



# **INTEGRATING WESTERN PARTIES INTO SPP'S RTO**

## TERMS AND CONDITIONS

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Published on TBD

Version: 1

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## EXECUTIVE SUMMARY

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Participants in Southwest Power Pool's (SPP) Western Energy Imbalance Services (WEIS) have expressed interest in joining the SPP regional transmission organization (RTO) and placing certain facilities under SPP's Open Access Transmission Tariff. An [independent study](#) found that WEIS participants' membership in the SPP RTO will save \$49 million annually: \$24.2 million in new savings for current members and \$25.1 million in savings for new western participants.

SPP works with prospective new members interested in joining the RTO using a new member process. As part of this process, SPP's Strategic Planning Committee formed a Members Forum and the Regional State Committee formed a State Commission Forum to work with staff on new member integration. The Members Forum and its Direct Current (DC) Tie Task Force met multiple times throughout the first two quarters of 2021 to agree on necessary governing document and operational changes to integrate the West parties into the RTO.

With the board of director's approval of this document, the identified terms and conditions will be valid for new member execution until April 15, 2022. If the West parties determine to financially commit to the integration, they will execute a commitment agreement before April 15, 2022, for an estimated go-live date of March 1, 2024. With these commitments, SPP will use its stakeholder process to finalize necessary governing document revisions for appropriate regulatory approvals.

Developing a framework to operate a single market across two interconnections presents several unique challenges, including:

- **DC Ties:** The four DC ties currently being considered for addition to the SPP market are the strategic enablers for operating single a market in two asynchronous interconnections. A single market design allowing for Marginal Energy Cost divergence within the eastern and western market footprints is also necessary for a dual interconnection market without breaking the fundamental price calculation principles used in the Integrated Marketplace. With the DC ties being legacy assets, a balance needs to be struck addressing compensation for market use within overall DC tie cost allocation. Special consideration is also required for Auction Revenue Right and Transmission Congestion Right allocation and management. The DC Tie Task Force continues to work toward solutions to these issues, with the goal of a fully vetted solution being provided to the Board in October.
- **Zonal Placement:** Some zones will cross interconnection boundaries requiring special consideration regarding transmission cost allocation and revenue recovery.
- **Planning Criteria:** A single FERC Order 1000 process will be employed for the entire market footprint while coordination with local planning groups is maintained.

- **Transmission Rates:** Network and point-to-point transmission rates allowing for crossing interconnection boundaries had to be developed that allow for proper revenue recovery while eliminating pancaking to ensure an efficient, one market solution.
- **Governance:** Changes and additions recognizing Eastern and Western Interconnection diversity.

The following policy revisions are necessary to integrate the West parties into the SPP RTO.

#### **POLICY REVISIONS FOR REGIONAL STATE COMMITTEE'S APPROVAL**

1. Approve the Supply Adequacy Working Group's recommendations on the planning reserve margin based on loss of load expectation (LOLE) study results for the West Balancing Authority (West BA).

#### **POLICY REVISIONS FOR BOARD OF DIRECTORS' APPROVAL**

1. Modify the SPP Bylaws:
  - The organizational group selection process in Section 3.1 should consider Eastern and Western Interconnection diversity when selecting participants as named members
  - Expand the Strategic Planning Committee by two seats, one for Transmission Owning and one for Transmission Using members as defined in Section 6.2
2. Form a new, single Balancing Authority (West BA) encompassing existing the Western Area Colorado Missouri and Western Area Upper West Balancing Authorities.
3. Approve the SPP West BA as a member of the Northwest Power Pool Reserve Sharing Group.
4. Expand SPP's current market by optimizing both BA's across the DC ties. The West parties will adopt the existing SPP Integrated Marketplace rules with only necessary modifications to incorporate a West BA into the existing market and to optimize the West DC ties.
5. If the East generation interconnection queue is experiencing a backlog at market launch, request a FERC waiver for West generation interconnection queue requests to be processed without waiting on the backlog to be cleared in the East queue.
6. Define transmission facilities **added in** the Western Interconnection under the tariff to be at or above 100 kV. Clarify language around DC tie facilities that do not alter the current application of Attachment A1 with regard to DC ties.
7. Utilize a single Order 1000 planning process for the SPP east and west footprints.

**Commented [JP1]:** From Steve Sanders after the meeting

8. Perform the following studies:
  - o LOLE study of the West consolidated footprint
  - o Two additional sensitivity cases to identify possible AC system limitations in the East and West by modeling DC ties at their full capability.
9. Attachment AU is to be applicable only to the Transmission Owners in the Eastern Interconnection.
10. Extend the WAPA federal provisions and requirements to the Colorado River Storage Project (CRSP) zone and the Loveland Area Projects (LAP) zone. There are similar provisions in the tariff for the Upper Missouri zone.
11. Manage the conversion from grandfathered service to SPP service using SPP's current process.
12. Follow the current zonal placement process. The exception may be the applicability of the smallest Annual Transmission Revenue Requirement (ATRR). However, the application of SPP's zonal placement criteria in the West may result in zonal size thresholds that differ in magnitude from those used in the East.
13. Revise Point-to-Point and Network Transmission Service Rates:

*Due to the Upper Missouri (UM) zone and LAP zone having facilities in both interconnections, some rates for point-to-point and network transmission service and the associated revenue distribution will be based on the amount of ATRR specific to the facilities in an interconnection, as detailed in the PTP and NITS sections below.*

  - o For network and point-to-point service sinking within a zone in the West, the zonal charges under Schedules 7, 8, 9, and 11 will be based on the zonal ATRR and load in the entire sink zone, including both the East and West portions of the UM and LAP zones.
  - o For Schedules 7 and 8, point-to-point service exiting the SPP footprint into other points of delivery in the western interconnection will be priced at a rate equal to the SPP West zonal weighted average price for facilities and load only in the West.
  - o For zonal Schedule 11, point-to-point service exiting the SPP footprint into other points of delivery in the western interconnection will be priced at a rate equal to the SPP West zonal weighted average price for facilities and load only in the West.
  - o For region-wide Schedule 11, service that sinks within a zone in the West, including the western portion of the UM and LAP zones, or exits the SPP region

from the West, the rate will be based on the region-wide facilities and load only in the West.

