190 FERC ¶ 61,030
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Chairman;
Mark C. Christie, David Rosner,
Lindsay S. See and Judy W. Chang.

Southwest Power Pool, Inc. Docket Nos. ER24-1658-000
ER24-1658-001
ER24-1658-002

ORDER ACCEPTING PROPOSED TARIFF, SUBJECT TO CONDITION

(Issued January 16, 2025)

1. On March 29, 2024, as amended on April 5, 2024 and September 20, 2024, pursuant to section 205 of the Federal Power Act (FPA)[1] and section 35.12 of the Commission's regulations,[2] Southwest Power Pool, Inc. (SPP) submitted a proposed tariff to implement a centralized day-ahead and real-time unit commitment and dispatch market (Markets+) in the Western Interconnection (Markets+ Tariff). In this order, we accept the proposed Markets+ Tariff, subject to condition, and direct SPP to submit a compliance filing within 30 days of the date of this order. We also direct SPP to submit an informational filing notifying the Commission of the actual effective date no later than six months prior to the date SPP implements the proposed Markets+ Tariff, as discussed below. Lastly, we direct SPP to submit informational reports every six months during the implementation period, as well as every six months for a period of three years after the Markets+ Tariff effective date, as discussed below.

I. Background

A. Integrated Marketplace

2. In 2014, SPP established the Integrated Marketplace, a day-ahead and real-time energy market in the Eastern Interconnection. As part of the Integrated Marketplace, SPP also introduced other services, including transmission congestion rights, a reliability unit commitment process, and price-based operating reserve procurement. According to SPP,

[1] 16 U.S.C. § 824d.

[2] 18 C.F.R. § 35.12 (2024).

since its inception, the Integrated Marketplace has provided more than $10.2 billion in benefits to its participants.[3]

B. Western Energy Imbalance Service Market

3. In February 2021, SPP began administering the Western Energy Imbalance Services market (WEIS Market), a contract-based real-time balancing market (RTBM) for customers in the Western Interconnection. The WEIS Market centrally dispatches energy from participating resources throughout the market footprint every five minutes, enhancing both the reliability and affordability of electricity delivery from utilities to their customers. Participating Balancing Authorities retain their reliability responsibilities and manage their own day-ahead processes. Currently there are 11 participants in the WEIS Market. SPP reports that, since its inception in 2021, the WEIS Market has provided $61.2 million in net benefits to participants and their customers.[4]

C. Western Resource Adequacy Program

4. On August 31, 2022, as amended on December 12, 2022, the Western Power Pool (WPP) proposed the Western Resource Adequacy Program (WRAP) tariff (WRAP Tariff), which sets forth the framework for a voluntary resource adequacy planning and compliance program in the Western Interconnection. The Commission accepted the proposed WRAP Tariff on February 10, 2023, finding that WRAP will "help ensure that Participants have sufficient capacity resources available to serve their load" and will "enhance reliability and resource adequacy among its Participants."[5]

5. The WRAP Tariff establishes two main programs: the Forward Showing Program and the Operations Program. The Forward Showing Program requires WRAP participants to show, seven months in advance of each WRAP winter and summer season, that they have sufficient capacity to meet a required planning reserve margin and have reserved at least 75% of the transmission necessary to deliver energy from that

[3] Transmittal at 13-14; *see Sw. Power Pool, Inc.*, 146 FERC ¶ 61,130 (2014) (approving the start-up and operation of the Integrated Marketplace, effective March 1, 2014).

[4] Transmittal at 14 (citing SPP Markets, Benefit of the Market: Western Energy Imbalance Service (WEIS), Southwest Power Pool Inc. (Mar. 27, 2023), https://spp.org/documents/69127/2022%20weis%20benefit%20of%20market%20report.pdf).

[5] *Nw. Power Pool*, 182 FERC ¶ 61,063, at P 27 (2023) (WRAP Order).

capacity to their load.[6] The Operations Program addresses any shortfalls approaching a given operating day within each binding season. WRAP participants who are short capacity can call on other participants who have surplus capacity relative to their Forward Showing obligations to make that capacity available for transfer.[7]

D. Extended Day-Ahead Market

6. On December 20, 2023, the Commission accepted the California Independent System Operator Corporation's (CAISO) proposed revisions to its Open Access Transmission Tariff (OATT) to implement its Extended Day-Ahead Market (EDAM).[8] Under the EDAM framework, CAISO revised its OATT to offer participation in CAISO's existing day-ahead market to external balancing authority areas in the Western states.[9] Similar to the instant proposal, EDAM will provide day-ahead and real-time energy optimization for external balancing authorities, but will not optimize ancillary services, and each balancing authority will maintain its own reliability obligations. CAISO intends to implement EDAM in May 2026.

II. SPP Filing

A. SPP's Stated Need for Markets+

7. SPP states that the Western Interconnection faces several challenges that have led to the desire for greater regional coordination and centralized energy market options. SPP explains that the resource mix in the West is rapidly changing, including near-term retirements of thermal-generating assets and the continued integration of variable energy resources. SPP states that, as this resource mix evolves, centralized commitment and dispatch across a broader region will be important for economic transfers of energy and for unlocking the potential load-serving capability of the diverse resource mix. SPP asserts that Markets+ will maximize participating resources' load-serving potential by optimizing the use of transmission capability available for use in Markets+ through flow-based, security constrained economic unit commitment and energy dispatch. SPP states that Markets+ will also support the region's ability to respond to changing system conditions by procuring and pricing dispatch flexibly through short-term and long-term

[6] *Id.* PP 53-56.

[7] *Id.* PP 90-98.

[8] *Cal. Indep. Sys. Operator Corp.*, 185 FERC ¶ 61,210 (2023) (EDAM Order).

[9] *Id.* P 1.

flexibility reserve products designed primarily for offsetting renewable generation's unexpected output changes.[10]

8. Further, SPP states that the Western Electricity Coordinating Council anticipates a load growth increase of 16.8% over the next 10 years due to drivers including data centers and electrification. SPP asserts that Markets+ provides an economic use of transmission and generation to address this growing demand, as well as appropriate price signals for new investments.[11]

9. SPP states that the West has also experienced extreme and volatile weather events and that certain areas in the West have faced supply or demand-side challenges at times when other areas in the West have not faced such conditions. SPP asserts that greater regional coordination and the development of wholesale centrally dispatched power markets will help mitigate these challenges by allowing for the broader regional use of generation and transmission under a centralized market structure.[12]

10. Additionally, SPP states that the West must navigate diverse approaches to greenhouse gas (GHG) initiatives, including GHG pricing, capping mechanisms, and reduction requirements and goals. SPP asserts that Markets+ offers pricing identification for affected regions and future development of tracking and reporting to provide the necessary functionality and flexibility for market participants operating under different GHG regulatory requirements.[13]

11. Finally, SPP states that there is a need for quantifiable value indicators to identify and facilitate transmission system improvement opportunities in the West. SPP explains that Markets+ stakeholders can leverage locational marginal prices (LMP) and the Markets+ co-optimization methodology to evaluate the presence and value of transmission constraints and then identify and demonstrate the value of transmission system expansion opportunities.[14]

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[10] Transmittal at 2.

[11] *Id.* at 2-3.

[12] *Id.* at 3.

[13] *Id.*

[14] *Id.*

B. Markets+ Proposal

12. SPP states that Markets+ is intended to maximize resource and transmission system potential through the establishment of day-ahead and real-time energy markets to meet the challenges faced by the region. SPP emphasizes that Markets+ is a narrowly defined service to be offered by SPP to utilities in the Western Interconnection under a separate, stand-alone Markets+ Tariff. The service will not be provided by SPP in its role as a Regional Transmission Organization (RTO), but rather will be provided separately by SPP as a Market Operator as defined by the North American Electric Reliability Corporation. Likewise, SPP states that while there are similar designs present in the WEIS Market, Markets+ is not an RTO or an extension of the WEIS Tariff. Markets+ is also not proposed to be an extension of SPP's Integrated Marketplace.[15]

13. SPP states that, consistent with the design of its Integrated Marketplace and other Commission-authorized markets, the objective of Markets+ is to determine the least-cost solution, including marginal losses, to meet the market's energy needs and reserve requirements through centralized unit commitment and dispatch. SPP explains that in the day-ahead market, market participants will submit offers to sell and/or bids to purchase energy and offers to sell flexibility reserve products. From these offers and bids, SPP will use simultaneous co-optimization to select the most cost-effective mix of resources to meet the energy and flexibility reserve product needs of the market for the operating day, while enforcing constraints to ensure reliable use of the transmission system. The day-ahead market will produce LMPs for energy and market clearing prices for flexibility reserve products. SPP states that Markets+ will use separate dispatch and pricing runs to accurately reflect the cost of fast-start resources in LMP.[16]

14. According to SPP, flexibility reserve products will comprise short-term flex up, short-term flex down, and mid-term flex up. SPP states that these products are analogous to the ramp capability and uncertainty reserve products in SPP's Integrated Marketplace. Responsibility for operating reserves and contingency reserves will remain with the respective balancing authority operators. SPP states that, as a result, it will not procure or issue deployment instructions for operating reserves but will receive information from Participating Balancing Authorities for ongoing deployments to avoid duplicative instructions from both the centralized unit dispatch and balancing authority actions.[17]

15. SPP states that the day-ahead market will be financially binding. Each market participant whose offer or bid clears the day-ahead market will be financially committed

[15] *Id.* at 2, 5, 7 & n.13.

[16] *Id.* at 16-19.

[17] *Id.* at 12, 17, 20.

to supply or consume electricity the following day in the RTBM. Therefore, the day-ahead market serves as a preliminary process for unit commitment to ensure sufficient resources are committed for use in the RTBM and to provide price assurance prior to real-time.[18]

16. SPP proposes to incorporate a must offer requirement into the day-ahead market, which will require market participants to make capacity available to satisfy the energy and flexibility reserve product needs of the market. The must offer requirement will be based on a market participant's load and reserve obligations, including obligations imposed on those market participants who also participate in WRAP, as described below.[19]

17. Following the day-ahead market, SPP proposes a reliability unit commitment (RUC) process. Resources that were not committed through the day-ahead market can be committed based on updated market participant offers. The RUC considers start-up, no-load, and energy offers in making economic choices for additional capacity to meet system needs.[20]

18. The proposed Markets+ RTBM will operate on a five-minute basis, calculating dispatch instructions for energy and clearing flexibility reserve products on a least-cost, co-optimized basis, and accounting for each resource's marginal system losses, impacts to congestion, and energy costs to minimize the overall production cost. Demand in the RTBM will be derived from a short-term load forecast on a rolling five-minute basis for the next three hours to use as an input to the RTBM and in the short-term 15-minute granularity RUC. In the RTBM, market participants may submit offers to sell energy and provide offline mid-term flex up. These offers can be submitted or adjusted until thirty minutes before the start of the next operating hour.[21]

19. SPP states that Markets+ will have multiple settlement processes that are performed on a five-minute basis. Like in the other markets administered by SPP, energy charges to load and credits to resources will be based on the actual resource output and load consumption in real-time as compared to the day-ahead market's cleared megawatts (MW), all multiplied by the RTBM LMP. Flexibility reserve product settlement will similarly calculate charges and credits by comparing the cleared flexibility reserve product MW in the RTBM to those cleared in the day-ahead market, factoring in the

[18] *Id.* at 17-18.

[19] *Id.* at 19.

[20] *Id.*

[21] *Id.* at 19-20.

relevant clearing prices. SPP states that, as in all markets it administers, the settlement activity will occur directly with the market participant responsible for the resource or load.[22]

20. SPP proposes that import interchange transactions, export interchange transactions, and through interchange transactions will likewise be subject to settlement of market charges on a five-minute granularity. SPP states that this will involve determining charges and credits based on the deviation between the real-time scheduled MW and the day-ahead market cleared MW at the RTBM LMP for the appropriate external interface settlement location.[23]

21. In the event of over-collection of losses, SPP proposes to use a loss adjustment factor similar to that employed in the WEIS Market. SPP will calculate separate loss adjustment factors for the day-ahead market and the RTBM and use those factors to adjust settlements. Marginal losses will still be included in LMP and used for both resource commitment and dispatch. Resources committed by SPP during the RUC that receive revenue less than the minimum costs to operate will receive an incremental payment to recover their start-up offer, no-load offer, and actual incremental energy costs, subject to specific eligibility criteria.[24]

22. SPP states that market participants will be incentivized to comply with dispatch targets, because charges will be imposed on those who fail to deploy energy as instructed. Flexibility reserve product procurement costs and penalty revenues for flexibility reserve product availability failure are collected from market participants on a real-time, load-ratio share basis within each Participating Balancing Authority Area.[25]

23. Finally, SPP states that market participants will be subject to various obligations in order to participate in Markets+. SPP proposes that, prior to participating in Markets+, a market participant must execute a Market Participant Agreement and submit an application to provide services in Markets+. Market participants will also be required to register all load and resources, excluding behind-the-meter generation less than 10 MW. SPP states that, in the event an entity within a Participating Balancing Authority chooses not to register its load or resources, the host Participating Balancing Authority will be responsible for registering those assets. SPP states that market participants will be prohibited from engaging in market manipulation activities and will also be required to,

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[22] *Id.* at 21.

[23] *Id.*

[24] *Id.* at 21-22.

[25] *Id.* at 22.

among other things: (1) follow dispatch targets and commitment instructions; (2) provide load and generation data; (3) submit wind and solar data; and (4) submit outage data to SPP.[26] Additionally, market participants that are load responsible entities will be required to submit attestations as to their participation in WRAP,[27] as discussed further below.[28]

C. Markets+ Implementation and Effective Date

24. SPP states that it anticipates commencing Markets+ operation in the second quarter of 2027 but is submitting this filing three years in advance to ensure adequate time for Commission review and acceptance prior to significant development of the necessary systems, processes, and software to operate Markets+. SPP explains that, additionally, market participants must execute agreements to participate in Markets+, provide funding to SPP to develop operating systems, and create and test their own systems. SPP states that market participants' training and market trials are set to begin during the fourth quarter of 2026. SPP notes that some market participants must also obtain state regulatory approval to participate in Markets+, which will require time for state commissions to examine the final Markets+ design. SPP explains that this implementation timeline will also allow Markets+ Transmission Service Providers (TSP) to amend their respective tariffs or similar agreements, as necessary.[29] SPP and the SPP Market Monitor state that they intend to provide a joint informational progress report every six months to the Commission to update the Commission on the ongoing development of the market during the implementation period.[30]

25. SPP requests an effective date of 12/31/9998 for its eTariff records and states that it will submit a filing with the Commission specifying a precise effective date no later than six months prior to the Markets+ go-live date.[31] Because the expected effective date of the proposed Markets+ Tariff provisions is more than 120 days after the submission of this filing, SPP also requests waiver of the Commission's notice requirements. SPP argues that good cause exists to allow the requested effective date because the process of implementing a market is complex and it will take a substantial amount of time after

[26] *Id.* at 56-57, 87-90.

[27] *Id.* at 57, 90.

[28] *See infra* section IV.B.12.

[29] Transmittal at 6.

[30] SPP October 23 Answer at 17; SPP Market Monitor October 23 Answer at 1.

[31] *Id.* at 7.

Commission acceptance of the proposed Markets+ Tariff to implement the steps necessary to begin providing Markets+ services.[32]

III. Notice of Filing and Responsive Pleadings

26. Notice of SPP's March 29, 2024 filing was published in the *Federal Register*, 89 Fed. Reg. 23593 (Apr. 4, 2024), with interventions and protests due on or before April 19, 2024. Notice of SPP's April 5, 2024 amended filing was published in the *Federal Register*, 89 Fed. Reg. 25621 (Apr. 11, 2024), with interventions and protests due on or before April 26, 2024.[33]

27. Timely motions to intervene were filed by: American Electric Power Service Corporation; Brookfield Renewable Trading and Marketing LP; Evergy Kansas Central, Inc.; Evergy Metro, Inc.; Evergy Missouri West, Inc.; Shell Energy North America (US), L.P.; Public Citizen, Inc.; Calpine Corporation; SunZia Wind PowerCo LLC; Pattern Energy Operations LP (Pattern Energy); AES Clean Energy Development, LLC; Electric Power Supply Association; Basin Electric Power Cooperative; Arizona Electric Power Cooperative, Inc.; Tri-State Generation and Transmission Association, Inc.; National Hydropower Association; Pacific Gas and Electric Company; Western Area Power Administration; Public Utility District No. 2 of Grant County, Washington; Natural Resources Defense Council (NRDC); Sustainable FERC Project; Western Resource Advocates; Financial Marketers Coalition; Public Service Company of New Mexico (PNM); Balancing Authority of Northern California; San Diego Gas & Electric Company; Colorado Springs Utilities; Commissioner Gabriel Aguilera of the New Mexico Public Regulation Commission; California Municipal Utilities Association; CORE Electric Cooperative; Sierra Club; Omaha Public Power District; CAISO; and WPP. Missouri Public Service Commission and Colorado Public Utilities Commission filed notices of intervention.

28. Timely motions to intervene and comments were filed by: Navajo Tribal Utility Authority (NTUA); Salt River Project Agricultural Improvement and Power District (Salt River Project); NV Energy;[34] Clean Energy Associations;[35] Idaho Power Company

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[32] *Id.* at 128.

[33] On April 1 and 8, 2024, the Commission issued errata notices to correct and extend the comment due date to April 29, 2024.

[34] NV Energy is Nevada Power Company and Sierra Pacific Power Company.

[35] Clean Energy Associations are American Clean Power Association, Advanced Power Alliance, Colorado Solar and Storage Association, and Solar Energy Industries Association.

(Idaho Power); Xcel Energy Services Inc. on behalf of Public Service Company of Colorado (PSCo); Tucson Electric Power Company (Tucson Electric); Interwest/NIPPC;[36] Public Power Council; Colorado Office of the Utility Consumer Advocate (Colorado Consumer Advocate); SPP Market Monitoring Unit (SPP Market Monitor); Renewable Northwest; Arizona Public Service Company (APS); Western Power Trading Forum (WPTF); PacifiCorp; Washington Municipals;[37] Google LLC (Google); Markets+ State Committee; Bonneville Power Administration (Bonneville); Portland General Electric Company (Portland General); Clean Energy Buyers Association (CEBA); and Powerex Corp. (Powerex). Commissioner Nick Myers of the Arizona Corporation Commission filed timely comments, and NTUA also timely filed supplemental comments.

29. Timely motions to intervene and protests were filed by: XO Energy, LLC (XO Energy) and Southern California Edison Company (SoCal Edison). Public Interest Organizations (PIO) timely filed a protest.[38]

30. Motions to intervene out of time were filed by: Freeport McMoRan Copper & Gold Energy Services LLC; Black Hills Power, Inc.; Cheyenne Light, Fuel and Power Company; Black Hills Colorado Electric, LLC; Voltus, Inc.; Puget Sound Energy, Inc. (Puget Sound); Guzman Energy LLC; Oklahoma Gas and Electric Company; and Cordelio Services LLC. PNM and Matthew Laudone filed comments out of time.

31. On May 14, 2024, the SPP Market Monitor and Pattern Energy filed answers. On May 20, 2024, WPP, Public Power Council, Bonneville, and Supporting Intervenors[39] filed answers. On May 21, 2024, SPP filed an answer (SPP May 21 Answer). On May 31, 2024, Colorado Consumer Advocate filed an answer. On June 5, 2024, SoCal Edison filed an answer. On June 6, 2024, Joint Responders filed an answer.[40]

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[36] Interwest/NIPPC are Interwest Energy Alliance and the Northwest & Intermountain Power Producers Coalition.

[37] Washington Municipals are Public Utility District No. 1 of Chelan County, Washington; Snohomish County Public Utility District No. 1; and City of Tacoma, Department of Public Utilities.

[38] PIOs are Earthjustice, NRDC, NW Energy Coalition, Sierra Club, Sustainable FERC Project, Western Grid Group, and Western Resource Advocates.

[39] Supporting Intervenors are Salt River Project, Puget Sound, and Powerex.

[40] Joint Responders are Idaho Power, NV Energy, PacifiCorp, and Portland General.

32. On July 31, 2024, Commission staff issued a letter informing SPP that its filing was deficient and requesting additional information (Deficiency Letter). On September 20, 2024, SPP filed a response to the Deficiency Letter in Docket No. ER24-1658-002 (Deficiency Response). Notice of SPP's Deficiency Response was published in the *Federal Register*, 89 Fed. Reg. 79284 (Sep. 27, 2024), with interventions and protests due on or before October 11, 2024. Joint Responders, the SPP Market Monitor, and Hydropower Entities[41] filed comments on SPP's Deficiency Response. On October 23, 2024, SPP filed an answer to the comments on its Deficiency Response (SPP October 23 Answer), and the SPP Market Monitor filed an answer to the SPP October 23 Answer.

IV. Discussion

A. Procedural Matters

33. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2024), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.[42]

34. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d), we grant the late-filed motions to intervene given those entities' interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

35. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2024), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We accept the answers because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

36. As discussed below, we find that SPP's proposed Markets+ Tariff is just and reasonable and not unduly discriminatory or preferential. We agree with SPP and various commenters that Markets+ has the potential to yield a range of benefits to market participants and customers in the Western Interconnection. We find that Markets+ will make more efficient use of the transmission capability and generation resources that

[41] Hydropower Entities are Bonneville; Powerex; Public Utility District No. 1 of Chelan County; Public Utility District No. 2 of Grant County; Public Utility District No. 1 of Snohomish County; and City of Tacoma, Department of Public Utilities, Power Division.

[42] The entities and individuals that filed protests but did not file motions to intervene are not parties to the proceeding. 18 C.F.R. § 385.211(a)(2) (2024).

participate in Markets+. We expect that Markets+ will provide important economic and reliability benefits to market participants, as well as help market participants manage the effects of increasing levels of variable energy resources, load growth, and extreme weather events in the region.

37. We accept SPP's proposed Markets+ Tariff, subject to condition,[43] and direct SPP to submit a compliance filing within 30 days of the date of this order, as discussed below. Further, we direct SPP to submit a joint informational report every six months during the implementation period, as well as every six months for a period of three years after the Markets+ Tariff effective date, as discussed below. We also grant SPP's request for waiver of the Commission's 120-day notice requirement for good cause shown[44] and accept the proposed Markets+ Tariff, with an effective date of 12/31/9998, as requested, subject to SPP making an informational filing notifying the Commission of the actual effective date of the proposed Markets+ Tariff no later than six months prior to the Markets+ go-live date.[45]

38. We limit our discussion and findings below to aspects of SPP's proposal that have been contested by various commenters. We find that the other aspects of SPP's proposal that are not contested and not specifically discussed herein are just and reasonable and not unduly discriminatory and preferential.

1. General Issues

a. Comments and Protests

39. Several commenters offer general support for SPP's filing, asserting that Markets+ will provide significant benefits. Clean Energy Associations, Google, and Commissioner Myers generally argue, for example, that Markets+ will facilitate more efficient and cost-effective use of the region's generation and transmission resources while maintaining reliability.[46] CEBA likewise contends that Markets+ will provide a centralized commitment and dispatch platform that is expected to more efficiently realize the

[43] *See NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114-15 (D.C. Cir. 2017) (discussing the Commission's authority to propose modifications to a utility's FPA section 205 rate proposal).

[44] 18 C.F.R. § 35.3(a)(1) (2024).

[45] SPP should use the eTariff Type of Filing Code: 150 – Data Response/Supplement the Record in making this informational filing.

[46] Clean Energy Associations Comments at 3-4; Google Comments at 3-5; Commissioner Myers Comments at 1.

potential for a rapidly growing fleet of renewable generation to reliably serve load in the West, including during extreme weather events.[47] Powerex argues that Markets+ will yield substantial benefits by replacing the existing bilateral framework with a centralized unit commitment and dispatch of all available resources and using a flow-based transmission model to manage transmission constraints throughout the footprint.[48] Similarly, Google asserts that regional wholesale electricity markets can also lay the groundwork for beneficial holistic regional transmission planning due to their wide geographical coverage and foster transparency through publicly available LMP data for each node.[49]

40. Colorado Consumer Advocate, however, asserts that, despite claims of fostering competition and driving down electricity prices, long-term trends suggest that wholesale electricity prices in regional markets do not consistently translate into savings for consumers. Colorado Consumer Advocate argues that practices such as self-scheduling within RTOs have resulted in significant costs for ratepayers without corresponding benefits. According to Colorado Consumer Advocate, under this "wholesale-retail disconnect," any potential cost savings resulting from utility participation in an RTO or other regional market are often offset by additional cost components encompassed in customers' retail rates, such as transmission costs, distribution costs, capital investments, fixed charges, operation and maintenance costs, taxes, fees, and other charges.[50]

41. NTUA states that it is concerned with the significant costs and operational complexity associated with participating in Markets+. NTUA asserts that implementation of Markets+ will require significant funding for the final development of the operating system and testing of SPP's system. NTUA argues that participating in Markets+ will also require NTUA to monitor ongoing market developments, which will result in significant resource commitments and related costs, and yet SPP's proposal does not include any mechanisms to address the disproportionate burden that participation would impose on smaller utilities. NTUA contends that SPP should implement in Markets+ a mechanism similar to CAISO's metered subsystem to reduce the financial and operational impacts of participating in an organized market.[51]

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[47] CEBA Comments at 3-4.

[48] Powerex Comments at 7.

[49] Google Comments at 6.

[50] Colorado Consumer Advocate Protest at 3.

[51] NTUA Comments at 5-7.

b. Answers

42. SPP responds that Markets+ will provide the benefits of regional centralized energy markets with independent governance and an inclusive stakeholder framework to an area of the country that is predominantly served by bilateral markets. According to SPP, Markets+ will promote the efficient use of the region's diverse energy resources and loads and will maximize the use of transmission capability for the benefit of the region and its customers.[52]

c. Commission Determination

43. We are unpersuaded by Colorado Consumer Advocate's argument that Markets+ will not be sufficiently beneficial and by NTUA's concerns about costs and operational complexity. As discussed further below, we find that SPP has demonstrated that the Markets+ proposal is just and reasonable and not unduly discriminatory or preferential. Entities, and their state regulators if applicable, considering whether to voluntarily participate in Markets+ can determine whether the benefits of membership, compared to the costs thereof, warrant participation in Markets+. Colorado Consumer Advocate has provided no evidence that regional markets result in higher costs to consumers or that costs in regional markets are higher than they would be absent the regional market itself. Further, we find that Colorado Consumer Advocate's arguments about retail rates are beyond the scope of this proceeding, which is to determine the justness and reasonableness of the proposed Markets+ Tariff under FPA section 205. Similarly, regarding NTUA's recommendation, we decline to require SPP to implement a mechanism akin to CAISO's metered sub-system. We do not believe that the lack of a metered sub-system model renders this proposal unjust and unreasonable or unduly preferential or discriminatory. Markets+ is voluntary and should NTUA decide that a metered sub-system model is necessary for its own participation, it can choose not to join.[53]

44. SPP and the SPP Market Monitor offer to file joint informational progress reports every six months to the Commission to provide updates on the ongoing development of

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[52] SPP May 21 Answer at 3.

[53] We note that filing parties need only demonstrate that a proposal is just and reasonable, not that it is the most just and reasonable proposal. *See, e.g.*, *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (stating that a proposal under FPA section 205 "need not be the only reasonable methodology, or even the most accurate"); *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) (finding that the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than alternative rate designs") (*Cities of Bethany*).

the market during the implementation period.[54] We agree that such reports would be useful to assess the progress towards implementation of Markets+. Furthermore, we find that such reports would also be useful to assess the performance of Markets+ once it has gone live. Specifically, they would provide a consolidated source of market information, as well as the SPP Market Monitor's independent view of market performance. Therefore, we direct SPP to submit an informational report every six months during the implementation period, which is between the date of this order and the start of Markets+ operation, as well as every six months for a period of three years after the Markets+ begins full operation, outlining market participation in terms of number of participants and the daily amount of resources offered into and load served by Markets+, transmission availability, modifications to transmission availability through intra-day changes and the opt-out provision, market prices, and other relevant issues.[55]

2. Transmission Availability and Transmission Opt-Out Mechanism

a. SPP's Filing

45. SPP states that because Markets+ is not an RTO, Markets+ TSPs will continue to administer and operate under their respective OATTs or other governing documents. SPP explains that Markets+ TSPs and market participants with transmission capability on non-participating transmission service provider systems will identify what transmission capability is available for use in Markets+, and Markets+ will optimize this flow-based transmission capability. SPP states that Markets+ will respect the transmission rights of non-participating transmission service providers and non-participating transmission customers and that SPP will utilize service flow constraints in its market commitment and dispatch software to prevent Markets+ from infringing on transmission rights not specifically made available to the market.[56]

46. SPP states that because Markets+ will not be operating under a single transmission service provider's OATT like other organized wholesale energy markets, the proposed

[54] SPP October 23 Answer at 17 ("SPP and the Market Monitor intend to provide a biannual joint informational progress report to the Commission to update the Commission on the ongoing development of the market during the implementation period"); SPP Market Monitor October 23 Answer at 1 ("The [SPP Market Monitor] will participate in the proposed joint informational progress report as recommended in SPP's Answer").

[55] These informational filings will not be noticed for comment or require Commission action.

[56] Transmittal at 9.

Markets+ Tariff includes provisions to enable the identification and use of available transmission capability in the day-ahead market and RTBM. SPP avers that Markets+ will enhance the use of Markets+ TSPs' facilities by optimizing the use of flow-based transmission capability communicated by market participants and Markets+ TSPs.[57] SPP explains that by allowing the use of the flow-based capability, SPP will optimize the use of the transmission system, while respecting the rights of any transmission customer with transmission rights that are not available for use in Markets+.[58]

47. SPP states that the Markets+ Tariff defines two sources of transmission for use in Markets+. SPP explains that the first source is from Markets+ TSPs who have signed a Markets+ TSP Agreement.[59] SPP states that this agreement obligates Markets+ TSPs to follow the Markets+ Tariff, which requires Markets+ TSPs to contribute their flow-based transmission capability less that which is not available to Markets+. SPP explains that examples of transmission capability that would not be available to Markets+ are the (1) transmission service rights of entities on a Markets+ TSP's host balancing authority area who have pseudo-tied out of Markets+, (2) transmission capability of a non-participating transmission service provider within a Participating Balancing Authority, or (3) transmission rights of transmission customers who are not participating in Markets+. SPP explains that this approach to manage transmission availability for the market is similar to that used in the WEIS Market.[60]

48. SPP states that the second source of transmission capability is from Markets+ Transmission Contributors. SPP explains that Markets+ Transmission Contributors are market participants who contribute their transmission rights on the system of a transmission service provider that is not participating in Markets+.[61]

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[57] *Id.* at 22; *see* SPP, Proposed Markets+ Tariff, pt. I, § 1.M (Definitions) (0.0.0) (defining Markets+ TSP); *id.*, attach. D, § 1 (0.0.0), § 1.0 (General).

[58] Transmittal at 22; *see* SPP, Proposed Markets+ Tariff, attach. A, § 8.2 (Market Operator Obligation to Coordinate Market Flows and Impacts to Non-Participating Transmission Systems and Balancing Authorities) (0.0.0).

[59] Transmittal at 23; *see* SPP, Proposed Markets+ Tariff, attach. M (Form of Agreement for Transmission Service Provider in Markets+) (0.0.0).

[60] Transmittal at 23.

[61] *Id.*; *see* SPP, Proposed Markets+ Tariff, pt. I, § 1.M (Definitions) (0.0.0) (defining Markets+ Transmission Contributor). We address Markets+ Transmission Contributors further below in section IV.B.4.

49. SPP states that Markets+ TSPs, Markets+ Transmission Contributors, and Participating Balancing Authorities will all be obligated to communicate operational transmission capability information to SPP. SPP states that it will respect the underlying transmission rights and transmission service priorities communicated to it, including the rights and priorities of Markets+ TSPs' customers who are not market participants.[62]

50. SPP explains that market participants and Markets+ TSPs that have made transmission capability available to Markets+ will have the flexibility to adjust that transmission capability. SPP states that while Markets+ will be able to incorporate new transmission capability quickly, consistent with operational feasibility, Markets+ will limit market participants' ability to reduce the availability of that transmission capability to no more frequently than once per month.[63] SPP explains that this limitation reflects a balance of interests between flexibility and avoiding the potential for strategic removal of transmission in an attempt to exercise transmission market power.

51. As an example, SPP states that if transmission rights can be used by Markets+ only seasonally because they are committed elsewhere, these rights can be taken in and out of Markets+ when they are available, allowing them to benefit Markets+.[64]

52. SPP explains that the ability of market participants to opt out previously contributed transmission capability to exercise market power is mitigated by three features of Markets+. First, SPP states that Attachment D, section 1.2 of the Markets+ Tariff limits opt-outs to no more than once a month and requires notification of any opt-out no later than 15 days prior to the start of the upcoming calendar month.[65] SPP argues that this limits the ability to take advantage of system conditions such as outages. Second, SPP explains that section 4.5 of Attachment C of the Markets+ Tariff states that the SPP Market Monitor will monitor for the exercise of transmission market power.[66]

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[62] Transmittal at 23; *see* SPP, Proposed Markets+ Tariff, attach. A, § 8.2 (Market Operator Obligation to Coordinate Market Flows and Impacts to Non-Participating Transmission Systems and Balancing Authorities) (0.0.0); *id*. § 8.3 (Obligation to Communicate Transmission Capability) (0.0.0).

[63] Transmittal at 23; *see* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.2 (Obligation to Communicate Markets+ Transmission Capacity Availability Changes).

[64] Transmittal at 23.

[65] *Id.* at 24; *see* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.2 (Obligation to Communicate Markets+ Transmission Capacity Availability Changes).

[66] Transmittal at 24; *see* SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), § 4.5 (Monitoring for Potential Transmission Market Power Activities).

Third, SPP states that Markets+ aligns the month-long opt-out time periods with the month-long verification period for receiving congestion rent allocations,[67] so the withholding of transmission rights will be less likely to be economically rational as the withholding entity will lose a potential revenue stream from any congestion along the paths of the transmission rights withheld from Markets+.[68]

b. Comments and Protests

53. Powerex and CEBA provide comments in support of SPP's proposed approach to Markets+ transmission availability.[69] Powerex states that the Markets+ approach is designed to maximize the OATT transmission capability that will be available to support market transactions and that the transmission assets of every participating Markets+ TSP are opted in unless a specific transmission transfer quantity is explicitly removed for specific circumstances on a month-ahead basis. Powerex asserts that Markets+ allows the use of additional connectivity by using firm OATT rights contributed by market participants on non-participating transmission systems.[70] CEBA explains that it supports SPP's proposal that transmission must be available to Markets+ before it will be used in dispatch, that market participants will have the flexibility to adjust their transmission capability, and that participating generation will not be required to purchase transmission service for transactions within the Markets+ footprint, which will make it easier to transact in the market.[71]

54. Similarly, WPTF and Interwest/NIPPC provide comments in support of the proposed transmission opt-out provision.[72] WPTF argues that transmission opt-outs are important for transmission customers seeking to use their transmission rights to deliver their output (and other attributes) from a Participating Balancing Authority to a non-market participant or to an entity that is participating in a different market, such as

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[67] SPP proposes to distribute congestion rents made available for use in Markets+ for a full month or longer. *See* SPP, Proposed Markets+ Tariff, pt. I, § 1.C Definitions (0.0.0) (defining Congestion Rent Eligible Transmission Service Reservation); *id.*, attach. A, § 7.16 (Congestion Rent Eligible Transmission Service Reservation Verification) (0.0.0).

[68] Transmittal at 24.

[69] Powerex Comments at 14-16; CEBA Comments at 5-6.

[70] Powerex Comments at 14-15.

[71] CEBA Comments at 5-6.

[72] WPTF Comments at 6-8; Interwest/NIPPC Comments at 3-6.

CAISO's EDAM. WPTF asserts that transmission opt-outs may also help facilitate pseudo-ties between different markets and between Markets+ and a non-market participant.[73] Interwest/NIPPC likewise contend that pseudo-ties require transmission opt-outs and that pseudo-ties are of critical importance throughout Markets+ because independent balancing authority areas remain intact.[74]

55. Further, according to WPTF, the transmission opt-out provision provides certainty to transmission customers that they will be able to continue using their transmission rights as they do today while also providing necessary safeguards to prevent opt-outs from being used as a tool to inappropriately influence market outcomes. WPTF notes, however, that if the Commission accepts the Markets+ Tariff, then individual Markets+ TSPs will need to file amendments to their OATTs to facilitate their participation in Markets+, given that the proposed market structure will include overlapping tariffs (i.e., SPP's Markets+ Tariff and Markets+ TSPs' OATTs) within the Markets+ footprint. WPTF and Interwest/NIPPC urge the Commission to carefully review these future proposals for potential inconsistencies between Markets+ TSPs' proposed OATT modifications and the Markets+ Tariff, such as limitations on the use of opt-outs.[75]

56. Some commenters raise concerns about SPP's proposed transmission availability and opt-out provisions. Interwest/NIPPC, for instance, contend that the Markets+ Tariff may be incomplete as it relates to transmission service capability, which may require undue reliance upon the Markets+ Protocols. Interwest/NIPPC assert that, if the Markets+ Tariff is deemed incomplete, the Commission should require SPP to revise the Markets+ Tariff or supplement it in a compliance filing.[76]

57. Further, PNM states that SPP's filing devotes little attention to how existing transmission rights will be treated by the market. According to PNM, SPP seems to suggest that the Markets+ Tariff will respect existing long-term firm point-to-point transmission rights and will not compel customers holding such rights to contribute those rights to the market. PNM asserts that the Markets+ Tariff, however, does not, but should, explicitly say that the participation of a transmission service provider in Markets+ does not mean that a long-term firm point-to-point transmission customer needs to make

[73] WPTF Comments at 7.

[74] Interwest/NIPCC Comments at 4.

[75] WPTF Comments at 7-8; Interwest/NIPPC Comments at 4-5.

[76] Interwest/NIPPC Comments at 6.

its transmission rights on that Markets+ TSP's system available to Markets+ or that the Markets+ TSP can do so over the objection of the customer.[77]

58. Other commenters express concern about how the transmission opt-out provision will affect the market.[78] Specifically, the Markets+ State Committee states that some of its members have strong concerns about the lack of guardrails around the transmission opt-out provision and its potential implications for the exercise of market power, particularly given the market participants' ability to opt out transmission capability monthly with only 15 days' notice. The Markets+ State Committee notes that the Markets+ footprint will likely include participation by Markets+ TSPs or transmission rights holders that may be pivotal transmission suppliers during certain market intervals or seasons. The Markets+ State Committee argues that while opting out may be appropriate for approved reasons, it is critical to specify those reasons in the Markets+ Tariff to safeguard against potential market manipulation and to align with WRAP, which itself relies on the availability of sufficient transmission capability. The Markets+ State Committee asserts that the Markets+ Tariff's permissive opt-out approach without limitation appears to allow an entity to opt out transmission to improve the market position of its resources, without regard for impacts on customers. The Markets+ State Committee states that it is uncertain whether the bid mitigation approach and congestion design sufficiently protects customers from unnecessarily high prices with the proposed transmission availability approach.[79]

59. The SPP Market Monitor similarly states that it is concerned about the opt-out provision because it allows transmission to be removed from the market without regard to economics or reliability but with an impact on both. The SPP Market Monitor asserts that if the transmission opt-out is allowed, market participants should be required to communicate all opt-out periods for the entire year, and no more than once per year, before the beginning of the year with enough lead time to inform all downstream processes. The SPP Market Monitor argues that drastic changes to available transmission could create a constantly changing congestion rents model and could even be used to isolate resources to create a local monopoly or make other resources unavailable. The SPP Market Monitor states that, as an extreme example, all transmission could be opted out of Markets+ under the proposed tariff language. The SPP Market Monitor states that monthly transmission opt-outs could also conflict with the requirements for the aggregated resource modelling process, as it may cause aggregated assets to be no longer

[77] PNM Comments at 3-4.

