

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO**

PROCEEDING NO. 25A-0075E

---

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL TO RECOVER COSTS ASSOCIATED WITH JOINING THE SOUTHWEST POWER POOL MARKETS+ MARKET THROUGH THE ELECTRIC COMMODITY ADJUSTMENT.

---

**COMMISSION DECISION DENYING MOTION TO  
STRIKE AND  
GRANTING, IN PART, AND DENYING, IN PART,  
THE APPLICATION**

---

Issued Date: October 9, 2025  
Adopted Date: July 23, 2025, July 30, 2025, &  
September 17, 2025

**TABLE OF CONTENTS**

I. BY THE COMMISSION .....	2
A. Statement .....	2
B. Procedural History .....	4
C. Motion to Strike .....	6
D. Party Positions .....	7
1. Public Service’s Application .....	7
2. Intervenor Positions .....	12
a. GHG Tracking and Reporting .....	12
b. Seams Coordination .....	13
c. Benefits and Costs .....	14
d. Additional Issues .....	18
e. Cost Recovery .....	19
3. Public Service’s Rebuttal and SOP .....	19
a. GHG Accounting .....	19
b. Seams Coordination .....	20

c.	Modeling and Analytical Support .....	20
d.	Additional Benefits .....	22
e.	Other Issues Raised by Intervenors.....	22
f.	Cost Recovery .....	23
E.	Findings and Conclusions.....	23
1.	Relevant Law.....	23
2.	Rule 3753(a) Criteria.....	27
a.	GHG Accounting .....	27
b.	Seams Coordination .....	30
c.	Modeling and Analytical Support .....	31
3.	Additional Benefits .....	35
4.	Issues Raised by Intervenors .....	37
5.	Requirement to File OWM Application or Waiver by June 1, 2027 .....	37
6.	Public Interest Finding .....	38
7.	Recovery of Costs to Join Markets+ .....	38
II.	ORDER.....	39
A.	The Commission Orders That: .....	39
B.	ADOPTED IN COMMISSIONERS’ WEEKLY MEETING July 23, 2025, July 30, 2025, & September 17, 2025.....	40
III.	Dissent of Commissioner Megan M. Gilman .....	41

---

**I. BY THE COMMISSION**

**A. Statement**

1. On February 14, 2025, Public Service Company of Colorado (“Public Service” or the “Company”) filed an application requesting a determination that it is in the public interest for the Company to participate in Southwest Power Pool’s (“SPP”) regional, day-ahead and real-time energy and flexibility reserve product market in the Western Interconnection, called Markets+ (“Markets+” or “SPP Markets+”) and requesting recovery of costs associated with Markets+ participation through the Electric Commodity Adjustment (“ECA”) (“Application”).

Public Service explains it seeks a Commission determination that its participation in SPP Markets+ is in the public interest based on the limited criteria set forth in Rule 3753(a) of the Commission's Rules Regulating Electric Utilities, 4 *Code of Colorado Regulations* ("CCR"), 723-3. Public Service further seeks a determination by the Commission on how it will recover the costs associated with its participation in Markets+.

2. By this Decision the Commission grants, in part, and denies, in part, the Application. We conclude that Public Service's participation in Markets+ is in the public interest and permit Public Service to recover a portion of the costs it incurs by joining Markets+ through the ECA.<sup>1</sup> As explained below, approval of the Application and the granting of cost recovery will provide benefits to Public Service's customers and will facilitate further development of market constructs in the Western Interconnection, consistent with the public interest determinations of the Colorado General Assembly regarding Organized Wholesale Markets ("OWMs") through the enactment of Senate Bill ("SB") 21-072.

3. Public Service's participation in Markets+ will encourage the effective dispatch of generation resources in Colorado, diminishing concerns of "seams issues" that would potentially result from two different market operators dispatching resources across Colorado's Balancing Authority ("BA") Areas. The expected Markets+ footprint and mitigation of seams across Colorado's BAs will correspondingly increase the likelihood that Colorado utilities will achieve the significant economic benefits sought by SB 21-072 and anticipated by multiple studies completed prior to that legislation. Adding to those economic benefits are other shorter-term benefits, including near-term resource adequacy benefits associated with participation in the

---

<sup>1</sup> Commissioner Megan Gilman voted to deny the Application, finding that Public Service failed to satisfy the criteria set forth in Rule 3753(a).

Western Resource Adequacy Program (“WRAP”). In sum, we grant Public Service’s Application and authorize the Company to recover the costs associated with joining SPP Markets+ because increased integration between Public Service and other utilities in the Western Interconnection will likely provide a number of benefits in the short term, while allowing the Company and stakeholders to explore longer-term benefits that may result from OWM or continued Markets+ participation. The approved methods to be used to recover the costs associated with joining SPP Markets+ is discussed further below and entail both the use of the ECA for expenses as requested in the Application and the deferral of capital costs including software and information technology (“IT”) investment costs to be addressed in the Company’s next rate case.

**B. Procedural History**

4. On February 14, 2025, Public Service filed its Application, requesting a determination that it is in the public interest for Public Service to participate in SPP Markets+ and requesting recovery of costs associated with Markets+ participation through the ECA.

5. By Decision No. C25-0129-I, issued February 21, 2025, the Commission established a shortened notice and intervention period for the Application.

6. By Decision No. C25-0182-I, issued March 14, 2025, the Commission granted the timely requests for permissive intervention filed by Climax Molybdenum Co., (“Climax”), Interwest Energy Alliance (“Interwest”), Black Hills Colorado Electric, LLC (“Black Hills”), Advanced Energy United (“AEU”), Tri-State Generation and Transmission Association, Inc. (“Tri-State”), Colorado Energy Consumers Group (“CEC”), Western Resource Advocates (“WRA”), and Holy Cross Electric Association, Inc. (“Holy Cross”). The Commission also acknowledged the notices of intervention of right filed by Trial Staff of the Colorado Public

Utilities Commission (“Staff”) and the Office of the Utility Consumer Advocate (“UCA”), and the Colorado Energy Office (“CEO”).

7. The Commission, through Decision No. C25-0213-I, issued March 20, 2025, set the Application for hearing before the Commission *en banc*. By Decision No. C25-0318-I, issued April 24, 2025, the Commission adopted a modified procedural schedule that, among other things, included a remote evidentiary hearing scheduled for May 27, 28, and 29, 2025.

8. An evidentiary hearing was held before the Commission *en banc* on May 27, 2025 and May 28, 2025. At the start of the evidentiary hearing, the Commission admitted all pre-filed testimony and attachments into the evidentiary record as Hearing Exhibit 1400. During the course of the hearing, the Commission admitted additional exhibits, including Hearing Exhibits 108, 701, 900 rev.2, 902, and 1502. Additionally, the Commission took administrative notice of Hearing Exhibits 1504 and 1505.<sup>2</sup>

9. On June 12, 2025, the following parties filed Statements of Position (“SOPs”): Public Service, Holy Cross, AEU, CEO, Tri-State, Black Hills, WRA, UCA, Staff, CEC, and Climax.

10. On June 17, 2025, Public Service filed a Motion to Strike portions of AEU’s SOP. That same day, AEU filed a revised SOP that meets the page limit and a response to Public service’s Motion.

11. The Commission deliberated at its July 23, July 30, and September 17, 2025 Commissioners’ Weekly Meetings, resulting in this Decision.

---

<sup>2</sup> Additionally, Hearing Exhibit 1500 was used as a demonstrative hearing exhibit during the hearing. Subsequently, Holy Cross moved to strike the hearing testimony provided by WRA witness Welter regarding Hearing Exhibit 1500. The Motion to Strike was granted. Accordingly, Hearing Exhibit 1500 was not admitted into the record and the related testimony was stricken from the record.

**C. Motion to Strike**

12. In its Motion to Strike, the Company states that AEU's SOP is over the SOP page limit, and that in footnote 102 and approximately 1.5 pages of argument, the SOP references a study that is not in evidence. The Company argues that since the study was never introduced into evidence and is not the record, AEU's argument improperly relies on material not in evidence. In response, AEU filed a revised SOP that meets the page limit. AEU also contends that the reference to the study in footnote 102 is included as information the Commission may consider as it is referenced in public comments, but it is not evidence. AEU states it included the reference for the proposition that conducting a Public Service-specific analysis of the costs and benefits of joining Markets+ and EDAM would have been feasible.

