MARKETS
Phase One Update
Feb. 16, 2023
WELCOME

ANTOINE LUCAS, SPP
# TODAY’S AGENDA

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VISION AND TIMELINE FOR SPP MARKETS

ANTOINE LUCAS, SPP
VISION

• Southwest Power Pool (SPP) continues to expand its market services in the Western Interconnection.

• SPP provides regional transmission organization services in both the Eastern and Western Interconnections as early as 2026.

• SPP expects the combined services footprint will grow beyond 100 GWs, adding unique value to SPP stakeholders by leveraging geographic, time zone and resource diversity.
GUIDING PRINCIPLES

SPP will deliver value-added products and services to western services participants and existing stakeholders by:

• Creating increased market opportunities while advancing high-quality services for existing stakeholders.

• Designing products desired by western participants with development costs appropriately allocated to those participants.

• Minimizing development costs by leveraging existing systems, market design and expertise as much as possible.

• Facilitating customer driven, independent governance for all participants.

• Adapting governance to assure stakeholders have appropriate input and voice for issues that matter to them.

• Minimizing risk to new and existing stakeholders.
ASPIRE 2026: Western Services Expansion

VALUE DRIVERS

- **Governance:** Participant-focused market design, equitable stakeholder representation on decision-making committees, multi-state collaboration and independent board.

- **Environmental & Public Policy:** Facilitation of progress toward renewable goals and carbon accounting as determined by state needs.

- **Economics & Reliability:** Broad geographic, resource and time zone diversity provides greater economic and reliability benefits to new and existing participants.

- **Customer Savings:** Increased market opportunities and settlement efficiencies reduce energy costs for current and new participants.

- **Seams:** Effective peer-to-peer negotiation with neighbors to assure fairer usage and protection of current and future generation and transmission assets.

- **Transmission:** Optimization of grid capacity while respecting existing transmission rights and increasing transparency of and motivation for cost-beneficial expansion.

- **Resource Adequacy:** Leverages participant designed, region-wide resource adequacy program.
ENVISIONED SCOPE OF WESTERN EXPANSION

Potential market scenario (could exceed 100 GW)

• Contiguous connection between the Rocky Mountains, Desert Southwest, Basin, and Pacific Northwest areas:
  • Leverages greater regional diversity of hydro, solar, wind and thermal.
  • Optimizes trade with the SPP RTO.
  • Realizes increased benefits from greater time zone diversity.
  • Facilitates market transactions with California.
LEVERAGING DIVERSITY

*Areas not shaded have annual average wind speeds less than 7.0 m/s and solar production less than 4.75 kWh/m2/day (from NREL data)
UPDATES ON PHASE ONE

CARRIE SIMPSON, SPP
PHASE ONE FUNDING UPDATE

• More than 20 entities involved in reviewing SPP’s phase one funding agreement since mid-December 2022.

• Executable version ready this week.
  • Agreement is binding ahead of April 2023, if critical mass is achieved.
    • 150,000 GWhs of NEL and at least two contiguous balancing authorities.

• Participation agreement for non-governmental organizations/public interest organizations has been distributed to any entity who has requested it.
GOVERNANCE UPDATE

• SPP developing plan for launch of Markets+ phase one governance in preparation for April 18-19 meeting.

• Details to be shared at virtual meeting in March:
  • Establishing three-member board of directors panel.
  • Engagement and role of the Markets+ State Committee.
  • Seating of the Markets+ Participants Executive Committee.
  • Identification of working group and task force composition and meeting cadence.
GOVERNANCE: PHASE ONE

SPP Board of Directors (SPP BOD)

SPP Board of Directors 3-Member Panel

Markets+ Participants Executive Committee (MPEC)

Markets+ State Committee

Working Groups

Ad hoc Task Forces
WORKING GROUPS: PHASE ONE

- Markets+ Participants Executive Committee (MPEC)
  - Market Design Working Group
    - GHG Working Group
    - Congestion Rent Task Force
  - Transmission Working Group
    - Rates Task Force
    - Usage and Capability Task Force
  - Reliability Working Group (BAs)
    - Establish Q3 2023
  - Seams Working Group
    - WRAP and Markets+ Task Force
**PHASE ONE: WORKING GROUP AND TASK FORCE CREATION AND COMPOSITION**

**Working Groups**
- Working group and scope document approved by MPEC
- SPP staff solicits for nominations for working group (including chair)
- MPEC chair in coordination with SPP staff submits a recommended slate for to the working group
- MPEC approves slate of working group members (including chair)

**Task Forces**
- Task force and scope document approved by MPEC or working group
- SPP staff solicits for nominations for task force (including chair)
- MPEC or working group chair in coordination with SPP staff appoints a task force
- Task force recommendations are voted on by the creating WG including MPEC and/or MIP
PARTICIPATION IN PROCESS

- All stakeholders are welcome to participate and provide input to all working groups, task forces and committees.
  - Meetings and materials will be posted on SPP.org.
  - Sign up for Markets+ distribution lists.
- Reach out to SPP staff if you have any questions.
INTRODUCTION TO SEAMS

CLINT SAVOY, SPP
WHAT ARE SEAMS?

