



BPA's Day-Ahead Market Readiness – Public Workshop 1

December 4, 2025



Welcome

1. Introductions
2. Meeting Logistics Reminders
3. Agenda Review

Webex Instructions

- BPA has adjusted its public stakeholder virtual engagement approach.
- The Webex format is moving to a “webinar” style.
 - Webex attendees can no longer mute/unmute themselves or enable their webcam.
- The all-chat feature is disabled. Attendees can only message panelists.
 - To participate, attendees must raise their hand (BPA will unmute you to enable your participation) or send a question to panelists in the chat.
- If you are Webex by phone only: press *3 to request to be unmuted.
- Moderators will continue to address raised hands in the order received.
 - Please continue to state your name and affiliation.
- As necessary, BPA may evolve these procedures and take other measures at its discretion to prevent future disruptions.

Agenda

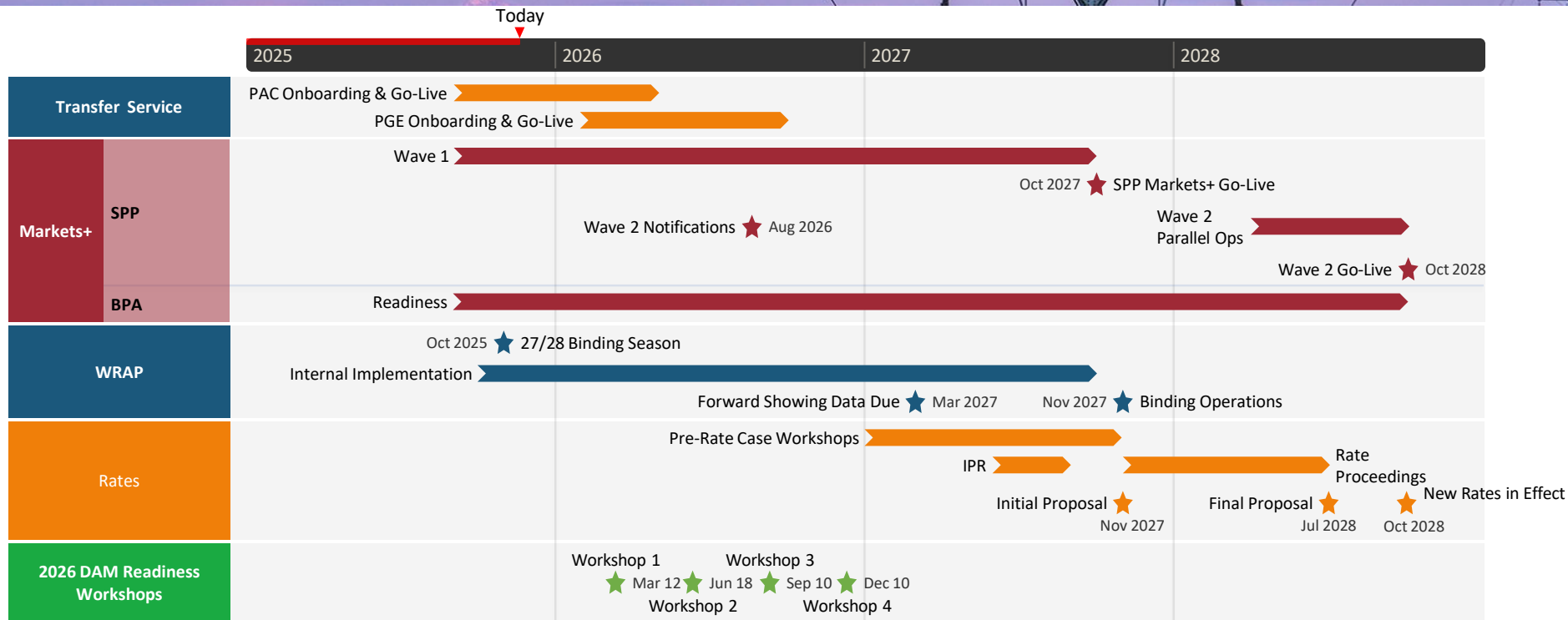
1. Upcoming Dates and Topics
2. Commercial Model Framework
3. Provider of Choice Overlap
4. Transmission Process Interaction
5. Update on Markets+ Preparation – Phase 2 Funding Entities
6. Southwest Power Pool (SPP) Phase 2 Towers and Workstreams
7. EDAM Update