13. Regarding Public Service's request to strike pages over the SOP page limit, this request is moot because AEU refiled its SOP. Regarding the request to strike footnote 102 and potentially related argument, AEU acknowledges that the referenced study is not in the evidentiary record, and it is correct that the study was referenced in a public comment and that it cites the study for the proposition that another study could have been done, not for the results of the cited study. The Commission is not strictly bound by the technical rules of evidence, pursuant to § 40-6-101(4), C.R.S., and it is well-equipped to consider any claims of prejudice in weighing the evidence presented. Therefore, the Commission denies the Motion to Strike.<sup>3</sup>

---

<sup>3</sup> Commissioner Gilman voted to deny the Motion to Strike, and therefore joins this portion of the majority Decision.

## D. Party Positions

### 1. Public Service's Application

14. Public Service explains that its Application serves two purposes: (1) to secure a Commission determination that the Company's participation in SPP Markets+ is in the public interest based on the limited criteria set forth in Rule 3753(a), and (2) to establish how Public Service will recover the costs associated with its participation in Markets+.

15. Public Service states Markets+ will consist of three specific market products: a regional day-ahead electricity market; a real-time electricity market; and a flexibility reserve product market. SPP established two phases for developing Markets+. Phase 1 was the process of designing, submitting, and gaining Federal Energy Regulatory Commission ("FERC") approval for a Markets+ tariff.<sup>4</sup> Phase 2 incorporates the additional staffing, hardware, software development, and other activities that will be required by SPP to implement Markets+.

16. Participation in Markets+ also requires membership in the WRAP, a FERC-approved resource adequacy program administered by the Western Power Pool. The WRAP has two primary components: (1) a forward-showing program, in which participants must show they have sufficient capacity to meet the required planning reserve margin, and (2) a real-time operations program, in which participants can share excess capacity.

17. In support of its Application, Public Service states that participating in Markets+ is a positive next step in the evolution of its organized wholesale market participation and that there are forecasted financial and operational benefits from participating in Markets+.<sup>5</sup> Public Service goes on to state that there is opportunity for those benefits to grow as the market

---

<sup>4</sup> FERC recently approved the Markets+ tariff, with some conditions, on January 16, 2025. Order Accepting Proposed Tariff, Subject to Condition, *Southwest Power Pool, Inc.*, 190 FERC ¶ 61,030 (2025), FERC Docket No. ER24-1658.

<sup>5</sup> Application, p. 8.

develops and as additional efforts continue to reduce friction with other regional markets, specifically the expansion of SPP's Regional Transmission Operator market in the Western Interconnection ("SPP RTO West") through more efficient seams.<sup>6</sup> The benefits include: access to expanded resource markets which allows for additional opportunities to source the energy needed to support system reliability; opportunities to manage the Company's generation and capacity resources more efficiently through market sales, which can result in net revenues and reduced curtailments; and further stabilization of rates long-term.

18. Public Service's Application includes specific information regarding the three criteria set forth in Rule 3753(a)(I)-(III). Regarding subpart (I), which considers whether the market has in place protocols that will implement a greenhouse gas ("GHG") tracking and accounting system enabling the fair and timely tracking, reporting, and accounting of GHG emissions sufficient to ensure compliance with Colorado's emission reduction requirements, Public Service states that SPP and stakeholders in the Markets+ GHG Task Force have developed a robust GHG tracking and reporting mechanism. The Company explains this mechanism relies on resource mapping, energy allocation, and residual energy mix determination, which allows SPP to conduct hours GHG accounting for each Load Responsible Entity. Public Service also highlights that it and Tri-State have identified several areas of alignment in application of the protocols which facilitate a uniform and consistent GHG accounting methodology for Colorado utilities participating in Markets+, as discussed in a letter dated September 25, 2024 and filed with the Commission

19. Regarding subpart (II), which considers whether the market has a plan to put in place policies and operational practices to optimize the efficient dispatch, exchange of energy,

---

<sup>6</sup> *Id.*



and unit commitment between markets, Public Service explains that Markets+ would operate within Public Service's BA while SPP RTO West will likely operate within the former Western Area Power Authority BAs (now the Western Area Power Authority, Colorado-Missouri Region "WACM" and the Western Area Power Authority, Upper Great Plains West "WAUW").<sup>7</sup> The Company states that SPP has restated its commitment to working to resolve seams issues, and that there are efforts underway to reduce seams issues between Markets+, CAISO EDAM, and SPP RTO West, including a Markets+ Seams Working Group developing a white paper called the Seams Strategy and Framework Roadmap.<sup>8</sup> Public Service states that various tools are being evaluated by the Markets+ Seams Working Group, and that Public Service is working with SPP and other Markets+ utilities on related measures to increase market optimization, identify attractive transmission expansion, and consolidate Balancing authorities. As an example of the ongoing seams coordination work, Public Service highlights one new tool known as real-time dispatchable transactions that has been approved through the SPP stakeholder process that will improve optimization between the Public Service BA and future SPP RTO West.<sup>9</sup> The Company states that forthcoming agreements are expected to address coordination of transmission planning, rights on jointly-owned transmission facilities, exchange of information, and emergency operating conditions.<sup>10</sup>

20. Regarding subpart (III), which considers whether the market has sufficient modeling and other analytical support showing that the expected benefits of joining that market, including production cost decreases, reliability improvements, and emission reductions, are likely to exceed the expected costs, the Company's Application highlights market benefits

---

<sup>7</sup> Hr. Ex. 101, Taylor Direct Testimony, p. 34:16-17.

<sup>8</sup> Hr. Ex. 101, Taylor Direct Testimony, p. 13:1-15.

<sup>9</sup> Application, p. 10.

<sup>10</sup> Hr. Ex. 101, Taylor Direct Testimony, p. 35:3-6.

analyses conducted as part of the Western Markets Exploratory Group's Western Day Ahead Market Production Cost Impact Study ("WMEG Study"). Public Service asserts that the WMEG Study's Alternative Pricing Proposal 4 Alternative Split 2 Footprint ("APP4 Alt Split 2 Footprint") is an adequate representation of the expected Markets+ footprint for purposes of analyzing production cost benefits accruing to Public Service's participation.<sup>11</sup> Based on the WMEG study's analysis of this footprint and additional modifications intended to reflect export capability and expected load growth, the Company contends that through 2042, expected net benefits of participation is approximately \$17.8 million.<sup>12</sup> In addition to the modeled production cost benefits, Public Service's Application states that its participation in Markets+ is expected to provide cumulative savings of 6.5 million tons of GHG emissions across the Markets+ footprint over the next 15 years, relying on the Western Flexibility Assessment 2019 report.<sup>13</sup>

21. With respect to cost recovery, Public Service explains in the Application that its proposed participation in SPP Markets+ necessitates recovery of the Company's Phase 1 expenditures, as well as other future costs, including the Phase 2 costs to implement Public Service's integration into Markets+ administered by the Western Power Pool. Phase 1 was the process of designing, submitting, and gaining FERC approval for a Markets+ tariff, and the Company estimates that its share of Phase 1 costs will be approximately \$2 million.

22. Phase 2 incorporates the additional staffing, hardware, software development, and other activities that will be required by SPP to implement Markets+. Total Phase 2 costs for SPP will be approximately \$150 million, which SPP intends to recover from market participants through an administrative fee that will be assessed on all market transactions. SPP intends to

---

<sup>11</sup> Hr. Ex. 101, Taylor Direct Testimony, pp. 52:18-53:3.

<sup>12</sup> Hr. Ex. 102, Attachment MRG-4, 15-Year Estimated Retail Rate Impacts.

<sup>13</sup> Hr. Ex. 101, Taylor Direct Testimony, pp. 74:1-14.

secure a loan to finance the implementation costs and to repay the loan over the first five years of Markets+ operations. Public Service estimates that administrative fees on market activities will approximate \$10 million annually and its share of Markets+ financing costs will be approximately \$4 million annually for the first five years of participation. The Company will also be required to post its share of collateral for the SPP financing, consisting of \$2 million of cash and an \$18 million standing letter of credit. As the loan is repaid, the amount of the letter of credit will decrease accordingly.