• Boundaries between neighboring entities performing similar functions.
  • Also boundaries within or along the geographic footprint of a function where some choose not to participate (embedded entity).

• SPP has seams with neighboring transmission service providers, reliability coordinators, market operators and planning regions.

• Neighbors often referred to as “first tier.”

• Generally limited to entities within the same interconnection.
CURRENT SPP FUNCTIONS
SEAMS MANAGEMENT: MARKETS+

• Fundamental purpose is to enhance, not limit, both intra- and inter-market trading.

• Entities will likely have increased benefits in a two-market system with a well-managed seam.
  • Market operators calculate prices & determine who flows.

• Requires stakeholders to determine what is best for the markets as a whole.

• Reduce impacts and/or gain efficiencies of some seams by leveraging relationships between functions/services (resource adequacy, day ahead, real time).
• SPP has a proven track record of working with stakeholders and neighbors to reduce or eliminate impacts of seams issues.

• All different types of seams (balancing authority, reliability coordinator, transmission service provider, market, etc.) can be managed well with the right governance structure and adequate stakeholder engagement and participation.
  • Market-to-market and market-to-non market seams.

• Seams partners more likely to engage and compromise when relationship is peer-to-peer rather than superior-to-subordinate.
SEAMS MANAGEMENT: MARKETS+

• Advocate on behalf of all market participants equally and independently.
• Ensure that dispatches, imports/exports and prices are efficient, reliable and equitable.
• Negotiate seams with other markets on peer-to-peer basis as the market operator to achieve improved outcomes.
• Working together collaboratively, we can find the right path forward.
WHAT IS MARKET TO MARKET?

Objectives of Market-to-Market (M2M) Coordination

- Effective M2M Coordination
- Equitable Compensation
- Consistent Pricing Across Both Markets
- Minimize Total Production Costs Between Both Markets
- Maintain Reliability
- Cost Effective Congestion Management for Both Markets
- Equitable Compensation
- Consistent Pricing Across Both Markets
- Minimize Total Production Costs Between Both Markets
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- Cost Effective Congestion Management for Both Markets
WHERE ARE THE OPPORTUNITIES FOR SEAMS MANAGEMENT? MARKETS+

• Interoperability of Western Resource Adequacy Program (WRAP) and Markets+:
  • Operational program and Markets+ market design.
  • Entities in Markets+ with WRAP obligations to the California ISO (CAISO) Extended Day-Ahead Market (EDAM) or non-market footprints.
  • Entities in EDAM with WRAP obligations to Markets+.
• Market-to-market coordination with EDAM neighbors and CAISO.
• Multi-market optimization between Markets+ and SPP RTO.
• Market-to-non-market coordination with neighbors.
MARKETS+: SEAMS WORKING GROUP

• Seams Working Group to report to the Western Markets Executive Committee (WMEC) within Markets+.
  • Identify and propose policies to address market seams that may exist, including drafting protocol and tariff language.
  • Representation on the group to be a diverse set of parties who signed the phase one funding and participation agreements.
  • Policy recommendation to be coordinate with impacted policy groups with recommendations made to WMEC.
SEAMS DOESN’T HAVE TO BE A NEGATIVE WORD

• Having more than one market option is a good thing.

• Effective seams management will require engagement from other market operators.

  • Market Liaisons concept

Market operators should invite and encourage each other to actively follow, and participate in when necessary, each other’s market design, development, and administration processes.
NEXT STEPS

• Upcoming Markets+ virtual calls to include more educational information:
  • Stakeholder participation in SPP seams efforts
    • Liaison committee examples from East
  • Types of seams agreements
  • Market-to-market coordination
  • Proposal to establish CAISO-SPP coordination.
FUTURE MEETINGS

CARRIE SIMPSON, SPP
UPCOMING MEETINGS

• Phase one updates – virtual calls
  • March 2, March 16, March 30, April 11
  • Topics:
    • Governance launch
    • Seams education
    • Markets+ real-time market option
    • Timeline and expectations

• Phase one kick-off
  • April 18-19 at Tri-States offices in Westminster, Colorado
OVERALL TIMELINES

2022

Service Offering
Markets+ Governance

Markets+ Phase 1

2023

Markets+ Phase 2

2024

RTO West

2025

Markets+ RT Go-live
Markets+ DA Go-live
Additional RTO services

2026

2027+

Additional RTO services
QUESTIONS?