BPA Readiness and Upcoming Workshops

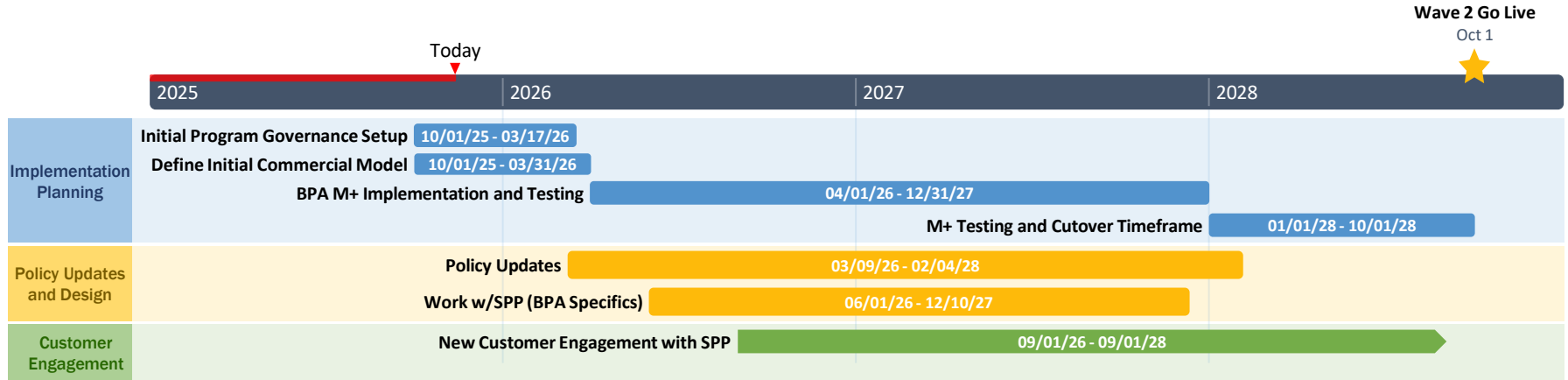


BPA Readiness Schedule



*Please note that dates are tentative and subject to change.

BPA Readiness Schedule



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Future Workshop Topics and Dates

Workshop Topics:

- Provider of Choice Contracts Implications and Overlap
- Customer Engagement and Requirements
- Commercial Model
- Readiness Progress Updates
- Rates and Tariff Implications and Overlap
- Western Energy Imbalance Market (WEIM) exit
- Automatic Generation Control (AGC)
- ...and more!

Workshop Dates:

- 2026
 - March 12th
 - June 18th
 - September 10th
 - December 10th
- 2027-28
 - TBD

Additional BPA Processes

As part of its decision-making process, BPA expects to undertake the following:

- Rate case(s)
- Tariff proceeding
- Transmission business practices
- Provider of Choice amendment process
- Environmental reviews
- Negotiation of Markets+ implementation agreements with SPP

Bonneville is actively analyzing and coordinating these workstreams and will provide more concrete information when as it becomes available.



Commercial Model Framework



What is a M+ Market Participant (MP)

Market Participant Definition:

An entity that executes the Market Participant Agreement in Attachment E of the Markets+ Tariff, or on whose behalf an unexecuted Market Participant Agreement has been filed at FERC.

- Bonneville is targeting execution of the MP Agreement in the Wave 2 timeline.