- o For region-wide Schedule 11, service that sinks within a zone in the East, including the eastern portion of the UM and LAP zones, or exits the SPP region from the East, the rate will be based on the region-wide facilities and load only in the East.



*Throughout the document, the red icon indicates a governing document change that must be approved by the SPP Board of Directors and Members Committee.*



*The green icon indicates a governing document change that must be approved by the Regional State Committee.*

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## BACKGROUND & PROCESS

### POTENTIAL WEST MEMBERS IN SPP RTO

All the participants in SPP's Western Energy Imbalance Services (WEIS) signed letters indicating their interest in joining the SPP RTO and placing certain western facilities under the terms and conditions of SPP's Open Access Transmission Tariff (OATT). This expansion opportunity in the Western Interconnection will help western utilities and states reach renewable objectives, enhance reliability, lower wholesale electricity costs, and create new trading opportunities for existing members in the east.

An [independent study](#) by the Brattle Group found that WEIS participants' membership in the SPP RTO will save \$49 million annually: \$24.2 million in new savings for current eastern members and \$25.1 million in savings for new western participants.

The following West parties are interested in joining the SPP RTO by placing some or all of their facilities in the Western interconnection under the SPP tariff:

- Basin Electric Power Cooperative \*
- Colorado Springs Utilities
- Deseret Power Electric Cooperative
- Municipal Energy Agency of Nebraska (MEAN) \*
- Tri-State Generation and Transmission Association \*
- Western Area Power Administration (WAPA)
  - Colorado River Storage Project [Management Center](#)
  - [Rocky Mountain Region](#) [Loveland Area Projects](#)
  - [Upper Great Plains Region](#) - West \*

\* [indicates an existing member](#)

**Commented [JP2]:** Clarify that some are existing members; term for interested parties, search doc for "new members"

In 2021, these interested West parties met weekly to discuss SPP membership.

SPP will work with other entities that sign a letter indicating their interest in joining the SPP RTO. Entities that are not participants of SPP's WEIS and are in a WEIS Balancing Authority can be part of the SPP RTO for an estimated go-live date of March 1, 2024, if they sign the Commitment Agreement by April 15, 2022. With a sufficient commitment period, entities that are not participants in the SPP WEIS and not in the WEIS balancing authority can be part of the SPP RTO as early as six months after the estimated go-live date of March 1, 2024.

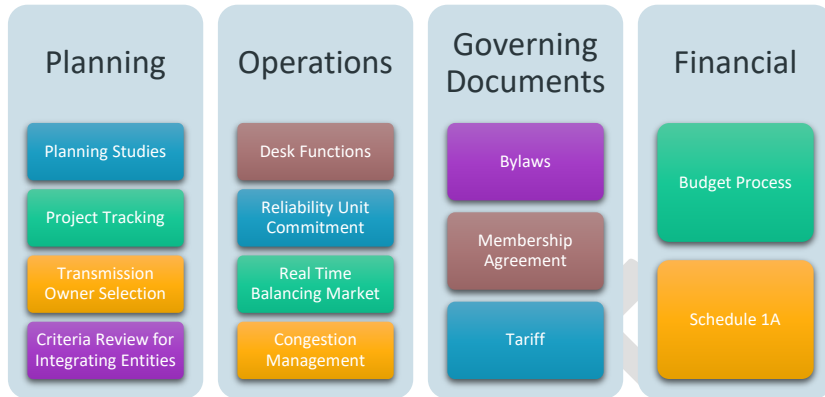
## NEW MEMBER INTEGRATION PROCESS

SPP's Strategic Planning Committee oversees the new member integration process with SPP staff acting as the primary facilitator for the review. The SPC created a Members Forum and State Commission Forum in late 2020 to work with staff on new member integrations. The Members Forum is open to all SPP members. Twelve SPP members representing diverse backgrounds participate on the Members Forum Steering Committee:

MEMBERS FORUM MEMBER	COMPANY
Jim Jacoby, Lead	American Electric Power
Joe Lang, Lead	Omaha Public Power District
Denis Florum	Lincoln Electric System
Steve Gaw	Advanced Power Alliance
Bill Grant	Xcel Energy
Brett Hooton	Gridliance High Plains
David Mindham	EDP Renewables North America
Robert Pick	Nebraska Public Power District
Jeff Riles	Google
Patrick Smith	Evergy
Al Tamimi	Sunflower Electric Power Corp
Mike Wise	Golden Spread Electric Cooperative

During January through June 2021, the Members Forum and its Steering Committee met regularly with SPP staff to discuss governing documents and operational changes needed to integrate the West parties into the SPP RTO. Discussion topics included:



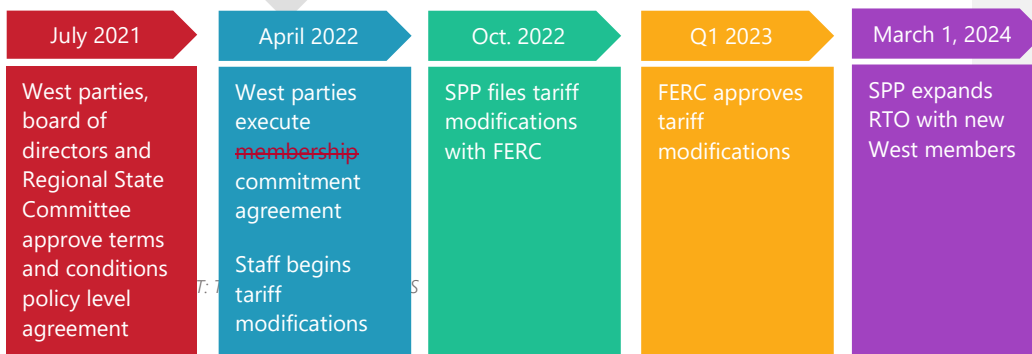


The Members Forum created the Direct Current (DC) Tie Task Force to discuss the terms and conditions under which the four DC ties will be operated and managed. The task force has representatives from the Eastern and Western Interconnections and one representative from each DC tie owner. The group began meeting weekly in April 2021.