23. Other future costs associated with Markets+ participation include WRAP costs and software and IT system upgrades. Public Service estimates costs for WRAP participation to be approximately \$750,000 annually, with a one-time entry fee of \$300,000. For software and IT system upgrades, Public Service estimates that integrating its systems into Markets+ will require \$13-15 million of software and IT system upgrades to align with SPP Markets+ integration methodologies. To recover costs associated with its participation in Markets+, Public Service proposes modifications to its ECA tariff to allow the recovery of Phase 1 funding fees the Company has incurred through March 31, 2025. Public Service also proposes modifications to its ECA tariff to allow the recovery of Phase 2 costs beginning in 2025, including administrative fees, cost of posting collateral via cash and a standby letter of credit, software and IT upgrades, and fees associated with entering and participating in the WRAP. Additionally, the Company proposes ECA tariff modifications to allow sales revenues associated with participation in Markets+ to be passed to customers, which it states is consistent with the Company's treatment of revenues received from sales made pursuant to the SPP Western Energy Imbalance Service Market ("WEIS").

## 2. Intervenor Positions

24. CEC, WRA, AEU, and Climax argue the Application should be denied.<sup>14</sup> Staff and CEO states it would be reasonable for the commission to deny the Application.<sup>15</sup> Many of these parties also recommend that ECA recovery of all or certain costs be denied and request additional ratepayer protections or guardrails if the Commission does approve the Application. While UCA and Holy Cross support approval of the Application, they recommend ratepayer and customer protections similar to parties that oppose the Application.<sup>16</sup> Black Hills does not take a position on whether the Commission should grant or deny the Application, but it believes that Markets+ participation could be a reasonable next step in market exploration.<sup>17</sup> Tri-State supports the Application. Specific party positions on the criteria set forth in Rule 3753(a) and additional issues are highlighted below.

### a. GHG Tracking and Reporting

25. Various parties criticize the Markets+ protocols for GHG tracking, reporting, and accounting. WRA and AEU raise that thus far, the Markets+ protocols for GHG accounting have focused on GHG pricing zones used by states such as Washington, and that Markets+ should have protocols in place to facilitate the compliance requirements in states that have non-pricing emission reduction requirements, such as Colorado.<sup>18</sup> WRA asserts that Public Service's reliance, in part, on the September 2024 letter signed by Public Service and Tri-State to demonstrate that Markets+ participation will allow for accurate GHG accounting suitable for Colorado is

---

<sup>14</sup> CEC SOP, p. 2; WRA SOP, p. 1; AEU SOP, p. 1; Climax SOP, pp. 1-2.

<sup>15</sup> See Staff SOP, p. 1; CEO SOP, p. 5.

<sup>16</sup> UCA SOP, p. 8; Holy Cross SOP, pp. 3-5.

<sup>17</sup> Black Hills SOP, p. 5.

<sup>18</sup> WRA SOP, p. 16; AEU SOP, pp. 4-9.

irrelevant to the Commission’s consideration of whether Rule 3753(a)(I) is satisfied, because it cannot reasonably be considered a Markets+ protocol.

26. Many parties also argue that due to recent actions of the federal government, there is uncertainty surrounding the ongoing ability of Markets+ to track, account for, or report on GHG,<sup>19</sup> or that changes in federal policy relevant to regional market participation could threaten Colorado’s emissions reduction goals if Public Service joins Markets+.<sup>20</sup> Holy Cross recognizes these tensions, but contends that the Commission can work to mitigate these concerns including by requiring Public Service to adhere to commitments made in the September, 2024 letter on GHG tracking..<sup>21</sup>

27. Tri-State contends that the Markets+ tracking and reporting protocols, as well as well as the commitments made by Public Service and Tri-State, result in the availability to the Commission of “the highly confidential hourly emissions and generation data to confirm that GHG tracking and reporting is done properly,” and that this ability goes to the core of the GHG requirement in the Commission’s rules and ensures the Commission has the full and complete ability to ensure that Colorado’s emissions reductions mandates continue to be satisfied.<sup>22</sup>

#### **b. Seams Coordination**

28. Many parties argue there is no meaningful seams coordination in place between the markets anticipated to operate in Colorado – Markets+ and SPP RTO West – and that contentions made in this Proceeding that a seam between Markets+ and SPP RTO West would be manageable due to sharing a market administrator is without evidentiary support.

---

<sup>19</sup> *E.g.*, CEO SOP pp. 10-15.

<sup>20</sup> Holy Cross SOP, pp. 11-12.

<sup>21</sup> *E.g.*, *id.*

<sup>22</sup> Tri-State SOP, p. 6 (quoting Hr. Ex. 101, Attachment JCT-4 to Direct Testimony of Joseph C. Taylor).

For example, AEU and WRA assert that the effort by SPP to develop a Seams Strategy and Roadmap only identifies problems created by seams without identifying specific solutions.<sup>23</sup>

29. Staff expresses concern that if Public Service joins and remains in Markets+, there will be a significant seam between the Company's balancing authority and the WAPA balancing authority. Staff is further concerned that WAPA has opposed a recent effort to address one seams issue – the real-time dispatchable transactions tool – on the grounds that it lacks the effectiveness of market-to-market seams coordination and zonal resource optimization.<sup>24</sup>

30. Tri-State contends the Real-Time Dispatchable Transactions functionality being developed in SPP will enable price-sensitive imports/exports across Markets+ and the SPP RTO, and it argues that this functionality and the broader efforts of the Markets+ Seams Working Group satisfy the criteria set forth in Rule 3753(a)(I).<sup>25</sup>

**c. Benefits and Costs**

31. Certain parties contend that Public Service's participation in Markets+ will bring benefits to Colorado ratepayers. Black Hills, which intervened in part to determine cost allocation issues relevant to Public Service BA customers, states that it does not dispute Public Service's position that participation in Markets+ could be a reasonable next step in market exploration, especially considering SPP's decision to sunset the WEIS upon the start-up of SPP RTO West. Despite concerns about the lack of a firm plan or timeline, on SPP's part, to put in place policies and operational practices to optimize the efficient dispatch and unit commitment between Markets+ and SPP RTO West, Black Hills states it has seen benefits in both the Joint Dispatch Agreement and the WEIS market when participating directly in those markets

---

<sup>23</sup> AEU SOP, pp. 9-13; WRA SOP, pp. 18-21.

<sup>24</sup> Staff SOP, pp. 6-7.

<sup>25</sup> Tri-State SOP, pp. 7-8.

alongside Public Service, and it believes market coordination that optimizes efficient dispatch and unit commitment between Markets + and SPP RTO West would bring benefits to Colorado customers.<sup>26</sup>

32. Holy Cross, which is connected to Public Service's BA and takes wholesale electric service from Public Service, is supportive of Public Service's application to join Markets+ because interconnected utilities and wholesale customers in Public Service's BAA, even if not members of Markets+, will nevertheless receive benefits from Public Service joining Markets+. It explains that interconnected utilities will be able to import generation directly from the market to serve load and will also be able to sell Colorado generation into the market with no additional transmission service costs in either direction.<sup>27</sup> It further explains that the net benefits of Public Service's participation in Markets+ will flow proportionally to its retail customers, wholesale customers, and interconnected utilities, without requiring interconnected utilities to double pay for Markets+ services.<sup>28</sup>

33. Tri-State, which has loads and resources in the Public Service BA, similarly believes it will realize benefits if the Commission approves the Application.<sup>29</sup> Tri-State urges the Commission to make findings similar to those made by FERC in approving the Markets+ tariff, namely, that "Markets+ has the potential to yield a range of benefits to market participants and customers in the Western Interconnection," that Markets+ will make "more efficient use of the transmission capability and generation resources that participate in Markets+," and 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

---

<sup>26</sup> Black Hills SOP, pp. 4-5.

<sup>27</sup> Holy Cross SOP, p. 9 (citing Hr. Tr. (May, 27, 2025), 129:9-13.)).

<sup>28</sup> Holy Cross SOP, p. 10 (citing Hr. Tr. (May, 27, 2025), 130:6 – 133:20 – 134:9).

<sup>29</sup> Tri-State SOP, p. 2.

resources, load growth, and extreme weather events in the region.”<sup>30</sup> Despite these statements, Tri-State takes no position regarding expected costs and benefits for Public Service’s retail customers.