More Generally:

An entity that is directly participating in the market, usually by virtue of **having/representing load and/or generation** in the market footprint **or by otherwise participating and receiving direct settlements** from the Market Operator in the market (e.g. virtual bidding). Each MP will have various requirements for participation based on their unique set up.

Market Participant Obligations

- Register as MP with Market Operator (MO)
- Sign multiple agreements with MO
- Identify Loads/Resources
- Establish data connections with MO
- Submit Commercial Model information
- Submit load bids and resource offers
- Assessed daily/hourly for Must-Offer Obligation (MOO)
- Submit meter data to MO or assign meter data agent
- Register Congestion Rent Eligible TSRs (CRETSRs) with MO

What is a M+ Asset Owner (AO)

Definition:

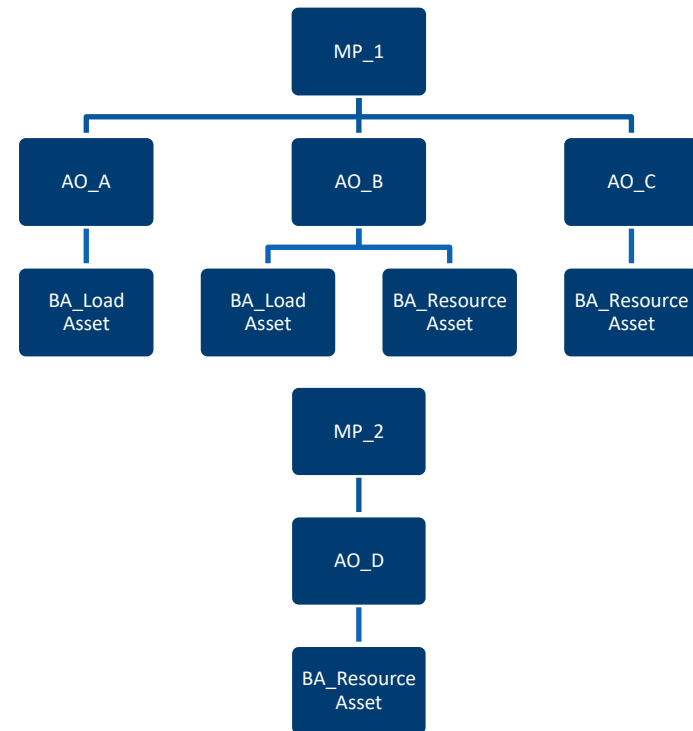
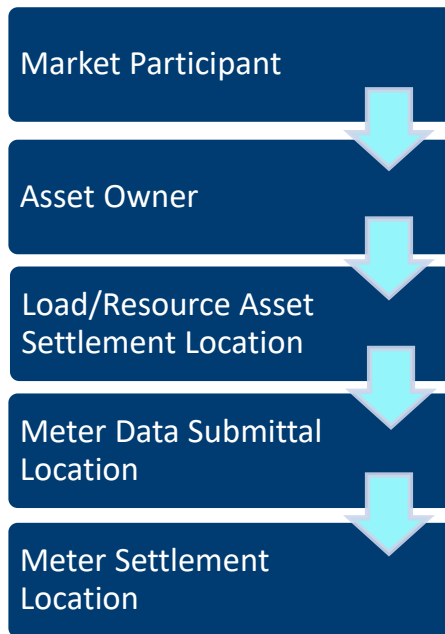
An owner of any combination of: (1) registered physical assets (Resource, load, Import Interchange Transaction, Export Interchange Transaction, Through Interchange Transaction), or (2) any combination of financial assets (Virtual Energy Offer, Virtual Energy Bid, Bilateral Settlement Schedules) within the Markets+ Footprint.

Related to the Commercial Model in Markets+:

- Next hierarchical level below the MP and typically, but not necessarily, represents a company
- Can own any. combination of generation and/or load assets within the Markets+ Footprint.
- The term “asset owner” does not necessarily mean property ownership, it is only a designation in the commercial model

Markets+ MP/AO Relationship

- Markets+ Market Participants may have one or more Asset Owners
- Asset Owners may have multiple asset types
- While not part of the formal modeling hierarchy, Load and Resource assets will be attributed to a single balancing authority (BA).