[78] *See* Markets+ State Committee Comments at 5-6; SPP Market Monitor April 29 Comments at 47-50.

[79] Markets+ State Committee Comments at 5-6.

electrically similar, disqualifying them from aggregating. The SPP Market Monitor argues that these assets would need to be re-registered as separate resources, but the 15-day opt-out requirement would likely not allow enough time for such re-registration.[80]

60. The SPP Market Monitor argues that the opt-out provisions may also confuse expectations around physical withholding of transmission capability. As the SPP Market Monitor reads the Markets+ Tariff, transmission opt-outs do not qualify as an exemption from transmission physical withholding, because the Markets+ Tariff provides that physical withholding includes making transmission capability unavailable. The SPP Market Monitor states that physical withholding exemptions are listed in Attachment C, section 4.6.4(2) of the proposed Markets+ Tariff and that this appropriately does not include transmission opt-outs. The SPP Market Monitor also recommends including more detail in the Markets+ Tariff about transmission opt-outs. Specifically, the SPP Market Monitor asserts that any deadlines or conditions around opting transmission out of or into the market should be included in the Markets+ Tariff.[81]

c. Answers

61. SPP states that one of the key principles underlying its approach to Markets+ has been that SPP will not act as a transmission service provider and instead will collaborate with existing transmission service providers and balancing authorities, working with and within the confines of their OATTs or equivalent governing documents. SPP further explains that these Markets+ TSPs, through their Participating Balancing Authorities, will communicate to SPP the transmission capability that is available to be optimized by Markets+ and that capability will be expressed in SPP's system through service flow constraints. SPP asserts that, with respect to transmission rights that are not on a Markets+ TSP's system, the owner of the transmission rights on that system may contribute its rights for use in Markets+.[82]

62. In response to PNM, SPP confirms that it will not impair or modify the existing rights of transmission customers on Markets+ TSPs' systems. According to SPP, Markets+ TSPs and Participating Balancing Authorities will communicate the rights available for Markets+ to optimize via service flow constraint values, which can be

[80] SPP Market Monitor April 29 Comments at 47-49.

[81] *Id.* at 49-50.

[82] SPP May 21 Answer at 7.

updated frequently to accommodate the requirements of the Markets+ TSPs' and Participating Balancing Authorities' OATTs and governing documents.[83]

63. In response to the SPP Market Monitor's recommendation that opt-outs be limited to once per year, SPP argues that, in the EDAM Order, the Commission found concerns about opportunities to withhold transmission or strategically deploy transmission rights within EDAM to be speculative. SPP asserts that, consistent with the EDAM Order, the SPP Market Monitor will look for inappropriate withholding and take appropriate action.[84]

64. In response to concerns about the transmission opt-out provision, WPP acknowledges that implementation of the opt-out process through multiple OATTs introduces the risk of inconsistent and potentially conflicting procedures amongst Markets+ TSPs. WPP argues, however, that this risk may be addressed by section 1.3 of Attachment D of the Markets+ Tariff, which provides that a Markets+ TSP agrees to "provide comparable service that it is capable of providing to all Markets+ Transmission Users on similar terms and conditions over facilities used for the transmission of electric energy in interstate commerce owned, controlled, or operated by Markets+ [TSPs]."[85] WPP states that it expects Markets+ TSPs will coordinate their OATT revision process to accommodate Markets+ in a consistent manner.[86]

65. Pattern Energy further argues that, for point-to-point transmission service, it should be the customer's choice whether to exercise its right under the opt-out provision to not participate in Markets+. Pattern Energy argues that point-to-point transmission customers have static rights to schedule up to a set maximum amount of energy 8,760 hours of the year and may redirect, resell, and assign all or a portion of those rights, consistent with their transmission service provider's OATT. Pattern Energy contends that the terms and conditions of the Markets+ Tariff, the associated protocols, and the subsequent Markets+ TSPs' associated OATT changes should not unduly complicate or undermine those long-term contractual arrangements. Pattern Energy argues that the Commission should acknowledge the importance of having both the Markets+ Tariff and the implementing OATT changes be drafted and applied consistently so that point-to-

[83] *Id.* at 17.

[84] *Id.* at 17 (citing EDAM Order, 185 FERC ¶ 61,210 at P 317).

[85] WPP Answer at 9 (quoting SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.3 (Conditions Precedent for Receiving Markets+ Transmission Capability)).

[86] *Id.*

point transmission customers are afforded access to these energy markets on a comparable and just and reasonable basis.[87]

d. Deficiency Letter, Deficiency Response, and Answers

66. In the Deficiency Letter, Commission staff requested further explanation of the type of transmission that will be available for use in Markets+, including the process by which that transmission will be made available.

67. In response, SPP states that the term "unused physical capability" in the Markets+ Tariff includes both unscheduled transmission capability for transmission reservations available for Markets+ use and capability for which there is no network, firm, or non-firm point-to-point transmission service reservations. SPP explains that the transmission available for Markets+ will still be subject to the terms and conditions of existing contracts and governing documents. SPP states that, in addition, firm transmission rights that are otherwise unavailable in Markets+ and are unscheduled may be made available for use in Markets+ if communicated to SPP as available by Markets+ TSPs.[88]

68. SPP states that it is unable to provide an exhaustive list of the types of transmission that will be unavailable for use in Markets+ because the Markets+ TSPs, in accordance with their respective OATTs, will determine the transmission that is available for Markets+. SPP explains, for example, that transmission may be unavailable due to reliability needs, congestion management, changes in scheduling outside of Markets+, and short-term sales of transmission rights.[89]

69. According to SPP, Markets+ TSPs will communicate the transmission capability that is unavailable to Markets+ during registration and then through an "ongoing updating process."[90] Specifically, SPP explains that, as part of the registration process, Markets+ TSPs will communicate the facilities and capabilities that will be available and unavailable for Markets+ use upon initial entry into the market. SPP states that this data will be updated monthly as necessary.[91]

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[87] Pattern Energy Answer at 5-7.

[88] Deficiency Response at 3.

[89] *Id.*

[90] *Id.*

[91] *Id.* at 3-4.

70. SPP explains that Markets+ TSPs will communicate any changes to this transmission availability to Participating Balancing Authorities, who will then communicate this information to Markets+ to reflect that limitation on a continuous basis. SPP states that, for changes to be reflected in the day-ahead market, this information must be communicated prior to the close of the day-ahead market, and for changes to be reflected in the RTBM, the information must be communicated before the next dispatch interval.[92]

71. SPP states that the Markets+ Tariff does not obligate network and firm point-to-point transmission customers within the Markets+ footprint who are not market participants to schedule their generation, demand, and transmission use through Markets+. SPP explains that the Markets+ Tariff requires all load and generation in the Markets+ footprint to be registered but provides that the Participating Balancing Authority must register the resource and load of any entity within the Participating Balancing Authority Area that declines to participate in Markets+. SPP states that although this requirement gives Markets+ visibility of all resources and load in its footprint, it does not require the resource or load to participate in the market or interfere with non-participating entities' ability to continue to schedule their transmission and generation to serve their load through the Participating Balancing Authority.[93]

72. In response to the Deficiency Letter's question regarding whether all unscheduled transmission capability on a Markets+ TSP's system will be made available to Markets+ by default, SPP states that Markets+ TSPs will communicate to SPP via the Participating Balancing Authorities the amount of, and terms by which, unscheduled transmission capability will be made available to Markets+. SPP reiterates that the transmission capability communicated by Markets+ TSPs will be based on the respective rights and obligations of the Markets+ TSP and the transmission customer that owns the transmission rights.[94]

73. In the Deficiency Letter, Commission staff also requested further explanation of the process for opting out transmission capability from Markets+, including how that transmission capability is made available again for use in Markets+.

74. In response, SPP states that if a Markets+ TSP submitted a Transmission Capacity Opt-Out on its system, but the transmission rights are not scheduled for the transmission customer's use elsewhere, the Markets+ TSP can make the associated capability available for Markets+ use based on the specifics of the Markets+ TSP's governing agreements and

[92] *Id.* at 4-5.

[93] *Id.* at 5.

[94] *Id.*

documents. SPP explains that Markets+ TSPs will make that capability available by communicating to SPP through the Participating Balancing Authority. SPP adds that, through the application of service flow constraints, Markets+ will use only the transmission capability that has been communicated as available for Markets+ in its optimization.[95]

75. SPP further states that, for transmission customers of a Markets+ TSP, the transmission customer will communicate Transmission Capacity Opt-Outs to the appropriate Participating Balancing Authority in coordination with the Markets+ TSP and SPP. SPP explains that it must be notified of the Transmission Capacity Opt-Out no later than 15 days prior to the start of the upcoming calendar month in which the opt-out will begin.[96]

76. Similarly, SPP explains that, for a Markets+ Transmission Contributor, transmission capability rights on a non-participating transmission provider's system that were previously contributed to Markets+ may be designated as unavailable no later than 15 days prior to the start of the calendar month in which the opt-out will begin. According to SPP, the Markets+ Transmission Contributor will communicate this designation to the source and sink Participating Balancing Authorities, who in turn will communicate it to SPP. SPP states that it will then reflect this limitation in the associated service flow constraint.[97]

77. SPP asserts that, for both Markets+ TSPs' systems and non-participating transmission service providers' systems, a Transmission Capacity Opt-Out must be for the entirety of one or more calendar months. SPP states that the opted-out transmission capability may then be made available again to Markets+ by modifying the Transmission Capacity Opt-Out. SPP states that, to do so, the market participant must notify SPP at least 15 days before the calendar month in which the transmission capability will be made available that the capability will no longer be opted out. SPP states that section 1.2 of Attachment D in the Markets+ Tariff describes the duration and timing requirements for Transmission Capacity Opt-Outs.[98]

78. SPP also clarifies that Transmission Capacity Opt-Outs are not exempt from physical withholding restrictions. SPP states that section 4.6.4(2) in Attachment C of the Markets+ Tariff sets forth a complete list of conduct that will be deemed to *not* be

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[95] *Id.* at 6.

[96] *Id.* at 7.

[97] *Id.*

[98] *Id.* at 7-8.

physical withholding and that other conduct, including opt-outs, *could* constitute physical withholding.[99]

79. In the Deficiency Letter, Commission staff asked SPP to explain whether Markets+ will accommodate firm point-to-point transmission customers' intra-day transmission schedule changes and how Markets+ will respond if the Markets+ day-ahead optimization is no longer feasible as a result of accommodating the point-to-point transmission schedules. In response, SPP states that Markets+ will respect the transmission service scheduling changes pursuant to the applicable OATT and governing documents, including firm point-to-point transmission service intra-day schedule changes.[100]

80. In its comments on the Deficiency Response, the SPP Market Monitor argues that SPP should clarify any timelines and conditions associated with increasing transmission capability sub-monthly. The SPP Market Monitor notes that, in its Deficiency Response, SPP states that "the facilities and capabilities that will be available and unavailable for Markets+ use" is submitted in registration and "is updated monthly as necessary."[101] The SPP Market Monitor notes that SPP's Transmission Capability Protocols include a provision stating that a transmission customer that has additional MW capability on an already registered opted-in path may increase their contributed amount before the close of the Day-Ahead Market. The SPP Market Monitor asserts that the Markets+ Tariff does not include that language, that making transmission capability available is as important as making it unavailable, and that the terms and conditions thereof should thus be included in the Markets+ Tariff.[102]

81. In response to the SPP Market Monitor's October 10 Comments, SPP asserts that the Protocols provision cited by the SPP Market Monitor describes an implementation detail clearly contemplated by the Markets+ Tariff.[103] SPP asserts that the only other limitation to adding transmission capability currently intended for the Protocols is the timeline relating to registration of new transmission. SPP asserts that modeling

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[99] *Id.* at 8.

[100] *Id.* at 11.

[101] SPP Market Monitor October 10 Comments at 6 (quoting Deficiency Response at 4).

[102] *Id.* at 6-7.

[103] SPP October 23 Answer at 15-16 (citing SPP, Proposed Markets+ Tariff, attach. D § 1 (0.0.0), § 1.0 (General)).

implementation timelines are implementation details that are not rates, terms, or conditions, and thus do not need to be in the Markets+ Tariff.[104]

e. Commission Determination

82. As discussed further below, we find that SPP's proposed Markets+ transmission availability framework and the proposed transmission opt-out mechanism are just and reasonable and not unduly discriminatory or preferential. We accept SPP's proposed Markets+ transmission availability framework and transmission opt-out mechanism, subject to the condition that SPP submit a compliance filing to revise the proposed Markets+ Tariff language to clarify "unused physical capability" and duration of transmission opt-outs as well as opt-ins, as discussed further below.

83. As noted above, under the proposed framework, Markets+ TSPs and Markets+ Transmission Contributors will identify and communicate to SPP the transmission capability that is available for use in Markets+, and by default, all Markets+ TSPs' transmission capabilities will be available for use in Markets+. We find that this proposal is just and reasonable and not unduly discriminatory or preferential because it will allow Markets+ to optimize the transmission capability that is intended to be used in serving load that are participants of Markets+. In addition, it will allow SPP to optimize such flow-based transmission capability while respecting the transmission rights of entities who have not made their transmission rights available to the market, including non-participating transmission service providers and non-participating transmission customers. SPP's proposal will achieve this through use of service flow constraints in its market commitment and dispatch software, which will prevent Markets+ from infringing on transmission rights not specifically made available for use in the market.

84. While we accept SPP's proposed framework, we find that the Markets+ Tariff is insufficiently clear about the requirements for transmission availability from Markets+ TSPs. SPP defines the required transmission availability in the Markets+ Tariff as "otherwise unused physical capability."[105] In its Deficiency Response, SPP clarifies that such available transmission capability includes, at minimum, "unscheduled transmission capability for transmission reservations available for Markets+ use and capability for which there is no network, firm, or non-firm point-to-point transmission service reservations."[106] Accordingly, we direct SPP, in a compliance filing due within 30 days

[104] *Id.* at 16.

[105] *See* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.1 (Limited Markets+ Transmission Service Provider Responsibilities).

[106] Deficiency Response at 3 (citing SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.1 (Limited Markets+ Transmission Service Provider Responsibilities)).

from the date of this order, to revise section 1.1 of Attachment D to include the explanation from its Deficiency Response that the phrase "otherwise unused physical capability" includes, at minimum, "unscheduled transmission capability for transmission reservations available for Markets+ use and capability for which there is no network, firm, or non-firm point-to-point transmission service reservations."

85. We also find that the proposed transmission opt-out mechanism's limits on the ability of market participants to reduce transmission capability available to the market are just and reasonable. Specifically, as discussed below, transmission opt-outs must be submitted at least 15 days before the month in which the opt-out will be, an opt-out may be updated no more than once per month, and the minimum duration of an opt-out is one calendar month.[107] We also understand that the ability of Markets+ TSPs to opt-out capacity is limited by the tariff requirements that Markets+ TSPs make "otherwise unused physical capability" available to Markets+. We agree with SPP that the proposed opt-out provision strikes a reasonable balance, affording market participants flexibility to adjust the transmission capability made available to Markets+ consistent with their continued role as transmission providers responsible for operating the transmission systems in their footprints under their respective, Commission-approved OATTs while mitigating the potential for strategic withholding of transmission capability from Markets+.

86. Regarding PNM's concerns about whether a non-participating transmission customer with long-term firm point-to-point transmission rights on a Markets+ TSP's system will be required to make its transmission rights available to the market, we find that SPP has confirmed that the Markets+ Tariff will not impair or modify the existing rights of transmission customers on Markets+ TSPs' systems.[108] Moreover, as discussed in more detail below, prospective Markets+ TSPs will be required to propose implementing revisions to their OATTs outlining the types of transmission that will be made available to Markets+.

87. With regard to the concerns raised by the SPP Market Monitor and the Markets+ State Committee on the opt-out provision creating opportunities to exercise market power, we find the Markets+ Tariff requirements, in combination with requirements to offer transmission on a non-firm basis and reporting requirements discussed below, are expected to mitigate these concerns. As SPP explains, transmission opt-outs must be submitted at least 15 days before the month in which the opt-out will begin, an opt-out may be updated no more than once per month, and the minimum duration of an opt-out is

[107] *See* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.2 (Obligation to Communicate Markets+ Transmission Capacity Availability Changes).

[108] SPP May 21 Answer at 17.

one calendar month. We understand that for Markets+ TSPs, opt-outs must also comport with transmission availability requirements under the Commission's open access requirements that any unused transmission capability must be made available on a transmission provider's OASIS for non-firm use by other transmission customers.[109] We find that the proposed limitations of the opt-out—in conjunction with the opt-out time period aligning with the congestion rent verification period, and the SPP Market Monitor's authority to monitor for the exercise of transmission market power under section 4.5 of Attachment C of the Markets+ Tariff—will reasonably mitigate market participants' ability to use the opt-out provision to strategically withhold transmission capability. Further, we note that a prospective Markets+ TSP will need to propose OATT revisions that include any additional clarifications and requirements for utilizing transmission opt-outs that would affect firm and non-firm transmission capacity, to the extent that the OATT enables or mandates the availability of non-firm capacity for use in Markets+, which will be reviewed by the Commission to ensure they are consistent with or superior to the *pro forma* OATT.[110]

88. To provide clarity, transparency, and oversight of the implementation of the opt-out and intraday schedule changes, we direct SPP to provide reporting to the Commission on a six-month basis for three years as part of the joint informational report discussed previously. This reporting should include the daily quantity of capacity opted-out per transmission facility, any (if available) rationale provided by the market participant for opting-out the capacity, the type of capacity that has been opted-out (i.e., firm or non-firm), and when the capacity is opted back in for each Markets+ TSP and Market+

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[109] *See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Servs. by Pub. Utils.; Recovery of Stranded Costs by Pub. Utils. & Transmitting Utils.*, Order No. 888, FERC Stats. & Regs. ¶ 31,036, at 31,693 (1996) (cross-referenced at 75 FERC ¶ 61,080), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (cross-referenced at 78 FERC ¶ 61,220), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Pol'y Study Grp. v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. N.Y. v. FERC*, 535 U.S. 1 (2002); *Preventing Undue Discrimination & Preference in Transmission Serv.*, Order No. 890, 118 FERC ¶ 61,119, at P 389, *order on reh'g*, Order No. 890-A, 127 FERC 61,297 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009); *pro forma* OATT §§ 4, 14.2.

[110] In Order No. 890, the Commission allowed transmission providers to propose non-rate terms and conditions that differ from those in Order No. 890 if those provisions are consistent with or superior to the *pro forma* OATT. *See* Order No. 890, 118 FERC ¶ 61,119 at P 135.

Transmission Contributor. Similarly, SPP should report to the Commission the quantity of capacity removed or added to Markets+ on an intraday basis, any (if available) rationale provided for modifying the capacity, and the type of capacity that has been modified in the intraday timeframe. Such report shall include all transmission capabilities relevant to Markets+, including those offered by Markets+ Transmission Contributors.

89. We find the SPP Market Monitor's concern that the opt-out provision could isolate or otherwise significantly change the Markets+ TSP transmission system availability on a month-to-month basis to be speculative at this time. The fact that the opt-out process must occur 15 days prior to each operating month is expected to mitigate the concern for transmission capacity that opt-out of Markets+.

90. We agree with Pattern Energy on the importance of both the Markets+ Tariff and the implementing OATT changes to be drafted and applied consistently across the Markets+ such that point-to-point transmission customers are afforded access to these energy markets on a comparable and just and reasonable basis.[111] However, we also agree with WPP that concerns regarding the risk of inconsistent implementation of the opt-out process across multiple OATTs are mitigated by the Markets+ Tariff's requirement that "[a] Markets+ [TSP] agrees to provide comparable service that it is capable of providing to all Markets+ Transmission Users on similar terms and conditions over facilities used for the transmission of electric energy in interstate commerce owned, controlled, or operated by Markets+ [TSPs]."[112] Thus, we anticipate that Markets+ use of transmission capability will be consistently applied across Markets+ TSPs' OATTs. The Commission will evaluate any proposed revisions to these entities' OATTs implementing Markets+ participation and will determine if any variations among such implementation proposals are just and reasonable and not unduly discriminatory or preferential at that time.[113]

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[111] Pattern Energy Answer at 5-7.

[112] WPP Answer at 9; SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.3 (Conditions Precedent for Receiving Markets+ Transmission Capability).

[113] This is analogous to the Commission's approach in the EDAM Order. *See* EDAM Order, 185 FERC ¶ 61,210 at P 320 ("We are not persuaded that EDAM implementation will be inconsistent across EDAM Entities' and EDAM transmission service providers' OATTs. The Commission will evaluate any proposed revisions to these entities' OATTs implementing EDAM participation and will determine if any variations among such implementation proposals are just and reasonable and not unduly discriminatory or preferential at that time.").

91. With regard to Markets+ Transmission Contributors' role in making their transmission available for use in Markets+, we note that Markets+ rules must not be applied in an unduly discriminatory or preferential manner. Any concerns regarding unduly discriminatory or preferential behavior in the provision of transmission capacity to Markets+ may be raised with the SPP Market Monitor or the Commission.

92. With regard to the SPP Market Monitor's concern about whether transmission opt-outs will be exempt from the prohibition on physical withholding, SPP has clarified that the Markets+ Tariff includes the complete list of activities that would not be considered withholding and that transmission opt-outs are not among them.[114] Further, we find that the SPP Market Monitor will have sufficient authority under the Markets+ Tariff to monitor transmission opt-outs and refer manipulative behavior to the Commission's Office of Enforcement and/or recommending the SPP make responsive changes to the Markets+ Tariff.[115] SPP also proposes that the market monitor specifically review and analyze data and information related to the availability of transmission facilities that impact access to services in Markets+ and refer any instances of suspected exercise of transmission market power to the Commission.[116]

93. We agree with the SPP Market Monitor that the language in section 1.2 of Attachment D of the Markets+ Tariff regarding the duration of transmission opt-outs is ambiguous,[117] as it is unclear whether the final clause in that provision relates to how updates are communicated or whether it relates to the duration of the opt-outs.[118]

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[114] Deficiency Response at 8 (citing SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), § 4.6.4(2)).

[115] *See* SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), §§ 4.2 (Market Monitoring Scope), 4.5 (Monitoring for Potential Transmission Market Power Activities), 4.6.4 (Physical Withholding). SPP proposes that a transmission facility would fail the withholding screen if the reason for a transmission derate cannot be verified, a transmission facility is operated in a way that is not economic and that causes a binding transmission constraint, binding Reserve Zone, binding Local Reliability Issue, or Emergency Condition, or if the market monitor identifies a pattern of scheduling outages resulting in increased market costs. *See id.* § 4.6.4.2 (Thresholds for Screening of Potential Physical Withholding of Transmission Facilities).

[116] *Id.* § 4.5 (Monitoring for Potential Transmission Market Power Activities).

[117] SPP Market Monitor April 29 Comments at 49.

[118] *See* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.2 ("Market Participants may update Opt-Outs no more than once per month, with notification no later than fifteen (15) days prior to the start of the upcoming calendar month for which a Markets+ Transmission Capacity Opt-Out will begin, and for the entirety of the one or

Specifically, the Markets+ Tariff states "Market Participants may update Opt-Outs no more than once per month, with notification no later than fifteen (15) days prior to the start of the upcoming calendar month for which a Markets+ Transmission Capacity Opt-Out will begin, and for the entirety of the one or more calendar months." In its Deficiency Response, SPP clarifies that the final clause refers to the minimum duration of transmission opt-outs. Accordingly, we direct SPP, in a compliance filing due within 30 days from the date of this order, to revise section 1.2 of Attachment D consistent with SPP's explanation in its Deficiency Response.

94. With respect to the SPP Market Monitor's argument that the Markets+ Tariff should include more information regarding how transmission opt-ins are communicated, we agree that transmission opt-in is just as important as opt-out provisions. The Markets+ Tariff provides that "[b]y the close of the Day-Ahead Market, Markets+ [TSPs] and Markets+ Transmission Contributors will communicate pursuant to the Markets+ Protocols, operational transmission capability information to the Market Operator."[119] We find that this tariff provision provides sufficient information about the timing of and responsibility for communicating operational transmission capability, as they relate to opt-in transmission capabilities, including when certain capabilities had been opted out 15 days prior to the month. We find this aspect of the proposal just and reasonable. However, we will rely on the reports provided by SPP every six months during implementation and in the first three years of Markets+ to monitor the activities of Markets+ TSPs and Markets+ Transmission Contributors. We find that specific provisions describing how such transmission capability is opted into the market are implementation details and can be contained in the Markets+ Protocols.

95. We note that SPP's proposal leaves certain aspects regarding transmission service to be specified in the Markets+ TSPs' OATTs.[120] Accordingly, Markets+ TSPs will

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more calendar months.").

[119] SPP October 23 Answer at 15 (citing SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.0 (General)).

[120] *See, e.g.*, Transmittal at 24 ("Markets+ [TSPs] will continue to administer and operate under their respective OATTs or other governing document, and Market Participants will continue to follow arrangements specified in those respective OATTs or other governing documents."); Deficiency Response at 3 ("Markets+ TSPs, *in accordance with their OATTs*, will determine the transmission that is available to Markets+.") (emphasis added); *id.* at 6 ("If a Markets+ TSP submitted a Transmission Capacity Opt-Out on its system in Markets+, but the transmission rights are not scheduled for the transmission customer's use elsewhere, the Markets+ TSP can make the associated capacity available for Markets+ use *based on the specifics of the Markets+*

need to propose revisions to their OATTs prior to joining Markets+ in order to conform to the proposed transmission framework, discussed further below. In accepting SPP's proposal, we are not pre-judging prospective Markets+ TSPs' future filings to revise their OATTs. Filing parties will be required to demonstrate that their implementing revisions are consistent with or superior to the *pro forma* OATT.[121] However, we provide the following guidance on the OATT revisions we expect to see in Markets+ TSPs' implementation filings based on what we are able to anticipate at this time.[122]

96. As an initial matter, we expect Markets+ TSPs to include in their future implementation filings any operational and procedural OATT revisions needed to effectuate Markets+ participation, including provisions that clearly identify which transmission capability will be made available for use in Markets+ and the timeline that such transmission capabilities will be made available or unavailable. Further, we again emphasize that a Markets+ TSP's proposed implementation revisions must be consistent with or superior to the *pro forma* OATT's requirements, including the *pro forma* OATT's obligation that transmission service providers offer for sale, reserved, but otherwise unscheduled, transmission capability on a non-firm basis.[123] Order No. 888 included this requirement to mitigate the potential harm of transmission hoarding.[124]

97. Next, we expect prospective Markets+ TSPs to specify in their proposed OATT revisions whether market participants that make their transmission capability available for use in Markets+ retain the right to make subsequent scheduling changes to engage in

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TSP's governing agreements and documents.") (emphasis added).

[121] This is analogous to the approach the Commission approved in the EDAM Order. EDAM Order, 185 FERC ¶ 61,210 at P 308.

[122] This section only addresses guidance relating to transmission availability and the transmission opt-out mechanism. Guidance on other topics is discussed below.

[123] *See pro forma* OATT § 14.2 ("Non-Firm Point-To-Point Transmission Service shall be available from transfer capability in excess of that needed for reliable service to Native Load Customers, Network Customers and other Transmission Customers taking Long-Term and Short-Term Firm Point-To-Point Transmission Service.").

[124] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,693 ("[T]he possibility that a customer will reserve capacity and then hold it without using or reassigning it is mitigated because the utility is free to schedule and sell any unscheduled firm point-to-point transmission capacity on a non-firm basis to any entity eligible to receive such service under the utility's tariff."); *see also* Order No. 890, 118 FERC ¶ 61,119 at P 811 (noting that "unscheduled firm capacity is available on a non-firm basis to other customers and, thus, there is little practical possibility of hoarding").

out-of-market transactions and, if so, the terms and conditions for doing so. Further, we expect Markets+ TSPs to propose OATT revisions such that firm transmission customers that do not make transmission capability available to Markets+ can continue to make intra-day schedule changes using their reserved transmission capability in a manner consistent with or superior to the *pro forma* OATT.[125]

98. Finally, we also expect prospective Markets+ TSPs to include in their OATTs the terms, conditions, and any additional limitations with respect to the use of the Markets+ transmission opt-out provision that the Markets+ TSP may wish to include, recognizing that such terms should be consistent with Markets+ Tariff's requirement that "unused physical capability" be made available to Markets+ and the clarification to those terms directed in this order. We expect that these OATT revisions will clarify whether and how reserved, but otherwise unscheduled, transmission capability that has been opted out will be made available for Markets+ optimization.

3. Transmission Use and Accommodating WRAP Transactions

a. SPP's Filing

99. SPP states that Markets+ TSPs will continue to administer and operate under their respective OATTs or other governing documents, and that market participants will continue to follow arrangements specified in those respective OATTs or other governing documents. SPP explains that Markets+ will not utilize transmission rights of entities that have not authorized such use or reprioritize respective OATT rights. SPP states that firm, short-term firm, and non-firm transmission services will continue to be priced according to the processes and tariffs of each Markets+ TSP. SPP argues that, consequently, Markets+ will optimize energy flow using a combination of firm and non-firm services made available by Markets+ TSPs and market participants.[126]

100. SPP explains that all market participants who contribute transmission for Markets+ optimization will do so without an incremental charge for the use of the transmission and that they will keep their own transmission rights and continue to be subject to the existing duties and obligations under the relevant OATTs (or their equivalents). SPP avers that, as such, no market participant will make any separate payment for these transmission rights.[127]

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[125] *See pro forma* OATT § 13.8 (Scheduling of Firm Point-to-Point Transmission Service).

[126] Transmittal at 24.

[127] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.3 (Conditions

101. SPP states that it anticipates that Markets+ TSPs will largely continue to manage their systems as before, with limited changes to accommodate the scheduling of flows using the available transmission capability for Markets+. SPP explains that Markets+ TSPs will pause processing transmission service requests for the upcoming operating day between the time the day-ahead market closes and when day-ahead energy schedules are sent by SPP.[128] SPP avers that if the transmission system experiences significant outages or transmission capability is otherwise not available, the applicable reliability coordinator(s), balancing authority, and transmission operators will maintain reliability.[129]

102. SPP states that Markets+ TSPs and SPP will collaborate with neighboring non-participating transmission service providers to address any congestion management issues, while respecting the priority of transmission services. SPP explains that Markets+ does not modify or usurp the transmission service priorities of transmission service reservations scheduled by customers.[130]

b. Comments and Protests

103. NV Energy argues that the Markets+ Tariff is unclear as to the entity—either the point-to-point transmission customer or the transmission service provider—that can establish a service flow constraint and "carve out" transmission capability from the market. NV Energy contends that SPP should clarify the operation of the service flow constraint.[131]

104. Powerex asserts that the Markets+ flow-based modeling approach allows for close monitoring of power flows on individual transmission elements under the actual circumstances of a particular dispatch interval. Powerex argues that this approach is a major improvement over transmission limits applied under the *status quo* contract-path framework, which are generally set at a conservative level and then fixed ahead of each

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Precedent for Receiving Markets+ Transmission Capability).

[128] Transmittal at 24-25; *see* SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), §§ 1.0 (General), 1.5 (Obligation to Pause Queue Processing).

[129] Transmittal at 25.

[130] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. A. § 8.2 (Market Operator Obligation to Coordinate Market Flows and Impacts to Non-Participating Transmission Systems and Balancing Authorities) (0.0.0); *id.*, attach. D, § 1 (0.0.0), § 1.1 (Limited Markets+ Transmission Service Provider Responsibilities).

[131] NV Energy Comments at 5-6.

operating hour. Powerex argues that eliminating contract-path scheduling limits and relying instead on flow-based modeling will safely and immediately increase the transfers on the existing transmission infrastructure, without incurring costs that would otherwise be necessary to physically upgrade the system. According to Powerex, this will yield both reliability and economic benefits.[132]

105. PacifiCorp states that it is concerned with SPP's use of a security constrained economic unit commitment and energy dispatch model that relies on an Available Flowgate Capability method of calculating Available Transfer Capability (ATC) in Markets+ because, with few exceptions, transmission providers in the Western Interconnection, including PacifiCorp, have historically developed and documented their ATC using the NERC Reliability MOD-029 rated system path methodology.[133]

106. NV Energy and PacifiCorp contend that SPP should confirm that the Markets+ Tariff maintains the ability of Markets+ TSPs to provide support to WRAP wheel-out and wheel-through transactions on a firm basis, even if the need arises after the close of the day-ahead market run.[134] Similarly, PacifiCorp contends that SPP should clarify that Markets+ will give transmission scheduling priority to wheel-through and export transactions to facilitate participation in WRAP.[135]

c. Answers

107. SPP states that, as it will not have functional control over transmission in Markets+, SPP will receive and adjust service flow constraints in the Markets+ unit commitment and energy dispatch model based on information it receives from participating balancing authorities, Markets+ TSPs, and Markets+ Transmission Contributors. SPP asserts that service flow constraints reflect the available capability of a transmission element, and not the lack thereof.[136]

108. SPP argues that not all transmission capabilities available for Markets+ use will be available for economic dispatch, as some market participants will self-schedule generation within Markets+ to reflect the desire to follow out-of-market schedules or obligations. SPP explains that the transmission supporting this self-scheduled generation

[132] Powerex Comments at 10-12.

[133] PacifiCorp Comments at 3-4.

[134] NV Energy Comments at 7; PacifiCorp Comments at 8.

[135] PacifiCorp Comments at 7.

[136] SPP May 21 Answer at 9.

will be communicated to SPP via the Markets+ TSP and Participating Balancing Authority for use in setting the service flow constraint limits for Markets+. Similarly, SPP states that if transmission capability that was once available for Markets+ use is opted out, it will become unavailable, lowering the service flow constraint and reflecting its unavailability to Markets+.[137]

109. In response to NV Energy, SPP states that, in situations where entities with firm point-to-point transmission rights on a participating transmission system may be wheeling through a Participating Balancing Authority or have pseudo-tie out arrangements, the entity can elect to opt out of Markets+, and the Markets+ TSP and Participating Balancing Authority will communicate the effect of that opt-out via a service flow constraint, which SPP will then use to constrain market commitment and dispatch. SPP asserts that, as it is receiving this information and using it to set service flow constraints, there is no need for further approvals by the Markets+ TSP. SPP also notes that, throughout this process, the parties must follow the relevant rules of the Markets+ Tariff and of the Markets+ TSPs and Participating Balancing Authority, as established in their OATTs or equivalent governing documents.[138]

110. In response to NV Energy's question about whether only transmission service providers can determine the need for a service flow constraint, SPP explains that it will use information from Markets+ TSPs, Participating Balancing Authority, and Markets+ Transmission Contributors to set service flow constraints. SPP asserts that, with regard to Markets+ Transmission Contributors, SPP may not have a contractual relationship or seams agreement with the transmission service provider or balancing authority that administers those rights. However, SPP explains that it will have a relationship with Markets+ TSPs and Participating Balancing Authority who would be receiving interchange or other schedules associated with the Markets+ Transmission Contributor's service, consistent with the business practices and rules of the non-participating entities. SPP asserts that it will work with the Markets+ Transmission Contributor, as well as the Markets+ TSPs and Participating Balancing Authority affected by the use of that service, to understand the limits of the transmission rights contributed to Markets+. SPP states that once it knows which entities have contributed transmission rights on non-participating systems, SPP will work to improve information sharing and coordination with these non-participating systems.[139]

111. SPP also states that, contrary to PacifiCorp's assertions, the Markets+ Tariff will not force changes on the operations of non-participating transmission service providers'

[137] *Id.* at 10.

[138] *Id.* at 11.

[139] *Id.* at 12.

systems. SPP states that, in the absence of other coordination, SPP will facilitate Markets+ Transmission Contributors' scheduling of their power consistent with the governing OATT, and non-participating transmission service providers will still manage their system for reliability. SPP explains that if a Markets+ Transmission Contributor's schedule across a non-participating system is cut, Markets+ will alter unit commitment and dispatch through the RUC and the RTBM to reflect the curtailment. Additionally, SPP states that the Markets+ market clearing processes do not impact transmission scheduling priority and that the transmission scheduling priority of wheel-through and export transactions is based on the transmission service priority of the transmission service sold by transmission service providers supporting the wheel-through and export transactions. SPP states that changing the transmission service priority of WRAP exports and wheel-throughs of Markets+, or any service being optimized by Markets+, would be inappropriate because SPP is not functioning as a transmission service provider in Markets+.[140]

112. Supporting Intervenors assert that the clarifications requested by various commenters arise from the potential misunderstanding of the Markets+ Tariff, namely, that transmission contributions by Markets+ Transmission Contributors would result in transmission customers with contract-path transmission rights on non-participating transmission service providers' systems somehow being able to use those transmission rights as flow-based rights (instead of contract-path rights) for Markets+ deliveries. Supporting Intervenors explain that this potential misunderstanding may be based on a reading of Markets+ Tariff language, which states that "Markets+ will economically dispatch Energy across the Markets+ Footprint *using Markets+ Transmission Contributors' and Markets+ Transmission Service Providers' flow-based transmission capability* less any capacity not available for market use."[141]

113. Supporting Intervenors assert that, as they understand it, the flow-based treatment of transmission capability under the Markets+ Tariff applies solely to the second part of the above phrase and that the transmission capability associated with Markets+ Transmission Contributors will be utilized in the Markets+ solution as *contract-path* delivery schedules, consistent with the applicable transmission service agreement and OATT. Supporting Intervenors suggest that, to remedy this misunderstanding, the Commission's order on the Markets+ Tariff should state that Markets+ intends to use

[140] *Id.* at 14-15.

[141] Supporting Intervenors Answer at 4 (quoting SPP, Proposed Markets+ Tariff, attach. D § 1 (0.0.0), § 1.0 (General) (emphasis added)).

Markets+ Transmission Contributors' transmission capability as a contract-path delivery schedule, not as flow-based usage.[142]

114. Bonneville asserts that, contrary to PacifiCorp's claims, there is nothing in the Markets+ proposal that suggests transmission donated by a Markets+ Transmission Contributor could impact the non-participating transmission service provider's ATC calculation. Bonneville asserts that the transmission rights that a Markets+ Transmission Contributor would donate on a non-participating system would be consistent with the transmission rights that are held by the Markets+ Transmission Contributor and should have already been accounted for in the ATC calculation.[143]

115. WPP supports the comments of several WRAP participants that desire additional clarification to ensure that the Markets+ Tariff maintains the ability of Markets+ TSPs to provide support to WRAP wheel-out and wheel-through transactions on a firm basis, even if the need arises after the close of the day-ahead market run. WPP recognizes that WRAP's ability to interact and operate in parallel with Markets+ and other emerging markets in the West is critical for WRAP to run successfully and to deliver its value proposition. WPP notes that SPP states in its transmittal that Markets+ does not modify or usurp the transmission service priorities of transmission service reservations scheduled by customers. In WPP's view, this statement provides the requested clarification. WPP states, however, that it would appreciate confirmation of its understanding to address the requests for clarification from some of WRAP's participants.[144] Similarly, Pattern Energy asserts that point-to-point transmission customers scheduling energy out of and through day-ahead market footprints to provide resource adequacy to WRAP participants must have a comparable ability to make intra-day changes and thus need access to their full reservation of transmission capacity rights. Pattern Energy agrees that SPP should confirm that the Markets+ Tariff will maintain the ability of Markets+ TSPs to support WRAP wheel-out and wheel-through transactions.[145]

d. Deficiency Letter, Deficiency Response, and Answers

116. In the Deficiency Letter, Commission staff requested further explanation of transmission priorities and intra-day transmission schedule changes in Markets+ and how Markets+ will treat WRAP-related transactions' associated transmission priorities.