34. Many other parties argue the modelling and analytical support provided by Public Service fails to satisfy Rule 3753(a)(III).<sup>31</sup> Generally, these parties contend the Markets+ footprint is too different from the Alt Split 2 footprint and does not capture that Public Service’s footprint will be economically isolated, that the 478 MW export limit overstates the likely transfer limit between Public Service and Four Corners, and that Public Service’s manual scaling of the benefits by the likely transfer capacity is either not well supported in theory or is too simplistic. They also contend that a single year of analysis (2026) is problematic, and that Public Service’s extrapolation of benefits by load growth is too simplistic. Many parties also contend that transmission expansion is necessary to fully realize the benefits of organized market participation, including in Markets+, but that no analysis has been done of the potential costs of such transmission expansion.<sup>32</sup>

35. For example, AEU argues that the WMEG study prepared in 2023 is outdated, not specific to the Company, and uses footprints that it contends are not sufficiently reflective of the anticipated participation in Markets+. AEU argues that the Company’s adjustments to the WMEG are questionable, including adjustments to attempt to account for differences in footprints, transfer capacity, and Public Service’s projected load growth. AEU notes that industry experts have discouraged regulators from using the WMEG study as a basis for approving market participation. AEU also argues that even under Public Service’s analysis, production cost

---

<sup>30</sup> Tri-State SOP, p. 5 (quoting *S.W. Power Pool, Inc.*, 190 FERC ¶ 61,030 (Jan. 16, 2025)).

<sup>31</sup> *E.g.*, CEO SOP, pp. 6-10; WRA SOP, pp. 7-16.

<sup>32</sup> *E.g.*, CEC SOP, p. 6.



savings from Markets+ would not be seen for 14 years and even at that point, benefits would be modest.<sup>33</sup>

36. WRA contends that Public Service's assumed 478 MW of export capability, used to manually reduce the estimated benefits in the Alt Split 2 scenario, likely significantly overestimates the Company's ability to export energy to other Markets+ entities, meaning that the adjusted 2026 savings and extrapolated future years are likely significantly overstated. WRA explains that the only transmission interconnection between the Public Service balancing authority area and other Markets+ balancing authority areas – located in the Four Corners region – results in an average transfer capability of 30 MW, and that this may be the only relevant export capability for the model. However, WRA also raises that this type of scaling may be too simplistic for production cost modeling.

37. Staff argues that the Company's analysis demonstrates that costs for IT and software upgrades means that costs will be larger than benefits though at least 2038.<sup>34</sup> In its SOP, Staff also addresses the Commission report *Colorado Transmission Coordination Act: Investigation of Wholesale Market Alternatives for the State of Colorado* §§ 40-2.3-101 to 102, C.R.S. completed through Proceeding No. 19M-0495E, which was admitted during the evidentiary hearing as Hearing Exhibit 1505. Staff highlights that the discussion of savings in that report was not specific to Markets+, and that the report indicates greater savings are likely available through participation in a full RTO.

38. Regarding emission reduction benefits, Staff contends that the Company's modeling appears to show fuel cost increases from joining the market due to higher export sales,

---

<sup>33</sup> AEU SOP, pp. 13-23.

<sup>34</sup> Staff SOP, pp. 2-3. (citing Hr. Tr. May 27, 2025 at 199:15-19; 207:2-6; 212:21-213:6.)

meaning that joining the market is likely to increase emissions from Public Service generators. This emissions increase may or may not be offset by renewable energy curtailment reductions from the market. Staff asserts it appears possible that Markets+ participation might frustrate Colorado GHG emissions goals rather than providing a benefit in this area.<sup>35</sup> CEC also criticizes the Company's analysis of expected emissions reduction benefits.<sup>36</sup> AEU argues that Public Service should not have used the same 47percent reduction as applied to the WMEG results equally to the Western Flexibility Assessment study results.<sup>37</sup>

**d. Additional Issues**

39. CEC, AEU, and WRA argue the Commission should require a comparative analysis of available markets, such as CAISO's EDAM and SPP RTO West, and these parties raise that approving participation now in Markets+ might make it more difficult to demonstrate benefits of Public Service joining an OWM in the future.

40. Many parties argue that if the Application is granted, the Commission should retain authority to revoke its public interest determination and require Public Service to withdraw from Markets+, in the event that market participation results in excessive costs or inadequate GHG accounting.<sup>38</sup> UCA recommends that if the Commission decides to grant the Application, as a condition of approval, Public Service should be required to provide consistent information regarding transmission planning and regional market development.<sup>39</sup>

---

<sup>35</sup> Staff SOP, pp. 6-7.

<sup>36</sup> CEC, SOP, p. 7.

<sup>37</sup> Hr. Ex. 900, Answer Testimony of Turner, pp. 36-37.

<sup>38</sup> *E.g.*, Staff SOP, pp. 7-9; CEC SOP, p. 12; CEO SOP, p. 21.

<sup>39</sup> UCA SOP, pp. 4-5.

**e. Cost Recovery**

41. Multiple parties encourage the denial of cost recovery for various expenses and costs associated with Public Service's participation in Markets+. CEO and CEC argue the Company should not be able to recover costs through the ECA due to the uncertainty of the costs and that the prudence of these costs would appropriately be examined in a rate case,<sup>40</sup> and CEC argues these costs should be considered as normal operations and maintenance expenses that should be included in base rates.<sup>41</sup> Staff opposes recovery through the ECA for the estimated \$13 to \$15 million of software and IT system upgrades, arguing that these costs are neither sufficiently scoped nor extraordinary and are a normal business activity that should be subject to normal ratemaking treatment.<sup>42</sup>

**3. Public Service's Rebuttal and SOP**

**a. GHG Accounting**

42. Public Service contends that the record as a whole supports a Commission finding that the Markets+ GHG tracking sufficiently conforms to Colorado's requirements and is structured to disallow any conflict or interference with Colorado GHG regulations. In response to intervenor criticisms that the Market Protocols remain a work in progress, Public Service notes that it, as well as intervenors in this proceeding such as WRA remain actively involved in the Markets+ GHG Task Force.

43. Regarding the arguments that there is uncertainty due to federal actions surrounding the ongoing ability of Markets+ to track, account for, or report on GHG, or that changes in federal policy relevant to regional market participation could threaten Colorado's

---

<sup>40</sup> CEO SOP, pp. 18-20; CEC SOP, pp. 12-14.

<sup>41</sup> CEC SOP, p. 13.

<sup>42</sup> Staff SOP, pp. 14-18.

emissions reduction goals if Public Service joins Markets+, Public Service contends that the Commission should not be swayed by potential adverse federal actions relating to Markets+ participation. The Company states that the risk is unfounded at the current time, would apply nation-wide, and that unlawful actions will likely be challenged.

**b. Seams Coordination**

44. On rebuttal, Public Service rejects criticisms that it has no tools in place to optimize seams transactions and contends that those intervenors could mislead the Commission into assuming it should not approve any market participation until no seams exist at all. It also highlights ongoing seams coordination developments, including the development of an inter-market optimization (“IMO”) framework similar to efforts that have proven successful between the New York ISO and ISO New England. The IMO framework is intended to more efficiently coordinate economic energy transfers between market operators to optimize the usage of available generation and transmission between two or more markets. At hearing, Public Service also stated that market participants are also exploring both markets using the same resource adequacy construct, which would result in lower planning reserve margins for the entire Markets+/SPP RTO West footprint.

**c. Modeling and Analytical Support**

45. On Rebuttal and in its SOP, Public Service continues to assert that financial and operational benefits will accrue from participating in Markets+. It contends that there is an opportunity for these benefits to grow as the market develops and as additional efforts continue to reduce friction with other regional markets, specifically SPP RTO West through more efficient seams. The Company suggests that Markets+ will provide an opportunity for the Company to continue to test and learn-by-operating within the western power market space.

Public Service also highlights that if it takes no action now, its participation in organized markets will come to an end in 2026 with the cessation of the SPP Western Energy Imbalance Service (“WEIS”) market.