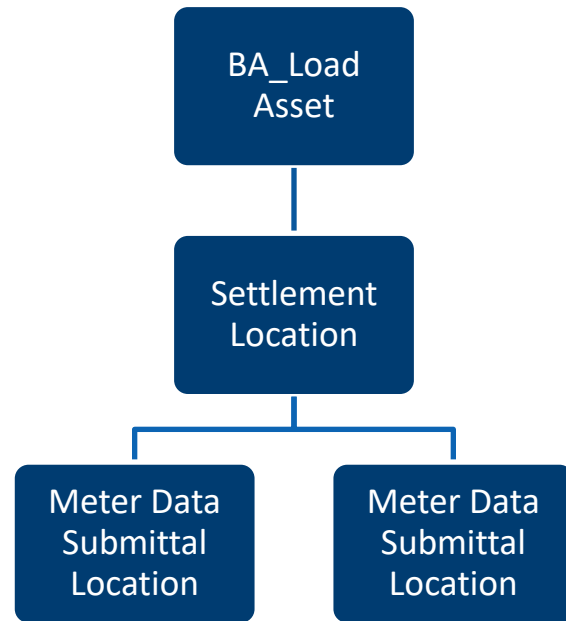


M+ Resource and Load Assets

- Resource Assets are represented as a single Settlement Location
- Resource Asset Settlement Locations have a one-to-one relationship to a Meter Data Submittal Location



- Load Assets are represented as a single Settlement Location
- Load Asset Settlement Locations may have a mapping to more than one Meter Data Submittal Location



BPA Commercial Model Considerations

- Expected Market Participants in the BPA BAA
- Modeling of Asset Owners under the BPA MP(s)
- Management of non-federal resources of Load Following customers
- Load modeling (e.g., granularity)
- Modeling of federal generation
- Modeling for GHG
- Modeling of transfer service load and generation
- Third party participation and BPA interaction

Expected Future Conversations

- Expectations of a Market Participant
- Expectations of an Asset Owner
- Requirements prior to go-live work
- BPA Power customer specific requirements and options
- BPA Transmission customer specific requirements and options

How to Reach Us

- If you have questions, please email them to BPAMarketInitiatives@bpa.gov



Provider of Choice Overlap



Provider of Choice (POC) Contracts

- Section 23 (Future Amendment for Day-ahead Market Implementation) of the Provider of Choice contract commits BPA to conduct a public process in the event it decides to join a day-ahead market.
- During the process, BPA will work with customers to review and negotiate any necessary POC contract amendments to “align with updated Transmission Services tariff and settlements.”
- Amendments limited to those “necessary to implement a day-ahead market.”

Contract Amendment Process

- Provider of Choice amendment process will be separate from the day-ahead market process.
 - Process will include workshops to review proposed amendment language, a comment period, and close-out with the final language.
 - Process likely to take 4-6 months.
- BPA is still evaluating the timing of the process, considerations include:
 - Terms and conditions needed for the BP-29 Rate Case.
 - Participation options for the commercial business model determined (e.g., determination of asset owner status for Load Following customers).



Transmission Process Interaction



Impacted Transmission Processes

Between now and October 2028, BPA would need to complete:

- BP-26E Rate Case Proceeding
- TC-27 Proceeding
- An additional Rate Proceeding for rate impacts resulting from Markets+ implementation
- An additional Tariff Proceeding for impacts resulting from Markets+ implementation
- Business Practice change process