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[142] *Id.* at 4-5.

[143] Bonneville Answer at 12-13.

[144] WPP Answer at 7-9 (citing Transmittal at 25).

[145] Pattern Energy at 7.

117. With respect to transmission service priorities, SPP states that Markets+ will not change the transmission priorities for the underlying rights that are used in Markets+. SPP states that Markets+ transfers do not supersede or diminish the transmission service priority of any transmission service. SPP explains, for example, that if Markets+ dispatches using a market participant's firm transmission service, the priority of that market transfer will be firm and communicated to the applicable Participating Balancing Authority and Markets+ TSP. SPP states that if a particular constraint cannot be managed by Markets+ dispatch, the applicable reliability entities will initiate e-Tag curtailment or congestion management procedures pursuant to the applicable OATT and governing documents, similar to that entity's processes today. SPP adds that, importantly, if a non-participating entity uses firm transmission service to support a transfer of power and Markets+ transfers are using the firm service of a participating Markets+ entity, both transfers will have equivalent priority in transmission service based on the applicable OATTs.[146]

118. Further, SPP states that Markets+ will use the transmission capability and transmission service priorities communicated to Markets+ and, with this information, will respect the transmission service scheduling changes pursuant to the applicable OATT and governing documents, including firm point-to-point transmission service intra-day schedule changes. SPP explains that if any schedule changes affect the feasibility of the constraints within the Markets+ footprint, Markets+ will incrementally commit and redispatch generation as necessary through the Simultaneous Co-optimization Methodology (SCOM).[147]

119. Additionally, with respect to WRAP-related transactions, SPP states that WRAP transactions must follow the scheduling requirements, which include transmission reservations, of the governing balancing authorities and transmission service providers. SPP explains that Markets+ does not evaluate or determine transmission service priority in the SCOM or change the transmission service priority of transmission service. The Markets+ Tariff does not include a provision allowing SPP to override or usurp the transmission service prioritization in the operations of any transmission service provider or balancing authority to favor WRAP transactions specifically.[148]

e. Commission Determination

120. We find that SPP's proposed Markets+ Tariff is just and reasonable and not unduly discriminatory or preferential with regards to the use of transmission in Markets+

[146] Deficiency Response at 11.

[147] *Id.*

[148] *Id.* at 12-13.

and its ability to accommodate WRAP transactions. As SPP noted in its Deficiency Response, because Markets+ TSPs will retain control of their transmission systems, Markets+ will utilize transmission in a manner consistent with each Markets+ TSP's OATT. As explained above, the Commission will evaluate each prospective Markets+ TSP's OATT revisions, and it will be incumbent on the prospective Markets+ TSP to demonstrate that those proposed implementing revisions are consistent with or superior to the *pro forma* OATT.

121. Consistent with the proposed transmission availability and opt-out framework, we expect each prospective Markets+ TSP to propose revisions to its OATT that will specify how Markets+ will use its transmission system. We expect such OATT revisions to include provisions describing the priority or priorities Markets+ transfers will receive, how they will be tagged through the e-Tag system, and how each Markets+ TSP will determine curtailment priorities given that Markets+ transfers will likely be utilizing a mixture of firm and non-firm transmission capability. We further expect each prospective Markets+ TSP will explain how its OATT is interoperable with WRAP, including whether, and if so, how opted-in transmission capability can be used to satisfy a market participant's obligation under WRAP to sell surplus energy to a deficient WRAP participant in an operating day. Such explanations should address whether, and if so, how, opted-out transmission capability 15 days prior to each month could be used in Markets+.

122. With regard to PacifiCorp's concern that it is unclear how SPP is proposing to use flowgate modeling for Markets+ in cases where the Markets+ TSP models their transmission using ATC, we find that the explanation in SPP's answer adequately addresses these concerns. Specifically, SPP clarifies that it is not proposing to change underlying ATC calculations on non-participating systems, but rather proposes to use the transmission capability communicated to it by Markets+ TSPs and Markets+ Transmission Contributors to create the service flow constraints used in the Markets+ optimization. Similarly, with respect to NV Energy's concern about use of service flow constraints, we find that SPP has adequately clarified that the Markets+ TSP and Participating Balancing Authority will communicate the effect of a transmission opt-out to SPP through service flow constraints. As discussed above, SPP proposes to use service flow constraints in its market commitment and dispatch, and it would avoid infringing on transmission rights that have not been made available to the market. We find this approach to be just and reasonable.

4. Markets+ Transmission Contributors

a. SPP's Filing

123. As noted above, SPP states that the second source of transmission capability will come from Markets+ Transmission Contributors, which are market participants who

contribute their transmission rights on the system of a transmission service provider that is not participating in Markets+.[149] SPP states that Markets+ Transmission Contributors, like Markets+ TSPs and Participating Balancing Authority Areas, will have obligations to communicate operational transmission capability information to SPP.[150]

b. Comments and Protests

124. NV Energy, Idaho Power, and Portland General assert that SPP should clarify that the Markets+ Transmission Contributor can only offer transmission capability to Markets+ if consistent with the Markets+ Transmission Contributor's rights under its transmission service agreement with the non-participating transmission service provider and the non-participating transmission service provider's OATT.[151] NV Energy argues that a network service customer or a point-to-point transmission service customer taking service under a Commission-approved OATT of a balancing authority participating in EDAM would need to respect the rights and obligations established by that external balancing authority's OATT. NV Energy argues that there cannot be two separate markets utilizing the same transmission capability. NV Energy asserts that, as market operators, neither CAISO nor SPP are Eligible Customers as defined in NV Energy's OATT and therefore cannot be assigned point-to-point transmission rights.[152] NV Energy avers that unscheduled transmission rights do not rest with the transmission customer but revert back to the transmission service provider.[153]

125. Further, NV Energy and Idaho Power assert that network service customers, in particular, can use their transmission service to only serve their load, and not for engaging in or facilitating external sales.[154] NV Energy contends that network service

[149] Transmittal at 23; *see* SPP, Proposed Markets+ Tariff, pt. I, § 1.M (Definitions) (0.0.0) (defining Markets+ Transmission Contributor).

[150] Transmittal at 23; *see* SPP, Proposed Markets+ Tariff, attach. A, § 8.3 (Obligation to Communicate Transmission Capability) (0.0.0).

[151] NV Energy Comments at 4-5; Idaho Power Comments at 2-4; Portland General Comments at 3-4.

[152] NV Energy Comments at 4-5 (citing Nevada Power Company, OATT, pt. 1, § 1 (0.5.0), § 1.14 (Eligible Customer)).

[153] *Id.* at 5 (citing Nevada Power Company, OATT, attach. C (Methodology to Assess Available Transfer Capability) (0.2.0), § 7.1 (Components)).

[154] *Id.* (citing Nevada Power Company, OATT, pt. III (Network Resources), § 30 (0.1.0), § 30.4 (Operation of Network Resources)); Idaho Power Comments at 3 (citing Idaho Power, IPCo eTariff, pt. III (Network Integration Transmission Service), § 28

customers' redispatch obligations also must be consistent with the transmission service provider's market participation.[155] NV Energy and Idaho Power therefore argue that network service customers on a non-participating transmission service provider's system will not be eligible to contribute their network service to Markets+.[156]

126. Idaho Power argues that SPP should also clarify how SPP will implement a flow-based market across balancing authority areas that do not grant transmission on a flow-based calculation and, specifically, how SPP will ensure that flow using the transmission rights contributed to Markets+ by a Markets+ Transmission Contributor will not exceed the rights granted. Idaho Power also requests that the Commission direct SPP to include in the Markets+ Tariff or the Markets+ Protocols a requirement that the non-participating transmission service provider must approve a Markets+ Transmission Contributor's contribution before those transmission rights are used in Markets+.[157]

127. PacifiCorp argues that the Markets+ Transmission Contributor option treats similarly situated transmission service providers and transmission customers differently. PacifiCorp contends that the Markets+ TSP option excludes transmission capability of a non-participating transmission service provider within a Participating Balancing Authority but the Markets+ Transmission Contributor option purportedly allows transmission customers on non-participating systems to contribute their transmission rights to the market. PacifiCorp argues that SPP does not explain how transmission customers would be entitled to make such decisions on behalf of transmission service providers, much less how it would be just and reasonable to prohibit contributions of non-participating capability inside a Markets+ balancing authority area while, presumably, permitting such contributions if the capability were outside a Markets+ balancing authority area.[158]

128. PacifiCorp also argues that the Markets+ Transmission Contributor option could adversely impact system operations and reliability. According to PacifiCorp, allowing individual transmission customers to potentially offer transmission rights to different day-ahead market offerings, such as EDAM or Markets+, is uneconomic and inefficient.

(Nature of Network Integration Transmission Service) (3.0.0), § 28.6 (Restrictions on Use of Service)).

[155] NV Energy Comments at 5 (citing Nevada Power Company, OATT, pt. III, (Network Resources), § 30 (0.1.0), § 30.5 (Network Customer Redispatch Obligation)).

[156] *Id.*; Idaho Power Comments at 3.

[157] Idaho Power Comments at 3-4.

[158] PacifiCorp Comments at 4-5.

PacifiCorp asserts that such capability contributions could undermine EDAM operations to the extent such capability is assumed to already be available to EDAM by virtue of the relevant balancing authority area's participation in EDAM. PacifiCorp argues that facilitating day-ahead market participation at the balancing authority area level as in the case of EDAM, or at least at the transmission operator level, is most appropriate and efficient, as balancing authorities and transmission operators are ultimately responsible for day-to-day system operations and ensuring reliability, absent a centralized transmission provider. PacifiCorp argues that transmission service providers who are not participating in Markets+ may face difficulties in managing transmission capability contributed to Markets+ by Markets+ Transmission Contributors.[159]

129. Additionally, PacifiCorp argues that it is unclear how transmission contributions from a transmission system utilizing a rated path ATC calculation methodology could be integrated into SPP's flow-based security constrained economic unit commitment and energy dispatch system. PacifiCorp states that it opposes any interpretation of the Markets+ Transmission Contributor option in a manner that would allow transmission customers to unilaterally revise how ATC is calculated for their own transmission rights in violation of NERC reliability standards, which require transmission operators, rather than individual transmission customers, to determine their preferred ATC calculation. PacifiCorp also argues that the Markets+ Transmission Contributor option could ultimately complicate or frustrate efforts by a non-participating transmission service provider to join EDAM, as such contributions could not only raise potential operational and reliability concerns, but also introduce unnecessary market inefficiencies and seams concerns.[160]

130. Portland General states that because it needs to ensure that its transmission customers are not exceeding its schedules or dynamic transfer capability awards, a Markets+ Transmission Contributor would need to limit dynamic dispatch to the specific dynamic dispatch rights granted to the Markets+ Transmission Contributor and to maintain those dispatches within specified limits. Portland General argues that SPP should thus clarify whether the dynamic allocation granted to Markets+ Transmission Contributors will be respected.[161]

c. Answers

131. SPP affirms that Markets+ does not change the terms of non-participating transmission service providers' OATTs. SPP asserts that the Markets+ Tariff will not

[159] *Id.* at 5-6.

[160] *Id.* at 6-7.

[161] Portland General Comments at 3-4.

force changes in the operations of non-participating transmission service providers' systems and that, in the absence of other coordination, SPP will facilitate a Markets+ Transmission Contributor's schedule into the market consistent with the non-participating transmission service provider's governing OATT, and non-participating transmission service providers will still have the ability to manage their system for reliability.[162] SPP explains that if a Markets+ Transmission Contributor's schedules across a non-participating transmission service provider's system are cut, Markets+ will alter unit commitment and dispatch within the Markets+ footprint to reflect that curtailment.[163]

132. Supporting Intervenors and Bonneville similarly contend that the Markets+ Transmission Contributor model respects and preserves OATT rights on non-participating transmission systems. Supporting Intervenors and Bonneville assert that nothing in the Markets+ Tariff changes or interferes with the rights and responsibilities of the transmission customer or transmission service provider.[164] Supporting Intervenors assert that once Markets+ is operational, a transmission customer will be able to use its OATT rights to deliver energy from one location in the Markets+ footprint to a different location in the Markets+ footprint, using the same OATT scheduling conventions that exist today. According to Supporting Intervenors, the transmission contract path used for such deliveries and the maximum quantity able to be delivered will not be altered by the existence of Markets+. Supporting Intervenors assert that the purpose of the Markets+ Transmission Contributor framework is only to make the quantities of those transfers more efficient by allowing SPP, for each interval, to timely inform the Markets+ Transmission Contributor of the most efficient energy quantity to schedule using its OATT rights on the non-participating transmission service provider's system.[165]

133. Joint Responders state that there seems to be consensus among SPP and the supporting parties that transmission rights over a non-participating system may only be used by Markets+ in accordance with the applicable transmission service provider's OATT. Joint Responders assert that the consensus clarification that underlying OATTs govern the use of transmission rights for purposes of participating in neighboring markets addresses and resolves the immediate issue before the Commission in this proceeding.[166] Nevertheless, Joint Responders argue that SPP should clarify that it agrees with the

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[162] SPP May 21 Answer at 8 (citing SPP, Proposed Markets+ Tariff, attach. D, § 1 (0.0.0), § 1.0 (Genera)l).

[163] *Id.*

[164] Supporting Intervenors Answer at 5-6; Bonneville Answer at 6.

[165] Supporting Intervenors Answer at 6-9.

[166] Joint Responders Answer at 2-3.

statements of Supporting Intervenors that: (1) contract-path transmission rights contributed to Markets+ on a non-participating transmission service provider will not be considered or used as flow-based in Markets+; and (2) Markets+ communication of an optimized schedule to a Markets+ Transmission Contributor will respect the contract limits of the available contributed transmission capability. Joint Responders assert that the Markets+ Tariff, which appears to permit transmission customers with contract-path transmission rights on external transmission service providers' systems to use those transmission rights as flow-based rights (instead of contract-path rights) for Markets + deliveries, could be misunderstood and cause confusion.[167]

134. With respect to Idaho Power's argument that a Markets+ Transmission Contributor should be required to obtain approval from the non-participating transmission service provider before contributing transmission to Markets+, SPP responds that dictating the manner in which a Markets+ Transmission Contributor interacts with its transmission service provider is beyond the scope of the Markets+ Tariff and better addressed in the individual transmission service provider's OATT or other governing documents. SPP argues, moreover, that with no restrictions, such a limitation would be unjust and unreasonable because it would give a non-participating transmission service provider an unrestricted veto on Markets+ transmission contributions and potentially interfere with the transmission rights for which the customer negotiated and paid.[168]

135. Supporting Intervenors likewise assert that that such a requirement is unnecessary because the Markets+ Transmission Contributor must still adhere to all requirements of the non-participating transmission service provider's OATT and related service agreements. Supporting Intervenors also argue that such an approval requirement, which is not found in CAISO's Western Energy Imbalance Market (WEIM) or EDAM tariff provisions, could constitute a new restriction on how OATT transmission rights are used or otherwise open the door to undue discrimination.[169] Similarly, Bonneville argues that the Commission must reject Idaho Power's argument that a non-participating transmission service provider must approve a Markets+ Transmission Contributor's contribution, because it would create unlawful barriers to competition, unilaterally degrade transmission contract holder rights, and result in unjust and unreasonable outcomes. Bonneville argues that allowing a transmission service provider to deny transmission customers the ability to use their transmission contract rights in Markets+ would be unjust and unreasonable because it presumes that reasonable solutions to seams could not be developed and would permit the transmission service provider to constrain

[167] *Id.* at 3-4.

[168] SPP May 21 Answer at 17-18.

[169] Supporting Intervenors Answer at 11.

and degrade existing transmission rights to its benefit by requiring the use of that transmission only in its preferred market.[170]

136. Responding to Idaho Power's and NV Energy's arguments regarding the limitations associated with network service, Supporting Intervenors and Bonneville recognize that generally such service may not be used for the purpose of enabling a simultaneous off-system sale.[171] Bonneville argues that if the terms of service for network service customers do not allow for the use of such transmission, then a prospective Markets+ Transmission Contributor should not be allowed to donate that transmission to Markets+. Bonneville argues that while it agrees with Idaho Power's interpretation of network service rights as they pertain to firm service, secondary network service rights of network service customers may be used to deliver alternative generation to network service loads and further discussion is needed to determine whether these rights can be donated if the load is participating in the market. Bonneville argues that forcing a transmission customer to use its transmission rights for the benefit of another market, especially the market that an affiliated merchant benefits from, is precisely the type of undue discrimination that is prohibited under the Commission's open access policies.[172]

137. Similarly, Pattern Energy states that the selection made by a particular transmission service provider should not foreclose the ability of its transmission customer to make its own choice and select a day-ahead market other than the market selected by its transmission service provider. Pattern Energy acknowledges that network service customers seeking to contribute their rights as Markets+ Transmission Contributors to the Market+ day-ahead market may present operational challenges that deserve further clarification in the SPP filing. Pattern Energy asserts, however, that there are important distinctions between network service and point-to-point transmission service. Pattern Energy states that, under the *pro forma* OATT, the point-to-point transmission customer has certain rights to use its point-to-point service flexibly, such as the ability to partially

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[170] Bonneville Answer at 7-8.

[171] Supporting Intervenors Answer at 10-11; Bonneville Answer at 6.

[172] Bonneville Answer at 6. Joint Responders note that Bonneville's argument that a market participant should be able to donate secondary network service rights over a non-participating transmission service provider's system is outside the scope of this proceeding but raises significant concerns. Joint Responders argue that the use of secondary network service in the manner Bonneville proposes would entail an examination of specific facts, circumstances, and contracts unique to the specific parties and, therefore, is an issue that is best addressed if or when it emerges. Joint Responders Answer at 4.

or temporarily assign the contracted service to another eligible entity and to redirect service, on a firm or non-firm basis, by changing the point of receipt and point of delivery. Pattern Energy asserts that, in contrast, there are different forecasting, scheduling, and settlement timing requirements for network service transmission customers and long-standing restrictions on the ability of the network service customer to use its transmission rights to engage in transactions other than balancing generation and load. Pattern Energy thus argues that many of the concerns raised by NV Energy and PacifiCorp regarding the Markets+ Transmission Contributor proposal are not applicable to point-to-point transmission service. Pattern Energy asserts that, with respect to the physical impacts of the service flow constraints, for example, point-to-point transmission customers opting out of Markets+ pursuant to the opt-out provision does not raise the same concerns with the flow-based transmission capability as network service customers, because transmission service providers participating in the day-ahead market will not be utilizing the same flow-based capabilities.[173]

138. With respect to NV Energy's argument about unscheduled rights reverting to the transmission service provider, Supporting Intervenors state that they agree with NV Energy that a transmission service provider is generally able to make available unscheduled firm point-to-point capability for other uses, but that the capability of unscheduled firm point-to-point rights can be offered only as lower-priority service. Supporting Intervenors assert that, under the Commission's *pro forma* OATT, firm point-to-point transmission customers retain the priority of their rights, including the right to adjust schedules intra-day, and that the transmission service provider's use of a transmission customer's unscheduled firm point-to-point rights for other purposes is subordinate to the customer's use of its rights to effectuate deliveries in Markets+.[174]

139. In response to PacifiCorp's protest, SPP and Bonneville assert that Markets+ does not treat similarly situated transmission providers and customers differently.[175] SPP explains that the transmission capability of non-participating transmission service providers is not available to Markets+ unless an entity that owns the transmission rights makes them available to Markets+, regardless of whether the entity is in a Participating Balancing Authority or not. Further, SPP asserts that CAISO's OATT for EDAM does not allow transmission service providers or balancing authorities to take transmission rights away from their customers by "assuming" that they are available to the EDAM market, and doing so would be unjust and unreasonable. SPP asserts that transmission

[173] Pattern Energy Answer at 3-5.

[174] Supporting Intervenors Answer at 11-12.

[175] SPP May 21 Answer at 13; Bonneville Answer at 10.

customers should be free to use their purchased rights consistent with the manner of their choosing and the terms of the governing OATT or its equivalent.[176]

140. Similarly, Bonneville notes that there is nothing in the Markets+ Tariff that would prevent a transmission service provider located inside a Participating Balancing Authority Area from donating its transmission to Markets+. Bonneville further argues that PacifiCorp cannot abrogate existing transmission rights by simply joining EDAM. Bonneville asserts that the Markets+ proposal specifically allows transmission customers with rights on participating transmission systems to opt out their transmission rights from the market. Bonneville explains that, while EDAM does not have similar tariff language, CAISO recognized the concept of opting out transmission capability in the EDAM filing and left the details for how transmission is opted out for the participating transmission service providers to determine.[177]

141. Public Power Council likewise argues that PacifiCorp's suggestion—that transmission service providers should be able to determine the counterparties with which a transmission customer can enter a commercial arrangement—conflicts with open access principles and would result in unduly discriminatory practices. Public Power Council asserts that, given the likelihood of multiple market options in the West, the ability to utilize transmission for organized market participation across a non-participating transmission provider's system will be needed to facilitate the highest levels of regional trade and consumer benefits.[178]

142. Additionally, in response to PacifiCorp's concerns about operational or reliability concerns, SPP asserts that PacifiCorp provides no basis for how allowing transmission customers to schedule their rights in a manner consistent with their transmission service agreements creates operational or reliability concerns.[179] Bonneville similarly argues that PacifiCorp's claim about potential adverse impacts on system operations and reliability is contrary to PacifiCorp's expectations in EDAM. Bonneville asserts that the EDAM proposal will need to use firm transmission rights held by EDAM participants on non-participating transmission systems, including a significant amount of long-term firm rights that PacifiCorp holds on the Bonneville system.[180] Public Power Council likewise

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[176] SPP May 21 Answer at 13 (citing *Sw. Power Pool, Inc.*, 172 FERC ¶ 61,115, at PP 19, 40 (2020)).

[177] Bonneville Answer at 10, 13-14.

[178] Public Power Council Answer at 7-8.

[179] SPP May 21 Answer at 13-14.

[180] Bonneville Answer at 10-11.

asserts that, contrary to PacifiCorp's argument, the Markets+ Transmission Contributor option should improve operational awareness and increase tools for the reliable operation of the grid relative to the status quo.[181]

143. Further, Supporting Intervenors argue that PacifiCorp misunderstands the Markets+ proposal and that any effort to prevent transmission customers' legitimate use of their transmission rights would be inconsistent with PacifiCorp's OATT, with the *pro forma* OATT, and with open access principles, and would also abrogate the transmission service agreements underpinning those rights. Supporting Intervenors assert that even a rejection of the Markets+ Transmission Contributor provisions will not stop such deliveries from taking place; it would only result in less efficient quantities of energy being delivered using these transmission rights.[182]

144. Supporting Intervenors argue that there is nothing new about a transmission customer using its OATT transmission rights to deliver energy from one part of an organized market footprint to another, based on optimal delivery quantities determined by that organized market. Supporting Intervenors assert that WEIM initiated the use of this concept a decade ago. Supporting Intervenors assert that these transmission "donations," which remain an integral part of WEIM connectivity, would be lost if PacifiCorp's arguments prevail. Supporting Intervenors argue that if the Commission were to find the Markets+ Transmission Contributor framework unjust and unreasonable, the same outcome would presumably apply equally to all other frameworks for an organized market to optimize deliveries using OATT transmission rights scheduled by transmission customers that participate in that market.[183]

145. Public Power Council similarly argues that the Markets+ Transmission Contributor option will allow transmission rights holders to voluntarily make transmission available to Markets+ in a manner analogous to the WEIM's "Interchange Rights Holder" transmission option.[184] Public Power Council contends that the Markets+ Transmission Contributor option simply adopts a common transmission practice in WEIM, utilized since its inception to facilitate organized market participation across donated transmission rights held under an OATT. Public Power Council asserts that transmission service providers will continue to administer and operate under their

[181] Public Power Council Answer at 7.

[182] Supporting Intervenors Answer at 16-17.

[183] *Id.* at 17-22.

[184] Public Power Council Answer at 5 (citing *PacifiCorp*, 147 FERC ¶ 61,227 (2014)).

respective OATTs and that market participants will continue to follow arrangements in their transmission service providers' transmission service agreements and OATTs.[185]

146. Relatedly, Bonneville asserts that, without a centralized transmission entity such as an RTO, it is essential for Markets+ participants to be able to utilize all transmission rights available for market transactions, including transmission rights on non-participating systems. Bonneville states that many of its transmission customers, including PacifiCorp, needed to use transmission rights on Bonneville's system to effectuate participation in WEIM. Bonneville argues that the Markets+ Transmission Contributors concept is no different than the use of transmission on Bonneville's system for any entity that wishes to join CAISO's EDAM. Bonneville contends that prohibiting transmission customers from using these rights to participate in a day-ahead market would undercut the viability of both EDAM and Markets+.[186]

147. Joint Responders contend that Bonneville's argument is misplaced because it fails to recognize that the fundamental principles of EDAM are captured in various seams agreements, have been utilized in practice since the implementation of WEIM, and are informed by nearly a decade of real-time market operations. Joint Responders assert that, by contrast, Markets+ does not yet have a foundation of agreements with neighboring entities to build on. Joint Responders assert that the ability of PacifiCorp to use its rights over Bonneville's system to participate in WEIM today was the result of negotiated agreements that gave Bonneville the assurance that the usage of those rights in that manner would not jeopardize reliable operation of the Bonneville system. Joint Responders argue that the Markets+ Tariff provides neighboring utilities no such assurance and purports to create a right to "donate" transmission capability to a market that was not the market in which the underlying transmission service provider decided to participate. Joint Responders assert that the clarifications by SPP and its supporters should nonetheless suffice for the time being to ensure that underlying OATTs will govern and time remains for regional stakeholders to work through these and other seams issues that may arise.[187]

148. Finally, in response to Portland General, Supporting Intervenors agree that transmission customers must continue to adhere to applicable OATT provisions and other applicable agreements, including dynamic scheduling arrangements. Supporting Intervenors also support coordination agreements as enhancements that ensure efficient, reliable use of transmission rights for deliveries across multiple transmission systems. Supporting Intervenors argue that the ability of a transmission customer to use its OATT

[185] *Id.* at 5-6.

[186] Bonneville Answer at 4-5.

[187] Joint Responders Answer at 4-5.

rights to enable an optimal quantity of energy to be delivered from one part of the Markets+ footprint to another part of the footprint supports the continued use and value of existing OATT rights and encourages long-term investments in transmission capability.[188]

d. Deficiency Letter, Deficiency Response, and Answers

149. In the Deficiency Letter, Commission staff requested further explanation of the proposal's effects on non-participating transmission service providers' systems. In response, SPP states that Markets+ Transmission Contributors will retain their rights and responsibilities as transmission customers in accordance with the applicable governing documents and agreements. SPP explains that, consistent with existing bilateral practices, Markets+ Transmission Contributors' responsibilities include coordinating transmission schedule changes, curtailments, and other operational concerns with the non-participating transmission service provider and non-participating balancing authority through use of e-Tags. SPP states that it will receive this information and use it in the Markets+ optimization. Similarly, SPP explains that Markets+ Transmission Contributors will also be responsible for costs associated with usage of its service on the non-participating transmission system, including any redispatch costs, which are allocated based on the non-participating transmission service provider's OATT or equivalent governing document.[189]

150. SPP further clarifies that Markets+ does not optimize the ancillary services needs of transmission service providers and balancing authorities. SPP explains that to the extent that transmission customers must procure or pay for ancillary services, they will continue to do so out of market to meet the needs of their balancing authority, which will retain its reliability function.[190]

151. In their comments on SPP's Deficiency Response, Joint Responders state that, notwithstanding ambiguities in the proposed tariff language, they appreciate SPP's explanation that nothing in its proposal is intended to undermine any transmission service provider's OATT or otherwise purports to govern the use of non-participating systems in any way. Joint Responders note that although it remains unclear how certain aspects of the Markets+ proposal will interact with and impact other regional day-ahead markets, they agree that such issues need not be resolved in this proceeding. With regard to SPP's assertion that contributions of a non-participating transmission service provider's capability would be effectuated primarily through the use of e-Tags, Joint Responders

[188] Supporting Intervenors Answer at 12-14.

[189] Deficiency Response at 9-10.

[190] *Id.* at 10.

explain that the West has not seen any organized day-ahead market offerings outside of California, much less from two such markets involving numerous intertwined transmission systems. Joint Responders contend that it therefore has not yet been explored how existing e-Tag practices would, or would not, suffice to address these market overlaps. Nevertheless, Joint Responders assert that it is currently unnecessary to predict and preemptively address all potential future seams issues.[191]

e. Commission Determination

152. As discussed further below, we find that SPP's proposed Markets+ Transmission Contributor option is just and reasonable and not unduly discriminatory or preferential, subject to the condition that SPP submit a compliance filing to revise the proposed Markets+ Tariff to clarify that a Markets+ Transmission Contributor's contribution of transmission capability abides by the non-participating transmission service provider's OATT.

153. We find that the Markets+ Transmission Contributors option is just and reasonable because allowing transmission rights holders on non-participating transmission systems to contribute their transmission rights to Markets+ may enable more efficient generation dispatch across the Markets+ footprint. With respect to various commenters' concerns about Markets+ Transmission Contributors potentially contributing transmission in a manner inconsistent with the non-participating transmission service provider's OATT and governing documents, including restrictions on network service rights, SPP has clarified that the Markets+ Tariff does not change the terms of non-participating transmission service providers' OATTs and that Markets+ Transmission Contributors, in accordance with the applicable governing documents and agreements, will retain their rights and responsibilities as transmission customers.[192] For the same reason, and similar to our finding above regarding the ATC accounting methods of Markets+ TSPs, we are unpersuaded by commenters' concerns about the Markets+ Tariff forcing changes to non-participating transmission service providers' ATC calculation methodologies and allowing Markets+ Transmission Contributors to contribute transmission in excess of their service rights. As SPP explains, the Markets+ Tariff will not force changes in the operations of non-participating transmission service providers' systems.[193]

154. However, we find that the Markets+ Tariff itself is insufficiently clear on these points and direct SPP, in a compliance filing due within 30 days from the date of this order, to revise the Markets+ Tariff to clarify certain aspects of the Markets+

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[191] Joint Responders October 10 Comments at 3-5.

[192] SPP May 21 Answer at 7-8; Deficiency Response at 9.

[193] SPP May 21 Answer at 8.

Transmission Contributor option, consistent with SPP's explanations in its May 21 Answer and Deficiency Response.[194] In particular, SPP must include in the Markets+ Tariff its statement in the Deficiency Response that Markets+ Transmission Contributors will be responsible for "coordinating transmission schedule changes, curtailments, and other operational concerns with the non-participating [transmission service provider] and non-participating [balancing authority], in accordance with the applicable governing documents and agreements, including applicable OATTs."[195] Additionally, we direct SPP to revise the Markets+ Tariff to include a requirement that Markets+ Transmission Contributors remain financially responsible for procuring ancillary services associated with their transmission service and any redispatch costs on the non-participating transmission system that might be incurred, as explained by SPP in its Deficiency Response.[196]

155. We disagree with Idaho Power's argument that SPP should include a tariff or protocol provision requiring that Markets+ Transmission Contributors obtain approval from the non-participating transmission service provider prior to contributing their transmission rights to Markets+. As explained above, under the Markets+ proposal, Markets+ Transmission Contributors will retain their existing obligations under the non-participating transmission service providers' OATT or other governing documents. Consequently, we find that an additional provision requiring approval of non-participating transmission service providers for transmission contributions is unnecessary. We also disagree with PacifiCorp's argument that SPP's proposal treats similarly situated transmission service providers and transmission customers differently. We agree with SPP's explanation that the transmission capability of non-participating transmission service providers is not available to Markets+ unless an entity that owns the transmission rights makes them available to Markets+, regardless of whether the entity is

[194] *See id.* ("SPP affirms that Markets+ does not seek to change, and does not change, the terms of non-participating [transmission service provider] tariffs…. SPP will facilitate a Markets+ Transmission Contributor's schedule into the market consistent with the governing OATT"); Deficiency Response at 9-10 ("Markets+ Transmission Contributors will retain their rights and responsibilities as transmission customers in accordance with the applicable governing documents and agreements, including applicable OATTs. The Markets+ Transmission Contributor is responsible for coordinating transmission schedule changes, curtailments, and other operational concerns with the non-participating TSP and non-participating BA, in accordance with the applicable governing documents and agreements, including applicable OATTs.").

[195] Deficiency Response at 9; *see also* SPP May 21 Answer at 8.

[196] Deficiency Response at 10.

in a Participating Balancing Authority or not.[197] Further, contrary to PacifiCorp's contention, Markets+ Transmission Contributors are not similarly situated to non-participating transmission service providers within a Participating Balancing Authority Area, as Markets+ Transmission Contributors are Markets+ market participants while non-participating transmission service providers are not.

156. Finally, regarding the interoperability of Markets+ Transmission Contributors and the non-participating transmission service provider's transmission systems, we find that such issues are premature prior to knowing which transmission service providers will participate in each market and thus the nature of resulting seams. However, we encourage SPP and affected non-participating transmission service providers to work on interoperability agreements as Markets+ Transmission Contributors are being identified.

5. Greenhouse Gas Programs

a. SPP's Filing

157. SPP explains that states and utilities in the Western Interconnection are concerned with curbing GHG emissions from the electric industry and that, to date, Washington state and California have adopted GHG pricing and capping mechanisms, with several other western states considering similar programs.[198] In its filing, SPP defines a GHG Pricing Program as a state regulatory program that has established an emissions trading program or a carbon tax that covers the electricity industry.[199] SPP explains that Markets+ proposes a comprehensive GHG pricing and accounting framework to incorporate these mandatory compliance costs of current and future state-determined carbon dioxide/GHG pricing programs. SPP states that the proposal is similar to the one adopted in CAISO's EDAM and WEIM and is comparable to approaches that other RTOs have adopted to incorporate GHG allowance costs incurred in the Regional Greenhouse Gas Initiative.[200]

158. SPP also states that it based the design of its proposed GHG mechanism on Commission guidance on incorporating costs associated with complying with state

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[197] *See* SPP May 21 Answer at 13.

[198] Transmittal at 11.

[199] SPP, Proposed Markets+ Tariff, pt. I, § 1.G (Definitions) (0.0.0).

[200] Transmittal at 37 (citing *Cal. Indep. Sys. Operator Corp.*, 182 FERC ¶ 61,067, at P 26 (2023); PJM Interconnection, L.L.C., Intra-PJM Tariffs, Operating Agreement, OA Schedule 2 (15.0.0), § 1.1 (Permissible Components of Cost-based Offers of Energy) (including emissions allowances/adders in cost-based energy offers)).

environmental regulations, as well as the Commission's 2021 policy statement that addressed the Commission's view on GHG pricing programs.[201] Finally, SPP notes its proposal is sufficiently flexible in that it allows various options for responsible entities with resources serving load in a state with a GHG Pricing Program, and to address the fact that the Markets+ footprint is expected to span states with and without GHG Pricing Programs.[202]

i. GHG Pricing Zone and Resource Types

159. SPP proposes to designate GHG Pricing Zones within its footprint, where each zone represents a state program requiring collection and payment of GHG costs associated with resources' carbon dioxide emission attributes. SPP explains that two defined resource types are eligible to offer into a GHG Pricing Zone: Internal GHG Resources (any resource defined as within a GHG Pricing Zone), and Specified Source Resources (resources located externally but meeting any regulatory criteria specified by the GHG Pricing Zone). Specified Source Resources are further divided into three different energy types (described more below). Both Internal GHG Resources and Specified Source Resources offering energy into a GHG Pricing Zone must include a Specified GHG Adder in the resource offer.[203]

160. SPP proposes that when a market participant offers energy into a GHG Pricing Zone, it must include a Specified GHG Adder and identify the type of energy offered. The Specified GHG Adder represents the market participant's cost of compliance that it will incur from selling energy within or into a GHG Pricing Zone; it is a cost-based adder that must reflect the applicable emission price multiplied by an emissions factor assessed by the relevant authority for each resource.[204] SPP notes that this approach is similar to other approaches approved by the Commission and, like those, provides resources an opportunity to recover the mandatory costs of compliance with GHG pricing programs.[205]

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[201] *Id.* at 12, 38 (citing *Carbon Pricing in Organized Wholesale Elec. Mkts.*, 175 FERC ¶ 61,036, at PP 7, 13-14, 16-17 (2021) (GHG Policy Statement)).

[202] *Id.* at 38-39.

[203] *Id.* at 39-40; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.1, 3.2.1. SPP also states that Specified GHG Adders are subject to the mitigated offer requirements found in Attachment B of the Markets+ Tariff. Transmittal at 40.

[204] Transmittal at 39-40. SPP proposes to define Specified GHG Adder as composed of monotonically non-decreasing MW quantity and price pairs and must be non-zero and positive. SPP, Proposed Markets+ Tariff, pt. I, § 1.S (Definitions) (0.0.0).

[205] Transmittal at 37 (citing *Cal. Indep. Sys. Operator Corp.*, 182 FERC ¶ 61,067

SPP states that the Markets+ framework allows Specified Source Resources to register to supply three types of energy into a GHG Pricing Zone: Type 1A, Type 1B, and Type 2, based on the resource's contractual obligations, as discussed below.[206]

161. SPP explains that Type 1A and Type 1B represent different types of bilateral agreements that may exist between market participants outside of Markets+. First, SPP proposes to define Type 1A Energy as energy from a Specified Source Resource with an existing commitment to supply load in a GHG Pricing Zone. SPP proposes that a market participant choosing Type 1A designation must register the Specified Source Resource in advance and must demonstrate contractual obligations to supply load in a GHG Pricing Zone, as specified in the Markets+ Tariff. SPP also proposes that Type 1A Energy can only be attributed to that GHG Pricing Zone which, according to SPP, helps ensure that entities that have invested in non- or low-emitting energy receive the GHG-related benefits of their investment.[207]

162. Further, SPP explains that Type 1A Energy will be considered in the market optimization using the sum of its energy offer price and Specified GHG Adder, and if it is economic and receives a market dispatch, the energy will be attributed to the GHG Pricing Zone specified by its contract. However, SPP proposes certain measures to ensure Type 1A functionality is limited to its intended purpose of being specifically contracted for and dispatched to serve load in the GHG Pricing Zone:

- Prior to offering, Specified Source Resources offering Type 1A Energy must notify SPP of underlying agreements to serve a GHG Pricing Zone, and then SPP will check with the relevant Load Responsible Entity to confirm their obligation;

- Type 1A Energy must not exceed the projected load to which the energy is contracted; and

- Market participants offering a Specified Source Resource as Type 1A Energy must have or be able to procure transmission service to fulfill their Type 1A commitments.[208]

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at P 26; PJM Interconnection, L.L.C., Intra-PJM Tariffs, Operating Agreement, OA Schedule 2 (15.0.0), § 1.1 (Permissible Components of Cost-based Offers of Energy)).

[206] *Id.* at 40.

[207] *Id.* at 41.