46. Regarding the WMEG study, the selected footprint for production cost modeling, and the manual modifications it performed, Public Service provides a number of arguments in response to other parties’ testimony. The Company argues the footprint scenario selected better reflects reality and that the Company’s limited interconnections to the Pacific Northwest required it to land on a smaller footprint area. On rebuttal and at hearing, Public Service supported its use of 478 MW export capability by stating that export capability internal to the Public Service BA is important, and that day-ahead and real-time optimization of the Black Hills and Tri-State systems in its BA is an important benefit.<sup>43</sup> The Company repeats its contention that there will likely be development of an SPP RTO seam coordination where resources can be exchanged between the Public Service BA and the SPP RTO.<sup>44</sup> The Company argues that considering costs and benefits through a shorter time frame incorrectly ignores its longer term analysis through 2042.<sup>45</sup>

47. Public Service also argues that while the WMEG study may be an imperfect proxy for Markets+, it is sufficient for indicating savings overall. The Company contends that parties’ criticism of the study is to sow doubt, delay, and need for more study, which would be both time-consuming and expensive.<sup>46</sup>

48. Regarding Public Service’s use of the Western Flexibility Study for estimating carbon reductions associated with Markets+, the Company’s rebuttal position maintains support

---

<sup>43</sup> Hr. Ex. 103, Taylor Rebuttal, 27:4-12.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*, 20:1-10.

<sup>46</sup> Hr. Ex. 103, Talyor Rebuttal, 29:1-13.

for using the study but agrees with AEU that it should not have applied a 47 percent reduction because the study assumed a transfer capability of roughly 2,300 MW, instead of the 900 MW assumed in the WMEG APP4 study. Using an updated 20.7 percent reduction, Public Service states the results would be a carbon savings of 2.5 million tons over the 15-year period from 2028 to 2042, compared to 6.5 million tons set forth in the Company's direct case.<sup>47</sup>

**d. Additional Benefits**

49. Additionally, Public Service emphasizes that SPP will require participants in Markets+ to join the WRAP, and the requirements will apply not only to its own retail load, but also for all or part of the generation and load across 11 other utilities in Colorado in its BA.<sup>48</sup> The Company contends that given its expected load growth and the resultant need for future additional resource, participation in the WRAP will be an important benefit for the Company and Colorado customers.<sup>49</sup>

**e. Other Issues Raised by Intervenors**

50. In response to CEC, AEU, and WRA's argument that the Commission should require a comparative analysis of available markets, Public Service states that the Commission's rules, promulgated after a thorough rulemaking, do not require such analysis for applications to join a day-ahead market. The Company indicates it prefers Markets+ as the only day-ahead market available to it that has been designed and built by market participants in the west, and because it includes a flexibility reserve product along with a day-ahead energy market and does not assume control of its transmission assets.

---

<sup>47</sup> Hr. Ex. 103, Taylor Rebuttal, 31:1-10.

<sup>48</sup> Public Service SOP, pp. 17-18.

<sup>49</sup> *Id.*

51. Regarding party proposals for the Commission to maintain the authority to revoke a public interest determination, the Company states that it generally supports continued evaluation of its participation in Markets+. However, it opposes Staff's proposal for provisional revocation of a public interest determination and approval for cost recovery as impractical, harmful to the Company and customers, and a violation due process and of the Colorado Constitution's bar on retrospective government action.<sup>50</sup> It also opposes Staff's proposed cost recovery cap of \$15 million of administrative fees as arbitrary and proposes that the Commission could consider a prospective load ratio share – if the Company's load ratio share of the Markets+ footprint (currently 13.3percent) increased above 20 percent, this event could trigger a future prospective review of whether the Company should continue participating in Markets+.<sup>51</sup>

**f. Cost Recovery**

52. Public Service maintains its request for cost recovery through the ECA that was contained in the Application. The Company states that it demonstrated by a preponderance of the evidence that the software and IT costs associated with Markets+ participation were sufficiently defined and scoped, and not ordinary course of business but unique and extraordinary.<sup>52</sup>

**E. Findings and Conclusions**

**1. Relevant Law**

53. Senate Bill 21-072, signed into law on June 24, 2021, and codified at § 40-5-108, C.R.S., mandates that Colorado Transmission Utilities<sup>53</sup> join an Organized Wholesale Market ("OWM") by January 1, 2030, unless the Commission grants a waiver or delay of the

---

<sup>50</sup> Public Service SOP, pp. 20-22.

<sup>51</sup> Public Service SOP, pp. 19-20.

<sup>52</sup> Public Service SOP, p. 27.

<sup>53</sup> A "Transmission Utility" is defined as a wholesale electricity supplier or transmitter that owns and operates transmission lines of 100 kV or greater and excludes municipal utilities. § 40-5-108(1)(b), C.R.S.

requirement. The statute defines an OWM as a Regional Transmission Organization (“RTO”) or Independent System Operator (“ISO”) that “is established for the purpose of coordinating and efficiently managing the dispatch and transmission of electricity among public utilities on a multistate or regional basis,” and which satisfies ten characteristics listed in § 40-5-108(1)(a), C.R.S. Evidenced in these characteristics is the legislature’s concern for enhancing regional coordination through generation optimization, coordinated unit commitment, more effective utilization of the existing transmission system, transmission system enhancements through planning, and reserve sharing.

54. Prior to the passage of SB 21-072, the Commission conducted an investigation in Proceeding No. 19M-0495E into whether it is in the public interest for Colorado’s electric utilities to participate in regional wholesale markets. Through Decision No. C21-0755, the Commission discussed potential benefits and concerns with market participation and the results of the investigation, including its study *Colorado Transmission Coordination Act: Investigation of Wholesale Market Alternatives for the State of Colorado §§ 40-2.3-101 to 102, C.R.S.*, (“CTCA Report”). Decision No. C21-0755 directed a rulemaking proceeding to address regional market participation and the concerns identified by the Commission.

55. On June 28, 2022, in Proceeding No. 22R-0495E, the Commission issued a Notice of Proposed Rulemaking to implement sections of SB 21-072 and set forth provisions governing participation in wholesale electricity markets, including day-ahead markets. After multiple rounds of stakeholder comments and public comment hearings on iterations of the proposed rules, Recommended Decision No. R24-0424 was issued on June 20, 2024. In its discussion of requirements for day-ahead market applications, the Recommended Decision stated that Participation in day-ahead markets will impact public utilities’ service, rates, resource



adequacy activities, and efforts to reach emission reduction goals, and regulation relating to day-ahead market participation is within the Commission's broad jurisdiction to regulate public utilities in Colorado under the Colorado Constitution and the Public Utilities Law.<sup>54</sup> The Recommended Decision also explained that given the Commission's previously identified concerns with market participation, which were less significant for less integrated market types and more significant for highly integrated markets such as RTOs and ISOs, more characteristics should be evaluated for participation in RTOs and ISOs compared to participation in Day Ahead Markets. The Commission subsequently adopted the rules through Decision No. C24-0600, and the rules became effective on September 25, 2024.<sup>55</sup>

56. As pertinent to Public Service's Application in this Proceeding, Rule 3753(a) set forth characteristics for the Commission to evaluate when determining whether participation by an Investor-Owned Utility ("IOU") in a day-ahead market is in the public interest. These characteristics are that the market: (i) has in place protocols to implement a greenhouse gas emissions tracking and accounting system to ensure compliance with greenhouse gas emission reduction requirements in §§ 25-7-102 and 40-2-125.5, C.R.S.; (ii) has a plan to address seams issues between the chosen market and adjacent markets; and (iii) has sufficient modelling and other analytical support showing that expected benefits of joining that market are likely to exceed expected costs. Additionally, Rule 3755 requires a market participation

---

<sup>54</sup> Decision No. R24-0424 at ¶ 56.

<sup>55</sup> Decision No. C24-0600 addressed exceptions, including a proposal to require a comparative analysis of available day ahead markets as part of an application to participate in a day-ahead market. Denying this exception, the Commission reiterated "[i]n Proceeding No. 19M-0495E, the Commission found that utility participation in less integrated market types raised fewer concerns than participation in full RTOs or ISOs, which require utilities to relinquish control of their transmission assets and many utility decisions to a regional governance process. Given the potential benefits of regional markets and the evaluation characteristics in the Adopted Rules concerning net benefits of participation in Day Ahead Markets, coupled with the need for timely review of market participation applications and prior Commission findings that Day Ahead Markets raise fewer concerns, we decline to add a comparative analysis provision to Rule 3753(a)." Decision No. C24-0600 ¶ 19.

application to file a market overview and various information relevant to the Commission's consideration and ongoing awareness of the potential market participation.