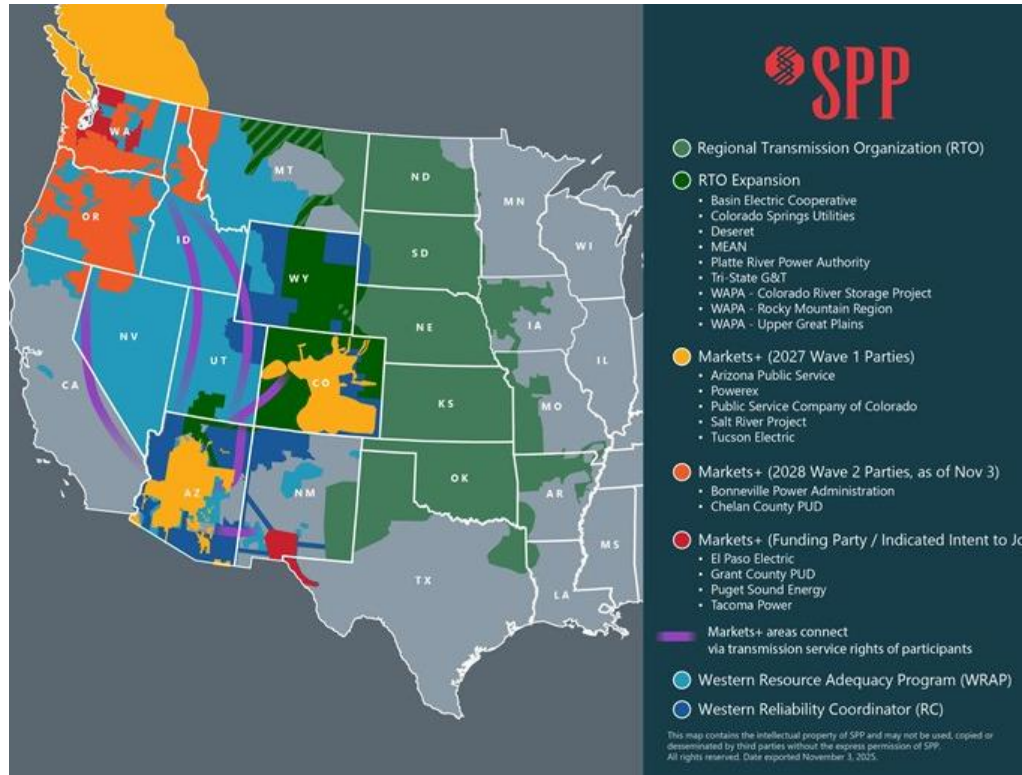


Update on Markets+ Preparation – Phase 2 Funding Entities



Update on Markets+ Preparation – Phase 2 Funding Participants

- Fourteen (14) new entities have joined Markets+ during Phase 2
- Two (2) entities have elected not to continue
- Forty (40) Total participating entities in Phase 2