SPP staff is responsible for implementing the governing document changes that the Members Forum and West parties discussed. These changes are summarized in the following sections of this report.

The State Commission Forum is comprised of staff and commissioners from the Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, Texas, and South Dakota state regulatory commissions. Some of these representatives also serve on SPP's Regional State Committee (RSC) and are Cost Allocation Working Group members. During January through June 2021, the forum received regular updates on the integration of West parties and outreach to western states' regulatory agencies. Any proposals from the West parties that impact the RSC's delegated areas of authority will be brought to the State Commission Forum for its review and consideration.

## NEXT STEPS



Between May 2021 and April 2022, SPP will work with the prospective new members in the Western interconnection to complete appropriate reviews. SPP staff will support the necessary internal and public reviews required by the prospective members.

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# POLICY AREAS



## GOVERNANCE

The West parties proposed two changes to the SPP bylaws:

1. The organizational group selection process in Section 3.1 should consider Eastern and Western Interconnection diversity when selecting participants as named members.
2. The Strategic Planning Committee (SPC) as defined in Section 6.2 would be expanded to include an additional participant in each of the Transmission Owning Member and Transmission Using Member sectors.

## DC TIES

### BACKGROUND

There are eight back-to-back DC ties in the United States and Canada, with a combined capacity of 1,470 MW, that connect the asynchronous Eastern and Western Interconnections. Seven of these back-to-back DC ties, with a combined capacity of 1,320 MW, are in the continental U.S. and connect SPP with the Western Interconnection. These DC ties provide a unique opportunity to develop the first organized market that spans two interconnections while expanding the current SPP RTO footprint.

Four of the DC ties in the United States are owned by current WEIS members and are the strategic enablers facilitating the westward expansion of the SPP RTO. Collectively the WEIS DC tie owners will provide 640 MW of capacity for RTO operation.

The four DC ties are:

DC TIE	CAPACITY (MW)	OWNERSHIP	PERCENT OF CAPACITY
Miles City	200 E-W/150 W-E	WAPA-Upper Great Plains Basin (ownership like rights)	WAPA-Upper Great Plains 60% Basin 40%
Rapid City*	200 bi-directional	Basin 65% Black Hills 35%	65% 35%
Stegall	110 bi-directional	Tri-State	Basin 100%
Sidney	200 bi-directional	WAPA-Rocky Mountain Region	100%

*\*Only the Basin share of Rapid City will be available for market operation*

## DC TIE TASK FORCE

The Members Forum established the DC Tie Task Force in April 2021 to discuss the terms and conditions under which the DC ties will be operated and managed. The group is addressing how to manage cost allocation of the legacy facilities, planning activities, point-to-point and network transmission rates, market utilization of the DC ties, and ARR/TCR allocations. Given the novel concept of operating a single market spanning two interconnections, with DC ties as the strategic enablers, the Members Forum wanted a balanced group to focus on these DC tie specific issues.

### DC Tie Task Force Members:

DC TIE TASK FORCE MEMBERS	
<b>DC Tie Owners</b>	
Basin Electric	Maria Tomac
Black Hills	Seth Nelson
Tri State	Mary Ann Zehr
WAPA-RMR	Raymond Vojdani
WAPA UGP	Lloyd Linke
<b>Non-owning Western Member</b>	
Deseret Power	Clay MacArthur
<b>Eastern Membership Representatives</b>	
AEP	Jim Jacoby
MEAN	Brad Hans
NPPD	Randy Lindstrom
WFEC	Brandon McCracken

The task force continues to evaluate options for DC tie use in the market. The taskforce has determined the following [goals/principles](#) and concepts- should be considered while working to develop an operations and cost recovery methodology:

- A single market solution allowing operation of the Integrated Marketplace in the Eastern and Western Interconnections
- ~~A cost recovery~~The mechanism ~~supporting charges and for recovering~~ costs associated with the DC Ties from the market is to be roughly commensurate with the benefits ensuring market use of DC ties is properly valued and compensated.
- Congestion between east and west zones will be handled in a similar fashion to today's Integrated Marketplace.
- DC ties will be utilized ~~and dispatched~~ by the market for maximum overall market benefit and dispatched on a five minute basis.
- The market design will not include a DC tie hurdle rate between interconnections for entities that utilize DC ties for transmission service.
- ~~DC ties are fully dispatchable by the market on a five minute basis~~

Several ideas have been considered by the task force in pursuit of the ultimate solution:

- Full regional cost allocation of legacy and future DC tie assets via a regional load-based rate, including a phased approach to regional cost allocation. This option was not supported by the task force.
- Zonal cost allocation of legacy DC tie assets. DC tie rights holders would retain all risk and value of DC tie transmission rights of legacy assets by treating the DC ties as a simultaneous load and generation within the east and west zones. This option does not support a single market solution.
- Zonal cost allocation of legacy DC tie assets, regional cost allocation of future DC tie assets based on SPP planning criteria, and a Market Efficiency Uplift (MEU) payment for market use of DC ties commensurate with market benefit up to the full ATRR of the DC tie facilities.

