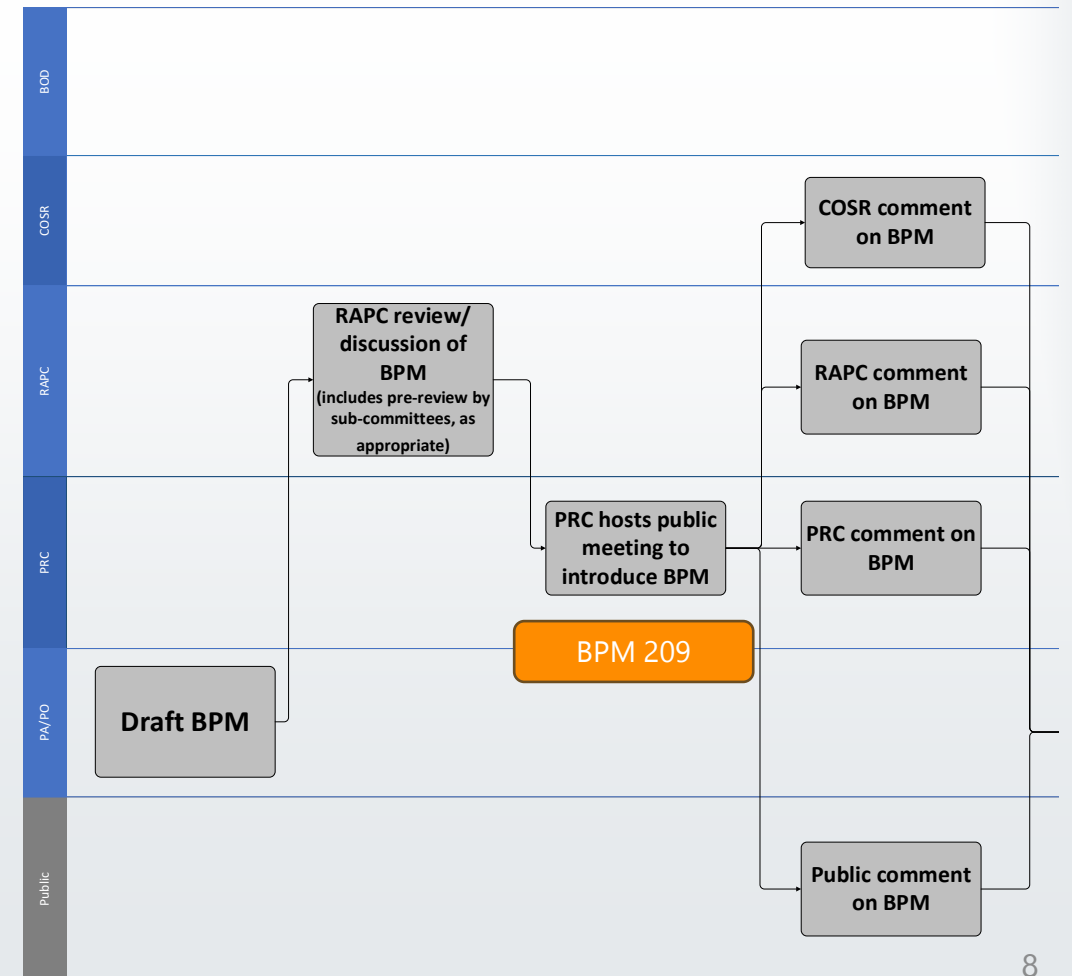
OPERATIONS PROGRAM – ENERGY DELIVERY FAILURE CHARGES

» Describes:

- Evaluation of Delivery Failures
- Calculation of the Delivery Failure Charge
- Limits on maximum amount of the charge
- The allocation of revenues received by WPP from payment of charges
- Consequence of repeated Energy Delivery Failures

» Describes the circumstances for obtaining a waiver of the charge and the process by which WPP evaluates and grants waivers