*Based on materials developed by SPP

Update on Markets+ Preparation – Phase 2 Funding Participants

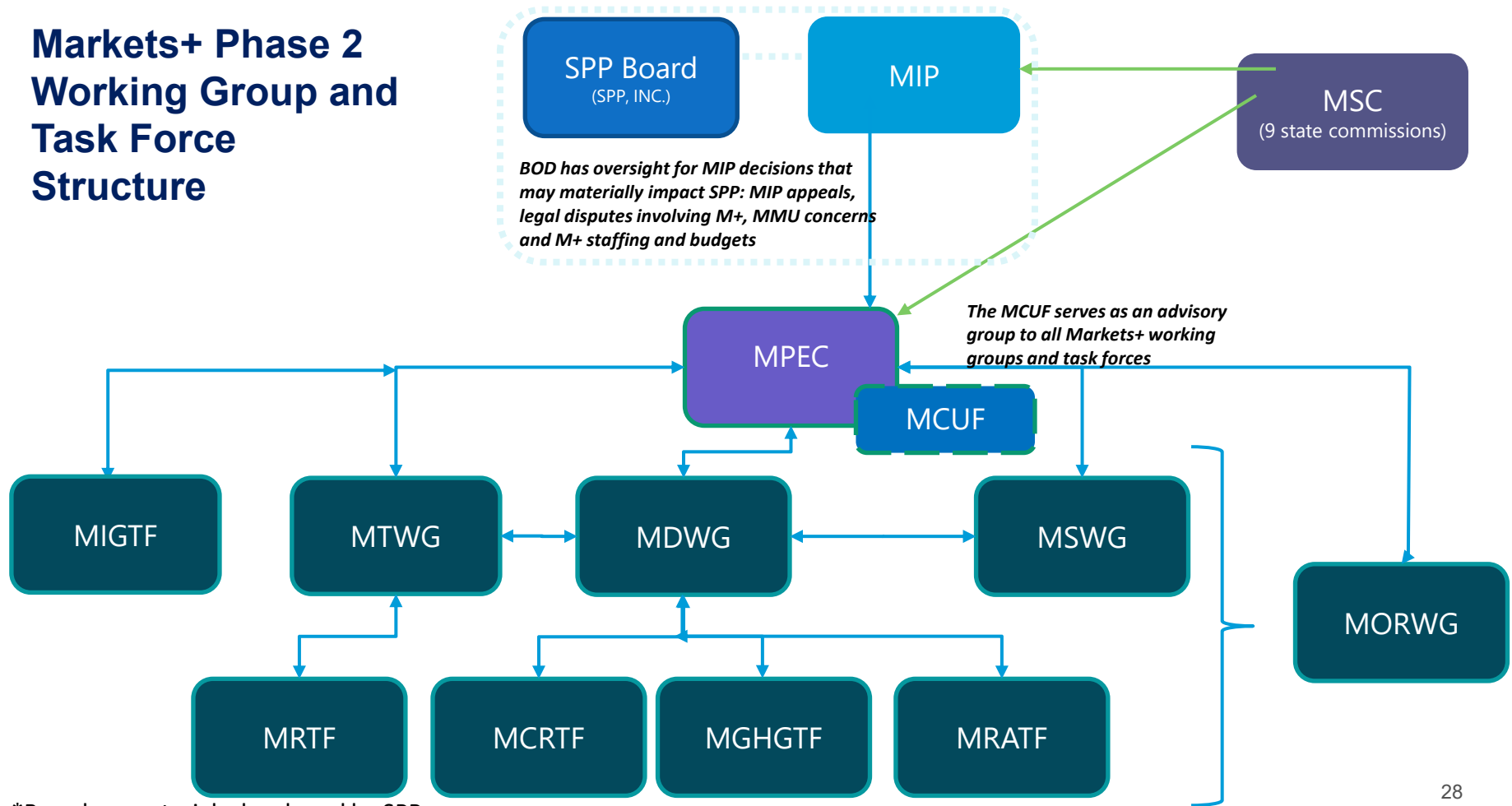
- Advanced Power Alliance
- American Clean Power Association
- Arizona Public Service
- Basin Electric Power Cooperative
- Black Hills Corporation
- Bonneville Power Administration
- Chelan County Public Utility District
- Cheyenne Light Fuel & power
- Clatskanie PUD
- Clean Energy Buyers Association
- Colorado Energy Office
- Colorado Utility Consumer Advocate
- CORE Electric
- EDP Renewables
- Grant County Public Utility District
- Idaho Power
- Interwest Energy Alliance
- Leeward Energy
- Lewis PUD
- Natural Resources Defense Council
- Northwest & Intermountain Power Producers Coalition (NIPPC)
- Northwest Requirements Utilities (NRU)
- NW Energy Coalition
- Pattern Energy
- Powerex Corp
- Public Generating Pool
- Public Power Council
- Puget Sound Energy
- Renewable Northwest
- Salt River Project
- Shell
- Snohomish County Public Utilities
- Tacoma Power
- The Energy Authority
- Tri-State Generation and Transmission Association
- Tucson Electric Power
- Voltus
- Western Energy Freedom Action
- Western Power Trading Forum
- Western Resource Advocates (WRA)
- Xcel/Public Service Company of Colorado