The task force is currently vetting the MEU option for SPP expansion into the west. FERC has indicated the following three policy principles in addressing storage as a transmission asset. Under the MEU option, these principles are deemed appropriate in this application of market-based revenue for compensation of DC tie facility costs.

- 1) **Avoid double-recovery of costs:** This would be achieved by providing for the crediting of market revenue against the ATRR as described below, but not permitting the Transmission Owner to retain ~~a windfall over and an overcollection~~ above the ATRR.
- 2) **Minimize adverse impacts on wholesale electric markets:** No bids or offers at the DC tie locations would be consistent with the way other entities have designed storage as a transmission-only asset.

- 3) **RTO/ISO independence:** This would be addressed through clearly distinguishing between the functional control of the RTO, including market dispatch, and the on-site operational control of the Transmission Owner.

## OPERATIONS



### OPERATING RESERVES

Operating Reserves will not be optimized across the DC ties, but rather within each Balancing Authority footprint.



### BALANCING AUTHORITY

Due to the dynamics of operating a market in two asynchronous interconnections, SPP will form a new, single Balancing Authority encompassing the current Western Area Colorado Missouri and Western Area Upper West Balancing Authorities. NERC and WECC must certify the new Balancing Authority. A North American Energy Standards Board waiver will be requested for tagging requirements between the two SPP BAs for market operation. If additional Western Balancing Authorities join the SPP RTO, the SPP West BA would be expanded to include new areas.

### BALANCING AUTHORITY AGREEMENTS

The WACM and WAUW have existing BA agreements and available transmission capacity agreements and arrangements that need to be terminated and the BA functions transferred to SPP-West BA. WACM and WAUW will no longer perform any BA functions after Market go live.

### RELIABILITY COORDINATOR

SPP currently acts as the Reliability Coordinator, West RC, under contract for the WEIS participants. The West RC will continue to provide RC services for the new RTO West footprint, as well as providing contract RC services for current West RC members not joining RTO West or participating in the WEIS. Upon joining the RTO, new members will receive RC services as members and the existing RC contract will be terminated.



## RESERVE SHARING

The SPP West BA will be a member of the Northwest Power Pool Reserve Sharing Group (NWPP RSG). The current WAPA BAs (WACM and WAUW) are NWPP RSG members. The SPP West BA will develop a settlements process for transactions under the NWPP RSG.



## MARKET DESIGN

With the addition of the West parties, SPP will continue to operate with one Integrated Marketplace. The West parties will adopt the existing SPP Integrated Marketplace rules with only necessary modifications to incorporate a western Balancing Authority into the existing market and to optimize the DC ties within the expanded market footprint. SPP will manage the flow on the DC ties using a single, co-optimized market solution.

Due to the usage of a dual reference bus model, marginal energy cost convergence between the eastern and western portions of the Integrated Marketplace may not occur. Convergence of the locational marginal prices on either side of the DC ties may exist when the DC ties are unconstrained. When delivery limitations exist on the DC ties or the underlying transmission system, there will be potential for divergence between the settlement locations representing both sides of the DC tie.

The overall concept outlined here allows for SPP to accurately calculate the market pricing for a dual interconnection market without breaking the fundamental price calculation principles used in the Integrated Marketplace.

## COMPLIANCE

### PLANNING COORDINATOR TASKS

SPP will act as the Planning Coordinator for the RTO West parties. SPP will perform the responsibilities of the Planning Coordinator as defined in applicable NERC Standards and WECC Criteria (e.g., TPL-001-WECC-CRT-3.2). SPP will not act as the Transmission Planner or fulfill Transmission Planner responsibilities. SPP will not act as the Planning Coordinator or fulfill Planning Coordinator responsibilities for NERC registered entities who have not signed the SPP membership agreement or who do not have a separate agreement with SPP for Planning Coordinator Services.

### OPERATIONS TASKS

SPP currently acts as the Reliability Coordinator and is responsible for applicable NERC Standards and WECC Criteria associated with RC functions. SPP will begin operating as a single

Balancing Authority in the Western Interconnection and will assume applicable NERC Standards and WECC Criteria associated with BA responsibilities. SPP will not act as the Transmission Operator or fulfill Transmission Operator responsibilities.

## TRANSMISSION PLANNING



### GENERATION INTERCONNECTION

The SPP Tariff will have one defined generation interconnection (GI) process that will apply to both the Western and Eastern interconnections. SPP is working on clearing the backlog for the East GI queue. SPP shall request a waiver from FERC for West GI queue requests to be processed should the East backlog to not be cleared at go-live. The timing of integrating the West parties and clearing the East backlog will determine if a waiver request is needed. If a waiver is needed, it will only be until the East queue is cleared; then SPP will have a single queue for the East and West. The queue position for the West interconnection will not be impacted by the East backlog clearing.

SPP has made changes to its GI process to address the cascading restudies caused by withdrawing projects late in the process that created the backlog. The study process changes have been in effect since July 1, 2019. SPP will utilize its current process to conduct GI studies for requests in both the Eastern and Western Interconnections. The SPP Board of Directors will consider recommendations for addressing the eastern GI backlog in July 2021.



### TRANSMISSION DEFINITION

The agreed definition of what western facilities qualify to be transmission under the SPP Tariff differs slightly from the existing Attachment AI definition. Transmission facilities added in the West will include existing non-radial lines, substations, and associated facilities, operating at 100 kV or above, plus radial lines and associated facilities operated at or above 100 kV that serve two or more eligible customers that are not affiliates of each other. Additionally, clarifying language will be added around DC tie facilities that do not alter the current application of Attachment AI with regard to DC ties. These tariff changes will not be applicable to entities in the Eastern Interconnection for which the current tariff uses a standard voltage threshold of 60kV. The current transmission definition including facilities "at or above 60 kV" will continue to be applicable to entities in the Eastern Interconnection.