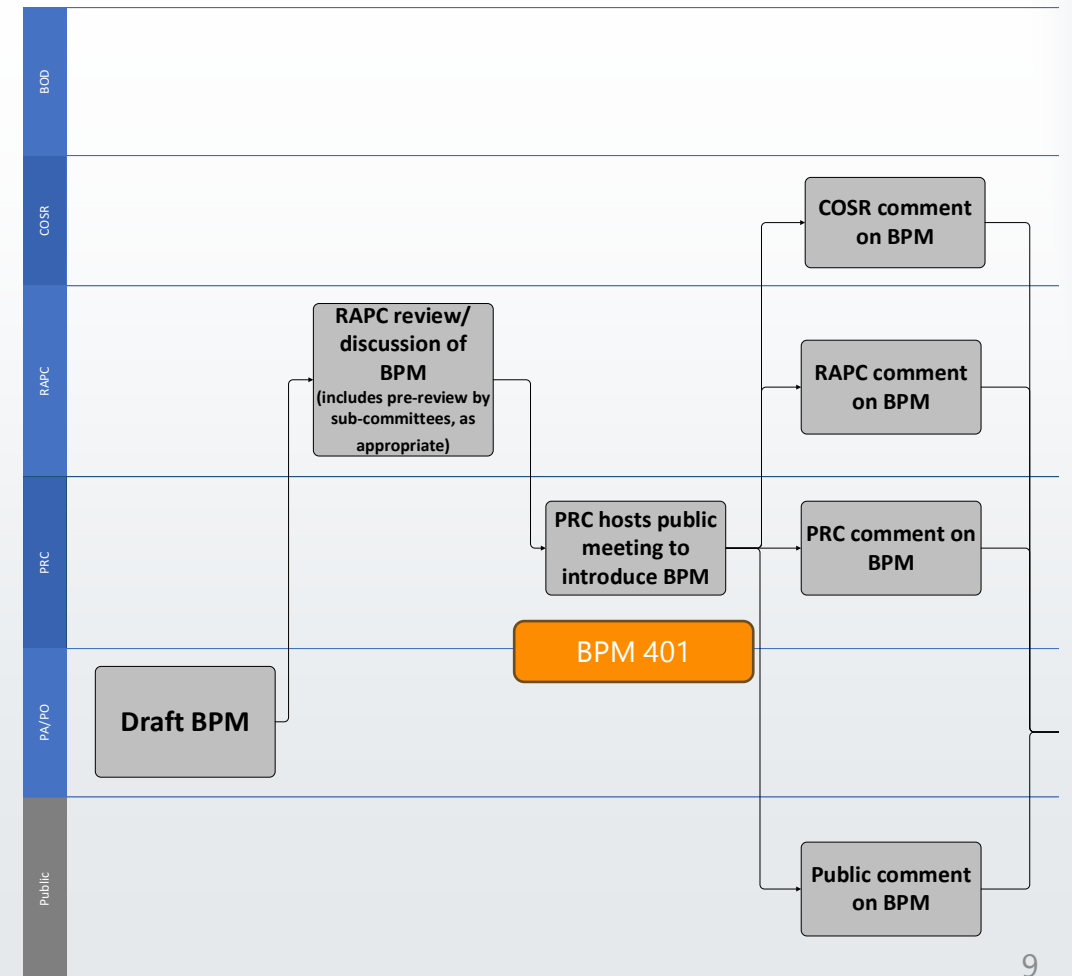
» *Updated language forthcoming*



BPM 401 SUMMARY

AUXILIARY – NEW PARTICIPANTS

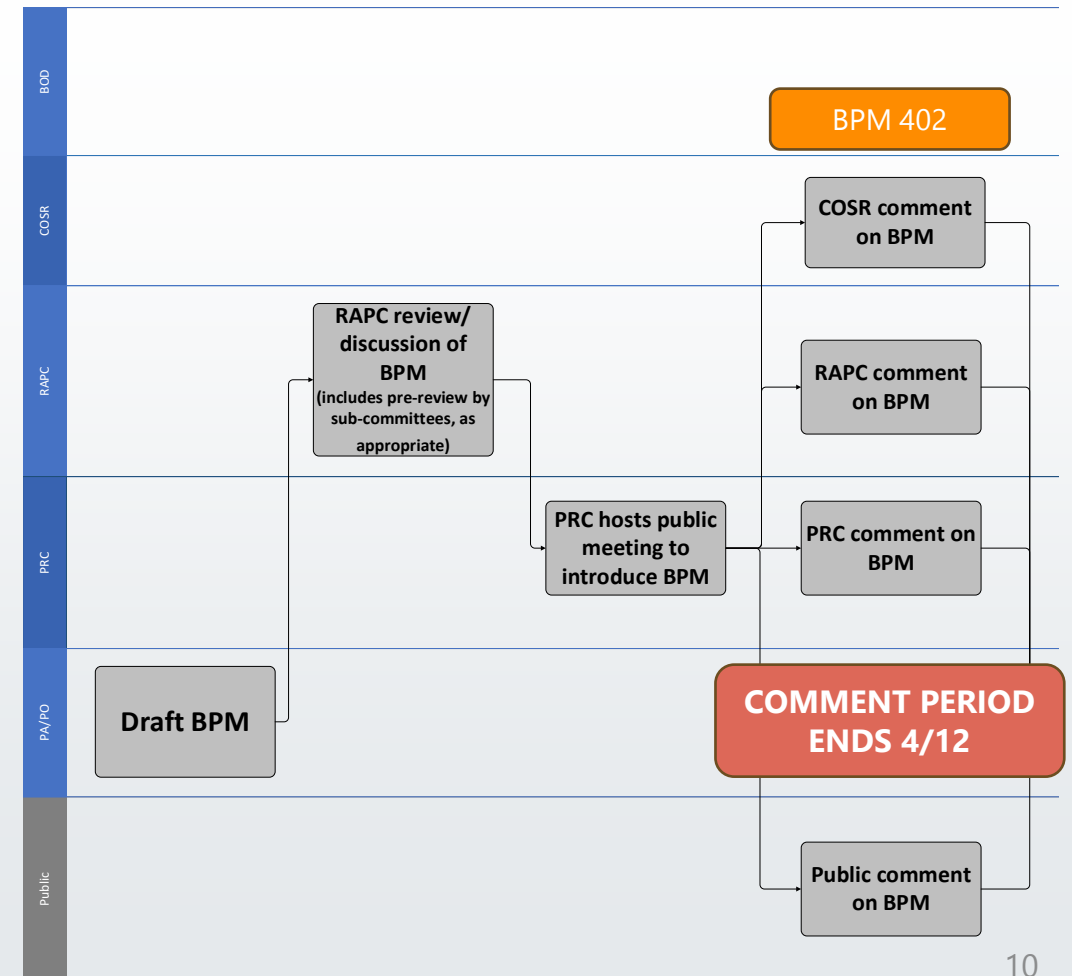
- » Provides guidance for new Participants joining the WRAP and those considering future participation
- » Describes the application and registration process
 - Timelines, signing a WRAPA, registering resources, program payment, WPP membership
- » Defines WRAP administrative items to be considered
 - WRAP committee involvement, Participant resources
- » Onboarding into the FS and Ops Program



BPM 402 SUMMARY

AUXILIARY – CONFIDENTIAL INFORMATION

- » Protection of Commercially Sensitive and Confidential Information
- » Describes process for handling and releasing Participant aggregated or composite information set forth in Tariff (section 10)
 - Form and format approval (new and revised)
 - Confidentiality requirements/disclosures
 - General exceptions (publicly available, FERC request...)
- » Includes process for appeals (RAPC, BoD)



Q3 BOARD MEETING

September 19 – BPM 102, 103, 106, 202, 204, 205

BPM 102 SUMMARY

FORWARD SHOWING – RELIABILITY METRIC SETTING

*SEPT BOARD

- » How the PO runs the Loss of Load Expectation (LOLE) study, including description of scope
 - Analyzes the ability of generation to reliability serve the WRAP region
- » Use of Load Resource Zones (LRZs) to distinguish weather when modeling resources