57. In addition to specific authority under the Rules, and as indicated in our past decisions addressing regional market participation, under Article XXV of the Colorado Constitution and the Public Utilities Law, the Commission has broad authority to regulate public utilities and their facilities, services, and rates. For example, Section 40-3-102, C.R.S., provides in relevant part that it is the Commission's duty to adopt rates, charges and regulations, as well as to govern and regulate all rates, charges, and tariffs of every public utility. Under that jurisdictional charge, the Commission must ensure that all rates are just, reasonable, and non-discriminatory pursuant to § 40-3-101(1), C.R.S. It is also within the Commission's power and authority to correct abuses and prevent unjust discrimination and extortions in the rates, charges, and tariffs of public utilities in Colorado. Given the cost recovery issues at issue in this Proceeding and that Public Service's participation in Markets+ will directly impact the wholesale electricity prices that will be charged to retail customers, the Commission keeps this broad authority over Public Service's rates at the forefront of its consideration of the Application and the Company's requests for cost recovery.

58. As the party that seeks Commission approval or authorization, Public Service bears the burden of proof with respect to the relief sought; and the burden of proof is preponderance of the evidence. Section 24-4-105(7), C.R.S.; § 13-25-127(1), C.R.S.; 4 CCR 723-1-1500. Additionally, the evidence must be "substantial evidence," which the Colorado Supreme Court has defined as: [S]uch relevant evidence as a reasonable person's mind might accept as adequate to support a conclusion ... it must be enough to justify, if the trial were to a jury, a refusal to direct a verdict when the conclusion sought to be drawn from it is one of

fact for the jury. *City of Boulder v. Colo. Pub. Utils. Comm'n*, 996 P.2d 1270, 1278 (Colo. 2000). The preponderance standard requires the finder of fact to determine whether the existence of a contested fact is more probable than its non-existence. *Swain v. Colo. Dep't of Revenue*, 717 P.2d 507 (Colo. App. 1985). A party has met this burden of proof when the evidence, on the whole and however slightly, tips in favor of that party.

## **2. Rule 3753(a) Criteria**

59. As discussed below, the Commission finds that Public Service's planned participation in Markets+ satisfies the three public interest criteria set forth in Rule 3753(a). We underscore that these criteria are intended to facilitate a more limited review than an application for participation in an RTO or ISO, due to the Commission's decreased concerns with day ahead market participation and the need for utilities to act quickly in the face of rapid market developments. We also understand the reality that regional markets are developed and market rules are changed through the continuous work of participating utilities, stakeholders, and regulators. Consideration of utility participation in any regional market, but particularly a market that has not yet begun operations, requires analysis of information that may be less than perfect and that may not be in final form.

### **a. GHG Accounting**

60. Rule 3753(a)(I) requires the Commission to consider whether Markets+ has in place protocols that will implement a fair and timely GHG Tracking and Accounting system to ensure compliance with the emission reduction requirements in §§ 25-7-102 and 40-2-125.5, C.R.S. GHG Tracking and Accounting System is defined in Rule 3752(f) as "a set of market and other protocols included in an RTO, ISO, or DAM tariff or other related materials that enables the tracking, accounting, and reporting of GHGs."

61. We find that the FERC-approved tariff, continuing development of market rules on GHG accounting and tracking, and the September 2024 letter signed by Public Service and Tri-State on GHG accounting methodology constitute protocols that will implement a sufficient GHG tracking and accounting system. As explained by Public Service, the Markets+ GHG Task Force continues to work towards a consensus on market practices that will further detail the operation of the related FERC-approved tariff provisions for GHG tracking and reporting, including practices relevant to states without GHG pricing zone policies such as Colorado. Additionally, Public Service has stated its commitment to GHG tracking and reporting methodologies tailored to Colorado's processes and policies in the September 2024 letter, and has explained how these methodologies will be implemented with its Markets+ participation. We agree with Tri-State that these methodologies will result in the availability to the Commission of the hourly emissions and generation data to confirm that GHG tracking and reporting is done properly, which goes to the core of our concerns regarding GHG accounting and Rule 3753(a)(I).

62. Further, the Markets+ approach and the methodology agreed to by Public Service and Tri-State in the September 2024 letter would be an improvement over the current situation, in which there is currently no common approach to GHG accounting in Colorado in terms of defining study regions, mapping GHG emissions to generators, determining dispatch methodology, or requiring data disclosure that applies equally to all utilities. The Joint Letter submitted to the Commission on behalf of Public Service and Tri-State,<sup>56</sup> to be implemented as part of the Markets+ protocols and applicable to all market participants in Colorado, systematically addresses these shortcomings across both Colorado balancing authorities.

---

<sup>56</sup> Hr. Ex. 101, Att. JCT-4, Joint Letter of Public Service & Tri-State.

More specifically, it defines GHG regions, maps GHG emissions to the entity that claims capacity credit for a resource, identifies a specific energy allocation dispatch method, and develops standards for key data disclosure. Public Service also explains that any future updates to the Markets+ GHG accounting practices impacting Colorado balancing authorities operating in Markets+ are anticipated to be incorporated into the SPP RTO West protocols as well to ensure alignment with GHG accounting for Colorado entities operating in either market.<sup>57</sup>

63. Therefore, if the Commission were to stop Public Service from joining Markets+, then GHG accounting in Colorado would remain disjointed and with no common approach. Similarly, if Public Service were to join a different market, there is no guarantee that GHG accounting methodologies would provide the same level of consistency across the Public Service balancing authority and the WACM balancing authority. Ultimately, we find that Public Service joining Markets+ represents a net positive for GHG tracking and accounting in Colorado, and that the criterium in Rule 3753(a)(I) is satisfied.

64. However, we agree with observations made in this Proceeding that the federal government's actions regarding energy issues are unpredictable. Any obstacle making it difficult or impossible for Public Service, stakeholders, and the Commission to verify the Company's compliance with state emissions reduction requirements is unacceptable. In the event of a federal or market administrator action that may substantially impair or remove Public Service's ability to ensure compliance with state emission reduction requirements, the Company shall file its proposed response to the action in this proceeding within 30 days. If the Commission finds that the Company's ability to ensure such compliance will be substantially impaired or eliminated, then the Commission may rescind the approval of the Application, including limiting further cost

---

<sup>57</sup> Hr. Ex. 103, Taylor Rebuttal Testimony, 39:16-19.

recovery, following a process that may include requesting input from CDPHE regarding the Company's and CDPHE's ability to verify emissions. While we believe that Public Service's participation in Markets+ will provide benefits to retail ratepayers, as discussed below, the Company's ability to comply with state statutes is critical.

65. To ensure that Colorado and Public Service continue to be able to track GHG emissions accurately, Public Service shall include in its Rule 3757(d) annual report a verification that Markets+ continues to account for and track GHG emissions as discussed above, and, if not, that sufficient hourly production data remains available to allow Colorado to track GHG emissions itself so as to compromise progress toward state emissions objectives. If federal actions affect GHG emission tracking, Public Service must confer with CDPHE to include in the Rule 3757(d) annual report CDPHE's assessment of whether the Company's continued participation in Markets+ also continues to permit Colorado to track its progress toward meeting state emission reduction goals. In the event that it does not, approval to continue with integration into markets+ and our associated determinations regarding future cost recovery may be withdrawn consistent with the process described in paragraph 64 above.

**b. Seams Coordination**

66. Rule 3753(a)(II) requires the Commission to consider whether Markets+ has a plan to put in place policies and operational practices to optimize the efficient dispatch, exchange of energy, and unit commitment between markets, if there is more than one regional market construct operating or proposed to operate in Colorado.

67. While certain intervenors assert the Commission should not find Rule 3753(a)(II) is satisfied because the seams coordination efforts discussed in this Proceeding are not sufficient or are not final, we again recognize that the development of a new market requires ongoing

stakeholder work through iterative processes. Public Service and SPP have committed to continuing their work on addressing seams issues relevant to this Commission, including through a specific Markets+ working group. As Public Service and Tri-State argue, work has already been done on enabling price-sensitive imports/exports across Markets+ and the SPP RTO. We agree with Public Service that this continued work is expected to result in practices and policies that increase the optimization the efficient dispatch, exchange of energy, and unit commitment between markets. Therefore, for the purpose of deciding the Application, we are satisfied that Markets+ has a plan to put in place policies and practices to address seams coordination.