Update on Markets+ Preparation – Phase 2 Entities

- Phase 2 Governance Structure

- SPP staff completed the phase two working group and task force roster approval process:
 - Aug. 19-27 – Solicitation for nominations
 - Aug. 29 – Roster nominees provided to MPEC for review
 - Sept. 2-15 – Ranking survey window
 - Sept. 16-23 – eBallot window for roster approvals
- MPEC voted unanimously to approve phase two working group and task force rosters and rosters were posted to spp.org Sept. 24
- Working groups and task forces conducted the nomination process after roster approval

Markets+ Phase 2 Working Group and Task Force Structure



*Based on materials developed by SPP

Update on Markets+ Preparation – Phase 2 Entities

- Markets+ Workgroups
 - BPA Staff Workgroup/Task Force Participation:
 - M+ Design Working Group (MDWG): Sara Eaton (Vice-Chair)
 - M+ Operations Reliability Working Group (MORWG): Libby Kirby (Chair)
 - M+ Seams Working Group (MSWG): Todd Kochheiser
 - M+ Transmission Working Group (MTWG): Mai Truong
 - M+ Resource Adequacy Task Force (MRATF): John McCoskery
 - M+ Greenhouse Gas Task Force (MGHGTF): Alisa Kaseweter
 - M+ Congestion Rent Task Force (MCRTF; Currently on Hiatus): Sara Eaton
 - M+ Rates Task Force (MRTF; Currently on Hiatus): Rebecca Frederickson
 - M+ Interim Governance Task Force (MIGTF): Neal Gschwend



SPP Phase 2 Towers and Workstreams



Readiness

- 54 overall registrations have been submitted to date.
- 43 entities of those are planning to go live in October 2027.
- BA onboarding and outreach effort in progress – have met with 4 funding BAs.
- Areas to focus on for next quarter:
 - Continue feedback to participants on Registration Workbooks with the goal of finalizing them by 1/29/26
 - Network/commercial modeling
 - Continued onboarding and outreach to Embedded Entities
 - Reconcile registered loads and resources with what actual loads and resources exist in the footprint and work with the BAs to resolve any mismatches

Markets Operations

- Executed implementation contract with EMS and Market System vendor
- Finalizing requirements for the following workstreams:
 - Forecasting (Load and VER)
 - GHG Reporting and Tracking
 - CROW
- Collaborating on requirements validation, functional design and delivery schedules:
 - EMS and Market Systems (vendor)
 - Scheduling and Tagging (vendor)
 - Congestion Rent Tool (internal)
- Areas to focus on through Q4 2025:
 - Complete application requirements
 - Negotiate remaining application vendor contracts
 - Integrated delivery schedule (with vendor contract input)

Settlements and Finance

- Progressing on Core Settlement Management System (SMS) Development Wave 2 (of 3).
- Development and testing complete for three Calculation Sets (of seven). In progress on fourth Calc Set.
- Areas to focus on for next quarter:
 - Design and Development through Calculation Set #5
 - Begin Settlements (SMS) Development work for Wave #3
 - Complete Credit Management System (CMS) Design work
 - Begin drafting Settlement Calculation Guide

IT/Shared Service

- Building out lower environment infrastructure and developing timeline for upper environment build-out
- Working with vendor to implement data services platform (data warehouse)
- Defining systems integration architecture and database schemas needed
- Areas to focus on for next quarter:
 - Complete lower environments infrastructure build-out
 - Start development of DB schemas in data warehouse
 - Order ICCP circuits for appropriate entities

Market Monitoring Unit (MMU)

- Design complete and under MMU review/approval for Market Monitoring Portal (MMP) Rewrite
- Development is starting on MMP Rewrite
- SAS screens being reviewed to identify changes needed for Markets+
- Finalizing plans for Mitigated Offer Development Methodology submittals and reviews
- Areas to focus on for next quarter:
 - MMP development sprints starting
 - Starting to reach out to Mitigated Offer contacts identified through Readiness Tower
 - SPP and the SPP Market Monitor offer to file joint informational progress reports every six months to the Commission. Next filing scheduled for January 2026



Questions?