[208] *Id.* at 42; *see* SPP, Proposed Markets+ Tariff, attach. K, § 2 (Type 1A Energy)

163. Next, SPP proposes to define Type 1B Energy as energy from a Specified Source Resource with an agreement to supply load within a GHG Pricing Zone but which may also be made available to a non-GHG Pricing Zone. SPP explains that the market optimization will evaluate whether the GHG Pricing Zone requires additional energy and, if needed, will consider Type 1B Energy for attribution to the GHG Pricing Zone. SPP notes that a Specified GHG Adder will only be included in Type 1B Energy costs going into a GHG Pricing Zone; Type 1B Energy attributed to non-GHG Pricing Zones will include only the energy bid in its economic dispatch and no GHG component.[209]

164. Third, SPP proposes to define Type 2 Energy as energy from Specified Source Resources not owned by or contracted to load within a GHG Pricing Zone. Thus, SPP explains that Type 2 Energy is available to be attributed either to a GHG Pricing Zone or outside a GHG Pricing Zone. SPP proposes that Specified Source Resources only be able to offer into a GHG Pricing Zone excess energy that remains after the resource's other obligations are met, determined by a resource's Surplus Threshold. According to SPP, the Surplus Threshold for a resource may be set by a market participant or determined by SPP through a merit order process.[210] Then, SPP states, the market clearing engine will evaluate whether a GHG Pricing Zone requires additional energy (after Type 1A and 1B) and, if needed, will consider Type 2 Energy for attribution therein. SPP requires that a market participant must include a Specified GHG Adder in its resource offer when offering Type 2 Energy; the adder will only be included in the economic dispatch if it is attributed to a GHG Pricing Zone. SPP explains that the Surplus Threshold approach allows external supply to manage the quantities Energy from non-emitting Resources that may be attributed to a GHG Pricing Zone and decreases the likelihood of MW re-designation, as discussed below.[211]

165. SPP proposes that market participants can register their Specified Source Resources as more than one type, but if the market participant offers the resource as Type 1A, it may not simultaneously offer it as Type 1B or Type 2. According to SPP, Type 1B

(0.0.0), §§ 2.1, 2.2, 2.3.

[209] Transmittal at 43; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.1, 3.2.5, 3.2.6.

[210] *See* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.4, 3.6, 3.6.1, 3.6.2.

[211] Transmittal at 43-44; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.2.5, 3.2.6, 3.4, 3.6.

and Type 2 may be offered simultaneously from the same resource, but only if the quantity of Type 1B is below the Surplus Threshold.[212]

ii. MW Re-Designation and GHG Adders

166. SPP also explains that the Commission recognized, in its Policy Statement, the potential for "leakage" when incorporating state-determined carbon pricing into multi-state wholesale electricity markets. SPP states that this concept is known as "MW Re-Designation" in Markets+. SPP asserts that the Markets+ design inherently reduces the potential for MW Re-Designation through: (1) the use of a GHG Adder in resource offers; and (2) utilization of a threshold method.[213]

167. SPP explains that there are two types of GHG Adders: (1) a Specified GHG Adder, which may be submitted for offers from either an Internal GHG Resource or a Specified Source Resource; and (2) an Unspecified GHG Adder. SPP states that an Unspecified GHG Adder is a price applied to an Unspecified Source Import, meaning energy attributed to a GHG Pricing Zone when the energy cannot be assigned to a particular resource. SPP also states that the Markets+ clearing engine will dispatch all energy economically, whether inside or outside the GHG Pricing Zone.[214] SPP also notes that the regulatory body that administers the emissions program in a GHG Pricing Zone determines the parties responsible for compliance costs associated with energy received from Unspecified Source Imports; in the event a GHG Pricing Zone does not establish a price for unspecified imports, the Unspecified GHG Adder would simply be $0 per MWh. SPP states that parties pre-determined to be responsible by a regulatory body that administers the emissions program in a GHG Pricing Zone will receive the Unspecified GHG Adder revenue collected by SPP.[215]

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[212] Transmittal at 40; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.2.3, 3.2.3.1, 3.2.4.

[213] Transmittal at 44 (citing GHG Policy Statement, 175 FERC ¶ 61,036 at P 21). SPP explains that "[l]eakage occurs when higher-emitting resources are deployed to serve load outside of a GHG Pricing Zone because lower-emitting resources that would otherwise serve that load are being used to serve load within the GHG Pricing Zone." *Id.* at 11.

[214] *Id.* at 44-45. The Markets+ Tariff defines an Unspecified GHG Adder as "[a] price applied to an Unspecified Source Import calculated using an emission factor set according to a methodology established by the GHG Pricing Program and an indexed allowance price." SPP, Proposed Markets+ Tariff, pt. I, § 1.U (Definitions) (0.0.0).

[215] Transmittal at 45 n.204. SPP notes that although Washington's Department of Ecology has not yet finalized its rulemaking regarding participation in wholesale

168. According to SPP, Markets+ will use a threshold-enhanced floating surplus optimization method to determine the energy available to be attributed to a GHG Pricing Zone, under which a participant offering Type 2 Energy may identify in its resource offer a Surplus Threshold, which is the quantity of energy that must be exceeded for the GHG Prizing Zone to access a resource's excess energy. If a market participant does not submit a Surplus Threshold in its resource offer, SPP may identify the Surplus Threshold by a merit order process.[216] SPP explains that to determine energy available for attribution to a GHG Pricing Zone, the market clearing engine first forecasts the amount of surplus energy available from the Specified Source Resource, using either the amount identified by the market participant or the merit order process. In the merit order process, the market clearing engine considers the resource offer (excluding a Specified GHG Adder) and economically stacks the energy. SPP states that the excess energy above the Surplus Threshold is then made available to the optimization.[217]

169. SPP asserts that this optimization method strikes a balance between the competing interests of load within a GHG Pricing Zone seeking to minimize costs and external supply managing the quantities of energy from non-emitting resources that may be attributed to a GHG Pricing Zone. SPP states that this method decreases the likelihood of MW Re-Designation because the energy available to the GHG Pricing Zone will only be that which is in excess of existing requirements in the non-GHG Pricing Zones.[218]

iii. **Tracking, Reporting, and GHG Reduction Programs**

170. SPP states that for states with state-determined carbon pricing and GHG reduction goals, SPP will create tracking and reporting mechanisms to provide data required by the state, and that the details thereof will be added to the Markets+ Protocols through the

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electricity markets, the Department of Ecology has indicated it will set a methodology to determine the emissions rate that will be used to calculate imports from unspecified sources, which will be instructive for the Unspecified GHG Adder. *Id.*

[216] *Id.* at 45; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.4, 3.6; *see id.*, pt. I, § 1.S (Definitions) (0.0.0) (defining Surplus Threshold).

[217] Transmittal at 46; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), § 3.6 (0.0.0).

[218] Transmittal at 46; *see* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), § 3.6.

stakeholder process. SPP also explains that a number of states within the Markets+ footprint have adopted policies that address emissions without specifically establishing carbon pricing (GHG Reduction Programs); SPP anticipates the number of GHG Reduction Programs to grow. Accordingly, SPP states that it is working with Markets+ stakeholders to develop a market design capable of incorporating GHG Reduction Programs into Markets+.[219]

b. Comments and Protests

171. APS, Bonneville, Commissioner Myers, Washington Municipals, and Powerex each express general support for the GHG framework as proposed in the Markets+ Tariff.[220]

172. PSCo states that it does not oppose the GHG proposal but believes that ongoing performance evaluation of the market design is needed considering stakeholders' concern over potential unintended outcomes resulting from the program. Specifically, PSCo states that the proposal could affect congestion and carbon intensity for customers in states that do not have GHG Pricing Programs. Therefore, PSCo states that it believes that SPP should provide the following information annually: (1) identification and attribution accuracy of resources in GHG Pricing Zones; (2) evaluation of Type 1A energy impacts on market outcomes to identify potential cost shifts; and (3) counterfactual market analysis comparing outcomes with and without the proposed design.[221]

173. Public Power Council states that the Markets+ zonal approach for incorporating compliance costs of state carbon pricing programs is a reasonable starting framework for the Markets+ GHG proposal, comparable to other RTOs. Public Power Council points out that the mechanism of using multiple energy "types" along with the "threshold-enhanced floating surplus optimization" empowers market participants to facilitate a range of contractual arrangements between generators and loads, both within and outside of state pricing programs. Public Power Council further emphasizes that the flexibility that the Markets+ framework provides for resources and loads in how they can meet various environmental compliance and accounting needs encourages market participation

[219] Transmittal at 46. SPP notes that as of the date of its filing, Arizona, Colorado, Oregon, and New Mexico have adopted GHG Reduction Programs. *Id.* at 46 n.209.

[220] APS Comments, attach. A at 2; Bonneville Comments at 6; Commissioner Myers Comments at 1-2; Washington Municipals Comments at 1, 6-7; Powerex Comments at 19-20.

[221] PSCo Comments at 3-5.

and increases market depth.[222] Finally, Public Power Council and Commissioner Myers state that the Markets+ GHG structure strikes a balance between improving the ability for the states to meet its carbon reduction goals and minimizing the economic impacts of other states' policies.[223]

174. WPTF urges the Commission to approve the GHG provisions included in the Markets+ Tariff as the proposed GHG design is intended to meet several goals, including complying with state programs, minimizing the potential for GHG emissions leakage, and ensuring states not participating in carbon pricing programs are not affected by the design. WPTF states that it does not believe that provisions for addressing state policies aimed at achieving GHG reduction are necessary for the Commission to approve Markets+ Tariff filing.[224]

175. CEBA states that it appreciates SPP's work in designing a GHG pricing and accounting framework, including a zonal pricing approach to incorporate mandatory compliance costs of state-determined pricing programs, but states that further work is necessary to account for non-price GHG Reduction Programs. CEBA also states that the Markets+ platform can make information such as marginal and average carbon emissions reporting (based on real-time electricity market data) available to all participants but, as currently proposed, does not do so. CEBA encourages SPP to engage in deeper discussions about accounting, tracking, and reporting metrics and customer access to this information.[225]

176. In their protest, PIOs argue that SPP has not met its FPA section 205 burden to show that the Markets+ GHG framework "is a just and reasonable approach to account for diverse GHG policies in the [Markets+] area," and is designed "in such a way that it does not circumvent state policies."[226] PIOs contend that SPP's current proposal only addresses compliance with a GHG Pricing Program, which applies only to Washington State, despite several western states having implemented carbon reduction policies.[227]

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[222] Public Power Council Comments at 4-5.

[223] *Id.* at 5; Commissioner Myers Comments at 1-2.

[224] WPTF Comments at 10-11.

[225] CEBA Comments at 4-5.

[226] PIOs Protest at 7-8 (quoting EDAM Order, 185 FERC ¶ 61,210 at PP 386, 388).

[227] *Id.* at 7.

177. Additionally, PIOs argue that the Commission should reject the Markets+ Tariff without prejudice because the proposed GHG pricing program lacks details on its operation and price formation. PIOs contend that SPP should be required to clarify the Markets+ Tariff with a full explanation of its approach for price formation impacts before approval. Specifically, PIOs assert that the Markets+ Tariff is not sufficiently clear on how the different types of specified resource designations (Type 1A, Type 1B, and Type 2 Energy) will be cleared in the market, a detail that directly affects the rates, terms, and condition of service. Furthermore, PIOs contend that SPP failed to address the improper cost shifts beyond GHG pricing zones that would result in designation of three types of specific resources and accompanying dispatch restrictions.[228]

178. Finally, PIOs state that SPP's proposed GHG framework does not lay out any plan for how GHG Reduction Programs, implemented in four states (Colorado, Oregon, Nevada, and New Mexico), will be incorporated into the market design. This lack of clarity, PIOs argue, demonstrates that the proposed GHG framework has not yet been shown to be just and reasonable.[229]

179. The SPP Market Monitor supports efforts to integrate state-level carbon pricing policies into wholesale markets and believes that the current proposal is consistent with the Commission's prior guidance on the treatment of emissions policies in market design. However, the SPP Market Monitor raises several concerns with the proposed GHG design.[230]

180. Specifically, the SPP Market Monitor highlights concerns surrounding the Surplus Threshold designation mechanism. The SPP Market Monitor explains that this mechanism could be misused to withhold clean energy from the GHG pricing zone or create the illusion of "clean" surplus by replacing it with emissions-intensive generation outside the zone. The SPP Market Monitor argues that further guidance on the value of leakage prevention would help better evaluate these decisions.[231]

181. The SPP Market Monitor also expresses concern that the Type 1 designation, intended as a temporary solution, could become a permanent fixture. The SPP Market Monitor states that it is concerned that market participants will write new contracts specifically to qualify for Type 1 status, hindering the transition towards a more open market. The SPP Market Monitor states that without grandfathering provisions to limit

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[228] *Id.* at 8-10.

[229] *Id.* at 10-11.

[230] SPP Market Monitor April 29 Comments at 21-22.

[231] *Id.* at 22-23.

the eligibility of future contracts for Type 1, the liquidity and flexibility for Type 2 clearing could be reduced.[232]

182. The SPP Market Monitor also asserts that the proposed GHG design does not address its interaction with other elements of the Markets+ Tariff, such as the transmission opt-out provision, multi-resource aggregation, and market power mitigation. The SPP Market Monitor is concerned that the frequent changes in transmission availability could introduce uncertainty in the GHG market and undermine the basis for Type 1 qualification. Additionally, the SPP Market Monitor states that the ability to aggregate resources creates questions about participation and oversight in the GHG market, as the Markets+ Tariff does not address how emissions factors and costs would be determined for these aggregated resources. The SPP Market Monitor states that resource aggregation could also circumvent leakage prevention efforts.[233]

183. Finally, the SPP Market Monitor argues that the proposed GHG design has significant shortcomings regarding market monitoring and market power mitigation. The SPP Market Monitor argues that the current framework for evaluating cost-based offers (the GHG Adder) lacks clarity on how it will address potential market manipulation. Additionally, the SPP Market Monitor contends that the brevity of the Markets+ Tariff language surrounding the GHG processes creates challenges in understanding and enforcing the rules. The SPP Market Monitor explains that, for instance, the concept of an "emissions price" within the GHG Adder is not clearly defined. Furthermore, the SPP Market Monitor states that the Markets+ Tariff does not require market participants to hold carbon credits when submitting offers, potentially allowing for practices that make it hard to track emissions and credit purchases.[234] The SPP Market Monitor states that it has consistently advocated for linking the emissions price to an external carbon credit price index, similar to how the SPP Market Monitor oversees fuel costs in the WEIS Market and Integrated Marketplace. The SPP Market Monitor states that it is particularly concerned about the lack of such an index for Type 1 and Type 2 imports within the Markets+ Tariff.[235]

184. The Markets+ State Committee notes that as voting members of the Markets+ Greenhouse Gas Task Force, it participated in creating the proposed methodologies for states with GHG pricing requirements and received SPP's assurance that a solution for states with GHG Reduction Programs would be incorporated in a future phase. The

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[232] *Id.* at 23-24.

[233] *Id.* at 24-25.

[234] *Id.* at 25-26.

[235] *Id.* at 26-27.

Markets+ State Committee also expresses concern about the implementation of the proposed GHG pricing design.[236] Specifically, the Markets+ State Committee explains that it is concerned about the ability for individual states to access pricing and emissions data from the market directly. Similarly, the Markets+ State Committee expresses concern regarding whether the GHG market optimization inappropriately raises costs for customers in states without GHG pricing requirements.[237]

185. NTUA argues that the Markets+ GHG proposal indicates that state greenhouse gas regulations will be addressed by the market, which may not appropriately recognize the sovereignty of the Navajo Nation.[238]

186. SoCal Edison states that the proposed GHG framework in Markets+ lacks sufficient detail and guardrails on the addition of Unspecified GHG Adders to unspecified GHG region imports and urges the Commission to not approve the proposal as filed. SoCal Edison explains that the GHG proposal intends to allow SPP to unilaterally modify bids by market participants by assigning a GHG Adder to unspecified transactions using the relevant state's GHG pricing program information. SoCal Edison states that the unilateral ability to modify market bids without the approval of market participants or providing sufficient information in the Markets+ Tariff without Commission oversight would render the Commission unable to confirm that rates are just and reasonable. Additionally, SoCal Edison argues that the proposal lacks detailed information about the adder and the methodology for calculating the adder to be included in the proposal and, without this, the Commission cannot determine whether the proposal may result in adverse outcomes. Specifically, SoCal Edison asserts that the proposal lacks sufficient detail explaining the Surplus Threshold and lacks a definition of the "Asset Owner's load obligation" in the merit order process described in Attachment K, section 3.6.1.[239]

c. Answers

187. In response to the SPP Market Monitor's argument that the allowance price is not clear because market participants do not buy carbon credits when dispatched, but rather beforehand, SPP counters that these allowances are still linked to emissions from operating a resource. SPP also highlights that the Specified GHG Adder is subject to safeguards. SPP explains that similar to how resources can estimate short-term costs

[236] Markets+ State Committee Comments at 4-5.

[237] *Id.* at 6-7.

[238] NTUA Comments at 5.

[239] SoCal Edison Protest at 9-13.

when making bids, market participants can estimate their expected allowance costs when setting the adder. In addition, SPP points out that the SPP Market Monitor has the authority to review the GHG Adders under the mitigation measures and that market competition should prevent excessive costs being added.[240]

188. SPP disagrees with PIOs' argument that the Commission cannot assess the Markets+ GHG framework without a tracking and reporting system for GHG Reduction Programs. SPP points out that a GHG Reduction Program is designed to simply provide data, not affect dispatch or rates, and therefore, SPP highlights that a tracking system is not needed now. In addition, SPP states that the Commission's precedent supports this view – similar proposals from CAISO's proposed GHG framework in the EDAM and WEIM were approved without requiring a tracking system upfront and those systems were developed later. Finally, SPP argues that the tracking system does not need to be in the Markets+ Tariff because it will not affect rates or terms of service and that it is developing a tracking and reporting protocol separately.[241]

189. Regarding the Markets+ State Committee's concern about accessing data from the market, SPP argues that this is not a requirement for the current proposal, as its information is not a rate, term, or condition. SPP explains that nothing in the Markets+ Tariff affects the ability of a state to obtain information from those utilities under its jurisdiction or to request information from SPP.[242]

190. SPP argues that the SPP Market Monitor's concerns about the Surplus Threshold designation mechanism allowing resources to withhold surplus energy from the GHG Pricing Zone is unfounded. SPP states that, similar to a previous case involving CAISO's WEIM proposal in 2014, where the Commission held that entities are not required to offer their resources for sale into a GHG pricing program zone, SPP will not require resources to participate in the GHG Pricing Zone.[243] SPP notes that the flexibility to not participate in GHG Pricing Zones is important for resources that do not want to be exposed to GHG compliance costs and that these resources may not participate in the market if required to take on the GHG compliance costs.[244]

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[240] SPP May 21 Answer at 18-20.

[241] *Id.* at 20-22.

[242] *Id.* at 22-23.

[243] *Id.* at 23-24 (citing *Cal. Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,231, at P 240 (2014) (*CAISO*)).

[244] *Id.* at 23-24.

191. In response to SoCal Edison's concerns about how the Surplus Threshold will affect dispatch and price formation, SPP clarifies that the market clearing engine dispatches all energy on a cost-minimizing basis, including GHG program costs. SPP clarifies that the Surplus Threshold does not affect how the market dispatches or calculates prices for energy as all available energy will be dispatched economically.[245]

192. SPP argues that it does not need to show that its proposal regarding Type 1 energy is the absolute best option, only that it is just and reasonable. SPP states that the SPP Market Monitor does not explain why forward contracts or future availability of Type 1 energy would be unfair or manipulative. Therefore, SPP argues that the Commission can disregard the SPP Market Monitor's suggestion for sunset provisions.[246]

193. In response to SoCal Edison's concern that SPP can add an Unspecified GHG Adder without proper explanation in the Markets+ Tariff, SPP argues that the emissions rate used to calculate the adder will be determined by the regulatory body that mandates GHG compliance, not by SPP itself. In addition, SPP explains that if a GHG Pricing Zone does not have sufficient energy from Specified Source Resources and Internal GHG Resources, then Unspecified Source Imports, along with an Unspecified GHG Adder, must be considered for purposes of compliance with the GHG Pricing Zone regulations on imports.[247]

194. Further, SPP states that, contrary to SoCal Edison's argument, it is unnecessary to define the "Asset Owner's load obligation" because it is clear from the language of the Markets+ Tariff that the resource offer will be considered in the merit order process in Attachment K, section 3.6.1.[248]

195. In its response to SPP's answer, SoCal Edison reiterates its concerns about the Surplus Threshold and Unspecified GHG Adder, as well as its request for a technical conference on GHG framework issues. First, SoCal Edison asserts that SPP has still not made it clear how or why the Surplus Threshold will not affect dispatch and price formation. SoCal Edison asserts that, to the contrary, if Markets+ deems energy as going to a GHG zone, that supplier will necessarily receive a different price than if the same energy is not deemed to go to a GHG zone. SoCal Edison also states that SPP fails to explain why the Surplus Threshold even exists if the goal is not to impact dispatch and price formation. Next, SoCal Edison maintains that SPP's answer does not resolve

[245] *Id.* at 24-25.

[246] *Id.* at 25-26.

[247] *Id.* at 26-27.

[248] *Id.* at 28.

Unspecified Source Adder concerns.[249] SoCal Edison notes that "instead of adding an Unspecified GHG Adder to a particular offer, SPP intends to apply the adder (or perhaps more accurately a 'hurdle rate') to all available Unspecified energy."[250] SoCal Edison asserts this would still have the effect of impacting its bids if they are included in the "bulk amount of Energy considered to serve the GHG Pricing Zone."[251] Thus, SoCal Edison argues, SPP's proposal still creates the same improper result as applying individual bid adders.[252]

d. Deficiency Letter, Deficiency Response, and Answers

196. In the Deficiency Letter, Commission staff requested further explanation on Internal Source Resource dispatch restrictions, Type 1A resource dispatch mechanics, the rules or guidelines governing where market participants may get information necessary to calculate their GHG Adders, whether (and in what circumstances) market participants would be able to estimate allowance prices, what price validation might occur in Markets+ if estimation of prices is allowed, and specific aspects of Unspecified Source Imports.

197. In response, SPP first clarifies that while all energy from Internal GHG Resources, any resource located within a GHG Pricing Zone, dispatched is "attributed" to a GHG Pricing Zone, that energy may serve load in the entire market. Next, SPP clarifies that while Type 1A energy offers from an individual Specified Source Resource must not exceed projected load, SPP explains that market participants have the flexibility to register physical resources in a way that allows participants to offer all available energy into the market (and register as one or more Specified Source Resources). SPP explains that, for example, part of a physical resource's output could be registered as Type 1A and another part as Type 1B or Type 2 (or a combination of both); thus, the output of the portion registered as Type 1A would be limited to only supply the contracted-for load, whereas the portion registered as Type 1B or Type 2 may offer energy to the full market. SPP states that the restriction on the quantity of Type 1A energy that a market participant may offer from an individual Specified Source Resource is used to limit the quantity of energy that can be attributed to a GHG Pricing Zone. SPP explains that this limitation does not restrict the ability to offer all energy that the physical resource is capable of

[249] SoCal Edison Answer at 2-3.

[250] *Id.* at 4.

[251] *Id.* (quoting SPP May 21 Answer at 27).

[252] *Id.*

producing or the ability of Markets+ to clear energy that is offered from the physical resource.[253]

198. Regarding GHG Adder price formation, SPP explains that the Markets+ Tariff only provides that the Specified GHG Adder must reflect the applicable allowance price multiplied by the applicable emission factor from the relevant authority. SPP adds that the emissions factor and allowance prices are not set by the Markets+ Tariff, but rather are determined by the government entity overseeing a GHG Pricing Program's cap-and-trade or cap-and-invest program. SPP notes that the Markets+ design is flexible to allow participation of multiple state GHG Pricing Programs and associated future modifications. SPP clarifies that the Markets+ Protocols will provide implementation details about the relevant authority for these components. SPP further explains that the means through which participants may purchase allowances are limited by state pricing program regulations.[254]

199. SPP explains that market participants may estimate the allowance prices in their Specified GHG Adders due to potential variation in state pricing programs from which participants may purchase allowances before or after the compliance obligation is incurred. SPP states that estimated costs are subject to the SPP Market Monitor's mitigated offer calculation methodology, including submitting accurate cost data and supporting documentation sufficient to replicate the Mitigated Energy Offer Curve to the SPP Market Monitor for approval.[255] SPP explains that the SPP Market Monitor will assess the Specified GHG Adders in the same way it assesses other cost-based offer requirements, and that mitigated offers (including components reflecting GHG program compliance costs) must be calculated according to the approved methodology.[256] SPP states that the implementation details establishing

[253] Deficiency Response at 15-17.

[254] *Id.* at 17-18 & n.83 (citing Washington Department of Ecology, *Washington's Cap-and-Invest Program* (May 15, 2024), https://ecology.wa.gov/air-climate/climate-commitment-act/cap-and-invest; Wash. Rev. Code Ann. § 70A.65.070(2)).

[255] Market Participants must submit Mitigated Energy Offer Curves for energy offers and include mitigation provisions specific to their resource types per section 3.3 of Attachment B of the Markets+ Tariff.

[256] *Id.* at 18 (citing SPP, Proposed Markets+ Tariff, attach. B, § (3.3 Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(N)).

guidelines under which market participants may estimate costs to reflect the applicable emissions price will be described in the Markets+ Protocols, Appendix D.[257]

200. Additionally, with respect to Unspecified Source Adders, SPP explains that, generally, the Unspecified Source Imports and adders were developed to support state cap-and-invest or cap-and-trade programs, which may place compliance obligations on imported energy from a centralized electricity market. SPP explains that certain aspects of the only existing program—that of Washington State—are not yet finalized, including specific emissions factors used to calculate GHG emissions for electricity supplied by a centralized electricity market. SPP states that the Markets+ Protocols will incorporate any future implementation details that Washington develops.[258]

201. SPP further explains that an Unspecified Source Import will be any energy in a given interval that is economic to serve load, but is not attributed from Internal GHG Resources, Specified Source Resources, or Import Interchange Transaction. SPP explains that Unspecified Source Imports are from the pool of available resources, and not assigned to any particular resource, aggregated set of resources, or group of resources. SPP explains that these will be relevant if a GHG Pricing Zone does not have sufficient energy from Specified Source Resources and Internal GHG Resources. SPP states that an Unspecified Source Import will not be connected to a single offer, but rather will be a bulk energy amount considered to serve the GHG Pricing Zone from the remaining resource pool available to the market.[259] Regarding how market dispatch would ensure, in such a circumstance, accurate marginal GHG cost attribution, SPP clarifies that market dispatch does not attribute marginal GHG costs to the GHG Pricing Zone, but rather attributes energy to the GHG Pricing Zone, which will include an associated compliance cost, through the Marginal GHG Price. SPP elaborates that the Marginal GHG Price represents the incremental cost to serve load within a GHG Pricing Zone relative to load outside of a program.[260]

202. SPP explains that the Unspecified GHG Adder is calculated using an indexed allowance price and an emissions factor set according to the relevant GHG Pricing Program/state regulatory program. SPP notes that a variety of resources could constitute Unspecified Source Imports and that SPP will use the state regulatory program-defined emissions factor for Unspecified Source Imports, using an indexed allowance price

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[257] *Id.* at 19. SPP notes that Appendix D will be similar to the SPP Integrated Marketplace Protocols Appendix G, Mitigated Offer Development Guidelines. *Id.*

[258] *Id.* at 20.

[259] *Id.* at 21.

[260] *Id.*

calculated according to implementation details in the Markets+ Protocols for each quantity of Unspecified Source Imports.[261]

203. SPP further explains that Unspecified GHG Adders will not be subject to a validation process because they are composed of a state regulatory program-determined emissions factor and an indexed allowance price. SPP states that it will calculate the Unspecified GHG Adder from those state-determined values, thus obviating the need for validation. SPP reiterates that the implementation details regarding the source and calculation of indexed allowance prices will be described in the Markets+ Protocols. SPP states that because market participants will not actually submit Unspecified GHG Adders, there are no applicable timelines or obligations on their part. Further, regarding SPP's obligations, SPP states that it will update the Unspecified GHG Adder calculation on a timeline described in the Markets+ Protocols. SPP clarifies that the GHG Adder is not itself settled, but rather applied to the Unspecified Source Imports, which are considered in the calculation of the Marginal GHG Price.[262]

204. SPP explains that if there is more than one emissions factor associated with a set of Unspecified Source Imports, there will only be a single emissions factor used for Unspecified Source Imports in each interval. Finally, SPP explains that the GHG Adder is not subject to the mitigation framework in Attachment B of the Markets+ Tariff because it is not submitted by a market participant and cannot be used to exercise horizontal or vertical market power. SPP states that while the Unspecified GHG Adder is calculated by SPP, it is composed of cost-based elements, set by the state regulatory program and an indexed allowance price, leaving no discretion for SPP to modify the components.[263]

e. Commission Determination

205. We accept SPP's proposal to accommodate GHG Pricing Programs as a just and reasonable approach to account for state-regulated GHG policies in Markets+. First, we find that SPP's proposal is analogous to the GHG accounting framework that the Commission accepted in WEIM and EDAM, both of which include resource-specific adders to energy bids to reflect the marginal cost of GHG generated by state GHG Pricing Programs.[264] Given the potential that states in the Markets+ footprint will have

[261] *Id.* at 22.

[262] *Id.* at 22-23.

[263] *Id.* at 24.

[264] *See* EDAM Order, 185 FERC ¶ 61,210 at PP 386-387; *Cal. Indep. Sys. Operator Corp.*, 182 FERC ¶ 61,067 at P 26.

GHG Pricing Programs, we agree with SPP that designing a market that reflects the marginal costs of complying with such programs is appropriate and will send better price signals. Further, we recognize that such a framework accommodates various state GHG Pricing Programs while enabling implementation of a regional market such as Markets+.

206. SPP has demonstrated that its proposal strikes a reasonable balance between accounting for the costs of market participants complying with state-jurisdictional GHG Pricing Programs and reducing the potential for any adverse impacts to customers in areas without a GHG Pricing Program. Markets+ will dispatch resources in a manner that reflects the costs of serving load in areas with and without a GHG Pricing Program, and SPP will not apply a GHG Adder in areas that do not have a GHG Pricing Program. We find that SPP's proposal to create various Energy Types provides a mechanism for entities in GHG Pricing Zones to meet their compliance obligations with qualified resources (e.g., those with contracts to supply loads in the GHG Pricing Zone), while also allowing system resources to maximize the supply they offer to the market, both within and outside of GHG Pricing Zones.

207. Next, we disagree with arguments suggesting that SPP has not provided sufficient details on specific GHG accounting aspects. We find that SPP's proposed Markets+ Tariff provisions accommodating state-jurisdictional GHG Pricing Programs outline the basic market mechanisms, definitions, and terms and conditions necessary to implement the intended dispatch. We find that, while the proposal does not contain all implementation details, such operational details need not be included in the Markets+ Tariff.[265] In the GHG pricing context, SPP's proposal sufficiently defines the mechanisms by which state GHG compliance costs will be incorporated into the market (via bid adders that reflect these as marginal GHG prices), where the sources for the prices and emissions factors lie (from relevant state regulatory authorities), what the dispatch mechanism is (resource types and their requirements and dispatch characteristics), and how transactions that involve GHG adders will be settled.

208. Regarding Type 1 designation, we are not persuaded by the SPP Market Monitor's argument that market participants will enter new contracts specifically to qualify for Type 1 status and hinder the transition to open markets. We find this concern speculative. Further, even if more market participants sought Type 1 contracts, we find no basis to conclude that it would be unjust and unreasonable. As SPP points out, even within Type 1 designated bids, the market seeks to economically dispatch resources. That more resources might shift towards Type 1 rather than Type 2 does not necessarily imply an illiquid market.

[265] *See generally Hecate Energy Greene Cnty. 3 LLC v. FERC*, 72 F.4th 1307, 1312-14 (D.C. Cir. 2023) (*Hecate*).

209. We are also not persuaded that the Surplus Threshold poses a market power risk due to resources withholding surplus from a GHG Pricing Zone. First, resources are not required to offer to sell into a GHG Pricing Zone. In the WEIM proceeding, for example, the Commission found that it was important to provide flexibility for resources that preferred not to be dispatched into GHG Pricing Zones or be exposed to GHG compliance costs.[266] Similarly, we find that it is reasonable for Markets+ to give resources flexibility in whether they want to offer into a GHG Pricing Zone. Second, we are not persuaded that there will be withholding by Type 2 resources given that there are already two resource categories that are optimized towards meeting load in GHG Pricing Zones (Type 1A and 1B), which would reduce the economic incentive for Type 2 resources to withhold capacity. If, however, the SPP Market Monitor finds evidence of anti-competitive conduct, it may refer such conduct to the Commission.

210. We also find that the Unspecified Source Import and Unspecified GHG Adder proposals are just and reasonable. We disagree with SoCal Edison's assertion that the proposed framework lacks sufficient detail and guardrails. As SPP explains, an Unspecified Source Import will be connected to a single bulk offer (which could consist of all remaining sources in market), with the bulk emissions factor and associated adder defined by the relevant state regulatory agency.[267] Therefore, because the Unspecified Source Import is not connected to a specific resource, SPP will not unilaterally modify market participant offers. We also note that SPP has committed to define and include details related to Unspecified Source Imports, and the associated adder, in the Markets+ Protocols as respective GHG Pricing Zones further define their applicable emissions factors and allowance price attributes.[268]

211. We agree that it is important for a market to be able to validate and/or mitigate bids and dispatch. In considering commenters' concerns about the potential mitigation of Specified and Unspecified Source Adders, we find SPP's Deficiency Response informative. We find that SPP's proposal will subject all Specified Source GHG Adders to the existing mitigated offer calculation methodology, which the SPP Market Monitor will assess in the same way it does other cost-based offer components.[269] Markets+ will allow resources to estimate GHG allowance prices in cases where the state regulatory authority prices are evident only after market bids are due; as such, we find that subjecting such bids to an ex-post mitigation reasonably accommodates state GHG

[266] *See Cal. Indep. Sys. Operator Corp.*, 153 FERC ¶ 61,087, at P 58 (2015).

[267] SPP May 21 Answer at 27.

[268] Deficiency Response at 20, 22.

[269] *See* SPP, Proposed Markets+ Tariff, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), §§ 3.3(A), 3.3(N).

Pricing Programs.[270] Given that Unspecified Source Adders are not traditional bids from specific resources, but rather have a bulk allowance price and emissions factor assigned to them and determined by the relevant state regulatory authority (the market participant does not submit a unique bid in this case), we find that it is not necessary to subject such adders to a traditional validation or mitigation regime for SPP's proposal to be just and reasonable. However, we encourage SPP to monitor usage of Unspecified Source Imports, to refine its provisions as more data accumulates, to list relevant Unspecified GHG Adder-related implementation information in its Markets+ Protocols, and to update the Protocols as state GHG Pricing Programs evolve.

212. Regarding comments on MW Re-Designation (or leakage), we find that SPP's proposal accommodates state GHG Pricing Programs while providing more accurate price signals, more efficient market dispatch, and more flexibility for market participants by accommodating different contractual arrangements. Although we recognize that MW Re-Designation is possible in a market with non-uniform GHG pricing policies across its footprint, we need not address alternative designs because we find that SPP's proposal is just and reasonable and not unduly discriminatory or preferential.[271] We also note that SPP's proposal is designed to mitigate MW Re-Designation through the inclusion of GHG Adders and by meeting the energy demand of GHG Pricing Zones first with resources located within or under an agreement to serve load in the GHG Pricing Zones. Similarly, the Surplus Threshold under the merit order approach limits the capacity for resources without agreements to be attributed to load in GHG Pricing Zones.[272] As such, we decline commenters' requests to provide additional guidance on MW Re-Designation prevention mechanisms.

213. Next, while we recognize the significance of non-priced GHG Reduction Programs and policies in several western states, the purpose of the Markets+ GHG accounting mechanism proposed in the Markets+ Tariff is to account for existing GHG Pricing Zones and GHG pricing policies. The Markets+ GHG accounting mechanism allows for the prevailing GHG allowance prices and emission factors to be incorporated through a GHG Adder into a centralized economic dispatch such that the cost of

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[270] *See id.* § 3.3(N).

[271] *See, e.g., Cities of Bethany*, 727 F.2d at 1136 (when determining whether a proposed rate was just and reasonable, the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than alternative rate designs").

[272] This approach limits the Type 2 resource to the excess economic capacity available when compared to the load obligation of the Asset Owner. *See* SPP, Proposed Markets+ Tariff, attach. K, § 3 (Market Clearing Process) (0.0.0), §§ 3.6, 3.6.1, 3.6.2.

supplying energy is accurate and energy dispatch results in just and reasonable rates. We find that it is not necessary for Markets+ to account for non-price GHG programs in order to find the proposed Markets+ GHG accounting mechanism just and reasonable. Nevertheless, we note that SPP and stakeholders state that they are actively working on analyzing and proposing potential paths to incorporate non-priced GHG Reduction Programs within the Markets+ framework.[273]

214. Because we find SPP's proposal to account for GHG Pricing Programs just and reasonable, we decline to initiate technical conference proceedings at this time. We also decline to require any specific informational reports or reporting on aspects of the proposed mechanism to account for GHG Pricing Programs. SPP notes that its monthly Markets+ Greenhouse Gas Task Force meetings are open to the public, and all documents related to this effort would be available on SPP's website.[274]

6. Aggregate Resource Model and Seasonal Hydroelectric Offer Curve

a. SPP's Filing

i. Resource Aggregation

215. SPP proposes a resource aggregation model that allows a market participant to participate in Markets+ as a single resource that represents the capability of multiple discrete physical units. SPP asserts that resource aggregation promotes market efficiency by allowing resources to participate in the market when they would not be able to participate as individual registered resources. SPP also argues that aggregation facilitates the participation of interdependent resources, improves market modeling accuracy, and helps resource operators better manage their operations.[275]

216. The Markets+ Tariff provides that market participants may register a resource that consists of multiple individual assets that inject energy into or reduce the withdrawal of energy from Markets+ at one or more points within the Markets+ footprint, provided that

[273] *See* Transmittal at 46-47.

[274] SPP May 21 Answer at 22. The Commission also found that formal tracking and reporting programs were not a necessary condition to accept accommodations for GHG Pricing Programs in CAISO's WEIM and EDAM proceedings. *See* EDAM Order, 185 FERC ¶ 61,210 at P 386; *see also See Cal. Indep. Sys. Operator Corp*., 153 FERC ¶ 61,087 at P 58.

[275] Transmittal at 47-48.

they: (1) are electrically similar,[276] and the aggregation does not have a material impact on market operations as determined by SPP; (2) are located or pseudo-tied into the same balancing authority area; (3) share common operational control; and (4) are the same fuel type.[277] The Markets+ Tariff states that resource aggregation may be at the plant or unit level, the aggregation is expected to be a long-term selection by the market participant at resource registration, and the aggregation is intended to reflect resources that are operationally linked on a long-term basis.[278] SPP proposes to require market participants using the aggregation model to provide resource-specific telemetry and other operational information for accurate modeling, price formation, and market clearing.[279] Also, if SPP observes or anticipates a material impact on market operations from a resource aggregation, then SPP will work with the market participant to remedy the issue through the resource registration process.[280]

ii. **Seasonal Hydroelectric Offer Curve**

217. SPP further proposes that, as an alternative to the default mitigated offer calculation methodology, market participants may elect to use the Seasonal Hydroelectric Offer Curve (SHOC) mitigation calculation methodology for hydroelectric resources and resource aggregations with hydro storage capability.[281] This mitigation methodology allows resource owners to apply a formula to determine a maximum mitigated offer for individual or aggregated hydroelectric resources reflecting the opportunity cost of forgone future revenues from offering into the energy market. SPP states that the methodology is primarily modeled after the hydro default energy bid (Hydro DEB) used in CAISO and is designed to better account for the opportunity costs of hydroelectric

[276] SPP states in its transmittal letter that "electrically similar" means having a similar operational impact on the transmission system. *Id.* at 48 n.215.