**Commented [JP3]:** From Steve Sanders after the meeting to address existing facilities under the 100 kV threshold

### LOCAL PLANNING COORDINATION

SPP's regional planning process, specifically the Integrated Transmission Planning (ITP) assessment, will address review locally planned upgrades proposed to address either resulting from a FERC-approved local or zonal planning criteria process. As SPP performs the ITP, it will



evaluate whether a regional solution can solve [needs resulting from](#) both local and regional [needs criteria](#) in a more cost effective way than upgrades ~~proposed to address~~ [produced by the local or zonal planning criteria alone process](#). SPP will also identify those local upgrades that are required to be constructed in ~~concert~~ [coordination](#) with a regional upgrade.



## RESOURCE ADEQUACY ANALYSIS



SPP will perform an LOLE study of the West footprint. The study will evaluate the possibility of adopting a minimum planning reserve margin for the Western interconnection that is different from the planning reserve margin currently approved, with due consideration of the DC tie capacities. SPP will review the need for a separate analysis for accreditation of generation resources in the West region.

The RSC will be asked to consider the Supply Adequacy Working Group's recommendations on the planning reserve margin based on LOLE study results for the West BA.

## TRANSMISSION FEASIBILITY

SPP will perform a transmission criteria review study comparable to the studies SPP performed to integrate both Nebraska and the Integrated System entities. The study will assess transmission system adequacy for meeting firm service obligations in the West footprint at the time of integration. Any transmission upgrades required from this study will be recovered from the responsible entity's customers and will not be eligible for regional cost allocation.

SPP will perform two additional sensitivity cases to identify possible limitations of the AC system in both East and West region by modeling the DC ties at their full capability in both directions. This study will be for informational purposes only.



## WESTERN AREA POWER ADMINISTRATION SPECIFIC PROVISIONS

The WAPA federal provisions and requirements will be extended to the Colorado River Storage Project ~~(Management Center (WAPA-CRSP) zone~~ and the ~~Loveland Area Projects (LAP) zone~~ [Rocky Mountain Region \(WAPA-RMR\) and their respective zones, as applicable](#). These are similar provisions ~~to those~~ in the current tariff for [Upper Great Plains Region \(WAPA-UGP\) and its facilities in the Upper Missouri zone](#) ~~Zone (UMZ)~~, including the Federal Service Exemption. SPP will make revisions as necessary to maintain Upper Great ~~Plain's~~ [Plains Region's](#) prior arrangements with the addition of [WAPA-CRSP](#) and [Rocky Mountain Region \(WAPA-RMR\)](#), and

include additions to address new WAPA requirements (primarily for [WAPA-CRSP](#) and [WAPA-RMR](#)) in the SPP West area.

The Federal Service Exemption, as found in Section 39.3 of the tariff, will apply to all project costs eligible for regional cost allocation.

WAPA is still engaged with SPP and discussing some potential additional terms and conditions it may need for ~~the WAPA-CRSP and/or WAPA-RMR members.~~



## ATTACHMENT AU

### PROCEDURES FOR ALLOCATION OF REVENUES RESULTING FROM THE SETTLEMENT AGREEMENT IN COMMISSION DOCKET NOS. EL11-34-002, et al.

Attachment AU describes the distribution of revenue received from MISO under a settlement agreement, to SPP Transmission Owners based on estimated flow impacts resulting from energy transfers between MISO north and south subregions. Attachment AU will be clarified to state that such revenues are allocated only to Transmission Owners in the Eastern Interconnection.

## EXISTING AGREEMENTS



### GRANDFATHERED AGREEMENTS

SPP staff is working with the West parties to assist them with determining how and when grandfathered agreements can be converted to transmission service under the SPP OATT. ~~There will be no changes in the process SPP currently uses.~~

SPP staff will continue to work with West parties regarding other agreements (e.g., the Missouri Basin Power Project Agreement), as requested. SPP and the West parties continue to work toward solutions to converting existing rights to transmission service under the SPP OATT.



### SEAMS AGREEMENTS

SPP has functional seams agreements with neighboring Transmission Service Providers, Reliability Coordinators, Balancing Authorities, Planning Coordinators, Market Operators, and Planning Regions in the Eastern Interconnection. SPP will work with integrating entities in the Western Interconnection to determine the level of coordination that may be required for each function. SPP will prioritize activities that are required by NERC and/or FERC. In many cases, existing western processes and procedures may be sufficient. At the appropriate time, SPP will reach out to neighboring entities to establish new coordination processes that are identified as required.

For negotiations between SPP and their neighbors to develop seams agreements, SPP will utilize the process established under a [Memorandum from the Seams Steering Committee to SPP](#).

## ZONAL CONSTRUCT

The current zonal placement process will be followed in the Western interconnection. ~~An exception may be~~ Among the ~~applicability of ATRR-size threshold. Criteria~~ criteria applied by SPP in recent reviews ~~included whether is a comparison of the proposed ATRR is less than~~ to a minimum threshold based on a three-year average. ~~SPP's application of its zonal placement criteria in the West may result in size thresholds that differ in magnitude from those used in the East.~~



## POINT-TO-POINT TRANSMISSION SERVICE <sup>1</sup>

This proposal details the point-to-point (PTP) transmission service rate design and revenue distribution under the SPP OATT to include Western Interconnection transmission pricing zones (West) in the SPP RTO.