68. Further, as discussed below, we believe that optimized integration of the Public Service BA in Markets+ and the WACM BA in SPP RTO West presents the potential for significant benefits and cost savings. We expect that SPP will continue to develop efficient seams coordination between its two market constructs to optimize this integration. To this end, we direct Public Service to include with its Rule 3757(d) annual report a narrative of Markets+ seams coordination improvements, including efforts by both Public Service and SPP to better optimize dispatch, unit commitment, transmission utilization and planning and reserve sharing, and with particular focus on how seams coordination tools are resulting in increased integration of the two Colorado BAs.

**c. Modeling and Analytical Support**

69. Rule 3753(a)(III) requires the Commission to consider whether Markets+ has sufficient modeling and other analytical support showing that the expected benefits of joining that market, including production cost decreases, reliability improvements, and emission reductions, are likely to exceed the expected costs. Rule 3755(f) requires an applicant to file an

assessment of the costs and benefits of the proposed market participation, including a forecast of total rate impact for 15 years after joining a day-ahead market.

70. The Commission agrees with Public Service and many other parties that the production cost savings derived from the WMEG study is an imperfect proxy for the production cost savings expected from the Company's participation in Markets+. Further, we recognize the criticisms made in this Proceeding regarding the resulting cost-benefit analysis and 15-year total rate impact forecast provided as Attachment MRG-4 to Hearing Exhibit 102. This includes the criticism that Public Service's cost-benefit analysis fails to demonstrate net benefits by 2030, which is the deadline under SB21-072 for Public Service to enter an OWM or obtain a waiver.

71. However, the Commission declines to require additional or altered study inputs or modeling to reach our decision here. We agree with Public Service that additional studies would be expensive and time-consuming. And we are not confident that consensus would be reached on more appropriate modeling inputs, given that the relevant markets in the Western Interconnection are not yet operating and are rapidly evolving. We are persuaded by Public Service's explanations as to why the WMEG footprint was selected and certain modifications were made that the analysis is sufficient, in part, to demonstrate that expected benefits of Markets+ participation will likely exceed the expected costs over the first 15 years of participation.

72. The CTCA Report provides additional support for our determination that Rule 3753(a)(III) is satisfied with respect to Markets+. The report summarized the results of a quantitative study for Colorado directed by Commission Staff and provided a review of other available quantitative studies. Relying on multiple quantitative studies, the CTCA Report portrays the potential levels of utility participation in organized wholesale markets along a



continuum, where at the RTO end of the spectrum dispatch, unit commitment, ancillary services, transmission, and ultimately new generation and transmission are fully optimized. In line with the public interest determinations inherent in SB 21-072, the benefits from utility market participation increase toward the full RTO participation.<sup>58</sup> A day-ahead market construct such as Markets+ delivers savings along the continuum, “depending on the exact market services included.”<sup>59</sup>

73. At its core, the CTCA Report modelling specific to Colorado involved a capacity expansion and dispatch optimization framework. In addition to estimating production cost savings, the model was useful in evaluating the interaction between different regional market structures, new generation, and new transmission investment. Notably, the CTCA modelling demonstrated that the benefits of regional market participation largely stem from greater market integration and larger market footprints, potentially resulting in savings to Colorado equal to 4 percent to 5 percent (roughly \$200-\$300 million per year) of an annual statewide utility revenue requirement of approximately \$6 billion.<sup>60</sup> In his answers to questions on redirect, Dr. Dahlke suggested that this rough order of magnitude of savings was still likely to be correct even though the original modelling was several years old.<sup>61</sup>

74. The record in this Proceeding further shows that there are limited transmission resources connecting Colorado to its regional neighbors with constraints to the north, south, east, and west.<sup>62</sup> In addition, the primary transmission interconnectivity for Colorado utilities appears to be within and between the two BAs within the state—one run by the Western Area Power

---

<sup>58</sup> Hr. Ex. 1505, pp. 23, 36.

<sup>59</sup> *Id.*, pp. 20-21, 36.

<sup>60</sup> Hr. Ex. 1505, pp. ii.

<sup>61</sup> Hr. Transcript (5/28/25), p. 133:24-134:7.

<sup>62</sup> *E.g.*, Hr. Trans. (5/27/25), pp. 174:17-175:8.

Administration (“WAPA”), which plans to operate in SPP RTO West, and the other by Public Service, which requests to operate in Markets+ and does not currently plan to operate in SPP RTO West.<sup>63</sup> As indicated by the CTCA Report, and as Public Service stated in rebuttal testimony and at hearing,<sup>64</sup> increased integration of these two balancing authorities will likely provide additional benefits to Public Service’s customers. These benefits are potentially significant depending on the level of integration and optimization, particularly in the absence of additional interconnecting transmission investment.

75. We thus believe that optimization of the seam between the two Colorado balancing authorities is possible with a single market operator administering markets in both balancing authorities. Indeed, it is even probable – Staff witness Dr. Dahlke agreed at hearing it was a fair contention that a single operating entity would offer the greatest chance to maximize market benefits for Colorado.<sup>65</sup> While the Commission recognizes a market administrator other than SPP could develop excellent tools to coordinate the seam between Public Service’s BA and SPP RTO West, on this record we are encouraged by Public Service’s and SPP’s ongoing efforts to optimize the seam between Markets+ and SPP RTO West, and their commitment to developing tools that will increase the integration of these balancing authorities. Additionally, granting Public Service’s Application here will ensure that the Company, Commission, and Colorado stakeholders have a voice in further development of SPP’s seams coordination and the associated integration of Colorado’s balancing authorities. We therefore find that Public Service’s participation in Markets+ will likely realize at least a portion of the cost savings due to balancing authority integration that the CTCA Report identified. As noted

---

<sup>63</sup> See generally *id.*

<sup>64</sup> Hr. Ex. 103, Taylor Rebuttal, 27:4-12.

<sup>65</sup> See Hr. Trans. May 28, 2025, 125:16-24.

above, these cost savings could be significant, and the opportunity to realize a greater portion of these significant benefits should not be undervalued.

76. Finally, the financial benefits from Public Service joining an OWM are expected to be substantial, outweighing any remaining “net costs” attributable to Public Service joining Markets+ before 2030. Participation in Markets+ as an interim step to RTO/ISO participation would allow the Public Service to gain experience with market stakeholder processes and operating in a day-ahead market and a resource adequacy construct. It would also allow the Commission, stakeholders, and the Company to fully explore whether the negative aspects of RTO/ISO participation are worth the benefits of additional market integration. If participation in Markets+ is instead sought to continue past 2030 in lieu of RTO/ISO participation, further Commission review of the associated costs is contemplated pursuant to the rules adopted through Decision No. C24-0600.

### **3. Additional Benefits**

77. In addition to benefits identified above, the Commission finds that Public Service’s participation in Markets+ will bring other important benefits to the Company’s customers and to Colorado.

78. The record shows that when Public Service joins SPP Markets+, all market participants in its BA must comply with the requirements of the WRAP,<sup>66</sup> thereby putting in place a common set of methodologies to determine resource planning reserve margins, capacity values, and overall measures of resource adequacy.<sup>67</sup> The WRAP also creates binding financial penalties in the form of Deficiency Charges for market participants that fail to comply with its

---

<sup>66</sup> See Hr. Tr., May 27, 2025, 182:7-184:5.