[277] *Id.* at 47-48; *see* SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 (Resource Aggregation) (0.0.0).

[278] SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 (Resource Aggregation) (0.0.0).

[279] Transmittal at 48; SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 (Resource Aggregation) (0.0.0).

[280] SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 Resource Aggregation (0.0.0).

[281] Transmittal at 75; SPP, Proposed Markets+ Tariff, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(M).

resources that can store water.[282] SPP argues that the SHOC methodology would more accurately assess hydroelectric opportunity costs compared to the default thermal cost-based mitigation methodology, because hydroelectric resources do not pay for their fuel, have the ability to generate opportunistically, and have variable access to water to be used for generation.[283]

218. Because the SHOC mitigation calculation would typically provide a higher mitigated price than a simple marginal cost calculation, SPP proposes that to be eligible to use SHOC to set its mitigated energy offer, a hydroelectric resource must have storage capabilities. For a resource with usable storage, SPP proposes that mitigated offer prices under SHOC be determined by calculating the maximum of three measures: (1) the gas floor; (2) the short-term component; and (3) the long-term/geographic component.[284] The gas floor is based on the most recent average heat rate for a typical natural gas generator, multiplied by the regional natural gas price, multiplied by 1.1.[285] The short-term component is multiplied by the maximum of the following, multiplied by 1.4: (1) the most recent day-ahead peak price at the applicable electric pricing hub; (2) the on-peak balance of the month futures price for the current month at the applicable electric pricing hub; and (3) the on-peak monthly index futures price at the applicable electric pricing hub for one month after the current month.[286] The long-term/geographic component is calculated by multiplying 1.1 by the maximum of the following: (1) the most recent day-ahead peak price at the applicable electric pricing hub(s); (2) the on-peak balance of the month futures price for the current month at the applicable electric pricing hub(s); and (3) the on-peak monthly index futures price at the applicable electric pricing hub for all future months after the current month up to the maximum storage horizon after the current month.[287]

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[282] Transmittal at 76 (citing *Cal. Indep. Sys. Operator. Corp.*, 168 FERC ¶ 61,213 (2019) (accepting a separate default energy bid calculation methodology specifically for hydro resources that accounts for opportunity costs differently than the methodology for other resource types)).

[283] *Id.*

[284] SPP, Proposed Markets+ Tariff, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(M)(1).

[285] *Id.* § 3.3(M)(2).

[286] *Id.* § 3.3(M)(3).

[287] *Id.* § 3.3(M)(4).

219. Under the proposal, the maximum storage horizon that is used to calculate the SHOC's short-term and long-term components must reflect a reservoir's typical storage duration, defined as the length of time between which the reservoir cycles from a maximum elevation to a new maximum elevation during a hydro cycle. For a resource with multiple reservoirs, including a resource aggregation, a participant will calculate the maximum storage horizon from the reservoir with the longest storage duration.[288] To incorporate additional hubs into the long-term/geographic component, a market participant must demonstrate that it has firm transmission rights capable of delivery to an electric pricing hub or demonstrate having previously had such rights.[289]

b. Comments and Protests

i. Resource Aggregation

220. The SPP Market Monitor expresses concern about the open-ended qualifications for aggregated resources in the Markets+ Tariff, arguing that the aggregation should be a means to solve specific operational problems. To address this, the SPP Market Monitor recommends that SPP develop stricter qualification criteria for aggregation, such as requiring documented proof from market participants to demonstrate a reasonable inability to operate independently. The SPP Market Monitor emphasizes that the Markets+ Tariff should require assets to operate independently, allowing aggregation only when demonstrably necessary.[290]

221. The SPP Market Monitor emphasizes that aggregations should be the exception, not the rule, and expresses its willingness to work with SPP and stakeholders to develop more rigor around resource aggregation. While recognizing benefits of aggregation to the market and independent generator in limited cases, such as independent hydroelectric resources in the same hydrological basin, the SPP Market Monitor contends that aggregating independent generators could limit resource commitment and dispatch flexibility. Additionally, the SPP Market Monitor highlights that aggregations could cause problems with other market design elements, such as withholding capacity or dispatchability to benefit from congestion, complicating operation parameters, incremental energy costs, emission factors, opportunity cost, and GHG prices. The SPP

[288] *Id.* § 3.3(M)(6)(a).

[289] *Id.* § 3.3(M)(5).

[290] SPP Market Monitor April 29 Comments at 40-41, 43.

Market Monitor asserts that it may also be beneficial to add detail about the term "electrically similar."[291]

222. The SPP Market Monitor also recommends that SPP develop a mitigated offer methodology for aggregated resources in its Markets+ Tariff. Due to the increased complexity of representing their commitment and energy offers compared to independent resources, the SPP Market Monitor states that this complexity can create uncertainty for market participants regarding their offer parameters. The SPP Market Monitor argues, therefore, that specific methodologies for calculating a mitigated offer are needed, which would provide a clear starting place, reducing the workload for both market participants and the SPP Market Monitor. The SPP Market Monitor highlights that the Integrated Marketplace in SPP already includes methodologies for almost all resources and, therefore, argues that a methodology for aggregations should also be included in the Markets+ Tariff.[292]

ii. **Seasonal Hydroelectric Offer Curve**

223. Washington Municipals support SPP's SHOC proposal.[293] The SPP Market Monitor represents that it also generally supports the SHOC methodology but recommends that SPP clarify some components of the SHOC design. The SPP Market Monitor explains that, in contrast to the methodology used for other mitigated energy offers, the SHOC methodology accounts for a unit's costs beyond just its short-run marginal costs, more accurately reflecting a hydroelectric resource's opportunity cost. Due to ambiguity in the Markets+ Tariff regarding certain definitions, the SPP Market Monitor is concerned about whether the SHOC methodology will accurately reflect the opportunity cost for hydroelectric resource aggregations and thus recommends that SPP revise the Markets+ Tariff to include clear definitions.[294]

224. First, the SPP Market Monitor recommends that SPP define "no useable storage" to better reflect actual opportunity costs. The SPP Market Monitor notes that, under the Markets+ Tariff, there is "no useable storage" when "generating less than the maximum output at *all available units* for all intervals of the Operating Day would not conserve

[291] *Id.* at 41-43.

[292] *Id.* at 44-47.

[293] Washington Municipals Comments at 7.

[294] SPP Market Monitor April 29 Comments at 30-31.

additional water *in any of the reservoirs*."[295] According to the SPP Market Monitor, the tariff's definition of "no useable storage" would allow a resource aggregation to apply the storage capability from one generating unit to all units in the aggregation, despite the possibility that different units within the aggregation might have different opportunity costs. The SPP Market Monitor further argues that defining "no useable storage" for resource aggregations allows aggregations to have more pricing options, and likely higher mitigated offers, than run-of-river resources. To address these issues, the SPP Market Monitor recommends that SPP: (1) clarify in the Markets+ Tariff how useable storage is defined for a single asset resource; and (2) separately detail how useable storage is defined for aggregations, which should reflect actual opportunity costs and should result in mitigated offers commensurate with non-aggregated resources with similar current storage times.[296]

225. Second, the SPP Market Monitor states that the proposed maximum storage horizon allows the largest reservoir of a hydroelectric resource aggregation to represent the storage horizon of all reservoirs together. The SPP Market Monitor recommends that SPP develop a method that considers the storage horizon of all reservoirs. The SPP Market Monitor states that, under the Markets+ Tariff, a market participant is required to reflect "the typical storage duration," defined as the time between which the reservoir cycles from a maximum to minimum and back to a new maximum elevation, based on historical data. The SPP Market Monitor explains that the Markets+ Tariff also states that, to calculate the maximum storage horizon for multiple reservoirs, the market participant should use data from "the reservoir with the longest storage duration."[297] The SPP Market Monitor argues that, for an aggregation in which multiple reservoirs feed into a single generating unit, using the reservoir with the longest duration would underrepresent the maximum storage horizon, resulting in low mitigated offers and potentially unavailable capacity at peak load. Conversely, for a resource aggregation in which units are located at different elevations, a downstream reservoir might appear to have the longest duration, but since its water does not flow through all units, it cannot accurately represent the maximum storage horizon for the entire aggregation. To address these issues, the SPP Market Monitor recommends that SPP: (1) clarify in the Markets+ Tariff how the maximum storage horizon is defined for a single asset resource; and

[295] *Id.* at 33 (quoting SPP, Proposed Markets+ Tariff, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(M)(10) (emphasis added)).

[296] *Id.* at 33-35.

[297] *Id.* at 35-36 (quoting SPP, Proposed Markets+ Tariff, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(M)(6)(a)).

(2) separately detail how the maximum storage horizon is calculated for aggregations, which should reflect actual storage horizons for each generating unit in the aggregate.[298]

226. Third, the SPP Market Monitor recommends that SPP clarify the multipliers applied in the SHOC methodology. The SPP Market Monitor explains that the SHOC modifies CAISO's Hydro DEB methodology by adding a seasonal component. The SPP Market Monitor states that the filing, however, appears to include an additional 10% adder on top of the Hydro DEB adders that were copied over from the CAISO design. The SPP Market Monitor explains that, for a mitigated resource, its energy offers are capped at 10% above its mitigated offer, and it is unclear whether the 10% is additive with the 40% hydro adder in the short-term component or the 10% cap is intended to reference the gas floor, short-term, and long-term hydro adders.[299] The SPP Market Monitor believes that this change was unintentional, because the CAISO Market Instruments Business Practice Manual clearly applies the 10% adder to the Variable Cost Option, not the Hydro DEB option.[300] The SPP Market Monitor recommends that SPP clarify the language to reflect the intent that hydroelectric resources should not receive an additional adder on top of the gas floor, short-term, and long-term/geographic adders.[301]

c. Answers

227. In response to the SPP Market Monitor's comments regarding the second 10% SHOC adder, SPP agrees that the SHOC unintentionally includes a duplicative adder. SPP states it will remove the duplicative adder if so ordered by the Commission in a compliance filing. In response to the SPP Market Monitor's comments regarding "no useable storage" and storage horizons, SPP states that additional details on these items will be reflected in the Markets+ Protocols, which are currently being developed with stakeholders.[302]

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[298] *Id.* at 36-38.

[299] *Id.* at 39 (citing SPP, Proposed Markets+ Tariff, attach. B, § 3.3 Mitigation Measures for Energy Offer Curves (0.0.0), § 3.3(B)).

[300] *Id.* at 38 (citing CAISO, Market Instruments Business Practice Manual, § D.3).

[301] *Id.* at 39.

[302] SPP May 21 Answer at 48-49.

d. Deficiency Letter, Deficiency Response, and Answers

i. Resource Aggregation

228. In its Deficiency Letter, Commission staff requested further explanation on several points regarding resource aggregation in the Markets+ Tariff. First, staff asked how SPP will determine whether a resource aggregation has, or is expected to have, a "material impact" on market operation. Second, staff sought an explanation of SPP's approach to defining "electrically similar" resources, specifically asking how SPP will assess if two or more assets have a "similar operational impact" on the transmission system. Third, staff asked SPP to clarify whether resource aggregation is restricted to hydroelectric resources or if other resource types (e.g., natural gas, wind, solar) could also aggregate under the four specified criteria, requesting details on the operational or other benefits of allowing such aggregation. Finally, staff asked how mitigated offers would be calculated for aggregated resources and where the methodology for this calculation is outlined in the Markets+ Tariff.[303]

229. In its Deficiency Response, SPP explains that it can determine whether a resource aggregation has a material impact on market operations by analyzing the distribution factors provided by the market participants, which indicate how individual assets in the aggregation respond to dispatch instructions. SPP states that it will perform power flow analyses using these distribution factors and generator shift factors to model how the aggregation affects transmission constraints. SPP further explains that if the actual output of individual assets deviates from these factors, unexpected flows may occur, potentially resulting in a negative material impact on market operations. SPP explains that it will assess material impact in the registration process by comparing the expected flow changes based on distribution factors with actual historical performance and will regularly monitor for any ongoing or anticipated material impacts. If a material impact is detected, SPP states that it will work with the market participant to resolve it. SPP further explains that assets have a similar operational impact if they have historically similar operational patterns that produce predictable operational impacts to the transmission system when dispatched jointly and that any differences in physical location can be adequately modeled through the use of distribution factors.[304]

[303] Deficiency Letter at 9-11.

[304] *Id.* at 30-31.

230. In its Deficiency Response, SPP also explains that the mitigated offer calculation methodology used for the resource aggregation will be based on the fuel type of the assets that make up the aggregation.[305]

231. In its comments on SPP's Deficiency Response, the SPP Market Monitor argues that the description of, and the requirements associated with, distribution factors must be included in the Markets+ Tariff and filed with the Commission, not in the Markets+ Protocols, based on the rule of reason, as they are described as a "key design component" of Markets+ and fundamental to the understanding of the resource aggregation.[306]

232. Additionally, the SPP Market Monitor argues that SPP's explanation is flawed because the methodologies for the other fuel types are for single assets, not aggregated assets. The SPP Market Monitor argues that SPP does not consider multiple sources of the same type of cost (e.g., fuel cost) or how those costs should be aggregated into a single mitigated offer for the resource aggregation. The SPP Market Monitor further argues that without distribution factors of each component resource and the number of assets in the aggregation, a methodology cannot accurately describe a resource aggregation's costs "sufficient to replicate the Mitigated Energy Offer Curve."[307] Therefore, the SPP Market Monitor requests that the Commission direct SPP to include in the Markets+ Tariff a mitigated offer methodology for resource aggregations that describes how distribution factors are used to calculate the mitigated offer.[308]

233. In its answer to the SPP Market Monitor's Deficiency Response comments, SPP argues that the SPP Market Monitor's request to include distribution factors explicitly in the Markets+ Tariff is unnecessary under the rule of reason. SPP explains that the Markets+ Tariff already addresses aggregation requirements, real-time telemetry, and operational resource characteristics for assets within a resource aggregation. SPP states that any technical details of how the aggregation should operate will be included in the Markets+ Protocols, if necessary.[309]

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[305] *Id.* at 32.

[306] SPP Market Monitor October 10 Comments at 1-4 (quoting Deficiency Response at 30).

[307] *Id.* at 5-6 (quoting SPP, Proposed Markets+ Tariff, attach. B, § 3.2 (Mitigated Offer Calculation Methodology) (0.0.0)).

[308] *Id.* at 6.

[309] SPP October 23 Answer at 6-12.

234. As to the mitigated offer calculation methodology for aggregated resources, SPP argues in its answer to the SPP Market Monitor that the Markets+ Tariff already mandates that market participants provide detailed "[p]hysical and operational Resource characteristics," cost data, and supporting documentation sufficient for the SPP Market Monitor to replicate the Mitigated Energy Offer Curve.[310] In addition, SPP states that the Markets+ Tariff requires market participants to register each asset within a resource aggregation, including the number of assets. Finally, SPP states that it will work with stakeholders, including the SPP Market Monitor, to finalize the Markets+ Protocols for aggregated resources but does not view the SPP Market Monitor's preferred additions as necessary in the Markets+ Tariff.[311]

ii. **Seasonal Hydroelectric Offer Curve**

235. In the Deficiency Letter, Commission staff also requested further explanation of the definitions of maximum storage horizon and no useable storage included in the Markets+ Tariff. Specifically, Commission staff requested information on how the maximum storage horizon would be calculated for hydroelectric resource aggregations and sought clarification on whether the aggregate generation capacity would be factored into the SHOC calculation. In response, SPP states that a resource aggregation's generation capacity is not reflected in the maximum storage horizon and explains that, in a situation where a resource aggregation has both a reservoir with no usable storage and a reservoir with useable storage, the market participant would calculate its maximum storage horizon using the reservoir with the longest storage duration. Therefore, the SHOC calculation for a resource aggregation depends on whether the aggregation "as a whole" has useable storage.[312]

236. Commission staff also sought clarification on whether a resource aggregation that contains one resource that only stores a single interval of storage in an operating day and other resources with no useable storage would be eligible to calculate its SHOC using the maximum of the gas floor, short-term component, and long-term/geographic component. In response, SPP clarifies the difference in how SHOC would be applied to resource aggregations with usable storage versus run-of-river resources. SPP explains that a run-of-river resource would not have demonstrated an ability to store energy for more than an hour for use in a future period and therefore would not be eligible for SHOC. A resource would only be eligible for SHOC if its historical reservoir elevation data shows that the resource aggregation is capable of storing water for more than an hour and the resource

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[310] *Id.* at 12-14 (quoting SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 (Resource Aggregation) (0.0.0)).

[311] *Id.* at 12-15.

[312] Deficiency Response at 25-26.

aggregation is currently expected to have usable storage. SPP further explains that the Markets+ Tariff does not prescribe a minimum volume of water associated with the usable storage. Therefore, before qualifying for SHOC, a resource would have to demonstrate its historical capability of storing over an hour of storage for use in a future period.[313]

237. Additionally, Commission staff requested a detailed example of how the SHOC would be calculated for: (1) a run-of-river resource that stores one hour of generation capacity; and (2) a resource aggregation that stores one hour of generation capacity. Commission staff also sought clarification on whether a resource aggregation with one interval of storage would be able to offer at higher prices than a run-of-river resource that stores one hour over the operating day. In response, SPP clarifies that, before qualifying for SHOC, a resource would have to demonstrate its historical capability of over an hour of storage for use in a future period. In other words, a resource that demonstrates a maximum storage horizon of over one hour would be eligible for SHOC, even if that resource does not have useable storage in an operating day. A run-of-river resource would not be eligible for SHOC because its maximum storage horizon cannot exceed one hour.[314]

238. Hydropower Entities express support for SPP's deficiency response related to resource aggregation and the application of SHOC.[315]

e. Commission Determination

i. Resource Aggregation

239. We find that SPP has demonstrated that its proposal to establish an aggregated resource model is just and reasonable and not unduly discriminatory or preferential. We agree with SPP that resource aggregation could promote market efficiency by facilitating participation of interdependent resources and helping resource operators better manage their operations. As discussed below, based on the Commission's rule of reason, we find it appropriate for SPP to reflect the distribution factors and the technical details of the SHOC in the Markets+ Protocols. However, we direct SPP, within 30 days of the date of this order, to submit a compliance filing to include in the Markets+ Tariff the explanation

[313] *Id.* at 27-28.

[314] *Id.* at 27-28.

[315] Hydropower Entities Comments at 2-9.

from its Deficiency Response that the mitigation methodology used for a resource aggregation will be for the fuel type of the assets that make up the aggregation.[316]

240. We do not share the SPP Market Monitor's concern about the broad eligibility for resource aggregation and reject its recommendation that SPP require stricter eligibility criteria for resource aggregation. We find that SPP's proposed language in the Markets+ Tariff adequately addresses the potential for unnecessary aggregation and reasonably limits an aggregation's effect on market operations. Specifically, the proposed Markets+ Tariff requires that an aggregation's individual components be electrically similar and that the aggregation does not have a material impact on Markets+ operations, that the resources participating in an aggregation be situated in, or pseudo-tied into, the same balancing authority area, that the resources in an aggregation be of the same fuel type, and that individual components of an aggregation share operational control.[317] The expected long-term selection of resources that are operationally linked, coupled with SPP's intervention in the case of material effects, provide sufficient safeguards to deter the formation of unnecessary aggregations. We note that elaboration on the application of both "electrically similar" and "material impact" could be included in the Markets+ Protocols.[318]

241. The SPP Market Monitor supports the development of a mitigated offer calculation methodology for aggregated resources. We find that, given the numerous possible configurations of aggregated resources based on the number and type of individual resources in each fuel category, it may be impractical for SPP to create a standard mitigated offer calculation methodology for all potential combinations. Under the proposal, market participants seeking to register as an aggregated resource must develop a mitigated methodology tailored to their unique aggregation arrangement.[319] We note that, in analogous contexts, the Commission has approved tariff provisions that provide flexibility for resource owners to negotiate with the transmission provider to

[316] Deficiency Response at 32.

[317] SPP, Proposed Markets+ Tariff, attach. A, § 4.2.6 (Resource Aggregation) (0.0.0). SPP clarifies that it will evaluate if the Resource aggregation has, or is likely to have, a negative material impact on market operations by determining the probable unexpected change in flow across the identified transmission facilities and [service flow constraints] that results from one or more individual asset's actual output deviating in a manner that is inconsistent with the submitted distribution factors. Deficiency Response at 30.

[318] Deficiency Response at 30.

[319] *See* SPP, Proposed Markets+ Tariff, attach. B, § 3.2 (Mitigated Offer Calculation Methodology) (0.0.0).

develop a mitigated offer.[320] Similarly, here, after a market participant develops a mitigated methodology for an aggregated resource, the SPP Market Monitor then reviews each methodology, along with the market participant's detailed physical and operational characteristics, cost data, and supporting documentation. We find that this approach accommodates the complexity of these calculations while ensuring the accuracy and transparency of mitigated offers in the aggregated model.

242. We also find that the SPP Market Monitor's recommendation to include a detailed description of distribution factors and their requirements in the Markets+ Tariff is unnecessary. The Commission has broad discretion in applying the rule of reason, under which provisions that "significantly affect rates, terms, and conditions" of service,[321] are realistically susceptible of specification, and are not generally understood in a contractual agreement, must be included in the tariff.[322] The tariff need not include "mere implementation details,"[323] which instead may be included only in the business practice manuals.[324] "[E]ven specifiable practices that significantly affect rates need not be included if they are clearly implied by the tariff's express terms."[325] Section 4.2.6 of the Markets+ Tariff mandates that "physical and operational Resource characteristics, real-time telemetry, and other information for each asset in a resource aggregation" be provided to SPP. This provision allows SPP to collect distribution factors as part of the

[320] *See, e.g.*, CAISO, CAISO eTariff § 39.7.1 (47.0.0), § 39.7.1.3 (Negotiated Rate Option).

[321] *Cargill Power Mkts., LLC v. Pub. Serv. Co. of N.M.*, 132 FERC ¶ 61,079, at P 23 (2010) (explaining that the FPA "requires all practices that significantly affect rates, terms, and conditions of service to be on file with the Commission" so that customers have "proper notice" and "obtain services on a just and reasonable and not-unduly discriminatory basis").

[322] *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (The FPA's "amorphous" requirement that tariffs include "practices affecting rates" means Commission has "broad discretion" in giving the FPA "concrete application.") (*City of Cleveland*); *see Hecate*, 72 F.4th at 1314.

[323] *Hecate*, 72 F.4th at 1312.

[324] *See, e.g.*, *N.Y. Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102, at P 108 (2022) (finding NYISO's marginal capacity accreditation approach to be consistent with the rule of reason because it "provides sufficient detail to define 'marginal reliability contribution,' and in addition sets forth the process for calculating the marginal capacity accreditation").

[325] *Hecate*, 72 F.4th at 1314 (citing *City of Cleveland*, 773 F.2d at 1376).

"other information" category. Furthermore, SPP has clarified that any technical specifications for aggregated resource operations will be included in the Markets+ Protocols, if necessary.[326] We find that this section of the proposed Market+ Tariff ensures that relevant implementation details are addressed without duplicating information in the tariff.[327]

ii. Seasonal Hydroelectric Offer Curve

243. We find that the proposed SHOC mitigation calculation methodology is just and reasonable and not unduly discriminatory or preferential because the SHOC calculation for hydroelectric resource aggregations reasonably calculates the opportunity cost of operating for hydroelectric resources with usable storage. Regarding the SPP Market Monitor's concern regarding the potential for preferential treatment for resource aggregations over run-of-river resources, we are satisfied with SPP's explanation that the SHOC methodology should not apply to run-of-river resources because they lack usable storage. Consequently, run-of-river resources do not face an opportunity cost based on when the hydro resources would be dispatched, and thereby the use of SHOC is unnecessary. Because all SHOC-eligible resources, including aggregated resources, will have to demonstrate to the SPP Market Monitor a minimum specified storage capability threshold, we find the proposal will not provide unduly preferential treatment to resource aggregations.

244. With respect to the SPP Market Monitor's comments regarding the calculation of a hydroelectric resource aggregation's maximum storage horizon using the longest duration reservoir, we find that it is impracticable for SPP to create a standard methodology for all of the potential hydrological layouts and the resulting opportunity costs that are included in mitigated offers, and as such, it is not necessary for the calculation methodology to be explicitly detailed in the Markets+ Tariff.[328]

245. In its May 21 Answer, SPP acknowledges that it inadvertently included a 10% adder in Attachment B, section 3.3(B) of the Markets+ Tariff. The 10% adder is duplicative of the adders included for each of the gas-price floor, short-term, and long-term components of the SHOC calculation in section 3.3(M), and SPP consents to removing the erroneous language in a compliance filing. Accordingly, we direct SPP to submit a compliance filing making this correction, consistent with SPP's commitment in its May 21 Answer, within 30 days of the date of this order.

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[326] SPP October 23 Answer at 11.

[327] *See generally Hecate*, 72 F.4th at 1312-14.

[328] *See City of Cleveland*, 773 F.2d at 1376.

246. Finally, we note that SPP has not specified the default electric pricing hub that would be used to calculate the short-term and long-term/geographic components of the SHOC. We remind SPP that its default electric pricing hub must adhere to the Commission's index liquidity standards.[329]

7. Market Monitoring and Mitigation

a. SPP's Filing

247. SPP represents that the SPP Market Monitor will perform the market monitoring services for Markets+, which involves the implementation of tools and procedures to detect potential gaming and manipulation within the market.[330] SPP explains that, to fulfill its monitoring duties, the SPP Market Monitor will examine market data and information, including analyzing resource offer data, virtual energy bids and virtual energy offers, export interchange transaction bids and import interchange transaction offers, resource commitment and dispatch, market clearing prices, and information on transmission and generator outages. The SPP Market Monitor will refer any instances of manipulation to Commission staff.[331]

248. SPP states that the SPP Market Monitor is responsible for monitoring and reviewing markets for the exercise of market power, including the physical withholding of generating capacity and transmission facilities.[332] The SPP Market Monitor plans to conduct a market power study after participation in Markets+ is determined. Under the proposal, market participants are required to submit a mitigated offer for each resource daily, and the mitigated offer should be calculated in accordance with a methodology approved by the SPP Market Monitor.[333] Existing market participants must submit a resource's mitigated offer calculation methodology, including accurate cost data and/or

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[329] *See Price Discovery in Nat. Gas & Elec. Mkts*, 109 FERC ¶ 61,184, at P 66 (2004).

[330] Transmittal at 72.

[331] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), §§ 4.2 (Market Monitoring Scope), 4.3 (Referrals to FERC).

[332] SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), §§ 4.5 (Monitoring for Potential Transmission Market Power Activities), 4.6 (Monitoring for Market Participant Behavior Possibly Warranting Mitigation).

[333] Transmittal at 75; *see* SPP, Proposed Markets+ Tariff, attach. B, §§ 3.2 (Mitigated Offer Calculation Methodology) (0.0.0), 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0).

verifiable supporting documentation, to the SPP Market Monitor no less than 30 days before making its first offer.[334] Except for eligible hydroelectric resources selecting an alternative mitigation calculation methodology, the mitigated offer methodology must include, if applicable, heat rates, fuel costs, emissions costs, and variable and operation cost data.[335]

249. SPP explains that, consistent with other SPP-operated markets, including the Integrated Marketplace, the SPP Market Monitor will conduct a market power test, conduct test, and market impact test on market offers to detect the potential exercise of market power.[336] First, the market power test is designed to detect whether a selling participant can significantly affect prices and consists of three criteria to determine whether a resource has market power: (1) whether the resource is necessary to relieve congestion;[337] (2) whether the resource is committed as a reliability must run resource; and (3) within its reserve zone, whether the resource is owned by a pivotal supplier.[338] Second, the conduct test examines whether a resource's market offer exceeds a certain price threshold beyond the resource's mitigated offer. SPP proposes to set the conduct threshold for a resource's market energy offer to 10% above its mitigated offer.[339] Third, the market impact test evaluates whether applying mitigation measures to a resource found to have market power would result in a more competitive market outcome. A resource's offer would fail the market impact test when one of the following conditions is

[334] SPP, Proposed Markets+ Tariff, attach. B, § 3.2 (Mitigated Offer Calculation Methodology) (0.0.0).

[335] *Id.*, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(F).

[336] Transmittal at 72; *see* SPP, Proposed Markets+ Tariff, attach. B, § 3.1 (Market Power Test) (0.0.0); *id.* § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0; *id.* § 3.4 (Mitigation Measures for Start-Up Offers and No-Load Offers) (0.0.0); *id.* § 3.5 (Mitigation Measures for Flexibility Reserve Product Offers) (0.0.0); *id*. § 3.6 (Validation of Mitigated Resource Offers) (0.0.0); *id.* § 3.7 (Additional Mitigation Measures for Resource Offer Parameters) (0.0.0); *id*. § 3.8 (Market Impact Test) (0.0.0).

[337] SPP, Proposed Markets+ Tariff, attach. B, § 2 (0.0.0), § 2.2 (Resource-to-Load Distribution Factor) (RLDF).

[338] *Id.* § 3.1 (Market Power Test) (0.0.0). SPP proposes to define a Reserve Zone as a zone, containing a specific group of Pnodes, for which minimum and maximum Flexibility Reserve Product requirements are calculated. *Id.*, pt. I, § 1.R (Definitions) (0.0.0) (defining Reserve Zones).

[339] *Id.*, attach. B, § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(B).

met: (1) an LMP or Market Clearing Price at a settlement location exceeds the corresponding price from the market solution with mitigation measures applied by the applicable impact test threshold; or (2) a make-whole payment for any resource exceeds the corresponding make-whole payment from the market solution with mitigation measures applied by the make-whole payment impact test threshold.[340] For market offers that fail all three tests, SPP will systematically replace the market offer with a mitigated, or cost-based, offer.[341] Finally, SPP proposes thresholds for screening for withholding transmission facilities.[342]

b. Comments and Protests

250. The SPP Market Monitor generally supports the market monitoring and mitigation proposal for Markets+. The SPP Market Monitor supports the proposed requirements for the mitigated offer calculation methodology.[343] The SPP Market Monitor notes that the Markets+ conduct test differs from the test applied in the Integrated Marketplace in two ways. First, the 10% conduct threshold for energy offers in Markets+ does not vary based on whether the resource is located in a frequently constrained area. In the Integrated Marketplace tariff, the conduct threshold for resources located inside a frequently constrained area is 17.5% above the mitigated energy offer, while the threshold for resources located outside a frequently constrained area is 25%.[344] The SPP Market Monitor prefers the more conservative singular threshold without defining frequently constrained area because the fragmented footprint in Markets+ will likely lead all areas to be frequently constrained, rendering the distinction between areas inconsequential. Second, offers that exceed the conduct threshold in the Integrated Marketplace are mitigated to a resource's cost-based offer, while offers in Markets+ are

[340] *Id.* § 3.8 (Market Impact Test) (0.0.0).

[341] Transmittal at 72.

[342] SPP, Proposed Markets+ Tariff, attach. C, § 4 (0.0.0), § 4.6.4.2 (Thresholds for Screening Potential Physical Withholding of Transmission Facilities).

[343] SPP Market Monitor April 29 Comments at 7-9 (citing SPP, Proposed Markets+ Tariff, attach. B, § 3.2 (Mitigated Offer Calculation Methodology) (0.0.0)).

[344] *Id.* at 12 & n.35 (citing SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1, attach. AF, § 3.2 (Mitigation Measures for Energy Offer Curves) (1.0.0), § 3.2(A)).

mitigated to its cost-based offer plus 10%.[345] The SPP Market Monitor states that this mitigation design is Commission-approved and has worked well in the Integrated Marketplace. The SPP Market Monitor also states that the adjustments for Markets+ are appropriate due to the potential fragmented footprint and that, given the lack of market history, the thresholds are a reasonable starting place.[346]

251. Regarding the proposed market mitigation, the SPP Market Monitor expresses some concerns, but does not recommend proposed revisions at this time; rather, it is awaiting further details outside the Markets+ Tariff and for market experience to determine if any future changes are necessary.[347] First, the SPP Market Monitor supports the proposed market power test but is concerned that certain elements of the test are yet to be developed. The SPP Market Monitor explains that the market power test utilizes the Residual Supply Index (RSI) to determine whether a market participant is a pivotal supplier within a reserve zone, which is defined in the same manner as a zone calculated for the provision of flexibility reserve products. The SPP Market Monitor supports the proposed RSI test and states that it improves on the WEIS Market, but it expresses concern because SPP has yet to develop the reserve zones; however, it believes that SPP will develop appropriate reserve zones that account for major areas of congestion that determine deliverability.[348]

252. Second, the SPP Market Monitor supports SPP's two proposed exemptions for physical withholding penalties that are unique to Markets+: (1) the market participant is exempt if it has fulfilled its must-offer requirements to the day-ahead and real-time markets per section 5.1 of Attachment A; and (2) the market participant is exempt if the resource is following water management requests or directives set by local authorities.[349] The SPP Market Monitor explains that if a resource withholding dispatch is not exempt, it will likely receive the uninstructed resource deviation penalty.[350] The SPP Market

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[345] *Id.* at 12 & n.36 (citing SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1, attach. AF, § 3.2 (Mitigation Measures for Energy Offer Curves) (1.0.0), § 3.2(B)).

[346] *Id.* at 13.

[347] *Id.* at 17.

[348] *Id.* at 18-21.

[349] *Id.* at 27-28 (citing SPP, Proposed Markets+ Tariff, attach. C, § 4 (Market Monitoring) (0.0.0), §§ 4.6.4(2)(b), 4.6.4(2)(e)).

[350] *Id.* (citing SPP, Proposed Markets+ Tariff, attach. A, § 9.3.23 (Real-Time Uninstructed Resource Deviation Amount) (0.0.0)).

Monitor explains that, while it supports the proposed exemptions for physical withholding, it believes the uninstructed resource deviation penalty could be more robust with a stronger uninstructed deviation penalty.

253. Third, the SPP Market Monitor expresses concern regarding its access to market participant data. The SPP Market Monitor explains that market participants are required to keep data and provide it upon request, unless exempted in the Market Participant Agreement.[351] The SPP Market Monitor expresses no specific objection because to date, SPP has not proposed any limitations on what could be exempted; however, potential future exceptions could be concerning.[352]

254. Colorado Consumer Advocate recommends consumer protections be incorporated into the Markets+ Tariff. Regarding market monitoring, Colorado Consumer Advocate states that the SPP Market Monitor should be empowered with adequate tools to act as a structural counterbalance. Further, Colorado Consumer Advocate suggests that the SPP Market Monitor be required to directly communicate with state consumer advocates, provide unrestricted access of data and reports, and guarantee access to transmission expansion modeling and other key analyses.[353]

c. Answers

255. In response to the SPP Market Monitor's comments recommending enhancements to Markets+, SPP states that it does not believe that the proposed enhancements impact the justness and reasonableness of the filing, nor are the enhancements necessary to have in place prior to market implementation.[354] Additionally, SPP reiterates that market participants must retain data and information and promptly provide any such data and information to the SPP Market Monitor "unless explicitly exempted in a Market Participant Agreement."[355] SPP explains that it is appropriate for the Commission to be provided an opportunity to make a determination of the reasonableness of the exemption

[351] *Id.* at 29 (citing SPP, Proposed Markets+ Tariff, attach. C, § 8 (0.0.0), § 8.3 (Access to Market Participant Data and Information)).

[352] *Id.*

[353] Colorado Consumer Advocate Comments at 10.

[354] SPP May 21 Answer at 47-48.

[355] *Id.* at 48 (quoting SPP, Proposed Markets+ Tariff, attach. C, § 8 (0.0.0), § 8.3 Access to Market Participant Data and Information).

under the specific circumstances of any non-conforming Market Participant Agreement.[356]

256. In response to Colorado Consumer Advocate's concern over access to data and reports, the SPP Market Monitor encourages all affected parties, including consumer advocate groups, to participate in the stakeholder process and to review any reports or analyses. The SPP Market Monitor states that the Commission should disregard Colorado Consumer Advocate's request for direct communications and its request to receive nonpublic, confidential analysis, data, or information in order for the SPP Market Monitor to maintain its independence.[357]

257. In response to the SPP Market Monitor's answer, Colorado Consumer Advocate states that it does not want to create advantages for specific interest groups or interfere with market impartiality, and that it only seeks to ensure that the proposal protects the public interest and that electricity consumers pay the lowest price possible for reliable service as envisioned by Order No. 2000.[358] Colorado Consumer Advocate argues that direct communication between the SPP Market Monitor and state utility consumer advocates would not compromise the market monitor's independence. Colorado Consumer Advocate also argues that it is regularly granted access to highly confidential documents, explaining that it files non-disclosure agreements in accordance with Colorado Public Utility Commission rules.[359]

258. Colorado Consumer Advocate also encourages the Commission to take further steps to support the independence of the SPP Market Monitor. Because the Markets+ proposal is a precursor to a larger RTO, Colorado Consumer Advocate suggests that the Commission consider whether the role of the SPP Market Monitor in Markets+ should grow in independence and scope. Colorado Consumer Advocate recommends that the

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[356] *Id.*

[357] SPP Market Monitor May 14 Answer at 9-11.

[358] Colorado Consumer Advocate Answer at 3 (citing *Reg. Transmission Orgs.*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999) (cross-referenced at 89 FERC ¶ 61,285), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000) (cross-referenced at 90 FERC ¶ 61,201), *aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish Cty. v. FERC*, 272 F.3d 607 (D.C. Cir. 2001)).

[359] *Id.* at 3-6.

SPP Market Monitor move away from an internal structure within SPP to a fully external and independent entity.[360]

d. Commission Determination

259. We find that SPP's proposed market monitoring and mitigation measures are just and reasonable and not unduly discriminatory or preferential. As discussed above, the market monitoring and mitigation measures are similar to the existing provisions previously accepted by the Commission in the SPP OATT for the Integrated Marketplace. Such market power monitoring and mitigation methodologies have been found to be effective in centrally cleared markets, such as in RTOs/ISOs and markets similar to the Markets+ proposal. Specifically, we find that the market power test will appropriately determine if a resource could exercise market power because it will evaluate whether the resource is necessary to relieve congestion, whether the resource is committed as a reliability must run resource, and whether the resource is a pivotal supplier, and will apply mitigation where necessary.[361]

260. We also find that the conduct test will appropriately determine whether a resource's market offer falls within the appropriate price level of 10% above the resource's mitigated offer,[362] which is more stringent than the Integrated Marketplace conduct thresholds of 17.5% and 25% for resources located inside and outside of frequently constrained areas, respectively.[363] As the SPP Market Monitor explains, Markets+ participants may be located in areas that are not geographically contiguous and the limited transmission between areas in the Markets+ footprint may cause all balancing authorities to be frequently constrained areas.[364] Therefore, we find that the more stringent conduct thresholds for energy and flexibility reserve products, as well as the lack of distinct thresholds for resources located in frequently constrained areas, are reasonable given the potential fragmented footprint and currently unknown participants of Markets+.[365]

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[360] *Id.* at 6-8.