### OUTLINE OF PROPOSAL

- 1) To the extent practicable, costs in the West are borne by load in the West and costs in SPP pricing zones in the eastern interconnection (East) are borne by load in the East.
- 2) All zones are wholly contained in either the East or the West with the exception of the Upper Missouri and LAP zones, which will have facilities in both interconnections.
- 3) PTP transmission service revenue distribution is based on either the sink zone or the interconnection of exit from the SPP region.
  - a) If PTP transmission service sinks in the East or exits to the eastern interconnection from SPP East, revenue stays with Transmission Owners in the East except for zonal revenues in the Upper Missouri and LAP zones.
  - b) If PTP transmission service sinks in SPP West or exits to the western interconnection from SPP West, revenue stays with Transmission Owners in the West except for zonal revenues in the Upper Missouri and LAP zones.
- 4) In general, the PTP transmission service rates are calculated by dividing the applicable annual transmission revenue requirement (ATRR) by the corresponding load used for network load ratio share. However, SPP West PTP rate methodology may differ from SPP East methodology for transmission service that exits the SPP region.

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<sup>1</sup> A link will be added to table on SPP.org

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## POINT-TO-POINT TRANSMISSION SERVICE UNDER SCHEDULES 7 AND 8

### *RATES*

Each zone's rates under Schedules 7 and 8 are based on the zonal Schedule 9 ATRR divided by zonal average coincident peak load. PTP transmission service exiting the SPP footprint into other points of delivery in the western interconnection will be priced at a rate equal to the SPP West zonal weighted average price. The weighting will be calculated as the total Schedule 9 ATRR in the West divided by the total load in the West that is used in determining zonal load ratio share under Schedule 9. This applies to transmission service originating in both the eastern interconnection and western interconnection, regardless of whether or not that source is located in the SPP region.

PTP transmission service exiting the SPP footprint into other points of delivery in the eastern interconnection will be priced at a rate equal to the lowest rate of those SPP pricing zones in the East that are interconnected with the external point of delivery. This applies to transmission service originating in both the eastern interconnection and western interconnection, regardless of whether or not that source is located in the SPP region.

PTP transmission service sinking within a West zone will be priced at a rate equal to the sink zonal rate, including service that sinks in the portion of the Upper Missouri or LAP zone in the West. The Upper Missouri zonal rate and the LAP zonal rate will be calculated based on the zone's total Schedule 9 ATRR and load in both the East and West.

PTP transmission service sinking within an East zone will be priced at a rate equal to the sink zonal rate, including service that sinks in the portion of the Upper Missouri or LAP zone in the East. The Upper Missouri zonal rate and the LAP zonal rate will be calculated based on the zone's total Schedule 9 ATRR and load in both the East and West.

### *REVENUE DISTRIBUTION UNDER SCHEDULES 7 AND 8*

For PTP transmission service that sinks in the West, the revenue will be distributed to Transmission Owners located in the West based 50% on Schedule 9 ATRR and 50% on MW-mile impacts. For PTP transmission service that does not source and sink in the same zone, the ATRR and MW-mile distribution considers all Transmission Owners in the West.

For PTP transmission service that sinks in the East, the revenue will be distributed to Transmission Owners located in the East based 50% on Schedule 9 ATRR and 50% on MW-mile impacts. For PTP transmission service that does not source and sink in the same zone, the ATRR and MW-mile distribution considers all Transmission Owners in the East.

In determining the Schedule 9 ATRR to be used for revenue distribution when the source and sink are not in the same zone, the Upper Missouri and LAP zonal Transmission Owners must

separate their ATRR between East and West such that only the eastern portion will be used for East revenue distribution and only the western portion will be used for West revenue distribution.

If the service sources and sinks in the same zone, including both the eastern and western sides of the Upper Missouri and LAP zones, all Schedule 9 Transmission Owners in that source/sink zone will receive revenue from charges under Schedules 7 and 8 based 50% on Schedule 9 ATRR and 50% on MW-mile impacts.

## POINT-TO-POINT TRANSMISSION SERVICE UNDER SCHEDULE 11

### *ZONAL RATES*

PTP transmission service sinking within any zone in the SPP region will be priced at a rate equal to the sink's Schedule 11 zonal rate. The Upper Missouri Schedule 11 zonal rate and the LAP Schedule 11 zonal rate will be calculated based on the zone's Schedule 11 zonal ATRR and load in both the East and West.

PTP transmission service exiting the SPP footprint into other points of delivery in the western interconnection will be priced at a rate equal to the SPP West zonal weighted average price. The weighting will be calculated as the total Schedule 11 zonal ATRR in the West, including the western portion of Schedule 11 zonal ATRR in the Upper Missouri and LAP zones, divided by the total load in the West that is used in determining zonal load ratio share under Schedule 11. PTP transmission service exiting the SPP footprint into other points of delivery in the eastern interconnection will be priced at a rate equal to the SPP East zonal weighted average price. The weighting will be calculated as the total Schedule 11 zonal ATRR in the East, including the eastern portion of the Schedule 11 zonal ATRR in the Upper Missouri and LAP zones, divided by the total load in the East that is used in determining zonal load ratio share under Schedule 11. These rules apply to transmission service originating in both the eastern interconnection and western interconnection, regardless of whether or not that source is located in the SPP region.

### *ZONAL REVENUE DISTRIBUTION UNDER SCHEDULE 11*

For PTP transmission service that sinks in an SPP zone in either the East or West, including both the eastern and western sides of the Upper Missouri and LAP zones, the revenue will be distributed to the Transmission Owners with Schedule 11 zonal ATRR in the sink zone. Such distribution will be in proportion to their Schedule 11 zonal ATRR in that zone.

For PTP transmission service that exits the SPP region from the West, the revenue will be distributed to all Transmission Owners with Schedule 11 zonal ATRR in the West, in proportion to their western Schedule 11 zonal ATRR.

For PTP transmission service that exits the SPP region from the East, the revenue will be distributed to all Transmission Owners with Schedule 11 zonal ATRR in the East, in proportion to their eastern Schedule 11 zonal ATRR.

In determining the Schedule 11 zonal ATRR to be used for revenue distribution when the service exits the SPP region, the Upper Missouri and LAP zonal Transmission Owners must separate their Schedule 11 zonal ATRR between East and West such that only the eastern portion will be used for East revenue distribution and only the western portion will be used for West revenue distribution.