- » How Qualifying Resources will be modeled
- » How the PO sets the Monthly FS Planning Reserve Margins (FSPRMs)
 - LOLE for the applicable year does not exceed one event-day in 10 years for summer and winter seasons
 - Determined with probabilistic methods by altering capacity and forecast demand

REQUIRED TARIFF CHANGE (NTF Proposal)

» **Tariff sections 16.1.2.1 and 16.1.2.3:**

- **Language requires adjustment to change “0.1 annual LOLE” to “0.1 seasonal LOLE”**

BPM 103 SUMMARY

FORWARD SHOWING – FS CAPACITY REQUIREMENT

*SEPT. BOARD

- » Amounts of capacity (Portfolio QCC) a Participant is required to demonstrate for the months of a Binding Season
- » Monthly P50 Peak Load Forecast for a Binding Season (looking back over the months of a Binding Season for five years)
 - Attest to significant loads added or removed
 - Apply load growth factor: WRAP-wide growth rate (currently 0%) or Participant alternative
- » FS Planning Reserve Margin (BPM 102 – FS Reliability Metrics)
- » Contingency Reserve Adjustment: LOLE Study assumes *average* 6% peak load. FS Capacity Requirement adjustment considers *each* Participant's *actual* imports/exports and any Contingency Reserve contracts to ensure correct amount of capacity required
- » Load Exclusion attestation: limited to discrete loads in disparate BAAs
- » LOLE Study Load Growth: currently set to 1.1%