[361] SPP, Proposed Markets+ Tariff, attach. B, § 3.1 (Market Power Test) (0.0.0).

[362] *Id.* § 3.3 (Mitigation Measures for Energy Offer Curves) (0.0.0), § 3.3(B).

[363] *See* SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1, attach. AF, § 3.2 (Mitigation Measures for Energy Offer Curves) (1.0.0).

[364] SPP Market Monitor April 29 Comments at 11-12.

[365] *Id.* at 12.

261. We find that the market impact test is consistent with that accepted for the Integrated Marketplace and will determine whether applying mitigation measures to a resource offer that fails the market power test and conduct test would result in a more competitive outcome.[366]

262. Although we recognize the importance of access to informational for states and consumer advocates, we disagree with Colorado Consumer Advocate's arguments that consumer advocate groups should have unrestricted access to data and reports of the SPP Market Monitor. We find that SPP's proposal provides the public with sufficient information. Moreover, we agree with the SPP Market Monitor's position that nonpublic analyses, data, and reports must be kept confidential because the information therein may be commercially sensitive. We note that this information is kept confidential in other centrally cleared markets. Finally, we find Colorado Consumer Advocate's comments on the scope and independence of the SPP Market Monitor to be outside the scope of this proceeding.

8. Virtual Transactions

a. SPP's Filing

263. SPP proposes to delay implementation of virtual transactions[367] until at least six months after the market go-live date and proposes to provide notice to the Commission 60 days beforehand. SPP states that its proposal to delay the start of virtual transactions will allow SPP and market participants to gain experience with the market before adding the potential complications involved with virtual transactions. SPP explains that it will determine when to begin virtual transactions by reviewing the level of price convergence between the day-ahead and real-time markets, among other things. SPP proposes to not implement virtual trading in the summer season due to concerns about physical generation being displaced in the day-ahead market during times of high load. SPP states that its proposal to delay virtual transactions is similar to CAISO's EDAM proposal, which the Commission accepted.[368]

[366] SPP, Proposed Markets+ Tariff, attach. B, § 3.8 (Market Impact Test) (0.0.0).

[367] *See id.* pt. I, § 1.V (Definitions) (0.0.0), (Virtual Energy Bid, Virtual Energy Offer, Virtual Transactions).

[368] SPP Transmittal at 51-52 (citing EDAM Order, 185 FERC ¶ 61,210 at P 408).

264. Under the proposal, when virtual bidding is implemented, SPP may suspend virtual transactions at its sole discretion.[369] In exercising this discretion, SPP states that it will consider whether virtual transactions remain a cost-effective tool aiding price convergence. The SPP Market Monitor will monitor divergence between day-ahead and real-time market prices, and if the SPP Market Monitor identifies excessive price divergence caused by market participants through virtual transactions,[370] it will recommend SPP impose mitigation measures that restrict the responsible market participants from submitting virtual transactions at the settlement locations where the market participants caused the divergence.[371] If this occurs, SPP proposes that "additional analysis is required,"[372] but also that the market monitor will recommend that virtual transactions can be suspended by the market operator.[373] Under the proposal, virtual transactions can be suspended as long as necessary at the market participant level, at individual locations or groups of locations, or market-wide to identify and resolve the underlying cause.[374] SPP states that its proposal to suspend virtual transactions is similar to the authority it has in its Integrated Marketplace and the authority to suspend approved

[369] SPP, Proposed Markets+ Tariff, attach. A, § 5.4 (Virtual Transactions Implementation, Suspension, and Mitigation) (0.0.0).

[370] SPP defines excessive price divergence as being a difference between day-ahead and real-time prices of plus or minus 10%. *Id.* attach. C, § 4 (Market Monitoring) (0.0.0), § 4.6.3 (Metric and Threshold Specifications).

[371] *Id.* § 4.6.2; *see id.* attach. A, § 5.4 (Virtual Transactions Implementation, Suspension, and Mitigation) (0.0.0).

[372] *Id.* attach. C, § 4 (Market Monitoring) (0.0.0), § 4.6.3 (Metric and Threshold Specifications).

[373] *Id.* § 4.6.2 (Monitoring for Virtual Energy Bids and Virtual Energy Offers).

[374] *Id.* attach. A, § 5.4 (Virtual Transactions Implementation, Suspension, and Mitigation) (0.0.0). SPP will be required to publicly post notice of the suspension "and the underlying cause." *Id.*

for CAISO and NYISO.[375] Finally, SPP proposes that it may restrict virtual transactions to physical Settlement Locations only.[376]

b. Comments and Protests

265. The SPP Market Monitor agrees with SPP that a delayed implementation of virtual trading will be beneficial. According to the SPP Market Monitor, if virtual traders capitalize on market volatility caused by lack of experience or a flawed market design or operation, then the virtual traders will extract money from the market with no benefit to the market.[377]

266. XO Energy objects to SPP's proposed six-month delay in implementing virtual transactions, stating that SPP offers no reasonable basis for doing so. XO Energy argues that the comparison to CAISO's EDAM proposal is inapposite because CAISO proposed to not implement virtual transactions and instead instituted a stakeholder process. XO Energy states that implementing virtual transactions at the beginning of the market is the only way to ensure the market functions properly. XO Energy further argues that given SPP's proposed suspension authority and its existing experience with the Integrated Marketplace, it is unclear what value delay will have other than to create a period of unnatural market dynamics.[378] Similarly, Interwest/NIPCC contend that initiation of virtual transactions after the first six months is subject to SPP's discretion, without any objective standard for SPP to apply. Interwest/NIPPC argue that this discretion may be too unconstrained.[379]

267. CEBA contends that SPP should establish a consistent set of criteria to apply when evaluating whether to suspend virtual transactions. CEBA argues that it is important for market participants to understand how SPP will exercise this discretion.[380]

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[375] Transmittal Letter at 53 (citing CAISO, CAISO eTariff, § 7.9 (Suspension or Limitation of Virtual Bidding) (0.0.0)); *N.Y. Indep. Sys. Operator, Inc.*, 97 FERC ¶ 61,091, at 61,472 (2001)).

[376] SPP, Proposed Markets+ Tariff, attach. A, § 5.4 (Virtual Transactions Implementation, Suspension, and Mitigation) (0.0.0).

[377] SPP Market Monitor April 29 Comments at 17.

[378] XO Energy Protest at 15-16.

[379] Interwest/NIPPC Comments at 7.

[380] CEBA Comments at 10-11.

c. Answers

268. In response to XO Energy's protest, the SPP Market Monitor expresses support for the proposed six-month delay in virtual trading. The SPP Market Monitor explains that the early days of a new market are a live testing period and while XO Energy correctly argues that SPP has the ability to suspend virtual transactions and apply mitigation measures to stop virtual trading at specific locations, these mechanisms cannot prevent initial market harm but only prevent further market harm.[381]

d. Deficiency Letter, Deficiency Response, and Answers

269. In the Deficiency Letter, Commission staff requested further explanation of how SPP will determine the need to suspend virtual transactions at only physical locations and, should SPP suspend an individual market participant's right to submit virtual transactions, under what conditions that market participant could regain its ability to submit virtual transactions. First, SPP explains that virtual transactions at physical locations could be suspended due to price divergence, just as with other virtual transactions. Second, SPP states that suspension of an individual market participant's ability to submit virtual transactions can be lifted when the underlying cause of the price divergence it caused has been identified and resolved.[382]

e. Commission Determination

270. We find SPP's proposal for virtual transactions to be just and reasonable and not unduly discriminatory or preferential. We find that the proposed six-month delay in implementing virtual transactions is reasonable, as it will allow SPP and market participants time to gain experience with the new market and avoid possible issues with virtual transactions. We note that the Commission found it just and reasonable to launch other new day-ahead markets without virtual transactions.[383] Thus, we disagree with XO Energy's protests that implementing virtual transactions at the beginning of the market is the only way to ensure the market functions properly given that this is a new day-ahead market structure and that SPP's suspension authority is a sufficient safeguard. We

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[381] SPP Market Monitor May 14 Answer at 9.

[382] Deficiency Response at 33-34.

[383] *See* EDAM Order, 185 FERC ¶ 61,210 at P 408 ("[M]andating participation in virtual bidding, especially for new market participants, is not a necessary condition to enable the broader EDAM framework…. This initial transitional framework will provide data and experience and ultimately help to inform CAISO's future examinations of whether and how to implement any potential permanent virtual bidding framework in EDAM.").

disagree with Interwest/NIPPC's argument that SPP's discretion to implement virtual transactions is too broad on the same grounds. We also find that SPP's proposed criteria for suspending virtual transactions, once implemented, are just and reasonable, such that SPP need not establish a more consistent set of suspension criteria as CEBA asserts. As SPP notes, the Commission has found other market operators' authority to suspend virtual trading to be just and reasonable, including in SPP's Integrated Marketplace,[384] and we continue to find that this suspension authority is an important tool for market operators to ensure that markets operate efficiently.

9. Market Participant Agreements

a. SPP's Filing

271. SPP proposes to require market participants to sign a legally binding Market Participant Agreement prior to joining Markets+.[385] The proposed Market Participant Agreement requires the market participant to represent and warrant that, upon registration of one or more resources, the market participant intends to participate in Markets+ in accordance with procedures specified in the Markets+ Tariff and Markets+ Protocols, and the market participant: (1) has been granted market-based rate authority from FERC; (2) has another FERC-approved basis for setting prices in Markets+; or (3) is exempt from the requirement to have rates for services on file with FERC.[386]

b. Commission Determination

272. We accept the proposed Market Participant Agreement as just and reasonable and not unduly discriminatory or preferential because it sets forth the primary obligations of SPP (as Market Operator) and the market participant, as well as the terms and conditions of the market participant's participation in Markets+, including the data and information required for initial registration. Additionally, we remind market participants that they must continue to comply with the requirements of the Commission's market-based rate program. Specifically, the Markets+ footprint will constitute a new relevant geographic

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[384] *See* SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1, attach. AF, § 4 (Mitigation Measures for Virtual Energy Bids and Virtual Energy Offers) (1.3.0); *id.* attach. AG, § 4 (5.0.0), § 4.6.2 (Monitoring for Virtual Energy Bids and Virtual Energy Offers).

[385] SPP, Proposed Markets+ Tariff, attach. E (Market Participant Agreement) (0.0.0), § 7.

[386] Transmittal at 118; *see* SPP, Proposed Markets+ Tariff, attach. E (Market Participant Agreement) (0.0.0).

market for market power analysis purposes, and potential market participants will have to seek market-based rate authority to participate in Markets+.[387]

10. Flexibility Reserve Product

a. SPP's Filing

273. SPP proposes that that Markets+ include a suite of reserve products, called flexibility reserve products, the procurement of which will be co-optimized with energy.[388] SPP states that flexibility reserve products include short-term flex up, short-term flex down, and mid-term flex up, similar to the ramp capability and uncertainty reserve products in the SPP Integrated Marketplace.[389]

274. SPP states that the short-term flex up and short-term flex down products will be procured from resources capable of following dispatch targets, that are reserved to provide upward and downward flexibility, respectively, during periods in which net obligations increase in future dispatch intervals.[390] SPP explains that these products systematically pre-position resources with ramp capability to manage net load variations and uncertainties, providing transparent price signals to incent resource flexibility and reducing the number of incidents of pricing excursions that could otherwise arise if system ramping were limited.[391] Resources that offer a cold start-up time of 10 minutes

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[387] 18 C.F.R. § 35.42 (2024); *Mkt.-Based Rates for Wholesale Sales of Elec. Energy, Capacity & Ancillary Servs. by Pub. Utils.*, Order No. 697, 119 FERC ¶ 61,295, at PP 267-274 (2007), *order on reh'g*, Order No. 697-A, 123 FERC ¶ 61,055 (2008); *cf.* EDAM Order, 185 FERC ¶ 61,210 at P 474 (finding that "the EDAM area will constitute a new relevant geographic market for market power analysis purposes and potential EDAM participants will have to seek market-based rate authority in order to participate in EDAM").

[388] Transmittal at 12. Markets+ will not procure operating reserve products, such as regulating reserves and contingency reserves, which will continue to be administered by the individual transmission service provides and balancing authorities.

[389] Transmittal at 12 (citing SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1, attach. AE, § (2.10.4 Ramp Capability Qualified Resources) (0.0.0), § 2.10.5 Uncertainty Reserve Qualified Resources (0.0.0); *Sw. Power Pool, Inc*., 172 FERC ¶ 61,027 (2020); *Sw. Power Pool, Inc*., 180 FERC ¶ 61,088 (2022))).

[390] Transmittal at 54; *see* SPP, Proposed Markets+ Tariff, pt. I, § 1.S (Definitions) (0.0.0) (defining Short-Term Flex Up and Short-Term Flex Down).

[391] Transmittal at 54.

or less, a minimum run time of 60 minutes or less, and are not on outage will be eligible to offer short-term flexibility reserves.[392]

275. SPP states that mid-term flex up will be procured from the portion of a dispatchable and participating resource's capability that is reserved for potentially increasing net obligations for future dispatch intervals.[393] This product will account for variability in the Markets+ footprint by increasing the residual flexibility available on the system, decreasing the necessity of make whole payments, and addressing changes in system needs that were not forecasted or foreseen.[394] Resources that offer a cold start-up time of 60 minutes or less and are not on outage will be eligible to provide mid-term flexibility reserves.[395]

276. SPP proposes that it will calculate daily flexibility reserve product requirements for both entire the Markets+ system and individual reserve zones. Hourly requirements will be determined at the Markets+ system level, and minimum and maximum requirement levels will be established for each reserve zone. SPP will estimate each market participant's flexibility reserve product obligation in each reserve zone based on its projected load share in each reserve zone relative to the total Markets+ system load.[396] SPP states that it may increase flexibility reserve requirements for RUC and RTBM above the requirements used in the day-ahead market to address changing system conditions and reliability needs.[397]

277. SPP further proposes that if a resource is determined to have market power, SPP will apply mitigation measures to submitted flexibility reserve product offers for that resource.[398] SPP proposes to apply the mitigation measures by placing a cap on the offer

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[392] SPP, Proposed Markets+ Tariff, attach. A, § 3.6.1 (Impact of Scarcity Pricing on Locational Marginal Prices and Market Clearing Prices) (0.0.0), §§ 3.6.1(2)(a)(i), 3.6.1(2)(b)(i).

[393] SPP, Proposed Markets+ Tariff, pt. I, § 1.M (Definitions) (0.0.0) (defining Mid-Term Flex Up).

[394] Transmittal at 54.

[395] SPP, Proposed Markets+ Tariff, attach. A, § 3.6.1 (Impact of Scarcity Pricing on Locational Marginal Prices and Market Clearing Prices) (0.0.0), 3.6.1(2)(b)(i).

[396] *Id.* § 7.4 (Flexibility Reserve Products and Instantaneous Load Capacity Requirements) (0.0.0).

[397] Transmittal at 50-51.

[398] SPP, Proposed Markets+ Tariff, attach. B, § 3.5 (Mitigation Measures for

when the flexibility reserve product offer exceeds the conduct threshold, the resource has market power, and the resource fails the market impact test. If a resource is determined to have market power as determined through the test as described in Attachment B, section 3.1(2), SPP will apply mitigation measures to submitted flexibility reserve product offers for that resource.[399]

278. SPP proposes that it will use demand curves to reflect scarcity prices in both the day-ahead market and RTBM during times of flexibility reserve product shortages, either on a market-wide or reserve zone basis. SPP proposes to use downward-sloping stepped demand curves with a maximum price based on the lesser of the average cost of committing a fast-start resource to cure the ramp deficiency or $1,000/MWh, and with a minimum scarcity price of $10/MWh for short-term flex up and mid-term flex up and $0/MWh for short-term flex down. SPP proposes that the demand curves contain six equal price increments depending on the severity of the shortage and will be updated every month based on the data from the last three months, similar to the demand curves for the ramp capability and uncertainty products in SPP's Integrated Marketplace.[400]

b. Comments and Protests

279. SoCal Edison urges the Commission to not approve the market power mitigation and bid structure for flexibility reserve products, as proposed, due to what it describes as a weak single pivotal supplier test that will be inadequate to assure appropriate market power mitigation. Highlighting this concern, SoCal Edison points out that the proposed Markets+ Tariff permits a bid for flexibility reserve product up to $1000/MWh and can set the demand curve under scarcity conditions at $1000/MWh. SoCal Edison argues that because such high prices raise market power mitigation concerns, the mitigation should be more in line with that already approved for similar products in EDAM, specifically a three pivotal supplier test, and bids and bid curves capped at $55/MWh. Additionally, SoCal Edison argues that the detailed methodology for calculating mitigated bids should be included in the Markets+ Tariff, instead of referring to Markets+ Protocols. Finally, SoCal Edison argues that SPP should provide the methodology for calculating the quantity of flexibility reserve products that will be procured and include it in its Markets+ Tariff.[401]

Flexibility Reserve Product Offers) (0.0.0).

[399] *Id.* §§ 3.5(A)-(B).

[400] *Id.* attach. A, § 3.6.1 (Impact of Scarcity Pricing on Locational Marginal Prices and Market Clearing Prices) (0.0.0).

[401] SoCal Edison Comments at 14-16.

280. PIOs also protest SPP's proposal to possibly increase reserve requirements for the RUC process and RTBM to cover the increased risk of supply availability of uncommitted imports, stating that if SPP does increase reserve requirements on that basis, the associated costs are charged to the participants with scheduled uncommitted imports.[402]

c. Answers

281. In response to SoCal Edison's protest about the single pivotal supplier test, the SPP Market Monitor contends that starting with a market screen of three pivotal supplier test at the beginning of the market may be overly restrictive and result in market inefficiencies. The SPP Market Monitor notes that a single pivotal supplier test has been approved by the Commission and successfully applied in markets that mitigate similar to SPP's proposed design. In response to SoCal Edison's protest that the Markets+ Tariff does not provide the methodology for mitigated offers for flexibility reserve products, the SPP Market Monitor recommends that SPP refer to its Integrated Marketplace's uncertainty product mitigated provision.[403] In its May 21 Answer, SPP states that SoCal Edison offers no support for the assertion that $55/MWh bid and bid curve cap is more reasonable for the Western Interconnection markets or that the proposed Markets+ Tariff will be inadequate to ensure appropriate market power mitigation beyond comparison to the CAISO EDAM design.[404]

d. Commission Determination

282. We find SPP's proposal to be just and reasonable and not unduly discriminatory or preferential. While SoCal Edison is concerned that SPP's shortage pricing level for flexibility reserve product is too high, contrasting it with CAISO's EDAM maximum imbalance reserve price of $55/MWh, the Commission has never mandated that all centrally cleared markets have the same demand curves for ancillary service products, and we decline to do so here. As the Commission stated in the order accepting CAISO's EDAM proposal, a range of values could be just and reasonable,[405] and we note that the cap that SPP proposed here matches the one used for similar products in SPP's Integrated Marketplace.[406] While the values used for the demand curve for the Integrated

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[402] PIOs Protest at 13.

[403] SPP Market Monitor May 14 Answer at 6-7.

[404] SPP May 21 Answer at 46.

[405] EDAM Order, 185 FERC ¶ 61,210 at P 186.

[406] *See* SPP, Open Access Transmission Tariff, Sixth Revised Vol. No. 1,

Marketplace's ramp product were based on an analysis of that market's operations, we find that they serve as a reasonable proxy for what can be expected in Markets+ given that the proposed ramp product is the same product as in SPP's Integrated Marketplace.[407] Moreover, SPP can propose changes to the demand curve should it think changes are necessary as it gains experience in the Western Interconnection. We agree with the SPP Market Monitor that a single pivotal supplier test is a just and reasonable method for screening for market power that we have approved in other markets. As with similar objections raised regarding aggregated resources, we find that SPP's proposal to include the detailed methodology for calculating mitigated bids in the Markets+ Protocols is reasonable. Finally, we find that it is reasonable for the methodology for calculating the quantity of flexibility reserve products that will be procured to be included in the Markets+ Protocols because such calculations are technical in nature and subject to change as conditions arise.

283. Further, we also disagree with PIOs' objection to SPP having authority to increase reserve requirements for the RUC process and RTBM to cover the increased risk of supply availability of uncommitted imports. While in this case the market operator is not the balancing authority, and ultimate responsibility for reliability lies with the Participating Balancing Authorities, we find that it is just and reasonable for SPP to have the authority to change the procurement target for flexibility reserve products if there is an increased risk that resources procured in previous markets will not deliver.

11. Resource Adequacy Requirements

a. SPP's Filing

284. SPP proposes three requirements for market participants regarding resource adequacy in order to ensure capacity is available for commitment in the day-ahead market and to incentivize forward capacity procurement. First, market participants with load registered in Markets+ must participate in a common, Commission-approved resource adequacy program. Second, market participants must make a daily amount of resource capacity available for commitment throughout the Markets+ operations horizon. Third, for purposes of relieving a capacity shortage, market participants must, subject to

attach. AE, § 4.1 (Offer Submittal) (13.0.0).

[407] *Sw. Power Pool, Inc.*, 172 FERC ¶ 61,027 at P 34 (stating that SPP's analysis demonstrated that "the ramp product and its demand curves will reduce the frequency of operating resource scarcity events").

limited exceptions, identify and make available additional supply that was not otherwise offered to Markets+.[408]

285. To satisfy the first requirement, SPP proposes that WRAP serve as the common resource adequacy program.[409] SPP explains that WRAP is designed to encourage resource adequacy through owned or contracted resources rather than leaning on other WRAP participants, and SPP anticipates that WRAP participation will support Markets+ reliability by making sufficient capacity resources available in the Markets+ operating timeframe.[410] SPP states that the proposed Markets+ Tariff requires Markets+ load responsible entities to submit attestations that (1) they will participate in WRAP and (2) will satisfy all applicable requirements of the WRAP Tariff.[411]

286. To satisfy the second requirement, to make a daily amount of resource capacity available for commitment throughout the Markets+ operations horizon, SPP proposes a must-offer requirement. In the day-ahead market and RUC, SPP proposes to require market participants to offer capacity equal to or greater than the sum of the market participant's: (1) hourly load forecast; and (2) flexibility reserve product obligations, adjusted by WRAP supply or receipt obligations and by net position for each operating hour.[412] During the WRAP binding season, SPP proposes that the must-offer obligation will not exceed the market participant's WRAP forward showing requirement (adjusted by any WRAP supply or receipt obligations, net position, and day-ahead forecasted fleet performance).[413]

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[408] Transmittal at 33-34.

[409] SPP serves as the Program Operator of WRAP pursuant to an agreement with WPP, which is the Program Administrator. SPP notes that WRAP's role in Markets+ is independent of, and will be unaffected by, SPP's role as WRAP Program Operator. *Id.* at 34 n.140.

[410] *Id.* at 35.

[411] *Id.* at 57, 90; *see* SPP, Proposed Markets+ Tariff, attach. A, § 6.10 (Load Responsible Entity Obligation) (0.0.0). SPP's Tariff defines "Load Responsible Entity" as "Market Participant with registered load in Markets+". SPP, Proposed Markets+ Tariff, pt. I, § 1.L (Definitions) (0.0.0) (defining Load Responsible Entity).

[412] Transmittal at 35-36. A market participant's net position is forward purchases minus forward sales impacting an load responsible entity's load obligation, as described in the Markets+ Protocols. SPP, Proposed Markets+ Tariff, attach. A, § 5.1.1 (Day-Ahead Market and Reliability Unit Commitment), §5.1.1(A).

[413] *Id.* at 36. SPP notes that WRAP is binding and effective each year for two

287. In the RTBM, SPP proposes that for each operating hour, to update market participants' must-offer obligations to reflect the effects of day-ahead market clearing, incremental resource commitments from the RUC processes, and other deviations from the day-ahead market.[414]

288. SPP proposes a corresponding day-ahead must-offer penalty and a real-time must-offer penalty that will be charged to market participants who are non-compliant for a given operating hour. SPP states that the revenues collected through both day-ahead and real-time must-offer penalties will be distributed to market participants who were compliant for said operating hour, weighted by resource capacity that exceeds the must-offer obligation for that operating hour.[415]

289. To satisfy the third requirement, to identify and make available additional supply that was not otherwise offered to Markets+, SPP proposes a reliability backstop mechanism in the RUC process. SPP proposes that market participants be required to identify and make available additional supply that was not offered into the day-ahead market to be available for RUC commitment (subject to limited exceptions).[416]

b. Comments and Protests[417]

290. Several commenters support using WRAP as the Markets+ resource adequacy platform, citing the benefits of having common resource adequacy standards and metrics.[418] Powerex asserts that WRAP will lay a good foundation for market

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seasons: the summer season (June 1 to September 15); and winter season (November 1 to March 15 of next year). The forward showing and operations program demonstrations and obligations are calculated for the binding seasons and are not binding in between. *Id.* at 36 & n.151.

[414] *Id.* at 36.

[415] *Id.* at 36-37.

[416] *Id.* at 37. SPP notes that due to a limited must-offer obligation that exists within WRAP, WRAP participants may elect not to offer all available resource capacity for Markets+ commitment and dispatch while still satisfying the must-offer obligation. *Id.*

[417] We note that this order addresses comments related to the Markets+ proposal's interoperability with WRAP in section IV.B.3, above.

[418] Powerex Comments at 2-3; Tucson Comments at 6-7; Salt River Project Comments at 5-6; Bonneville Comments at 6; CEBA Comments at 3; Public Power

participation, enable centralized unit commitment and dispatch of all available resources on an hourly and sub-hourly basis, with increased transfers enabled by flow-based modeling of transmission limits that will reduce the cost of electricity to consumers and help protect reliability in the region.[419] Tucson Electric and Salt River Project state that pairing WRAP with a day-ahead must-offer requirement provides both certainty to the market and flexibility to participants that have natural gas and hydro resources.[420] APS notes that a resource-adequate market opens opportunities for benefits beyond reliability, including avoided generation development.[421]

291. WPTF requests clarification on whether third-party loads within a Participating Balancing Authority would be required to become Markets+ market participants by virtue of their balancing authorities electing Markets+ participation. WPTF notes that, if so, then such a third party would *de facto* be required to become a WRAP participant, which appears contrary to WRAP's voluntary nature. WPTF also highlights that the imposition of a requirement for third-party loads to participate in Markets+ (and therefore to join WRAP) is another component which may be brought before the Commission when jurisdictional transmission service providers propose OATT modifications to effectuate Markets+.[422]

292. Commenters generally request assurance from SPP that WRAP-related wheel-throughs and wheel-out transactions will be on a firm basis, and request clarification on how prioritization would work for WRAP deliveries between Markets+ WRAP participants and non-Markets+ WRAP participants.[423]

293. NTUA notes that at least part of its system is within WAPA's balancing authority area and thus might need to participate in Markets+. As such, NTUA also states that though it is not apparent how the Markets+ Tariff will impact NTUA's existing rights and resources, the resource adequacy requirement proposed for Markets+ adds a layer of complexity that typically accompanies organized market rules, and notes that the WRAP

Council Comments at 2; APS Comments at 6-8.

[419] Powerex Comments at 2-3, 7-9.

[420] Tucson Electric Comments at 7; Salt River Project Comments at 5.

[421] APS Comments at 7-8.

[422] WPTF Comments at 8-10.

[423] NV Energy Comments at 6-7; Portland General Comments at 4; PacifiCorp Comments at 7; WPTF Comments at 10.

resource adequacy program is itself evolving and unproven.[424] NTUA asserts that WRAP will not become binding until Summer 2025 with a three-year transition period and nobody has demonstrated how WRAP will function in practice. NTUA also argues that the requirement to participate in WRAP is not consistent with the purported ability to retain local control while participating in Markets+ and that forcing participation in an unproven mechanism introduces more uncertainty and complexity to the already existing levels in Markets+. NTUA suggests that the Commission and SPP develop mechanisms to mitigate detrimental impacts of participation on NTUA and its customers, citing, for example, to CAISO's metered subsystem entity type to enable existing systems to manage their own resources and reduce financial and operational impacts of organized market participation.[425]

c. Answers

294. WPP supports WRAP integration into Markets+, noting the support of several utilities, and agrees that the common resource adequacy structure will help ensure reliability and provide a solid foundation of common metrics. WPP also notes that the Markets+ requirement to participate in WRAP supports continued (and potentially expanded) participation in WRAP itself. WPP also agrees with commenters that WRAP interoperability (relating to firm transmission) would benefit from further clarification, while noting that the efficacy of solutions depends on the details of actual implementation.[426] On this topic, WPP states that it will remain keenly focused on the details of implementation and dependencies on future implementing tariffs. WPP states that while the individual Markets+ TSP OATTs are not before the Commission at this time, given the interdependence, these issues are relevant here.[427]

[424] NTUA Comments at 5.

[425] *Id.* at 6-7.

[426] WPP Answer at 5-9. As noted above, the issue of WRAP interoperability with Markets+ is addressed in Section IV.B.3 of this order.

[427] *Id.* at 9-10.

295. In response to WPTF's concerns about third-party loads, SPP states that the Markets+ Tariff does not require WRAP participation by a load, but rather by the load responsible entity.[428] SPP notes that market participants must register all resources and load in Markets+ and that, for third-party loads who choose not to register, responsibility for registering those assets will be with the utility operating the host participating balancing authority, and the entity that registers it will be the load responsible entity and subject to WRAP.[429]

296. SPP also generally agrees with the importance of the working relationship between the parties and states that it has taken actions to work towards future interoperability with WRAP. SPP states that it works closely with WPP through regularly scheduled meetings, and with WRAP Program Operations staff, to ensure that the development of these programs occurs in tandem and to identify issues proactively. SPP also states that it is in a unique position to maintain constant contact with the individuals tasked to operate WRAP and that SPP staff meets regularly to discuss further development and implementation details.[430]

297. In response to Portland General's interoperability concerns, Supporting Intervenors state that the Markets+ Tariff clearly protects both the supply priority and transmission priority of WRAP deliveries, and that SPP, in its dual role as Markets+ market operator and the WRAP program operator, is fully committed to ongoing interoperability between these important regional efforts.[431] Bonneville refutes NV Energy's request for clarification, arguing that as WRAP Program Operator, SPP will ensure the compatibility of Markets+ with WRAP and that clarification on this point is unnecessary.[432]

d. Commission Determination

298. We find that SPP's proposals to require Markets+ load responsible entities to participate in WRAP, implement a must-offer requirement, and implement a reliability backstop are just and reasonable and not unduly discriminatory or preferential. In

[428] SPP May 21 Answer at 46 (citing SPP, Proposed Markets+ Tariff, attach. A, app. 3 (Attestation Regarding Resource Adequacy and Participation in the Western Resource Adequacy Program) (WRAP) (0.0.0)).

[429] *Id.* at 47.

[430] *Id.*

[431] Supporting Intervenors Answer at 13.

[432] Bonneville Answer at 8.

particular, we find that it is just and reasonable for SPP to require participation in WRAP as the common resource adequacy program for Markets+. The WRAP framework, which has already been approved by the Commission, will provide a uniform resource adequacy standard across all of the Markets+ footprint because it has the benefit of standardized resource adequacy metrics, standards, and compliance obligations. Importantly, WRAP obligations include both capacity and transmission requirements (with associated penalties for not meeting these requirements), which can help ensure that Markets+ capacity planning and procurement is linked to actual deliverability. Further, requiring all Markets+ load responsible entities to abide by WRAP requirements will provide more information to the market regarding resource availability and available transmission capability, thereby improving price signals in Markets+ and the West in general.

299. We also find that SPP's must-offer obligation and reliability backstop present an effective supplement that can help ensure resource sufficiency by ensuring that a minimum amount of capacity is offered into Markets+ to meet the market's load and reserve needs to maintain reliability in the operating day. The must-offer obligation will also further ensure that capacity is not strategically withheld from the market. We note that other Commission-approved markets have a must-offer obligation in the day-ahead and real-time markets.[433] Finally, SPP's mechanism allows resources the ability to adjust their required bids to reflect any WRAP-related obligations that might exist outside of their base obligations.

300. With regard to concerns raised by WPTF and NTUA, we find that SPP has provided a sufficient basis for requiring WRAP participation by each load responsible entity in Markets+. As SPP notes, while load responsible entities are required to register all load with the relevant Balancing Authority (including third party entities who choose not to register), the Markets+ Tariff does not require loads themselves to participate in WRAP; rather, it requires load responsible entities to participate in WRAP.[434] Moreover, participation in Markets+ is itself voluntary. We also note that although WRAP is a voluntary program in its own context, WRAP is a requirement in the Markets+ as the resource adequacy compliance framework; thus, in this context, we disagree that the

[433] For example, CAISO imposes must-offer obligations on certain resource categories, such as resources providing imbalance reserves, reliability capacity, and flexible resource adequacy resources. *See* CAISO, CAISO eTariff § 40.6.1 (Day-Ahead Availability) (8.0.0); *id.* § 40.10.6 (Flexible RA Capacity Must-Offer Obligation) (5.0.0); *see also Sw. Power Pool, Inc.,* 141 FERC ¶ 61,048, at PP 50-51 (2012); *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,280, at P 96 (2003).

[434] *See* SPP May 21 Answer at 46-47.

WRAP participation requirement in Markets+ would conflict with WRAP's voluntary nature.

301. With regard to NTUA's concerns about WRAP being unproven or not yet implemented, we note that WRAP's non-binding test period and transition period is intended to assist potential participants by allowing them to better prepare before WRAP becomes binding and fully implemented and, indeed, to help avoid potential non-compliance penalties and operational costs in the future. We disagree with NTUA that WRAP will result in undue complexity (and operational costs) for Markets+. We find that the proposal includes the tariff provisions necessary to implement the requirement that load-serving participants in Markets+ participate in WRAP. We also note that participation in Markets+ is voluntary and individual entities may evaluate on their own whether the rules are unduly complex and will make their own determination about whether to join.

302. With regard to concerns about WRAP interoperability with Markets+, we find that SPP has provided sufficient description. Specifically, SPP states that Markets+ respects the transmission service priority of all transactions, including those associated with "WRAP deliveries," regardless of when an entity submits the transaction related to the Markets+ market processes, such as in the day-ahead market. SPP states that, consequently, WRAP transaction transmission service prioritization will remain a function of the transmission priority attached to the transaction, just as it would be without Markets+.[435]

12. Interchange Transaction Award Priority Process

a. SPP's Filing

303. SPP proposes to use a priority process to determine which interchange transactions will be awarded when the market load exceeds the available market generation or when generation exceeds load. This process will apply in the day-ahead market, the RUC, and the RTBM. SPP argues that the market priority award process is a just and reasonable approach to scarcity and excess generation circumstances because it provides equal priority to load within the Markets+ footprint and load that is external to Markets+ if the export was prearranged from surplus supply.[436]

304. SPP proposes to define a high priority export interchange transaction, a high priority import interchange transaction, an uncommitted export interchange transaction,

[435] SPP May 21 Answer at 16.

[436] Transmittal at 50-51.

and an uncommitted import interchange transaction. To be defined as high priority, the export or import must be backed by committed supply.[437]

305. SPP proposes that in the event of a capacity shortage, self-scheduled uncommitted export interchange transactions will be reduced first because those transactions are supported by market supply only and are not backed by a specific resource or part of a resource adequacy obligation. If such a reduction is insufficient, self-scheduled demand bids, high priority export interchange transactions, and resources' charge MW will be reduced pro rata in the market clearing.[438] Similarly, in the event of excess generation, uncommitted import interchange transaction offers will be reduced before high priority import interchange transactions offers.[439] To serve load in real-time, SPP may also increase the flexibility reserve product requirements for RUC and RTBM above the requirements used in the day-ahead market to cover the increased risk of the supply availability of uncommitted import interchange transactions. During the RUC process, uncommitted export interchange transactions will be reduced prior to committing additional resources that were not otherwise offered to the market to relieve the capacity shortage.[440]

b. Comments and Protests

306. Tucson Electric states that the proposed framework for high-priority imports and exports for WRAP transfers maintains benefits for participants that join Markets+.[441] Powerex also supports SPP's proposal for market award scheduling priority, arguing that it ensures protection for WRAP deliveries to WRAP participants that are not Markets+ market participants. Powerex explains that WRAP deliveries from the Markets+ footprint to WRAP participants outside of the Markets+ footprint will be "high priority exports" and treated on an equivalent basis to firm demand within the Markets+ footprint in the event of a supply deficiency. Powerex also explains that the Markets+ framework ensures that a WRAP delivery to a non-Markets+ WRAP participant using firm

[437] SPP, Proposed Markets+ Tariff, pt I, § 1 (Definitions) (0.0.0).

[438] Transmittal at 50; *see* SPP, Proposed Markets+ Tariff, attach. A, § 2 (Day-Ahead and Operating Day Activities) (0.0.0), §§ 2.1.2.1, 2.3.1.2.

[439] Transmittal at 50; *see* SPP, Proposed Markets+ Tariff, attach. A, § 2 (Day-Ahead and Operating Day Activities) (0.0.0), §§ 2.1.2.2, 2.2.2(3), 2.3.1.2(4).

[440] Transmittal at 50-51; *see* SPP, Proposed Markets+ Tariff, attach. A, § 2 (Day-Ahead and Operating Day Activities) (0.0.0), § 2.2.2(2); *id.*, § 7.4 (Flexibility Reserve Products and Instantaneous Load Capacity Requirements) (0.0.0), § 7.4(4).

[441] Tucson Electric Comments at 7.

transmission under an OATT will retain its firm priority through the operating hour.[442] APS states that SPP's proposal to prioritize load service inside the Markets+ footprint over low-priority exports supports reliability and helps protect all Markets+ participants and their customers.[443]

307. Portland General asserts that SPP should continue to work with stakeholders to ensure interoperability between Markets+ and WRAP, not only for market participants, but also for WRAP participants outside of the Markets+ footprint to deliver WRAP transactions. Portland General argues that SPP should clarify that prioritization of WRAP deliveries will be given equal priority between WRAP participants within the Markets+ footprint and WRAP participants outside the Markets+ footprint.[444]

308. PIOs assert that SPP's proposed definitions of high priority export interchange transaction and high priority import interchange transaction are ambiguous because the former includes two examples of qualifying exports but does not specify whether other export transactions could qualify, while the latter provides no examples at all. PIOs also argue that the definitions do not specify whether uncommitted transfers (either imports or exports) are part of a market participant's must-offer obligation. PIOs contend that whether a transfer is designated high priority has major ramifications for curtailment in shortage or excess conditions, as well as potentially subjecting participants to additional reserve requirement costs.[445]

309. PIOs argue that, because of extensive seams and regional trading dynamics, imports and exports will likely be prevalent. Thus, PIOs state that the scheduling priority process implicates both compliance with market participants' must-offer obligations, and resource adequacy beyond the Markets+ footprint. PIOs contend that SPP, however, has not yet resolved critical ambiguities and gaps to ensure that the high priority framework in the Markets+ Tariff is just and reasonable, including whether high priority transfers will include *any* other transactions outside of WRAP or other resource adequacy obligations, whether high priority transfers must be scheduled prior to day-ahead market closing, any impacts on footprint reliability and implications for emergencies arising after

[442] Powerex Comments at 9.

[443] APS Comments, attach. A, at 2-3.

[444] Portland General Comments at 4-5.