#### *REGION-WIDE RATES*

PTP transmission service sinking within a West zone, including the western portion of the Upper Missouri and LAP zones, or exiting the SPP footprint into other points of delivery in the western interconnection will be priced at the West region-wide rate, which will be calculated as the total Schedule 11 region-wide ATRR in the West divided by the total load in the West that is used in determining region-wide load ratio share under Schedule 11. The Schedule 11 region-wide ATRR and load will be calculated based on facilities and load located only in the West.

PTP transmission service sinking within an East zone, including the eastern portion of the Upper Missouri and LAP zones, or exiting the SPP footprint into other points of delivery in the eastern interconnection will be priced at the East region-wide rate, which will be calculated as the total Schedule 11 region-wide ATRRs in the East divided by the total loads in the East that are used in determining region-wide load ratio shares under Schedule 11. PTP service sinking within the Upper Missouri Zone in the East will include only ATRR for facilities subject to rate recovery after the October 1, 2015, bright-line date. The Schedule 11 region-wide ATRRs and loads will be calculated based on facilities and loads located only in the East.

#### *REGION-WIDE REVENUE DISTRIBUTION UNDER SCHEDULE 11*

For PTP transmission service that sinks within a zone in the West, including the western portion of the Upper Missouri and LAP zones, or exits the SPP region from the West, the revenue will be distributed to Transmission Owners with Schedule 11 region-wide ATRR in the West. Such distribution will be in proportion to their western Schedule 11 region-wide ATRR.

For PTP transmission service that sinks within a zone in the East, including the eastern portion of the Upper Missouri and LAP zones, or exits the SPP region from the East, the revenue will be distributed to Transmission Owners with Schedule 11 region-wide ATRR in the East. Such distribution will be in proportion to their eastern Schedule 11 region-wide ATRR.



## NETWORK TRANSMISSION SERVICE

This proposal details the network integration (Network) transmission service rate design and revenue distribution under the SPP Open Access Transmission Tariff (Tariff) for inclusion of western interconnection transmission pricing zones (West) in the SPP RTO.

### OUTLINE OF PROPOSAL

- 1) To the extent practicable, costs in the West will be borne by load in the West and costs in SPP pricing zones in the eastern interconnection (East) will be borne by load in the East.
- 2) All zones will be wholly contained in either the East or the West with the exception of the Upper Missouri and LAP zones, which will have facilities in both interconnections.
- 3) Network transmission service charges and resulting revenue distribution will be based on either the sink zone in the SPP region or the delivery point external to the SPP region.
  - c) If Network transmission service sinks in the East or exits to the eastern interconnection from SPP East, revenue stays with Transmission Owners in the East except for zonal revenues in the Upper Missouri and LAP zones.
  - d) If Network transmission service sinks in SPP West or exits to the western interconnection from SPP West, revenue stays with Transmission Owners in the West except for zonal revenues in the Upper Missouri and LAP zones.
- 4) In general, the Network transmission service charges will be calculated by multiplying each customer's load ratio share by the applicable annual transmission revenue requirement (ATRR).

### NETWORK TRANSMISSION SERVICE UNDER SCHEDULE 9

#### *RATES*

Each zone's charges under Schedule 9 will be based on the zonal Schedule 9 ATRR multiplied by each customer's zonal load ratio share. Network transmission service sinking within any zone in the SPP region will be charged based on the sink's Schedule 9 zonal rate, including service that sinks in the Upper Missouri or LAP zones. The Upper Missouri zonal rate and the LAP zonal rate will be calculated based on the zone's total Schedule 9 ATRR and load in both the East and West.

Network transmission service exiting the SPP region to load through the Upper Missouri zone will be charged based on the Upper Missouri zone's Schedule 9 rate.

Network transmission service exiting the SPP region from zones other than the Upper Missouri zone will be charged based on the lowest Schedule 9 charge of the zones interconnected with the external point of delivery.

The above rules apply to transmission service originating from Network resources in either the eastern interconnection or western interconnection.

#### *REVENUE DISTRIBUTION UNDER SCHEDULE 9*

For Network transmission service that sinks in the SPP region, the Schedule 9 revenue will be distributed to Transmission Owners with Schedule 9 ATRR in the sink zone, in proportion to their Schedule 9 ATRRs. When the Upper Missouri or LAP zone is the sink, the ATRR of both the eastern and western sides of the zone will be included in such distribution.

For Network transmission service that sinks outside the SPP region, the Schedule 9 revenue will be distributed to Transmission Owners with Schedule 9 ATRR in the zone that is used to determine Schedule 9 charges, in proportion to their Schedule 9 ATRRs.

### NETWORK TRANSMISSION SERVICE UNDER SCHEDULE 11

#### *ZONAL RATES*

Network transmission service sinking within any zone in the SPP region will be charged based on the sink's Schedule 11 zonal ATRR and load. The Upper Missouri Schedule 11 zonal rate and the LAP Schedule 11 zonal rate will be calculated based on the zone's Schedule 11 zonal ATRR and load in both the East and West.

Network transmission service exiting the SPP region will be charged based on the Schedule 11 zonal rate of the zone used for Schedule 9 charges to the same Network load. The Upper Missouri zonal rate and the LAP zonal rate will be calculated based on the zone's total Schedule 11 zonal ATRR and load in both the East and West.

The above rules apply to transmission service originating from Network resources in either the eastern interconnection or western interconnection.

#### *ZONAL REVENUE DISTRIBUTION UNDER SCHEDULE 11*

For Network transmission service that sinks in an SPP zone in either the East or West, including both the eastern and western sides of the Upper Missouri and LAP zones, the revenue will be distributed to the Transmission Owners with Schedule 11 zonal ATRR in the sink zone. Such distribution will be in proportion to their Schedule 11 zonal ATRR in that zone.