REQUIRED TARIFF CHANGE (NTF Proposal)

- » Updates to properly reflect Contingency Reserves Adjustments

BPM 106 SUMMARY

FORWARD SHOWING – QUALIFYING CONTRACTS

*SEPT. BOARD

- » FS Capacity Requirements can be met with Net Contract QCC (BPM 106)
- » Delivery requirements to Contract Capacity Firm Delivery Point
- » Resource-Specific Capacity Agreements
 - QCC based on identified resource(s)
- » System Sales
 - QCC a function of Participant/Non-Participant Buyer/Seller permutations
 - Resources associated with qualified System Sales from sellers that are not Participants do not have to be registered

REQUIRED TARIFF CHANGE (NTF Proposal)

- » **Tariff Definitions section:**
 - **Change System Sales definition**
- » **Tariff section 16.2.7:**
 - **First sentence of RA Transfer content is misleading, and slightly contradictory with remainder of the text (which properly reflects that RA transfers are treated as QCC)**

BPM 202 SUMMARY

*OPERATIONS PROGRAM – *SEPT BOARD*

- » Describes the inputs that will be used for the Sharing Calculation of the Operations Program and how Participants
 - P50 Peak Load Forecast
 - Monthly FSPRMs
 - Expected performance by Qualifying Resource type and any RA Transfers
 - Expected Force Outage rates by resource type
 - Expected Contingency Reserves
 - Firm transmission service rights made available for purposes of Regional Diversity

REQUIRED TARIFF CHANGE *(NTF Proposal)*

» **Tariff section 20.1.1:**

- **Incorrect implementation of how Contingency Reserves are calculated in the Operations Program**

BPM 204 SUMMARY

*OPERATIONS PROGRAM – HOLDBACK ALLOCATION *SEPT BOARD*

- » Outlines key processes associated with Participant Holdback Requirements in Ops Program
- » Details:
 - Allocation of a Holdback Requirement to Participants for Subregions with a Central Hub and for Subregions without a Central Hub
 - Process for opting in to Holdback Capacity and the release of capacity not claimed on the Preschedule Day
 - Bilateral exchange of holdback
 - Voluntary offers of capacity are deployed first
 - Early release of holdback

REQUIRED TARIFF CHANGE *(NTF Proposal)*

- » **Tariff section 20.2:**
 - **Voluntary capacity to be subject to non-delivery charges and prioritized above non-voluntary capacity**
- » **Tariff section 20.2.1 and 20.2.2:**
 - **Updated to reflect implantation of Ops Program (removing “pro rata” from descriptions of how SWEDE operates)**

BPM 205 SUMMARY

OPERATIONS PROGRAM – ENERGY DEPLOYMENT

*SEPT BOARD

- » Outlines key processes involved in:
 - Identification and dispatch of energy in the event of a WRAP Participant being energy deficient
 - Claiming holdback
 - Confirming an energy delivery
- » Describes confirmation process Participants are to follow when a Sharing Event occurs, as well as guidance on scheduling and emergency events

REQUIRED TARIFF CHANGE (NTF Proposal)

- » **Tariff section 20.4.1:**
 - **Revised to reflect Ops Program as implemented**

NON-TASK FORCE PROPOSALS

September BPMs

NON-TASK FORCE PROPOSALS

BPM	Topic	Change Required
102	Reliability Metrics	Tariff sections 16.1.2.1 and 16.1.2.3: Language requires adjustment to change "0.1 annual LOLE" to "0.1 seasonal LOLE"
103	FS Capacity Requirement	Tariff changes to properly reflect adjustments to FS Capacity Requirement
106	Qualifying Contracts	Tariff Definitions section: Change System Sales definition Tariff section 16.2.7: Initial component of "Total RA Transfer" definition is incorrect and may lead to double counting
202	Sharing Calculations	Tariff section 20.1.1: Incorrect implementation of how Contingency Reserves are calculated in the Operations Program
204	Holdback Requirement	Tariff section 20.1.3: Change to only discuss priorities during insufficiencies in terms of Holdback Tariff section 20.8.1: Change raise hand association with Transition Period priority tiers
205	Energy Deployment	Tariff section 20.1.3: Change to only discuss priorities during insufficiencies in terms of Holdback Tariff section 20.8.1: Change raise hand association with Transition Period priority tiers