[445] PIOs Protest at 11-13.

market closing, and whether generation supported by a balancing authority's balancing services would qualify as high priority exports.[446]

310. PIOs also argue that SPP's proposal does not explain why the must-offer obligation is treated differently in different scenarios. PIOs argue that, while high priority export interchange transactions "will" be included in the must-offer obligation, high priority import interchange transaction only "may be used" to meet the must-offer obligation. PIOs further state that SPP has also not provided information on how uncommitted transfers relate to the must-offer obligation.[447]

311. Finally, PIOs argue that the treatment of imports and exports in Markets+ has implications for dispatch and curtailment, as well as resource adequacy programs and balancing services. PIOs state that the Commission has previously required market operators to provide these sorts of details prior to launching a market; as an example, PIOs state that, in its initial rejection of SPP's imbalance market proposal, the Commission found that SPP had not provided sufficient information for numerous aspects of the filing, including various contingency operations, interactions with affected control area operations, and potential seams issues.[448] PIOs state that the Commission likewise required further detail where SPP's proposed WEIS Market could affect dispatch in adjoining areas or had uncertain effects on resource adequacy.[449]

c. Answers

312. WPP supports Markets+ treatment of committed export supply, stating that identifying WRAP transactions as high priority export interchange transactions in the event of resource capacity shortfalls is necessary to ensure the appropriate importance of reliability-based transactions.[450] In response to Portland General, Supporting Intervenors state that the Markets+ Tariff clearly protects both the supply priority and transmission priority of WRAP deliveries, as described in SPP's transmittal letter.[451]

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[446] *Id.* at 13-15.

[447] *Id.* at 15.

[448] *Id.* at 15-16 (citing *Sw. Power Pool, Inc.*, 112 FERC ¶ 61,303, at PP 26-27 (2005)).

[449] *Id.* at 16 (citing *Sw. Power Pool, Inc.*, 172 FERC ¶ 61,115 at PP 41, 59).

[450] WPP Answer at 6-7.

[451] Supporting Intervenors Answer at 13 (citing Transmittal at 34-37).

d. Commission Determination

313. We find that SPP's interchange transaction prioritization proposal is just and reasonable and not unduly discriminatory or preferential. First, we agree that it is reasonable to prioritize high priority interchanges based on committed supply and resource adequacy attributes and to first reduce uncommitted interchange transactions (i.e., interchange transactions without committed supply backing it) during capacity shortages or capacity surplus situations. We also find that SPP's proposal to allow high priority import interchange transactions to be used to meet a market participant's must-offer obligation of capacity to satisfy resource adequacy requirements under the proposed Markets+ Tariff[452] is just and reasonable, as it allows market participants to make the most use of reliable supply and reduces participants' exposure to potential penalties for offering insufficient capacity. Further, we find that clearly classifying WRAP-related interchanges as high priority provides much-needed certainty to market participants and supports Markets+ reliability and resource adequacy.

314. We further find that SPP's Markets+ Tariff contains the essential mechanics of how the two interchange categories (high priority and uncommitted) will be treated and prioritized, and addresses both capacity surplus and shortage scenarios. We find that the proposed Markets+ Tariff also sufficiently defines high priority interchange transactions.[453] While the Markets+ Tariff does not specify every potential type of transaction that could be considered high priority or (conversely) uncommitted interchange transactions, we find that it is not necessary to include these specifics in the Markets+ Tariff, as these implementation details are appropriately reflected in the Markets+ Protocols.

315. Although the Markets+ Tariff does not explicitly clarify how uncommitted interchange transactions relate to must-offer obligations, the Markets+ Tariff identifies the sort of interchange that could be used to satisfy a market participant's resource adequacy capacity must-offer obligation and we find this level of specification sufficient to render the proposal just and reasonable. Specifically, we find that the Markets+ Tariff provides a clear path for high priority import interchange transactions to be used in market participants' resource adequacy capacity must-offer obligations, which is reasonable, as these transactions are backed by committed supply and thus appropriate

[452] SPP, Proposed Markets+ Tariff, attach. A, § 5.1.1 (Day-Ahead Market and Reliability Unit Commitment) (0.0.0), §§ 5.1.1, 5.1.1(A), 5.1.1(B).

[453] SPP, Proposed Markets+ Tariff, pt. I, § 1.H (Definitions) (0.0.0) (defining High Priority Export Interchange Transaction and High Priority Import Interchange Transaction as "[a]n Export Interchange Transaction that is backed by committed export supply.").

for a must-offer requirement. Similarly, we find that market timelines and certain implementation details related to interchange transactions (such as whether high priority interchanges can be identified after the day-ahead market run) are implementation details that are appropriate for the Markets+ Protocols.

13. Market Transmission Use Charge

a. SPP's Filing

316. SPP states that Markets+ includes a Market Transmission Use (MTU) charge (MTU Charge), which will be calculated by SPP and assessed to all purchases from and sales to the market and the revenues collected will be distributed by SPP to Markets+ TSPs. SPP explains that wholesale bilateral transactions in the area that will comprise the Markets+ footprint currently involve transmission service of varying duration, including a substantial amount of short-term firm and non-firm transmission sales. SPP asserts that one of the anticipated impacts of adopting Markets+ is that the energy sales associated with this type of transmission service will begin to take place within Markets+ where transmission capability can be better optimized. SPP explains that the result is that sales of short-term firm and non-firm transmission on a bilateral basis may decline for Markets+ TSPs within the Markets+ footprint. SPP argues that as these sales provide revenues that help reduce the share of the costs paid by long-term transmission customers, the potential exists for cost-shifting among market participants and end-use customers in the Markets+ footprint absent a mitigating element and that this could disincentivize transmission providers from offering transmission to the market.[454]

317. SPP asserts that the MTU Charge seeks to remove disincentives that could prevent Markets+ TSPs from providing the full capability of their systems to be optimized by the market while mitigating cost-shift concerns, by providing compensation for lost potential sales revenues resulting from participation in Markets+.[455] SPP explains that Markets+ will collect the MTU Charge and distribute the proceeds to Markets+ TSPs.[456] SPP states that the MTU Charge proceeds are designed to make up for the revenue lost from short-term firm and non-firm bilateral transmission sales and that MTU Charge amounts received by a Markets+ TSP will be credited against that Markets+ TSP's overall revenue

[454] Transmittal at 25.

[455] *Id.* at 25-26; *see* SPP, Proposed Markets+ Tariff, attach. A, § 7.11 (Market Transmission Use) (0.0.0), § 7.11(A).

[456] Transmittal at 26; *see* SPP, Proposed Markets+ Tariff, attach. A, § 7.11 (Market Transmission Use) (0.0.0), §§ 7.11(D)-(E).

requirements, thereby mitigating cost-shifts and avoiding higher rates paid by network and native load customers.[457]

318. SPP states that it proposes to collect and distribute the MTU Charge using a formula rate template and that the template is intended to be flexible enough to accommodate both jurisdictional and non-jurisdictional Markets+ TSPs.[458] SPP explains that the formula rate template will be used to estimate the Markets+ TSP's lost short-term firm and non-firm transmission revenues from bilateral sales, add those lost revenues to determine the actual market charge necessary, and then distribute the MTU revenues collected to the Markets+ TSPs. SPP avers that the formula rate template will allow for true-ups of collections and adjustments to reflect the data representing the changes in transmission sales experienced by Markets+ TSPs after the implementation of Markets+.[459]

319. SPP argues that including the MTU Charge within the Markets+ design from the implementation date is critical to encouraging participation in Markets+ and maximizing the depth of the market. SPP explains that calculating the MTU Charge for the initial year will allow for concurrent recovery at the same time that the revenues are being lost and that this is important to address potential cost-shifts proactively in the initial year of the market. SPP states that including this feature in the Markets+ Tariff now will remove disincentives and increase certainty that the market will have the full capability of the transmission systems available to optimize, while also providing an approach for addressing and mitigating cost shifts to customers of Markets+ TSPs from the start. SPP argues that the formula rate template and calculation of the rate ensures that Markets+ TSPs do not over-recover if revenue exceeds expectations.[460]

320. SPP argues that the MTU Charge is appropriate because it aligns costs and benefits so that load and generation causing the reduction in transmission revenue are also the ones paying the MTU Charges. SPP explains that the reason for the lost revenues is that bilateral sales that use short-term firm and non-firm transmission will be replaced with sales inside Markets+ and will use optimized transmission. SPP states that both generation and load benefit from Markets+ and that both will pay MTU Charges. SPP argues that because these Markets+ transactions are displacing the bilateral energy

[457] Transmittal at 26.

[458] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. A, app. 2 (Market Transmission Use Rate Template) (0.0.0).

[459] Transmittal at 26.

[460] *Id.*

transactions, it is just and reasonable that these beneficiaries are funding the lost revenue recovery to prevent cost shifting.[461]

321. SPP explains that the MTU Charge works by estimating the share of short-term firm and non-firm transmission service on a particular Markets+ TSP's system, adjusting for the lost revenues, scaling to the current annual transmission revenue requirement (ATRR), aggregating all the Markets+ TSPs to produce a market charge, and truing up collections and adjusting for improved data. SPP states that, first, the initial MTU Charge revenue recovery amount is defined by a Markets+ TPS's Qualified Revenue Amount, which is based on the revenue a Markets+ TSP historically received from sales of short-term firm and non-firm transmission service over the three years prior to joining Markets+.[462]

322. SPP explains that, next, the qualified revenue ratio is determined for the Markets+ TSP by dividing the Markets+ TSP's Qualified Revenue Amount by the Markets+ TSP's ATRR.[463] SPP states that this ratio remains fixed for that particular Markets+ TSP for purposes of calculating the MTU Charge and is applied to its Markets+ TSP's ATRR for the current year in order to estimate what portion would be funded by short-term firm and non-firm transmission sales.[464]

323. SPP states that the estimated revenue from short-term firm and non-firm transmission sales for the current year is then multiplied by a scaling factor to determine the total estimated recovery amount for the Markets+ TSP.[465] SPP explains that this amount represents the revenue expected to be displaced by Markets+ and eligible for recovery under the MTU Charge and that the scaling factor is set based on the impact of Markets+ on short-term firm and non-firm revenue the previous year. SPP asserts that due to a lack of historical data, the initial scaling factor will be set to 50% for all

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[461] *Id.* at 26-27.

[462] *Id.* at 27; *see* SPP, Proposed Markets+ Tariff, attach. A, app. 2 (Market Transmission Use Rate Template (0.0.0), § C (defining Markets+ Transmission Service Provider Qualified Revenue Amount (MTSPQRA)).

[463] Transmittal at 27; *see* SPP, Proposed Markets+ Tariff, attach. A, app. 2 (Market Transmission Use Rate Template) (0.0.0), §§ C (defining Markets+ Transmission Service Provider Annual Transmission Revenue Requirement (MTSPATRR)), D.

[464] Transmittal at 27.

[465] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. A, app. 2 (Market Transmission Use Rate Template) (0.0.0), §§ C (defining Markets+ Transmission Service Provider Recovery Scaling Factor (MTSPRSF)), D.

Markets+ TSPs for the first year, based on stakeholder estimates and that consistent with other transmission ratemaking, prior-year over and under collections will further adjust recovery amounts.[466]

324. SPP states that the annual MTU rate, assessed region-wide, is established by dividing the total estimated recovery amount for all Markets+ TSPs by twice the Markets+ TSP net energy for load.[467] SPP explains that doubling the Markets+ TSP net energy for load recognizes that the recovery is allocated to both the energy injections and withdrawals, including both imports and exports.[468]

325. SPP avers that MTU Charges will be assessed on both purchases and sales, as resources, load, imports, and exports all benefit from Markets+.[469] SPP explains that, therefore, the amount of the charge needs to be halved to account for the charge to the buyer and the seller and that the charge will not be assessed on virtual transactions, as no net energy or use of the transmission system occurs with a virtual transaction.[470] SPP states that the Annual Formula Rate Implementation Protocols included in Attachment A, Appendix 2 describe the mechanics of updating the template.[471] SPP explains that the Annual Formula Rate Implementation Protocols describe how SPP will receive annual audited information, post updates, receive comments on the updates, and file the informational formula rate annual updates with the Commission. SPP explains that as different Markets+ TSPs may use different rate years, or may be non-jurisdictional, the formula rate template and Annual Formula Rate Implementation Protocols are flexible and allow for these differences using finalized data.[472]

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[466] Transmittal at 27-28.

[467] *Id.* at 28; *see* SPP, Proposed Markets+ Tariff, attach. A, § 9.6 (Market Transmission Use Distribution Amount) (0.0.0), § 9.6(1).

[468] Transmittal at 28.

[469] *Id.*; *see* SPP, Proposed Markets+ Tariff, attach. A, § 9.6 (Market Transmission Use Distribution Amount) (0.0.0).

[470] Transmittal at 28; *see* SPP, Proposed Markets+ Tariff, pt. I, § 1.V (Definitions) (0.0.0) (defining Virtual Transaction).

[471] Transmittal at 28; *see* SPP, Proposed Markets+ Tariff, attach. A, app. 2 (Market Transmission Use Rate Template) (0.0.0), Annual Formula Rate Implementation Protocols.

[472] Transmittal at 28.

b. Comments

326. Several commenters support the proposed MTU Charge because it allows transmission service providers in the Markets+ footprint to forecast and recover lost revenue from short-term transmission service and protects transmission customers from cost shifts.[473]

327. CEBA supports the MTU Charge because it removes a potential disincentive for transmission service providers' participation in Markets+ by providing a mechanism to mitigate anticipated revenues lost from short-term firm and non-firm transmission sales. CEBA explains that there is no tariff requirement for review of the MTU Charge; however, it believes that a review of the MTU Charge mechanism should be included in the Generator Transmission Requirement Review and will work through the Markets+ stakeholder process to advocate for this improvement.[474]

c. Commission Determination

328. We find that SPP's proposed MTU Charge is just and reasonable and not unduly discriminatory or preferential. We find that the MTU Charge is generally similar to EDAM's access charge, which the Commission previously approved.[475] We agree with SPP and commenters that the MTU Charge is a just and reasonable mechanism to avoid unintended cost shifts among customers. On joining Markets+, Markets+ TSPs may voluntarily make unscheduled transmission capability—which could otherwise be sold as short-term firm or non-firm point-to-point transmission service on a bilateral basis—available to Markets+ at no cost, thus forgoing the opportunity to sell that transmission capacity. Because the revenues from such sales are typically credited back to the transmission service provider's native and network load and long-term firm point-to-point transmission service customers, without a mechanism like the MTU Charge, Markets+ participation may shift costs and allow market participants to benefit from the use of Markets+ TSPs' transmission systems through access to a larger market without contributing to the costs of transmission system.

329. Similar to the OATT implementation filings for Markets+ discussed in the transmission section, Markets+ TSPs will have to revise their OATTs to incorporate the MTU Charge or demonstrate that their transmission rates already does so, prior to Markets+ participation. In accepting SPP's proposal here, we are not prejudging a

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[473] Salt River Project Comments at 7; Tucson Electric Comments at 8; APS Comments at 8-9; Powerex Comments at 15; Public Power Council Comments at 3-4.

[474] CEBA Comments at 6.

[475] *See Cal. Indep. Sys. Operator Corp*, 187 FERC ¶ 61,154 (2024).

Markets+ TSP's future filing to revise its OATT. These entities will still need to demonstrate that any proposed OATT revisions are consistent with or superior to the *pro forma* OATT.[476]

330. We encourage SPP to continue to engage with CEBA and other stakeholders in its stakeholder processes to identify and propose any additional Markets+ Tariff revisions that may be needed. At this time, we will not require that the MTU Charge be reviewed along with the Generator Transmission Requirement Review; however, we expect SPP to work with the SPP Market Monitor and stakeholders to monitor the MTU Charge as Markets+ evolves and to address any issues that may arise.

14. Governance

a. SPP's Filing

331. SPP states that the proposed governance structure for Markets+ is both independent and stakeholder-driven and consists of several key bodies: (1) the SPP Board of Directors; (2) the Markets+ Independent Panel; (3) the Markets+ Participants Executive Committee (MPEC); (4) the Markets+ State Committee; (5) the Markets+ Nominating and Governance Committee (Nominating Committee); and (6) formal stakeholder working groups and ad hoc task forces.[477]

i. SPP Board of Directors

332. SPP proposes that the SPP Board of Directors will provide ultimate oversight of SPP's administration of Markets+ but will give significant recognition and deference to the Markets+ Independent Panel. The SPP Board of Directors will review and consider: (1) the Markets+ Independent Panel's decisions, after completion of the applicable Markets+ stakeholder process, that have a "material adverse effect" on SPP; (2) Markets+ budgets, any debt obligations related to Markets+, or material changes to SPP's staffing requirements; and (3) appeals of Markets+ Independent Panel decisions.[478]

ii. Markets+ Independent Panel

333. The Markets+ Independent Panel will serve as the highest-level decision-making authority for Markets+, subject to the SPP Board of Director's ultimate independent

[476] *Supra* n.111.

[477] Transmittal at 60-61.

[478] SPP, Proposed Markets+ Tariff, attach. O, § 4 (0.0.0), § 4.1 (SPP Board of Directors).

oversight, as noted above. Absent an appeal to, or review by, the SPP Board of Directors, SPP staff will be authorized to submit filings to implement the Markets+ Independent Panel's decisions.[479]

334. SPP proposes that the Markets+ Independent Panel will consist of five individuals, one of which will be an independent SPP Director, and the other four will be elected by the MPEC.[480] The Markets+ Independent Panel members will be independent of any market participant, market stakeholder, and Markets+ Non-Voting Stakeholders (non-voting stakeholder). The Markets+ Independent Panel members must also have recent and relevant senior management expertise and experience in the electric industry and comply with SPP's standards of conduct and conflict of interest rules.[481]

335. In carrying out its functions, the Markets+ Independent Panel will: (1) provide a forum for market participants, market stakeholders, the Markets+ State Committee, and non-voting stakeholders to discuss issues related to the ongoing administration and advancement of Markets+ development;[482] (2) approve or reject proposed amendments to the Markets+ Tariff made by the MPEC or the Markets+ State Committee before filing such amendments at the Commission; (3) consider, approve, or reject market rules if such rules solely apply to the administration of Markets+; (4) collaborate with SPP staff on the development of Markets+ Tariff provisions, market protocols, business practices, and interregional agreements; (5) evaluate and provide consultation to SPP on the Markets+ administration budget, including modifications or adjustments of the Markets+ administration rate; (6) review, consider, and decide whether to approve market design system or process enhancement proposals recommended by SPP, the Markets+ State Committee, the MPEC, or any designated working group, committee, or task force

[479] *Id.* § 4.2.1 (Purpose and Scope of Activities).

[480] *Id.* §§ 4.2.2 (Composition and Qualifications), 4.2.3.1 (Term). The initial term for the four non-SPP director members will be a one-, two-, three-, or four-year term to allow staggering. *Id.* § 4.2.3.1 (Term). For purposes only of electing or removing the Markets+ Independent Panel members, each group of market participants that are affiliates will be considered a single market participant. *Id.* § 4.2.3.2 (Election Process); *see id.* § 2 (0.0.0), § 2 (Definitions) (defining Affiliate).

[481] *Id.* § 4 (0.0.0), § 4.2.2 (Composition and Qualifications).

[482] The Markets+ Independent Panel will have authority to set priorities and direct the MPEC to investigate potential market design and Markets+ Tariff revisions. *Id.* § 4.2.1 (Purpose and Scope of Activities).

established by the MPEC; and (7) resolve any disputes regarding the establishment of a working group or task force and the staffing of that working group or task force.[483]

iii. Markets+ Participants Executive Committee

336. SPP proposes that the MPEC will serve as a forum for market participants, market stakeholders, and non-voting stakeholders to discuss issues related to ongoing Markets+ administration and development. The MPEC will review system or process enhancement proposals and provide recommendations on the proposals for the Markets+ Independent Panel's consideration and decision. These recommendations will be advisory and nonbinding. The MPEC may also establish standing working groups and task forces as needed to facilitate its authorities.[484]

337. SPP proposes that each market participant and market stakeholder will appoint one representative to the MPEC.[485] Upon execution of the Market Participant Agreement or the Markets+ Stakeholder Agreement and payment of the annual fee, an entity will be assigned to one of three membership sectors: (1) investor-owned utilities;[486] (2) public power;[487] or (3) independent.[488] Votes in the investor-owned utility and public power sectors will be calculated based upon load-ratio share. Votes in the independent sector, on the other hand, will be calculated on a one-vote-per-entity basis, with at least half of the independent sector's weighted vote reserved for market participants, market stakeholders with at least one MW of load within the Markets+ footprint, and market stakeholders that are membership organizations of at least five members in which a

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[483] *Id.* Markets+ Independent Panel decisions will be by simple majority vote. *Id.* § 4.2.3.5 (MIP Voting Structure).

[484] *Id.* §§ 4.3.1 (Markets+ Participants Executive Committee, 4.3.1.2 Authority).

[485] *Id.* § 4.3.1.1 (Composition).

[486] The investor-owned utilities sector will include market participants that are public utilities under the FPA, regulated by one or more state regulatory commissions and subject to a fiduciary responsibility to investors to earn a return on rate-based assets, and agents or representatives participating in Markets+ on behalf of such entities. *Id.* § 4.3.1.4 (Voting Structure).

[487] The public power sector includes market participants that are publicly owned utilities, electric cooperatives, and power marketing administrations, as well as agents or representatives participating in Markets+ on behalf of such entities. *Id.*

[488] The independent sector will include any market participant that is neither an investor-owned utility nor a public power entity, as well as any market stakeholder. *Id.*

majority of voting members are engaged in generating, selling, or buying electricity at wholesale. Each sector's vote will be calculated separately, by tallying the percentage of votes within the sector that vote to approve an item. Each sector will represent 33.33% of the vote, and an action will be approved by the MPEC if the average of these percentages is at least 67%.[489]

iv. **Markets+ State Committee**

338. SPP proposes that the Markets+ State Committee will provide advice to the Markets+ Independent Panel, the MPEC, and any working group or task force on all matters pertinent to Markets+, including, but not limited to, initiative prioritization and policy issues. One representative from each state in which a market participant has generation or load participating in Markets+ may participate as a member of the Markets+ State Committee. The Markets+ State Committee will have discretion to determine participation of representatives from other state agencies in the Markets+ State Committee's governing structure, including state consumer advocates. Markets+ State Committee members and other state officials will also be eligible for appointment to Markets+ task forces. SPP will facilitate the retention of independent staffing to support the Markets+ State Committee.[490]

v. **Nominating Committee**

339. SPP proposes that the Nominating Committee will be responsible for reviewing and maintaining the overall governance of Markets+, including nominations for the Markets+ Independent Panel. The Nominating Committee will also conduct periodic reviews of the Markets+ governance structure and present any recommended revisions to the MPEC for consideration before being presented to the Markets+ Independent Panel for approval. Any modification to Markets+ governance requires a super majority (4/5th vote) of the Markets+ Independent Panel. To the extent Markets+ participation allows, the Nominating Committee will consist of 12 representatives of market participants and market stakeholders, including one representative from each of the following sectors or groups: (1) independent power producers; (2) Markets+ State Committee; (3) public interest organizations and consumer advocates; (4) cooperatives; (5) state agencies and provincial entities; (6) municipal utilities, including public utility districts and joint action agencies; (7) federal agencies; (8) investor-owned utilities; (9) power marketers; (10) large energy and industrial customers; (11) residential and small commercial retail

[489] *Id.*

[490] *Id.* § 4.3.2.1 (Composition/Membership).

customers; and (12) a Markets+ Independent Panel representative, who is not up for re-nomination, serving as chair.[491]

vi. Working Groups and Task Forces

340. SPP proposes that MPEC may establish standing working groups to assist with its mission, with the chair of each working group nominated by the MPEC and appointed by the Markets+ Independent Panel.[492] Following a solicitation of nominations by SPP staff, working group representatives will be recommended by SPP staff to the MPEC for approval. Similarly, a temporary task force may be proposed by the MPEC chair or working group chair and approved by the MPEC or applicable working group.[493] All task forces will be temporary, with the scope of its activities limited to a specific purpose.[494] Each representative of a working group or task force will have one vote, with a simple majority required for approval of an action.[495]

vii. Appeals Process

341. SPP proposes that if any market participant, market stakeholder, or the Markets+ State Committee disagrees on an action or inaction taken or recommended by any working group or task force, they may, upon written request, appeal and submit an alternative recommendation to the MPEC within seven calendar days. The MPEC will then timely consider and take any action it deems necessary to address the appeal. Similarly, SPP proposes that if any market participant, market stakeholder, or the Markets+ State Committee disagrees on the MPEC's action on any issue, they may, upon written request, appeal and submit an alternative recommendation to the Markets+ Independent Panel within seven calendar days. The Markets+ Independent Panel will then timely consider and take any action it deems necessary to address the appeal, including affirming the action or inaction appealed, reversing the action or inaction appealed, or remanding the matter back to the appropriate group.[496]

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[491] *Id.* § 4.5.1 (Markets+ Nominating and Governance Committee).

[492] *Id.* §§ 4.4 (Working Groups, 4.4.1 Composition and Terms).

[493] *Id.* § 4.6 (Task Forces).

[494] *Id.* § 4.6.1 (Composition and Terms).

[495] *Id.* §§ 4.4.4 (Voting Structure, 4.6.4 Voting Structure).

[496] *Id.* § 7 (0.0.0), § 7 (Appeals to the MPEC and the MIP).

342. Finally, SPP proposes that any member of the Markets+ Independent Panel may request that the SPP Board of Directors review any action or inaction of the Markets+ Independent Panel. Upon such request, the SPP Board of Directors will review the matter in consultation with the Markets+ Independent Panel. If the SPP Board of Directors determine that there is insufficient consensus supporting the Markets+ Independent Panel's decision, and provided time allows, the SPP Board of Directors may remand the issue to the Markets+ Independent Panel or appropriate Markets+ working group, or both, for further consideration. SPP proposes that only Markets+ Independent Panel members may appeal to the SPP Board of Directors.[497]

b. Comments and Protests

343. Several commenters support the proposed Markets+ governance structure, arguing that the Markets+ governance structure is transparent, independent, and seeks to build consensus among a diverse array of participants and stakeholders.[498] Interwest/NIPPC state that the Markets+ governance provisions contain a novel approach, appropriate to the region, that combines features of sector-based committees with an advisory model that allows SPP to continue to make timely decisions that benefit the market as a whole, without being wholly bound to a participant and stakeholder body. Interwest/NIPPC further contend that the one-member, one-vote approach for the independent sector balances the interests of commercial and non-commercial entities.[499] Similarly, the Markets+ State Committee argues that consumer advocates—both non-profit organizations and state agencies—are properly represented on the MPEC.[500]

344. Interwest/NIPPC assert that governance matters—such as potential refinement of sector definitions, the formation of new sectors or subsectors, and further evaluation of the governance structure in light of the market participants and market stakeholders that ultimately elect to join—are all topics that the MPEC has directed an interim task force to further consider before Markets+ goes live. Interwest/NIPPC views this approach of further review to be an appropriate plan.[501]

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[497] *Id.* § 4 (0.0.0), § 4.2.1 (Purpose and Scope of Activities).

[498] Salt River Project Comments at 4-5; Tucson Electric Comments at 4-6; Washington Municipals Comments at 5-6; APS Comments at 5-6; Bonneville Comments at 4-5; Commissioner Myers at 1; Powerex Comments at 13-14; WPTF Comments at 3-4.

[499] Interwest/NIPPC Comments at 10-12.

[500] Markets+ State Committee Comments at 4.

[501] Interwest/NIPPC Comments at 12.

345. Several other commenters, however, raise concerns with SPP's governance proposal. CEBA and Clean Energy Associations argue that the limited number of stakeholder groups in the Markets+ governance structure has the potential to severely restrict the voices of those in the diverse independent sector. Clean Energy Associations assert that, under the 67% approval threshold, the voice of independent power producers could be drowned out. CEBA and Clean Energy Associations both argue that the addition of load interests in the independent sector creates conflicting interests within that sector. According to Clean Energy Associations, without clear procedures for creating new subsectors in the future, many developers face a very real threat of having no viable voice in the MPEC. Clean Energy Associations note that the independent sector's voting task force recommended establishing a Markets+ Interim Governance Task Force to review governance issues, including intra-sector vote weighting. Clean Energy Associations request that the Commission direct SPP to submit quarterly reports on the progress of that task force and any changes to the governance structure that it is contemplating. CEBA also supports a mechanism to trigger a review of the sectors and allow for improvements to the governance process.[502]

346. Colorado Consumer Advocate contends that the sector weighted voting rules for the MPEC are heavily weighted towards generation interests because such interests in the three sectors can easily meet the MPEC's 67% voting threshold. Colorado Consumer Advocate also states that the Markets+ Tariff appears to allow affiliate voting in the MPEC, which, in theory, means that a single holding company could have subsidiaries voting in multiple MPEC sectors.[503]

347. PIOs argue that the Markets+ Tariff's governance provisions lack transparency and accountability and do not meet the Order No. 719 governance criteria of inclusiveness, fairness in balancing diverse interests, representation of minority positions, and ongoing responsiveness. PIOs contend that while such requirements are not directly applicable here, they are nonetheless illustrative of governance attributes necessary to ensure just and reasonable rates.[504]

348. PIOs contend that the proposal gives undue preference to market participants from the Eastern Interconnection because the SPP Board of Directors, which has ultimate oversight authority over Markets+, is elected only by SPP's RTO members. Moreover,

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[502] Clean Energy Associations Comments at 4-6; CEBA Comments at 8-9.

[503] Colorado Consumer Advocate Comments at 6, 13.

[504] PIOs Protest at 16-17 (citing *Wholesale Competition in Regions with Organized Elec. Markets*, Order No. 719, 125 FERC ¶ 61,071 (2008), *order on reh'g*, Order No. 719-A, 128 FERC ¶ 61,059, *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009)).

PIOs assert that the Markets+ Tariff provides only a limited opportunity to provide feedback when the SPP Board of Directors take authority over a Markets+ issue. PIOs argue that if the SPP Board of Directors decides to reject Markets+ Tariff changes, the only recourse would be to file a FPA section 206 complaint with the Commission. According to PIOs, this is also problematic because the SPP Board of Directors is not required to explain its decisions and votes by secret ballot, limiting its accountability and transparency. PIOs further argue that it is unclear whether SPP will involve its RTO members in the SPP Board of Directors' final decision-making or whether the SPP Board of Directors will act alone on Markets+ appeals. PIOs contend that, if it is the former, there is no way for Markets+ stakeholders to participate in SPP as a member, unless the stakeholder pays a $6,000 annual fee, signs a contract, and is approved by the appropriate SPP committee.[505]

349. Additionally, PIOs assert that the Markets+ Tariff lacks necessary details about how the Markets+ Independent Panel's decisions may be appealed. PIOs contend that because the Markets+ Tariff fails to define what constitutes inaction of the Markets+ Independent Panel, it is unclear exactly what can be appealed to the SPP Board of Directors. PIOs argue that it is also unclear why only a Markets+ Independent Panel member may appeal to the SPP Board of Directors. PIOs maintain that the Markets+ Tariff also fails to define the process for submitting an appeal or how the SPP Board of Directors will review and resolve such appeals.[506]

350. Colorado Consumer Advocate argues that the proposed governance structure provides inadequate customer representation, questions the independence of the Markets+ Independent Panel and SPP Board of Directors, and asserts that various provisions concerning the roles and responsibilities of the different governing bodies are unclear.[507] With respect to the Nominating Committee, Colorado Consumer Advocate also expresses concern about consumer advocates and public interest organizations sharing

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[505] *Id.* at 17-19.

[506] *Id.* at 19-21.

[507] Colorado Consumer Advocate Comments at 4-6. For example, Colorado Consumer Advocate contends that the Markets+ Tariff is unclear with respect to, among other things, whether the Markets+ State Committee has any shared FPA section 205 filing rights, what actions the SPP Board of Directors can take if time does not allow it to remand a matter back to the Markets+ stakeholder process, how the Nominating Committee's representative nomination process will take place, whether Markets+ State Committee members can also be MPEC members, whether the Markets+ State Committee will develop its own voting structure, and how SPP will determine its list of nominees for working groups. *Id.* at 5-9, 12-15.

representation on the committee because, according to Colorado Consumer Advocate, most public interest organizations have a specific focus that may interfere with consumer advocates' statutory mandate to represent the public interest more broadly.[508]

351. Colorado Consumer Advocate also lists various recommendations to improve the Markets+ governance structure, including enhancing states' oversight and decision-making by establishing shared FPA section 205 filing rights with the Markets+ State Committee, establishing "jump ball" filing rights, increasing state-level voting representation in the MPEC, giving the Markets+ State Committee veto power over the Markets+ Independent Panel's decisions, and replacing the SPP Board member on the Markets+ Independent Panel with a Markets+ State Committee member. Colorado Consumer Advocate further argues that the SPP Director member on the Markets+ Independent Panel should be a non-voting position, that SPP should provide more justification for how the MPEC votes for the Markets+ Independent Panel candidates, and that voting behavior at the individual representative level should be publicly disclosed.[509]

c. Answers

352. SPP argues that although the Markets+ filing does not propose to establish an RTO, Order No. 2000 is instructive on the types of governance structures that promote just and reasonable rates. SPP contends that the Markets+ governance structure is just and reasonable because it is based on four tenets of RTO governance: independent oversight; meaningful participation rights for market participants; an advisory role for state commissions; and a forum for market participants and market stakeholders to voice concerns and appeal decisions to the Markets+ Independent Panel and, through the Markets+ Independent Panel, to the SPP Board of Directors. According to SPP, the Markets+ governance is structured to closely mirror that of the SPP RTO.[510]

353. SPP asserts that the Markets+ governance structure meets the Commission's independence standards for RTOs and the organized regional markets that they administer because the Markets+ Tariff provides both the SPP Board of Directors and the Markets+ Independent Panel with oversight and independence from any single market participant or class of market participants. SPP notes that the Markets+ Tariff will require the Markets+ Independent Panel to meet the same independence obligations as the SPP Board of Directors. SPP adds that the SPP Board of Directors is independent of

[508] *Id.* at 5-6.

[509] *Id.* at 11-15.

[510] SPP May 21 Answer at 32 (citing Order No. 2000, FERC Stats. & Regs. ¶ 31,089 at 31,073, 31,213-14).

any RTO Member or market participant and conducts its meetings in an open and transparent forum that encourages participation from stakeholders.[511]

354. In response to PIOs' argument about undue influence, SPP argues that PIOs conflate SPP RTO members with "Eastern participants."[512] According to SPP, it is the SPP RTO *members*, not the Integrated Marketplace participants, that participate in the election of the SPP Board of Directors, and any qualifying entity may become a SPP RTO member for a nominal fee, with no preference given to whether the entity is located in the Eastern or Western Interconnection. SPP asserts that, like market participants in the Integrated Marketplace, Markets+ market participants may become members of SPP, participate in the election process for the SPP Board of Directors, and become eligible to participate in SPP's Members Committee, which advises the SPP Board of Directors. SPP notes that Markets+ also involves an additional layer of independent governance through the Markets+ Independent Panel, as four of its five members are nominated by the Nominating Committee and elected by the MPEC. SPP therefore argues that all decisions made regarding Markets+ rules, policies, and procedures will ultimately be made by an independent body.[513]

355. Moreover, SPP argues that the Markets+ Tariff requires the SPP Board of Directors to give significant recognition and deference to the Markets+ Independent Panel's decision-making role and sets forth only three grounds for which the SPP Board of Directors will review and consider Markets+ related issues. In SPP's view, it is appropriate that the SPP Board of Directors, the entity responsible for overseeing all of SPP's operations, have the opportunity to review and consider issues involving SPP management and finances. Further, with respect to the PIOs' claims regarding the appeals process, SPP asserts that Attachment O of the Markets+ Tariff contains sufficient detail describing who may appeal to the SPP Board of Directors, when, and under what circumstances.[514]

356. Public Power Council similarly contends that PIOs' argument about undue influence overlooks the limited role that the SPP Board of Directors has over issues related to Markets+, which are primarily decided by the Markets+ Independent Panel. Further, Public Power Council contends that the SPP RTO footprint and the Markets+

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[511] *Id.* at 33-34.

[512] *Id.* at 35.

[513] *Id.* at 35-36.

[514] *Id.* at 36-37 (citing SPP, Proposed Markets+ Tariff, attach. O, § 4 (0.0.0), § 4.2.1 (Purpose and Scope of Activities); *id.*, § 7 (Appeals to the MPEC and the MIP) (0.0.0)).

footprint operate under separate market rules and will be optimized separately, which should greatly reduce the opportunity for such conflicts. With respect to PIOs' concern about the limited ability for stakeholders to provide feedback to the SPP Board of Directors, Public Power Council asserts that the SPP Board of Directors will solicit and consider comments from the Markets+ Independent Panel, MPEC, and any market participant, market stakeholder, and Non-Voting Stakeholder before taking action on any voting item. In Public Power Council's view, this solicitation mechanism provides sufficient opportunity to stakeholders to provide feedback.[515]

357. SPP also argues that the Markets+ governance structure encourages participation by a diverse array of stakeholders, similar to the stakeholder process employed in the SPP RTO. SPP contends that because the MPEC will include representation of every market participant and market stakeholder, no one class of participant will have undue influence.[516]

358. SPP argues that the Clean Energy Associations' concerns about the independent sector's voting power fail to recognize that an action will be approved only if the average of the votes from all three sectors is at least 67%, with each sector representing one-third of the vote, meaning that two sectors cannot "drown out" an individual sector. SPP contends that the Clean Energy Associations' argument also fails because, even if the MPEC did "drown out" a sector's vote, the matter must ultimately be approved by the Markets+ Independent Panel and, potentially, the SPP Board of Directors.[517]

359. With respect to Colorado Consumer Advocate's concerns about inadequate consumer advocate representation in Markets+, SPP responds that state consumer advocates, if allowed by authorizing statutes, may execute the Market Stakeholder Agreement, giving them a vote on the MPEC and making them eligible for a voting seat on all working groups and task forces. SPP notes that consumer advocates are also eligible for waiver of the $5,000 annual fee that is required of market stakeholders, removing any barrier to participation. SPP argues that, alternatively, if consumer advocates do not choose to become market stakeholders, they may participate in all open meetings and are also eligible for appointment to task forces.[518]

360. SPP further argues that the Markets+ governance structure includes an appropriate advisory role for state commissions. According to SPP, the Commission has declined to

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[515] Public Power Council Answer at 10-12.

[516] SPP May 21 Answer at 38-39.

[517] *Id.* at 39-40.

[518] *Id.* at 40-41.

impose any specific requirements for state government agencies' roles in regional organization governance and has acknowledged that there are good policy reasons for providing state commissions with an advisory rather than voting role.[519] SPP states that it recognizes the importance of state commission engagement and has provided an avenue for exactly that by giving the Markets+ State Committee an advisory role on task forces and appeal rights to the MPEC and Markets+ Independent Panel. SPP contends that, by design, the Markets+ proposal also provides the Markets+ State Committee with flexibility to determine how best to organize and when and how to engage with SPP and Markets+.[520]

361. Lastly, SPP asserts that the proposed Markets+ governance structure ensures that all stakeholders' concerns can be heard. SPP contends that the MPEC, working groups, and task forces provide an open forum for interested parties to express concerns and participate in market development initiatives, even though formal voting rights will be reasonably limited to entities that have taken on financial responsibility for Markets+ market activities. In response to the Clean Energy Associations' concern that the limited number of stakeholder groups has the potential to restrict the voices of those in the independent sector, SPP notes that additional working groups and task forces can be created, subject to approval by the MPEC or Markets+ Independent Panel, and that Markets+ is specifically designed to allow for evolution of the stakeholder structure as needed.[521]

362. Colorado Consumer Advocate argues that although state consumer advocates can participate in the MPEC separately from their state commission, their voices will be overwhelmed because the sector weighted voting rules for the MPEC are heavily weighted towards generation interests. Further, in response to SPP, Colorado Consumer Advocate reiterates its recommendation to enhance state oversight in Markets+ decision-making, including establishing shared FPA section 205 filing rights with the Markets+ State Committee. Colorado Consumer Advocate contends that establishing shared FPA section 205 filing rights for both SPP and the Markets+ State Committee would fall within the Commission's authority because SPP would still retain its statutory filing rights. Colorado Consumer Advocate asserts that certain shared filing rights currently exist in SPP and some other RTOs. Colorado Consumer Advocate argues that adopting such an approach in Markets+ would further the public interest and improve the

[519] *Id.* at 41 (citing Order No. 2000, FERC Stats & Regs. ¶ 31,089 at 31,074-75).