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EDAM Updates



EDAM Updates

- 2026 features two EDAM implementations
 - May 1, 2026 | PacifiCorp EDAM Go-Live
 - October 1, 2026 | PGE EDAM Go-Live
- PacifiCorp
 - Bonneville has resources and transfer service loads located in the PACE & PACW BAAs
- PGE
 - Bonneville has transfer service load located in PGE's BAA

EDAM | PacifiCorp

- PacifiCorp EDAM Implementation
 - Transfer service includes OATT service and legacy contract loads
 - OATT Load will be scheduled by and settled with BPA's EDAM Scheduling Coordinator
 - Legacy Load will be scheduled by the EDAM Entity and settled according to the terms of the GTA (out of market)
 - Bonneville has completed CAISO registration process to serve as the Scheduling Coordinator for resources/loads in PACW/PACE

EDAM | PacifiCorp

- **Transfer Service OATT Load**
 - PAC EDAM scheduling timelines require schedules to be submitted prior to 9 AM
 - Bonneville intends to self-schedule resources & loads in PACW/PACE
 - Schedules subject to meeting PAC DA Hourly Resource Sufficiency Evaluation
 - Hourly RSE Evaluation results available in Pac's new MCG Portal
 - CAISO (MO) will settle directly with the Scheduling Coordinator (i.e., Bonneville) for OATT loads

EDAM | PacifiCorp

- **GTA (i.e., Legacy Contracts)**
 - Bonneville intends to self-schedule GTA loads
 - Schedules will be submitted to entity scheduling coordinator (i.e., PacifiCorp) who in turn shares with the MO
 - Bonneville intends to submit etags for GTA loads by 9 AM to leverage automation that creates self schedules from the etag
 - Schedules submitted after 9 AM will need to be submitted using Pac's OATI schedule portal
 - Settlements will continue as they are done today

EDAM | PacifiCorp

- Testing
 - CAISO opened Market Sim in September, it concludes in January before transitioning to parallel ops
 - Adjacent entities transitioning to EDAM are necessitating Bonneville switch from base schedules to mirrors at those EDAM adjacencies
 - Bonneville has done initial testing with Pac during November and will continue further testing during the remaining portion of Market Sim and Parallel Ops.

EDAM | PGE

- PGE EDAM Implementation
 - Transfer service includes OATT service and legacy contract loads
 - OATT Load will likely be scheduled by and settled with BPA's EDAM Scheduling Coordinator
 - Legacy Load will be scheduled by the EDAM Entity and settled according to the terms of the GTA (out of market)
 - Bonneville is engaging in conversation with PGE regarding the Scheduling Coordinator role.

EDAM | PGE

- **Transfer Service OATT Load**
 - Bonneville is working through the Scheduling Coordinator process
 - PGE EDAM scheduling timelines require schedules to be submitted prior to 10 AM
 - Bonneville intends to self-schedule loads in PGE
 - Schedules subject to meeting PGE DA Hourly Resource Sufficiency Evaluation
 - CAISO (MO) will settle directly with the Scheduling Coordinator (i.e., Bonneville) for OATT loads

EDAM | PGE

- GTA (i.e., Legacy Contracts)
 - Bonneville intends to self-schedule GTA loads
 - Schedules will be submitted to entity scheduling coordinator (i.e., PGE) who in turn shares with the MO
 - Bonneville intends to submit etags for GTA loads by 10 AM
 - Settlements will continue as they do today

EDAM | PGE

- Testing
 - CAISO will open Market Sim in March 2026
 - Adjacent entities transitioning to EDAM are necessitating Bonneville switch from base schedules to mirrors at those EDAM adjacencies
 - Parallel Operations will begin in June 2026
 - Bonneville intends to actively participate in both Market Sim and Parallel Ops



Questions?

