<table>
<thead>
<tr>
<th>AGENDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Reactions</td>
</tr>
<tr>
<td>Governance Design Team Readout</td>
</tr>
</tbody>
</table>
| JOINT Transmission Availability and Market Products/Price Formation Design Teams Readout | Steve Johnson, SPP  
Jim Gonzalez, SPP |
| Questions/Discussion | Bruce Rew, SPP |
| GHG Market Design Introduction | Kara Fornstrom, SPP |
| Next Steps/Schedule | Bruce Rew, SPP |
| Milestones for June In-Person Meeting Phoenix Takeaways | SPP Facilitators Participants |
MARKETS

GENERAL REACTIONS
GOVERNANCE DESIGN TEAM READOUT

ALY KOSLOW, APS
MARKETS+ GOVERNANCE OPTIONS

2A

- SPP Independent Board
- Markets+ Participants Executive Committee (MPEC) – Participant Based
- Markets+ Working Group (M2WG) – Sector Based
- Future Joint (with RTO) Work Groups
- Markets+ State Committee
- Markets+ Independent Governing Board
- Nominating Committee (Sector Based)

2B

Add 3?

- SPP By-Laws Modification Board Qualifications?
- SPP CGC Add Markets+ Seat?
GOVERNANCE OPTIONS EVALUATION MATRICES

DEFINITIONS:

MEMBER – SPP RTO

MARKET PARTICIPANT

STAKEHOLDER
<table>
<thead>
<tr>
<th>Ultimate Entity</th>
<th>Participants Executive Committee v. Governing Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Executive Committee</td>
<td>Lower cost, ease of implementation</td>
</tr>
<tr>
<td>Pro Governing Board</td>
<td>Useful mechanism to build trust, independent decision-making, accessibility, transparency</td>
</tr>
<tr>
<td>Con Executive Committee</td>
<td>Complicated decisional authority</td>
</tr>
<tr>
<td>Con Governing Board</td>
<td>Increased cost and complexity</td>
</tr>
<tr>
<td>Markets+ Governing Board</td>
<td>Gov Board Nominating Cmte</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>Authority</strong></td>
<td>Tariff changes, business practices</td>
</tr>
<tr>
<td><strong>Composition</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td>Market experience, financial independence from market participants,</td>
</tr>
<tr>
<td>2A</td>
<td>Market Participants Executive Committee</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Authority</td>
<td>Markets+ Tariff, Business Practices</td>
</tr>
<tr>
<td>Purpose</td>
<td>Review, Working Group Proposals, Recommendations to Governing Board</td>
</tr>
<tr>
<td>Composition</td>
<td>Market Participants</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Sr. mgmt. official w/binding financial decision-making authority</td>
</tr>
</tbody>
</table>
### 2A

<table>
<thead>
<tr>
<th></th>
<th>Market Participants Executive Committee</th>
<th>Working Group (sector-based)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Committee to determine</td>
<td>Committee to determine</td>
</tr>
<tr>
<td>(Term/Election)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Resignation/Vacancies)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>Public, except when noticed with</td>
<td>Public, except when noticed</td>
</tr>
<tr>
<td>(Frequency)</td>
<td>transparent meeting purpose</td>
<td>with transparent meeting</td>
</tr>
<tr>
<td>(Public/Private)</td>
<td></td>
<td>purpose</td>
</tr>
<tr>
<td>Voting Structure</td>
<td>House/Senate</td>
<td>Senate</td>
</tr>
<tr>
<td>(House/Senate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential SPP RTO Governance Modifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bylaws</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Interconnection Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corporate Governance Cmte</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Markets+ Seat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, Voting</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Others?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance Modification Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance Review (Timeframe) (Process)</td>
<td>3 years with defined triggering conditions</td>
<td></td>
</tr>
<tr>
<td>Exit Provisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appeals Process</td>
<td>Market participant can appeal any action or inaction of the ultimate authority</td>
<td></td>
</tr>
</tbody>
</table>
## Markets + States Committee

<table>
<thead>
<tr>
<th>Authority/Purpose</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>Qualifications</td>
</tr>
<tr>
<td>Functions</td>
<td></td>
</tr>
</tbody>
</table>
## Markets+ States Committee

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership (Term/Election)</td>
</tr>
<tr>
<td>(Resignation/Vacancies)</td>
</tr>
<tr>
<td>Meetings (Frequency) (Public/Private)</td>
</tr>
<tr>
<td>Voting Structure</td>
</tr>
<tr>
<td>Technical Support (Funding Mechanism)</td>
</tr>
</tbody>
</table>
REQUEST FOR WRITTEN COMMENTS

COMMENT TEMPLATE: ISSUE APRIL 1

COMMENT DEADLINE: APRIL 20
GDT FUTURE MEETINGS/SCHEDULE

• April 20: Written Comments Due
• April 25: Governance Design Team Webinar
  • Provide Summary of Written Comments
• April 27: Development Update Webinar
  • Design Team Updates
  • Market Monitor Options
• May 23: Governance Design Team Webinar
  • Present Governance Concept Proposal
• June 1-2: In-Person Meeting - Denver
JOINT TRANSMISSION AVAILABILITY AND MARKET PRODUCTS/PRICE FORMATION DESIGN TEAMS READOUT