[520] *Id.* at 42.

[521] *Id.* at 43-44.

responsiveness of SPP by elevating the consumer voices represented by state consumer advocates and state commissions.[522]

d. Commission Determination

363. We find that SPP's proposed Markets+ governance structure is just and reasonable and not unduly discriminatory or preferential. Although Markets+ is administered by SPP, the proposed market is not an RTO/ISO. However, because Markets+ organizes a broad range of participants in an independent market structure, the Commission's principles of RTO/ISO governance can provide guidance for assessing the Markets+ governance proposal.[523] The Commission has explained that an RTO/ISO's governance structure should be independent of control from any individual market participant or class of participants and should be responsive to the needs of customers and other stakeholders.[524]

364. We find that the Markets+ governance is sufficiently independent from undue influence because, similar to the SPP OATT (as well as the WEIS Tariff), the Markets+ Tariff provides that the SPP Board of Directors will provide ultimate independent oversight of Markets+. Although SPP proposes that the SPP Board of Directors will generally defer final decision-making authority to the Markets+ Independent Panel, the proposed provisions require that the Markets+ Independent Panel also be independent of any market participant or market stakeholder and subject to SPP's conflict of interest rules and the SPP Board retains ultimate decision-making authority.

365. Additionally, we find that the proposed governance structure is sufficiently inclusive and balances diverse stakeholder interests. The proposed MPEC provides a forum for interested entities—including market participants, market stakeholders, non-voting stakeholders, and Markets+ State Committee members—to participate in the governance of Markets+. The voting sectors within the MPEC and voting representatives within the Nominating Committee also represent a broad range of interests, including both participating and non-participating entities.

366. Clean Energy Associations and CEBA contend that the limited number of stakeholder groups in the governance structure has the potential to dilute the voices of those in the diverse independent sector. Similarly, Clean Energy Associations assert that the broad membership of the independent sector will potentially create intra-sector

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[522] Colorado Consumer Advocate Answer at 8-14.

[523] *See, e.g.*, WRAP Order, 182 FERC ¶ 61,063 at P 50.

[524] *See* Order No. 2000, FERC Stats & Regs. ¶ 31,089 at 31,073-74; Order No. 719, 125 FERC ¶ 61,071 at PP 502-510.

conflict, and Colorado Consumer Advocate asserts that the proposed sector weighted voting rules for the MPEC are heavily weighted towards generation interests. While we recognize these concerns, we find that the proposal to include three voting sectors in the MPEC strikes a reasonable balance between allowing meaningful input from an array of interested entities (including both participants and non-participants) and ensuring that no single entity or stakeholder group can dominate the process.

367. PIOs contend that the proposal gives undue preference to market participants from the Eastern Interconnection because the SPP Board of Directors, which has ultimate oversight authority over Markets+, is elected only by SPP's RTO members. We disagree with this argument because, as discussed above, the SPP Board of Directors will generally defer decision-making authority on Markets+ issues to the Markets+ Independent Panel, where four of the five members are directly elected by the MPEC. Additionally, market participants and stakeholders (regardless of whether they are in the Western or Eastern Interconnection) may join the SPP RTO and, as members, participate in the election of the SPP Board of Directors. Further, we find that PIOs' concern about undue influence by SPP RTO members from the Eastern Interconnection is speculative, given that Markets+ would operate under a different set of market rules and in a different footprint than SPP's Integrated Marketplace. Moreover, with respect to PIOs' concern that market participants and stakeholders have only a limited opportunity to provide feedback when the SPP Board of Directors takes authority over a Markets+ issue, we are also unpersuaded. We note that the proposed Markets+ Tariff recognizes stakeholders' right to file an FPA section 206 complaint with the Commission.[525]

368. As to Colorado Consumer Advocate's arguments that consumer advocates and state commissions must have an expanded role in Markets+, we find that SPP's proposal provides an acceptable role for such entities and need not address alternative governance designs.[526] In particular, we appreciate the desire for a greater role for the states in Markets+ governance and encourage any necessary enhancements in the future.

369. PIOs and the Colorado Consumer Advocate further assert that the Markets+ Tariff lacks necessary details about, among other things, the process for appealing a Markets+ Independent Panel decision. However, we find that the Markets+ Tariff provides sufficient detail about the roles, responsibilities, and procedures of the various governing bodies, including the appeals process. Finally, although these commenters advance several alternative proposals for the Markets+ governance structure (e.g., shared filing rights for the Markets+ States Committee), we need not address those alternative designs

[525] *See* SPP, Proposed Markets+ Tariff, pt. I, § 2 (Regulatory Filings) (0.0.0), § 5.5 (Rights Under the Federal Power Act) (0.0.0).

[526] *See supra* n.53.

because we find that the governance structure as proposed is just and reasonable and not unduly discriminatory or preferential.[527]

15. Markets+ Stakeholder Agreement

a. SPP's Filing

370. SPP proposes to include in the Markets+ Tariff a Markets+ Stakeholder Agreement that will provide the terms pursuant to which entities who are not market participants may participate and have a vote in the Markets+ stakeholder process (market stakeholders).[528] Under the proposed Markets+ Stakeholder Agreement, the market stakeholder will pay an annual fee to SPP unless it seeks or obtains a waiver of such payment. SPP proposes that the annual fee may be waived for eligible entities that are either: (1) nonprofit organizations under the Internal Revenue Code who provide satisfactory evidence of their status; or (2) a governmental entity designated by state statutes to represent the interests of end-use customers before a state's regulatory agencies who provides satisfactory evidence supporting such authority. SPP proposes that an entity is eligible to participate as a voting market stakeholder upon SPP's receipt of payment or upon approval of a waiver.[529] SPP explains that the Markets+ Stakeholder Agreement is necessary to effectuate the governance structure of Markets+.[530]

b. Comments and Protests

371. Colorado Consumer Advocate asserts that any Markets+ membership fees should be waived for state-sanctioned consumer advocates.[531]

c. Answers

372. SPP responds that consumer advocates, if allowed by authorizing statutes, may execute the Markets+ Stakeholder Agreement, giving them a vote on the MPEC and making them eligible for a voting seat on all Markets+ working groups and task forces. SPP explains that the Markets+ governing documents also specify that consumer

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[527] *Id.*

[528] SPP, Proposed Markets+ Tariff, attach. N (Markets+ Stakeholder Agreement) (0.0.0).

[529] *Id.* attach. N (Markets+ Stakeholder Agreement) (0.0.0), art. 3 Payments.

[530] Transmittal at 126.

[531] Colorado Consumer Advocate Protest at 11.

advocates are eligible for waiver of the $5,000 annual fee that is required of market stakeholders, removing any barrier to participation in Markets+.[532]

d. Commission Determination

373. We find that SPP's proposed Markets+ Stakeholder Agreement is just and reasonable and not unduly discriminatory or preferential. The Markets+ Stakeholder Agreement accounts for the fact that non-market participants are allowed to participate in the Markets+ governance process, upon satisfaction of the terms and conditions specified in the agreement. With respect to Colorado Consumer Advocate's argument about fees, we note that the Markets+ Stakeholder Agreement already states that "a governmental entity designated by state statutes to represent the interests of end-use customers before a state's regulatory agencies" is eligible to seek and obtain a waiver of the annual fee.[533] We find that the Markets+ proposal therefore addresses the Colorado Consumer Advocate's concern about membership fee requirements for consumer advocates.

16. Seams

a. SPP's Filing

374. SPP acknowledges that Markets+ will likely share seams with the WEIS Market, CAISO's WEIM, and CAISO's EDAM. Nevertheless, SPP believes the issue of seams is premature because it is not taking on responsibilities for administering open access transmission service, balancing authority operations, transmission planning or operation, or any other function that might normally require comprehensive agreements with neighboring entities performing similar functions, and, thus, it has not identified immediate seams issues of concern related to Markets+.[534]

375. SPP states that, subsequent to the Commission's approval of the Markets+ Tariff, and as part of its implementation of Markets+ and preparation for go-live, it plans to work with CAISO, and other parties in the West as appropriate, to develop seams agreements to address coordination and communications, and to enable improved information exchange between market operators in the Western Interconnection. Further, SPP states that it considers the lack of uniform congestion management an issue the West should address regardless of whether markets further develop. SPP encourages and is

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[532] SPP May 21 Answer at 40.

[533] SPP, Proposed Markets+ Tariff, attach. N (Markets+ Stakeholder Agreement) (0.0.0), art. 3(b).

[534] Transmittal at 54-55.

supportive of the Commission exploring this issue in more detail to facilitate greater awareness and consideration of approaches for addressing this gap.[535]

b. Comments and Protests

376. Many commenters express their concern over the seams that will exist between Markets+, EDAM, WRAP, and the rest of the Western Interconnection and state that there is a need for seams coordination.[536] Bonneville states that effective seams agreements are necessary to ensure the value of markets to all participants.[537] CEBA notes seams between Western day-ahead markets related to transmission optimization, contracting for resources across seams, resource adequacy compliance across seams, GHG accounting conflicts, and market power mitigation inefficiencies. CEBA is also concerned that SPP views itself as structurally inhibited from promoting effective seams because of its role as Market Operator and supports SPP's call for the Commission to support development of uniform congestion management in the West.[538] Similarly, Renewable Northwest states that, while SPP correctly notes that its role is as only a Market Operator for Markets+, the seams issues identified and addressed in prior Commission proceedings (loop flow and congestion management) revolve primarily around market operations.[539]

377. PSCo recommends that the Commission encourage SPP to address seams between CAISO, CAISO's EDAM, and Markets+, including issues such as reliability, transmission usage, congestion rent revenue allocation, and resource adequacy.[540] WPTF states, among other things, that uniform congestion management should be evaluated for implementation, as it would provide an important foundational element that can support better seams management in the West. WPTF urges the Commission to require day-

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[535] *Id.* at 55-56.

[536] Bonneville Comments at 5-6; CEBA Comments at 6-8; Salt River Project Comments at 8; Interwest/NIPPC Comments at 8-10; PSCo Comments at 2-3; PIOs Protest at 24-25; PacifiCorp Comments at 3-4; Tucson Electric Comments at 9-10; Renewable Northwest Comments at 4-13; APS Comments at 9-10; WPTF Comments at 11-12; SoCal Edison Protest at 6-9; NV Energy Comments at 6-7; Powerex Comments at 21-22.

[537] Bonneville Comments at 5-6.

[538] CEBA Comments at 7-8.

[539] Renewable Northwest Comments at 10.

[540] PSCo Comments at 3.

ahead market operators to work with their participating balancing authorities and transmission service providers to develop efficient approaches to coordination at their boundaries, through a seams agreement or other mechanism, by a date certain, ideally before both go live.[541]

378. SoCal Edison states that it fully anticipates it will want to transact with Markets+ if it comes to fruition, but it does not find anywhere in the proposed Markets+ Tariff details on how seams issues may be addressed. SoCal Edison is concerned that the proposed Markets+ Tariff may create electrical "market islands" of Markets+ market participants within WEIM, or "market islands" of WEIM participants within Markets+, rather than operating as part of an interconnected West.[542] SoCal Edison, therefore, argues that SPP should preliminarily identify obvious seams issues to the Commission as well as a framework for identifying and evaluating seams issues in the future.[543]

379. Interwest/NIPPC note that the Commission has required agreements to mitigate seams as part of approving markets in the past, including in approving SPP as an RTO, and state that the Commission should require attention to seams management prior to market go-live.[544] Renewable Northwest also points to Commission precedent where it required PJM and MISO to coordinate across their seams and where it encouraged Entergy and SPP to execute a seams agreement.[545]

380. On the other hand, PIOs request that the Commission issue a set of guiding principles for a joint operating agreement or other coordination mechanism for adjoining day-ahead markets that can be used to implement appropriate procedures of coordination and communication.[546] Likewise, Renewable Northwest states that, should the Commission determine that it is premature to direct operating agreements between

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[541] WPTF Comments at 11-12.

[542] SoCal Edison Protest at 8-9.

[543] *Id.* at 7-8.

[544] Interwest/NIPPC Comments at 9 (citing *Sw. Power Pool, Inc.*, 106 FERC ¶ 61,110, at PP 49-59 (2004)).

[545] Renewable Northwest Comments at 11 & nn.23, 24 (citing *Alliance Cos.*, 100 FERC ¶ 61,137 (2002); *The New PJM Cos.*, 105 FERC ¶ 61,251 (2003); *Sw. Power Pool, Inc.*, 131 FERC ¶ 61,236 (2010)).

[546] PIOs Protest at 23-24.

CAISO and SPP, guidance from the Commission on an appropriate timeline and milestones would be useful for the region.[547]

381. Salt River Project and Interwest/NIPPC request that the Commission require CAISO and SPP report to the Commission on the status and progress of seams coordination.[548] Finally, PSCo sees the opportunity to design an efficient seams agreement between SPP's RTO West and Markets+ since SPP will operate both markets.[549]

c. Answers

382. Public Power Council agrees that seams between neighboring markets need to be treated deliberately and with extensive coordination between market operators but, contrary to PIOs, recommends that the Commission not reject this tariff due to seams management because Public Power Council believes it is premature to require seams coordination. However, Public Power Council agrees with Renewable Northwest, which states that broad guidance principles and market operator accountability could be helpful in informing future discussions.[550]

383. Bonneville states that a good example of the type of seams agreement that can address the use of non-participating transmission systems is the Coordinated Transmission Agreement between Bonneville and CAISO, which for years set the parameters for WEIM to use the firm transmission rights held by PacifiCorp and other WEIM participants on Bonneville's transmission system prior to Bonneville joining WEIM, including the modeling and enforcement of constraints on Bonneville's transmission system. Bonneville also states that it is not aware of any seams discussions being initiated between SPP and CAISO but that these conversations will need to start in the near future.[551]

384. Bonneville argues that it is not necessary to resolve all potential seams issues for the Commission to determine that the Markets+ Tariff is just and reasonable. Bonneville explains that when CAISO filed the WEIM Tariff, many entities were concerned about transmission impacts from the use of dynamic transfer capability on the California-

[547] Renewable Northwest Comments at 12.

[548] Salt River Project Comments at 8; Interwest/NIPPC Comments at 10.

[549] PSCo Comments at 2-3.

[550] Public Power Council Answer at 12-13.

[551] Bonneville Answer at 3-4.

Oregon intertie and on other transmission users not participating in WEIM. Bonneville states that the Commission did not reject the proposal and was ultimately "satisfied that these matters will be appropriately addressed in the framework created by the memorandum of understanding between [Bonneville], CAISO, and PacifiCorp" and the reliability coordinator.[552]

d. Deficiency Letter, Deficiency Response, and Answers

385. In response to the Commission staff's Deficiency Letter seeking more information on how transmission will be made available to Markets+, SPP states that because actual market borders are not known at this time, it is unknown at this time if any form of seams or operating agreements are necessary, but that once seams are known, it will work with transmission owners and balancing authorities to coordinate operations, exchange data, and otherwise work to reasonably minimize seams friction.[553] Joint Responders state that SPP's Deficiency Response falls short of their clarification request or otherwise raises questions that would need to be addressed in future market implementation and seams discussions.[554]

e. Commission Determination

386. We decline to address seams in this proceeding. While borders between organized markets (and non-market areas) in the West are likely to arise, we disagree with commenters who argue that action is necessary at this time. Consistent with our experience in the Eastern Interconnection, we anticipate that seams between centrally cleared markets (*e.g.*, EDAM and Markets+) and between markets and non-market areas will necessitate agreements between parties that will address issues such as data sharing, congestion management, and transmission rights and use. However, we agree with SPP that the parties to or scope of the issues that will need to be addressed by such agreements are not yet fully known. We acknowledge SPP's commitment to continue to work on these issues with CAISO and other stakeholders.[555]

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[552] *Id.* at 7 (quoting *CAISO*, 147 FERC ¶ 61,231 at P 259).

[553] Deficiency Response at 9-10.

[554] Joint Responders October 10 Comments at 3-4.

[555] Transmittal at 55-56.

17. Miscellaneous Issues

a. Comments and Protests

387. Colorado Consumer Advocate presents several recommendations for the Commission's consideration about regional markets in general. For instance, Colorado Consumer Advocate proposes, among other general recommendations, that: consumer rates should not increase as a result of utility participation in regional markets; competitive bidding should be required for large new transmission projects; transmission-related costs should be subject to after-the-fact regulatory review in the proper state or federal forum; and regional markets should provide a dedicated funding stream to create a regional consumer advocate office.[556]

388. The SPP Market Monitor argues that the proposed language in Attachment A, section 5.5, regarding the assignment of resources to load, is ambiguous. The SPP Market Monitor asserts that although it does not believe that SPP intended this language to affect market operations or settlements, there is no such disclaimer in the Markets+ Tariff.[557]

389. The SPP Market Monitor also argues that the proposed Markets+ Tariff provisions regarding manual resource selection should include a claw-back mechanism.[558] The SPP Market Monitor asserts that although the proposed tariff language appropriately requires that manual resource selections be non-discriminatory and describes how the SPP Market Monitor will evaluate those selections, the Markets+ Tariff lacks a mechanism to claw back the revenue a resource earned if the SPP Market Monitor determines that the resource was selected discriminatorily. The SPP Market Monitor argues that, without such a mechanism, the only recourse is for the SPP Market Monitor to refer the matter to

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[556] Colorado Consumer Advocate Comments at 9-11.

[557] SPP Market Monitor April 29 Comments at 17-18 (citing SPP, Proposed Markets+ Tariff, attach. A, § 5.5 (Assignment of Resources to Load) (0.0.0) ("Nothing in this Markets+ Tariff conflicts with a Market Participant's ability to assign Energy from a specific Resource (or group of Resources) to a specific load inside the Markets+ Footprint.")).

[558] Manual Resource Selection is any process used by Participating Balancing Authorities, applicable Reliability Coordinators, Markets+ TSP, or Transmission Operators to manually select resources for Out-of-Merit Energy dispatch must not be unduly discriminatory. SPP, Proposed Markets+ Tariff, attach. A, § 2.3.1 (0.0.0), § 2.3.1.4.1 (Determination of Non-Discriminatory Manual Resource Selection).

the Commission, which would likely require much more time and resources than a settlement mechanism.[559]

390. XO Energy contends that although proposed Attachment A, section 9.3.17 (Reliability Unit Commitment Make Whole Payment Distribution Amount) is intended to fund make whole payments for RUC and is substantially similar to Attachment AE, section 8.6.7 in SPP's OATT, neither SPP's OATT nor the Markets+ Tariff go far enough to adhere to cost causation principles. XO Energy argues that because proposed section 9.3.17 does not net deviations, include a separate local reliability charge, or in any way account for the reason for RUC commitments in allocating costs, the calculation has no ability to determine whether any asset owner's deviations from the day-ahead market, or any activity of the asset owner, caused the RUC commitment. Additionally, XO Energy contends that due to the way the rate is calculated on a daily basis, asset owners will likely incur increased costs for hours in which they were not even operating—the daily rate is spread across all hours equally. XO Energy also contends that RUC cost allocation will be unduly allocated to virtual transactions, as it states happens in the SPP Integrated Marketplace.[560]

b. Answers

391. The SPP Market Monitor agrees with XO Energy that a virtual offer that converges day-ahead and real-time prices is considered a deviation and allocated a portion of the RUC make-whole payment cost for all of its cleared quantity. According to the SPP Market Monitor, the deviation charge reduces overall profitability, which can adversely affect the market. However, the SPP Market Monitor argues that, although cost allocation should be improved, it does not recommend delaying the start of Markets+. Instead, the SPP Market Monitor argues that Markets+ should begin evaluating cost allocation soon after go-live.[561]

392. In response to XO Energy, SPP states that the RUC balancing authority area make whole payment distribution will be on a cost-causation basis through calculation of certain load and resource deviations from the day-ahead market cleared amounts, operating parameter changes from those used in the Day-Ahead Market, and deviations

[559] *Id.* at 29-30.

[560] XO Energy Protest at 7-9.

[561] SPP Market Monitor May 14 Answer at 7-8.

associated with not following dispatch instructions.[562] SPP asserts that the Commission previously approved the same cost allocation methodology in the SPP OATT and that while methodologies used in other markets may be just and reasonable, SPP is not required to demonstrate that the proposed Markets+ methodology is more just and reasonable than others.[563]

c. Commission Determination

393. We find that Colorado Consumer Advocate's arguments are beyond the scope of this proceeding, in which we consider only whether SPP's proposed Markets+ Tariff revisions are just and reasonable under FPA section 205. Colorado Consumer Advocate's arguments do not address particular aspects of SPP's proposal but rather present a series of recommendations about the design of organized wholesale electricity markets more generally, which is not at issue here.

394. We are also unpersuaded by the SPP Market Monitor's concern about Attachment A, section 5.5 of the Markets+ Tariff. SPP explains in its transmittal that this provision does not impact market mechanics,[564] and there is nothing in the proposed tariff language that suggests otherwise. Regarding the SPP Market Monitor's contention that the Markets+ Tariff should include a claw-back provision for resources that were found to have been manually dispatched in a discriminatory manner by a Participating Balancing Authority, Markets+ TSP, or transmission operator, we find that the existing referral process is sufficient to deal with the need to reverse any undue revenue credited to the offending party. The SPP Market Monitor can alert the Commission to its finding of discriminatory behavior, which is clearly prohibited by the Markets+ Tariff.

395. Finally, we note that XO Energy itself states that SPP's proposed methodology for calculating RUC cost allocation is almost identical to the language in the SPP OATT. While XO Energy cites to "concern by the Market Monitor, as well as the Commission's evolving direction in this area,"[565] we note that we have not directed SPP to change its OATT in this regard and will not do so here.

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[562] SPP May 21 Answer at 45 (citing SPP, Proposed Markets+ Tariff, attach. A, § 9 (Reliability Unit Commitment Make Whole Payment Distribution Amount) (0.0.0), § 9.3.17(A)(2)).

[563] *Id.* at 45-46.

[564] Transmittal at 50.

[565] XO Energy Protest at 8.

The Commission orders:

(A) SPP's proposal is hereby accepted, subject to condition, as discussed in the body of this order.

(B) SPP is hereby directed to submit a compliance filing, within 30 days of the date of this order, as discussed in the body of this order.

(C) SPP is hereby directed to submit an informational filing notifying the Commission of the actual effective date no later than six months prior to the Markets+ go-live date, as discussed in the body of this order.

(D) SPP is hereby directed to submit informational reports every six months during the implementation period, as well as every six months for a period of three years after the Markets+ Tariff effective date, as discussed in the body of this order.

By the Commission. Commissioner Christie and Commissioner Rosner are concurring with a joint separate statement attached.
Commissioner Chang is concurring with a separate statement attached.

(S E A L)

Debbie-Anne A. Reese,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Southwest Power Pool, Inc. Docket Nos. ER24-1658-000
ER24-1658-001
ER24-1658-002

(Issued January 16, 2025)

CHRISTIE, Commissioner, ROSNER, Commissioner, *concurring*:

1. Today we approve Southwest Power Pool, Inc.'s (SPP) Markets+ proposal and we concur in that approval, because Markets+ has the potential to bring significant benefits to Western electricity consumers through greater competition and more efficient operation of the transmission system. We write separately, however, to raise an important issue of governance that we urge be addressed expeditiously by SPP.

2. Markets+ will expand SPP's geographic footprint into the Rocky Mountain West with its great diversity of states, along with their shared and respective interests. While the Markets+ proposal is not a full regional transmission organization (RTO) at this time, it is nonetheless timely to raise an important issue of governance that is pertinent not only to the Markets+ proposal with its proposed Markets+ State Committee, but also to SPP – which obviously is a full RTO – and specifically its Regional State Committee (RSC) as well. That issue is the absence of dedicated staff for either the Markets+ State Committee or the RSC, staff who are hired by and work exclusively for the state organizations, with adequate funding to support these staff through a tariff provision, and whose sole responsibility would be to support the work of the states' organizations, not any other organization, including SPP itself.

3. Along with PJM Interconnection, L.L.C. (PJM) and the Midcontinent Independent System Operator, Inc. (MISO), SPP is one of the three largest multi-state RTOs in the country. Unlike SPP's RSC, however, both PJM and MISO have successfully established state *organizations* with dedicated staff and funding who work directly for those state organizations, not for the RTO nor for other organizations. This structure is not unique: PJM has the Organization of PJM States, Inc. (OPSI), and MISO has the Organization of MISO States (OMS). Both OPSI and OMS have long played critically important roles in representing the states and, importantly, their millions of consumers and the public interest, in those large RTOs.[1] The full-time staffs of OPSI and OMS,

[1] ISO New England, Inc. (ISO-NE) similarly has the New England States Committee on Electricity with independent staffing and funding through the ISO-NE

who work *exclusively* for those organizations, are essential to the vital roles played by those organizations of state regulators.

4. Here, however, staff support for the Markets+ State Committee (which will provide advice to the Markets+ Independent Panel, the Markets+ Participants Executive Committee, and any working group or task force on all matters pertinent to Markets+) will be facilitated by SPP itself.[2] In its comments, the Markets+ State Committee provides clarification that it will be staffed by the Western Interstate Energy Board (WIEB), which *also* provides staff support and technical expertise to several other established Western committees, including the Committee on Regional Electric Power Cooperation (CREPC), the Western Interconnection Regional Advisory Body (WIRAB), the Western Energy Imbalance Market Body of State Regulators (BOSR), and the Western Resource Adequacy Program (WRAP) Committee of State Representatives (CSR). As valuable as WIEB staff are, we believe RTO state regulator organizations must have their own dedicated staff to be effective in evaluating and advising on RTO matters, especially when it comes to the impact of those matters on individual states and their consumers.

5. The absence of a dedicated staff for the RSC and for the Markets+ State Committee prevents states in SPP and those in Markets+ from participating more meaningfully. Knowledge is power, and state organizations must have dedicated staff to obtain the requisite knowledge to act effectively. We believe it is imperative for states to be active participants in RTO matters. If not, states and the consumers they represent may not realize the full benefits of RTO participation, and states may be saddled with costs that their consumers will be forced to pay, a concern the Markets+ State Committee highlights in its comments on this proceeding. Simply put, the Markets+ State Committee's position is clear: states need resources to do the jobs with which they have been tasked consistent with its public interest mandates.

6. As it launches Markets+, now is the right time for SPP to take action to remedy the flaws in its governance, for both the Markets+ State Committee and the RSC. OPSI and OMS have demonstrated that dedicating staff and resources to support state participation can be done cost-effectively. For example, OPSI has annual expenses of

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tariff. *See* ISO-NE, ISO-NE Transmission, Markets and Services Tariff, § IV.A, § IV.A Recovery of ISO Administrative Expenses (40.0.0).

[2] Order at P 338.

roughly $1 million, which represents just .002% of PJM's total annual billings in 2023.[3] As the energy industry becomes increasingly more complex, it is critical that states have the resources and staff they need to participate fully. The promotion and defense of the public interest in each member state demands no less.

For these reasons we respectfully concur.

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Mark C. Christie
Commissioner

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David Rosner
Commissioner

[3] *See* Monitoring Analytics, LLC, *State of the Market Report for PJM, Volume 1: Introduction (2023)*, at 5 (2024), https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2023/2023-som-pjm-vol1.pdf.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Southwest Power Pool, Inc.	Docket No.	ER24-1658-000 ER24-1658-001 ER24-1658-002

(Issued January 16, 2025)

CHANG, Commissioner, *concurring*:

1. Today's order[1] is the latest major step forward in the continued development of organized wholesale markets in the West.[2] I strongly support these efforts, which reflect increasing experience with markets across the West that bring substantial reliability and economic benefits to customers. That experience and other collaborative regional efforts[3] are driving progress across the interconnection to support more efficient use of the West's generation and transmission resources at a time of substantial load growth and increasing reliability challenges. Market expansion and evolution are critically important to meeting these challenges, and I write separately to discuss the record before the Commission in this proceeding and what steps are needed to ensure Markets+ delivers on its potential.

[1] *Sw. Power Pool, Inc.*, 190 FERC ¶ 61,030 (2025) (Markets+ Order).

[2] *See, e.g.*, *Cal. Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,231, *order denying reh'g*, 149 FERC ¶ 61,058 (2014) (accepting the California Independent System Operator Corporation's (CAISO) tariff revisions establishing the Western Energy Imbalance Market); *Sw. Power Pool, Inc.*, 173 FERC ¶ 61,267 (2020) (accepting the Southwest Power Pool's (SPP) tariff revisions establishing the Western Energy Imbalance Service Market); *Cal. Indep. Sys. Operator Corp.*, 185 FERC ¶ 61,210 (2023) (accepting CAISO's proposed tariff revisions to implement its Extended Day-Ahead Market (EDAM)). I note that SPP's proposed RTO West tariff revisions are currently pending before the Commission in Docket No. ER24-2184.

[3] *See, e.g.*, *Nw. Power Pool*, 182 FERC ¶ 61,063, at P 27 (2023) (accepting the Western Power Pool's proposed Western Resource Adequacy Program (WRAP) tariff). I note that additional regional reforms are currently pending before the Commission in Docket No. ER25-595 (Western Power Pool's proposed revisions to the WRAP tariff) and Docket No. ER25-542 (CAISO's proposed tariff revisions to implement step 1 of the West-Wide Governance Pathways initiative).

2. I appreciate that market constructs developed in the West reflect the varying needs, priorities, and geography of states, utilities (both Commission-jurisdictional and public power), and other participating entities.[4] Under section 205 of the Federal Power Act, the Commission's role is to assess whether market proposals before us are just and reasonable and not unduly discriminatory or preferential. I recognize that there may be multiple means of satisfying that statutory standard,[5] and the Commission need not demand uniformity for uniformity's sake.

3. In this case, the filing before us is not as comprehensive, clear, or understandable as I would have preferred to review prior to making such an important decision. Establishing a new market, like the Markets+ proposal before us, is an understandably complex task, particularly when stakeholders and future market participants may have diverse priorities. Market design details matter, and resolving market design issues upfront provides greater certainty for utilities, states, customers, and other market participants about market operations and ultimately the benefits of market participation. By comparison, when market rules are flawed, incomplete, or unclear, the market faces significant risks from opaque transactions with unexpected and volatile prices. Ultimately, consumers could end up paying higher prices for market flaws. Thus, I believe the Commission should, within the limits of our statutory task under section 205, strive to resolve known design issues at the inception of a market to the greatest extent possible.

4. SPP's filing, as further expounded upon in its subsequent pleadings and response to an extensive deficiency letter issued by Commission staff, provides sufficient information about key market design elements for us to assess what the Markets+ filing does – and critically, does not – resolve at this time. While today's order addresses many of those key elements, it leaves many others to future proceedings and processes.

5. One of the most critical market design issues before us is the rules governing transmission availability to the market, to which the record and today's order rightly dedicate a substantial amount of discussion. Put simply, the more transmission that is available to Markets+, the more value it can bring to customers. Without adequate transmission capabilities made available to Markets+, customers could end up paying significant congestion costs and lacking access to low-cost generation. In addition,

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[4] And, of course, regional variation in markets is not unique to the West; eastern organized markets have wide variation across many aspects of their market design.

[5] *See, e.g.*, *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (stating that a proposal under FPA section 205 "need not be the only reasonable methodology, or even the most accurate"); *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) (finding that the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than alternative rate designs").

without clear rules around when and how transmission capabilities will be made available to serve load, the markets face the risk that participants may attempt to take advantage of that ambiguity through strategic withholding of capacity. Thus, the availability of transmission in Markets+ will directly impact the value of the market and its ability to deliver reliable, cost-effective power to its customers.

6. Under the Markets+ construct, participating transmission service providers will provide much of the transmission used, subject to restrictions on what transmission capabilities they can opt-out of the market and respecting their bilateral transmission agreements. In addition, the Markets+ construct enables entities located outside of participating balancing authorities to contribute additional transmission to Markets+, while respecting the provisions of the Open Access Transmission Tariffs (OATTs) of their local transmission providers.

7. However, the details of the rules governing transmission contribution and withdrawal, which are fundamental to the ultimate success of Markets+, are only partially established in today's order. The record makes clear that these rules will be split between a broadly-applicable Markets+ tariff – which we approve today – and future filings from individual transmission providers whose capacity will be made available to Markets+. As a result, our action today is only one step in the full story, and the complete suite of rules and procedures governing transmission commitments to and withdrawals from Markets+ is not yet known.

8. For transmission service providers that enroll in Markets+, the Commission will review any necessary revisions to their OATTs to facilitate their participation in future filings, including rules regarding transmission contribution and withdrawal. It is important that these individual filings ensure that transmission service providers and contributors make transmission availability decisions transparently to ensure efficient transmission use. I look forward to reviewing these filings as parties commit to Markets+ and strongly encourage market participants to develop uniform, consistent rules across individual OATT filings to minimize the variability of transmission contribution and withdrawal approaches.

9. Several parties, particularly the SPP Market Monitor and Markets+ State Committee,[6] raise legitimate concerns about the potential for market participants to selectively contribute to or withdraw transmission from Markets+ to benefit their position in the market. Today's order addresses those concerns by highlighting certain market provisions that should help deter or guard against the potential exercise of market power.[7]

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[6] Markets+ Order at PP 58-60.

[7] *Id.* P 87.

10. I take seriously the concerns raised by the SPP Market Monitor and Markets+ State Committee. The Markets+ tariff will require that entities decide on a monthly basis what transmission they will contribute to Markets+ and provide at least 15 days of notice for transmission withdrawals. However, SPP's deficiency letter response also states that SPP will defer to the operation of individual transmission provider's OATTs and their associated scheduling rights, including possible intra-day withdrawals of otherwise-contributed transmission.[8] Such intra-day changes presumably occur today and do not inherently raise concerns. But, in the context of a new and complex market design where concerns have been raised by multiple parties, transmission contributions, both on a monthly and intra-day basis, warrant additional oversight as SPP stands up the market to ensure that flexibility is not abused to skew market clearing prices and potentially facilitate the exercise of market power or market manipulation. To that end, today's order requires that SPP include in its informational reports, for the first three years of Markets+ operation, specific information regarding transmission contribution decisions to facilitate robust oversight by the Commission, SPP's Market Monitor, and SPP.

11. In addition, today's order identifies several areas in which the Markets+ tariff, as proposed, lacks specificity on key points. Where possible based on the record before us, the order directs SPP to revise its Markets+ tariff to provide additional clarity[9] and highlights areas where SPP could provide additional details in its protocols related to market and resource dispatch mechanics to account for state greenhouse gas (GHG) programs and the ability for resources to be aggregated when participating in Markets+.[10] The order also provides guidance to future filers of the information the Commission expects them to include in their respective OATTs.[11] Given how critical these elements are to the proper functioning of Markets+, regulators and market participants need clarity regarding what transmission will be made available to the market by transmission service providers, how state-regulated GHG price adders will be factored into market dispatch for certain parts of the market and not in other parts of the market, and the specific criteria to determine what aggregations of resources are permissible. The direction and guidance are necessary to ensure that all interested parties – states, utilities, market participants, and other stakeholders – understand the rules of the road as Markets+ proceeds through development and into full operation.

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[8] SPP Deficiency Letter Response at 11-12.

[9] Markets+ Order at PP 84, 93, 154.

[10] *Id.* PP 210, 240.

[11] *Id.* PP 95-98.

12. Finally, I want to summarize and emphasize what actions follow from this order, to address issues that are deferred for future resolution or that will require ongoing oversight as Markets+ goes live in the coming years.

13. First, transmission service providers will need to amend their OATTs to participate in Markets+.[12] These modifications will help ensure that all interested parties adequately understand the rules governing transmission use in Markets+ as well as promote relative consistency in the rights and behaviors of various market participants.

14. Second, SPP will be responsible for maintaining protocols that provide additional clarity regarding the details and implementation of key Markets+ design components, including the dispatch of resources into different parts of the market that are subject to state GHG price adders versus those that are not subject to adders, the implementation of the MW re-designation mitigation,[13] resource aggregation, and the interaction between various market elements. To the extent possible, I encourage interested parties to actively participate in the development of those protocols to ensure they contain sufficient clarity and detail.

15. Third, SPP will provide routine reports regarding transmission contribution decisions from transmission providers, which will in turn support the market oversight efforts by SPP, the SPP Market Monitor, and the Commission's Office of Enforcement. The reports will help address the concerns raised around the potential for exercise of market power to affect Markets+ energy prices, congestion rents, or other aspects of the market.

16. Fourth, while today's order declines to initiate a new proceeding regarding potential seams issues (*e.g.*, between EDAM and Markets+ participants, or between organized and bilateral markets), seams issues will arise as market participation becomes clearer. Given the extensive comments in the record, stakeholders are well aware of the challenges that seams issues may present.[14] If helpful to the West, I am open to

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[12] *Id.*

[13] I encourage SPP, as part of its approach to GHG Pricing Programs, to provide additional detail in its protocols regarding the MW re-designation mitigation concept included in the Markets+ design and tariff. This detail includes clarifying and defining the interactions between the economic dispatch of resources and subsequent attribution of GHG emissions to different market areas. As a part of this process, I similarly encourage SPP to fully describe the interactions between the use of the Surplus Threshold concept (for Type 2 resources) with Markets+ dispatch mechanisms.

[14] Commenters also raised similar issues in the EDAM proceeding. *See Cal. Indep. Sys. Operator Corp.,* 185 FERC ¶ 61,210 at PP 505-509, 512 (2023).

Commission action, such as convening a technical conference, when those issues and the footprints of various markets crystalize. In the meantime, I encourage SPP, CAISO, Western Power Pool, and other Western stakeholders to coordinate and develop workable solutions to minimize friction at the seams and maximize the benefits of wholesale market transactions for customers.

17. These ongoing efforts to stand up Markets+ will require additional efforts by SPP, its Market Monitor, states, market participants, and other stakeholders. I recognize that stakeholder participation can be a substantial commitment, particularly for state regulatory commissions, energy offices, and consumer advocates that are often resource constrained relative to the significant stakeholder obligations that regional markets require. I accordingly echo the concerns raised by my colleagues, Commissioners Christie and Rosner, in their joint concurrence and encourage efforts, including through existing regional organizations like the Western Interstate Energy Board, to support states' robust participation in the ongoing implementation of Markets+.

18. Notwithstanding my concerns and cautions noted above, today's order marks a significant milestone in the years-long, if not *decades*-long, effort to improve wholesale market competition across the West. While much work is yet to be done, I thank all the parties involved in the Markets+ effort for their engagement and look forward to continued work to ensure its success for the customers it serves.

For these reasons, I respectfully concur.



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Judy W. Chang
Commissioner