For Network transmission service that exits the SPP region, the revenue will be distributed to the Transmission Owners with Schedule 11 zonal ATRR in the zone used in determining the Schedule 11 zonal rate for that Network load, in proportion to their Schedule 11 zonal ATRR.



### *REGION-WIDE RATES*

Network transmission service sinking within a West zone, including the western portion of the Upper Missouri and LAP zones, or exiting the SPP region into other delivery points in the western interconnection, will be charged based on the West region-wide ATRR multiplied by the West region-wide load ratio share. The Schedule 11 region-wide ATRR and load will be calculated based on facilities and load located only in the West, including only the West portions of the Upper Missouri and LAP zones.

Network transmission service sinking within an East zone, including the eastern portion of the Upper Missouri and LAP zones, or exiting the SPP region into other delivery points in the eastern interconnection, will be charged based on the East region-wide ATRRs multiplied by the applicable East region-wide load ratio shares. Network service sinking within the Upper Missouri zone in the East will include only ATRR for facilities subject to rate recovery in accordance with the October 1, 2015, bright-line date. The Schedule 11 region-wide ATRRs and loads will be calculated based on facilities and loads located only in the East, including only the East portions of the Upper Missouri and LAP zones.

### *REGION-WIDE REVENUE DISTRIBUTION UNDER SCHEDULE 11*

For Network transmission service that sinks within a zone in the West, including the western portion of the Upper Missouri and LAP zones, or exits the SPP region from the West, the revenue will be distributed to Transmission Owners with Schedule 11 region-wide ATRR in the West. Such distribution will be in proportion to their western Schedule 11 region-wide ATRR.

For Network transmission service that sinks within a zone in the East, including the eastern portion of the Upper Missouri and LAP zones, or exits the SPP region from the East, the revenue will be distributed to Transmission Owners with Schedule 11 region-wide ATRR in the East. Such distribution will be in proportion to their eastern Schedule 11 region-wide ATRR.

# COMMITMENT AGREEMENT



The RTO West Parties, who decide to move forward following their internal and stakeholder processes and approvals, would then execute a Commitment Agreement before April 15, 2022, for estimated go live date of March 1, 2024. SPP also would execute the Commitment Agreement. The Commitment Agreement would commit SPP to perform work and incur costs that will allow SPP to integrate the RTO West parties. The agreement would commit the RTO West parties to perform work that will prepare them to integrate, and if they decide not to do so, they are obligated to pay SPP for costs ~~it will incur as defined in the Commitment Agreement~~. SPP's costs will be identified, and allocated, in the agreement and each RTO West party will be responsible to pay SPP its share of those costs should it decide to not integrate. The RTO West Parties and SPP are evaluating the specific terms and provisions of the Commitment Agreement and intend to present a proposed final agreement to the SPP Board at the next SPP Board Meeting. The details of the following concepts are being vetted and negotiated and are anticipated to be included in the final agreement:

- The agreement allows for changes to the integration costs to be made by SPP.
- Implementation delay ~~costs requested by an RTO West party results in such party's obligation to pay SPP a service fee during the pendency of the delay.~~
- The agreement can be terminated by any party without cause. If an RTO West party terminates the agreement, that party pays SPP its share of SPP's costs.
- If SPP terminates the agreement, the RTO West parties pay SPP 50% of SPP's costs.
- Other participants may be able to integrate at the same time as the RTO West parties, if SPP determines it is feasible and those parties execute a Commitment Agreement.
- The agreement terminates upon integration of the SPP West parties.
- The agreement will contain certain provisions applicable to the Western Area Power Administration and its participation in the integration.
- Integration costs for new member integration are recovered by SPP schedule 1-A rates on the membership effective date.

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# SPP WEST NEW MEMBER PROCESS COST SUMMARY

BRUCE REW

SENIOR VICE PRESIDENT, OPERATIONS

JUNE 30, 2021

# COMMITMENT AGREEMENT COST RECOVERY

- Commitment Agreement integration and expense recovery includes the following:
  - Costs for Implementation from Commitment Agreement Execution through RTO Go-Live
  - Costs are determined based on SPP's standard process as was used for the SPP West RC and WEIS efforts
  - Interest on 4-year cost recovery period post go-live (assumed 3%)

# FINANCIAL SUMMARY

Budget Category	Total (MM)
Salaries & Benefits	\$15.1
Travel, Admin, & Comm.	\$2.2
Outside Services	\$7.0
<u>Project Capital</u>	<u>\$5.8</u>
<b>Total Project Costs</b>	<b>\$30.1</b>
<u>Four year Interest</u>	<u>\$1.9</u>
<b>Total with Interest</b>	<b>\$32.0</b>

# OPERATING RESERVE

# OPERATING RESERVE

- That capability above firm system demand required to provide for regulation, load forecasting error, equipment forced and scheduled outages and local area protection. It consists of spinning and non-spinning.
  - BAL-001-2
  - BAL-002-WECC 3
  - BAL-002-3
  - BAL-003-2

# DC TIES AND OPERATING RESERVE

- DC ties will be dispatched on a 5 minute basis and subject to direction reversal constraints
- Contingency reserve would require firm capacity set aside on DC ties
- Frequency Response
  - Synthetic response subject to ramp rates, ramp status and would require capacity set aside



# **NORTHWEST POWER POOL RESERVE SHARING GROUP PARTICIPATION**

- Operates under BAL-002-WECC 3 requirements
- Lowers overall contingency reserve requirement
- Ensures NWPP RSG fleet response to contingency events

# TRANSMISSION SERVICE AND DESIGNATED RESOURCES

- Can leverage designated resources in one interconnection to serve load in another
- Subject to available transmission capacity