STEVE JOHNSON, SPP
JIM GONZALEZ, SPP
TADT DESIGN SESSION

• Flow-based market operations
  • Agreement that market will employ a flow-based solution in the day-ahead and real-time windows
  • Will not require TSP conversion from MOD-29 to MOD-30 to facilitate
  • Flexible enough to accommodate conversion to MOD-30 on an individual entity basis
  • ATRR and rate design discussions
TADT DESIGN SESSION

- Base Schedules
  - Generation to Load relationship
  - Not equivalent to self scheduling
  - Demonstrate transmission rights to deliver
  - May be a e-TAG, but not required
TADT DESIGN SESSION

• Congestion
  • Hedge/rents based on TSR
    • Only available to 7/6 transmission priority
  • Not a tradeable instrument
    • Existing OATTs provide mechanisms to “trade”
  • Network rights limited to load + buffer (e.g., 103%)
  • Designated Resources limited based on availability to Markets+

• Next Steps:
  • SPP provide examples to help navigate through option vs. obligation vs. hedge discussion
DISCUSSION TOPICS

• Review of guiding principles and Markets+ Roadmap
• Inventory of key decision topics for Markets+ market design
• Grouping of topics into buckets and document decisions when possible
KEY DECISION TOPICS

- Market Timelines
- Losses
- Congestion Hedge
- Market Products
- Congestion Management
- Dispatch
- Unit Commitment
- Physical Sufficiency
- Uplifts
- Bilateral Transactions
- Physical Deliverability
- Mitigation
- Participation Models
- Price Formation
- Virtuals
- GHG/Carb
DESIGN TOPIC DECISION GROUPINGS

No Brainer
- Guiding Principles
- Markets+ Evolution Options
- FERC Orders
- Wholesale Market evolution in North America

Regional Preference
- Driven by unique characteristics, evolution and operation of Western Interconnection
- External drivers
- Complexity versus benefit of design and implementation

Balancing Authority
- Driven by Balancing Authority functional role

Joint Discussion
- “Chicken or egg” based on decisions in Markets+ Transmission Availability Design Team
MARKET TIMELINE

• Multi-Day Advisory
• Day-Ahead Market (close and posting TBD)
• Real-Time Balancing (same timeline as SPP IM)
• Reliability unit commitment
DAY-AHEAD MARKET KEY FEATURES

- Hourly granularity for clearing and start/stop instructions
- BA to BA Firm transfers
- Ensures physical sufficiency
  - Blending of must-offer requirements and scarcity pricing
- Make-whole payments
- GHG compatible (Accounting and pricing)
DAY-AHEAD MARKET KEY FEATURES (CONT)

• Support “Base Schedules”

• Market window is a single Operating Day
MARKETS+ MARKET DESIGN OVERALL KEY FEATURES

• Market Products:
  • Energy => yes
  • Contingency Reserve and Regulation => no
  • Flexibility => yes

• Day-ahead is market position, Real-time is delta

• Flow-based market operations

• Net Settlement including DA Market, RT and congestion rents

• Technology agnostic (adopt participation models from SPP IM)
NEXT STEPS

• Determine mitigation design
• Inventory of TSP timelines compared to Markets+

• Parking lot:
  • Virtuals
  • Losses
FUTURE MEETINGS/SCHEDULE

• April 13: Transmission Availability Design Team
• April 26: Market Products/Price Formation Design Team
• April 27: Development Update Webinar
  • Design Team Updates
  • Market Monitor Options
• May Meetings: TBD – Joint/Topics
• June 1-2: In-Person Meeting - Denver
QUESTIONS/DISCUSSION
GHG MARKET DESIGN
INTRODUCTION

KARA FORNSTROM, SPP
GHG TRACKING: GUIDING PRINCIPLES

- Robust and consistent framework
- Sufficient granularity to demonstrate compliance with state regulation
- Simple, cost-effective solution
- Avoid administrative burden and double counting
- No interference with market dispatch principles
GHG DESIGN ELEMENT

• Leverage existing work by numerous parties in the West

• Invitations to Present Concepts
  • April 20: 11:00-1:00 (Pacific)
  • May 17: 11:00-1:00 (Pacific)

• Written Comment Opportunity

• June 1-2 In Person Breakout Session
NEXT STEPS
SCHEDULE

BRUCE REW, SPP
2022 MARKETS+ GOAL AND SCHEDULE

• Draft Service Offering – End of September
  • Written Comment Period

• Final Service Offering – Mid-November
  • Will Not Include: Market Protocols and Tariff Language

• Commitment to Investigate – Q1 2023
  • Financially Binding to Scope Implementation

• Stakeholder Process to Develop Market Protocols and Tariff Language

• Participant Agreement Execution – Fund Implementation
MILESTONES FOR JUNE MEETING

TRANSMISSION  MARKET DESIGN
CONGESTION RENT  SEAMS
GOVERNANCE  MARKET MONITOR
GHG TRACKING
MARKETS
GENERAL SESSION
March 30, 2022