<sup>67</sup> See Hr. Ex., Taylor Direct Testimony, HE 101, 43:10-44:10.

resource adequacy standards.<sup>68</sup> Notable, the same WRAP structure, methodologies, and rules also apply to participants in SPP RTO West. Currently, however, there is no binding state or regional resource adequacy standard for municipal utilities, distribution co-ops, or third-party power marketers in Colorado. There are consequently no consistent approaches to determining generation resource planning reserve margins, resource capacity values, or overall resource adequacy.<sup>69</sup> As a result, certain unregulated electric utilities in Colorado may lean on the two Colorado BAs with little or no adverse economic or regulatory consequences.<sup>70</sup> Due to the lack of WRAP requirements or provisions similar to those that would be binding on participants in organized markets, it is possible that additional costs could be imposed on the Company's customers where those resource adequacy costs could exceed the amounts Public Service seeks to recover to support its entry into SPP Markets+.<sup>71</sup>

79. The record also reveals how Public Service's participation in the WEIS market resulted in transparent wholesale pricing becoming publicly available.<sup>72</sup> The availability of that data has real value for utility customers, providers of virtual power plant resources, generation project developers, and regulators including this Commission.<sup>73</sup> If Public Service does not join Markets+, continued availability of such wholesale market pricing data is at risk of no longer being publicly available.<sup>74</sup>

---

<sup>68</sup> *See id.*

<sup>69</sup> *See* Hr. Tr., May 28, 2025, 63:13-25.

<sup>70</sup> *Id.*, at 65:6-16.

<sup>71</sup> *Id.*, at 64: 7-65:5.

<sup>72</sup> Public Service SOP, p. 3.

<sup>73</sup> *See* Hr. Tr., May 28, 2025, 68:13-69:8; 127:21-24.

<sup>74</sup> *See id.*, 116:4-17.

#### **4. Issues Raised by Intervenors**

80. Regarding parties' arguments that the Commission should require a comparative analysis of available markets before approving Public Service's Application, we repeat our determination from Decision No. C24-0600. In that decision, we concluded that a comparative analysis of available markets should not be required for day-ahead market applications, given the potential benefits of regional markets and the criteria already required by rule and prior Commission findings that day-ahead markets raise fewer concerns than RTO/ISO participation. Therefore, we do not require Public Service to analyze alternative markets in this Proceeding.

81. We also decline to adopt proposals for the Commission to expressly maintain authority to revoke our public interest determination or to include a trigger for a future prospective review of whether the Company should continue participating in Markets+. The Commission anticipates that Public Service will provide robust reporting on its participation, in accordance with Rule 3757, and that stakeholders and Commission staff will closely monitor the outcomes of joining the market. To the extent that participation results in adverse outcomes, we trust that existing available procedural mechanisms would be sufficient to bring the matter before the Commission.

#### **5. Requirement to File OWM Application or Waiver by June 1, 2027**

82. Additionally, we direct Public Service to file either the application required by Rule 3754(a) for approval to join an OWM or in the alternative, an application for a waiver from the statutory requirement in § 40-5-108, C.R.S., no later than June 1, 2027. This earlier filing deadline will again help confirm that Public Service is moving towards its eventual participation in an OWM or is prepared to show why OWM participation is not in the public interest. The record in this case demonstrates a genuine potential for Public Service to conclude its efforts

in organized wholesale market participation with SPP Markets+. A waiver request made as late as June 2029 could conceivably postpone resolution of whether Public Service will join an OWM to 2034 or 2035. While entry into an OWM as late as 2034 is not directly contradictory to the statute, such a delay would be contrary to the 2030 target in SB 21-072.

83. Further, to avoid substantial delay in Public Service's entry into an OWM in the event a June 1, 2027 waiver application is denied, due to the time needed to prepare an OWM application, Public Service must file with any June 1, 2027 waiver application information that is in addition to that required under Rule 3756(b). The June 1, 2027 filing must also include a report analyzing the then-available RTOs or ISOs that includes analysis of each of the criteria set forth in 3754(a)(I)-(VIII). In compiling this report, the Company must prepare modelling and other analysis on the costs and benefits of available RTOs or ISOs, including production cost decreases, reductions in capacity requirements or costs, reliability improvements, and emission reductions.

## **6. Public Interest Finding**

84. Due to the benefits that Public Service's participation in Markets+ will likely provide, which are set forth in Rule 3753(a) and which are discussed as additional benefits above, and with additional reporting and filing requirements noted above, we find it is in the public interest for Public Service to join Markets+.

## **7. Recovery of Costs to Join Markets+**

85. In addition to finding it is in the public interest for Public Service to join Markets+, we allow recovery of some costs through the ECA. Regarding cost recovery generally, it is crucial to keep funding in place for the continued development of Markets+ and for seams coordination that will increase integration of Colorado's two balancing authorities to optimize

dispatch, unit commitment, transmission utilization, transmission planning, and reserve sharing. Through Public Service's continued involvement, the Company and stakeholders with Colorado policy interests can continue to shape these market structures.

86. Therefore, we approve, in part, the Company's proposed modification to its ECA tariff sheets with respect to Public Service's specific requests to modify its ECA tariff to allow the recovery of Phase 1 funding fees and Phase 2 costs beginning in 2025, including the costs associated with entering and participating in the WRAP. We clarify that costs accounted for as expenses may be recovered from ratepayers through the ECA. However, capital costs including software and IT costs shall not be recovered through the ECA. Instead, capital costs may be deferred for consideration for recovery in the Company next base rate proceeding. Accordingly, Public Service shall strike from its proposed addition to its ECA tariff on Sheet No. 143H the sentence: "The Company shall also include the retail costs associated with the software and information technology upgrades necessary to enable participation in the SPP Markets+ in accord with Commission orders until such time as these costs are included in the Company's base rates."<sup>75</sup> Public Service is otherwise permitted to modify its ECA tariff sheets as part of its next routine quarterly ECA filing following the Issued Date of this Decision.

## **II. ORDER**

### **A. The Commission Orders That:**

1. The Motion to Strike filed by Public Service Company of Colorado ("Public Service") on June 17, 2025, is denied, consistent with the discussion above.
2. The Application requesting a determination that participation in Southwest Power Pool's Markets+ is in the public interest and recovery of associated costs through the Electric

---

<sup>75</sup> Hr. Ex. 102, Attachment MRG-1 to Direct Testimony of Michael R. Grubert.

Commodity Adjustment, filed by Public Service on February 14, 2025, is granted, in part, and denied, in part, consistent with the discussion above.

3. In its annual reports to be filed in accordance with Rule 3757(d), 4 *Code of Colorado Regulations*, 723-3, Public Service shall include additional information on greenhouse gas accounting and seams coordination, consistent with the discussion above.

4. Public Service shall file an application under Rule 3754 or 3756 no later than June 1, 2027, consistent with the discussion above.

5. The 20-day time period provided by § 40-6-14, C.R.S., to file an Application for Rehearing, Reargument, or Reconsideration shall begin on the first after the effective date of this Decision.

6. This Decision is effective upon its Issued Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING  
July 23, 2025, July 30, 2025, & September 17, 2025.**

(S E A L)



ATTEST: A TRUE COPY

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

ERIC BLANK

TOM PLANT

Commissioners

Rebecca E. White,  
Director

COMMISSIONER MEGAN M. GILMAN  
DISSENTS, IN PART



### III. DISSENT OF COMMISSIONER MEGAN M. GILMAN

1. I agree with the majority of parties to this Proceeding that the Company failed to make a showing that customer-funded participation in SPP Markets+ is in the public interest. The Company fundamentally failed to satisfy the public interest criteria listed in Commission Rule 3752(a) and, therefore, should have properly been denied by the Commission without prejudice.

2. Rule 3753(a)(I) requires a Day Ahead Market to have “in place protocols that will implement a GHG Tracking and Accounting System enabling the fair and timely tracking, reporting, and accounting of GHG emissions sufficient to ensure compliance with the emission reduction requirements in 25-7-102 and 40-2-125.5, C.R.S”. No evidence has been put forth to indicate that such a tracking, reporting and accounting program is in place. SPP Markets+ appears to have protocols that are still under development, with several issues left to be resolved, leaving the final result unknown. Further, several parties point to the new potential for unprecedented federal interference, especially related to emissions tracking. Such an obvious and emerging risk should not be taken lightly and could stand to significantly complicate processes moving forward. While a conditional approval allowing for reevaluation under a significant situation of interference in the GHG tracking is better than nothing, it also may make for a very messy waste of millions of dollars in ratepayer funding by going down this path before any significant showing of benefits and without any disclosure from the Company as to the exit timeline and terms.<sup>76</sup> I also agree with party criticism that the Company’s modeling of potential

---

<sup>76</sup> See Hr. Tr. May 27, 2025, 154:8-10.

GHG benefits were cobbled together from older and disparate resources, creating an outcome that cannot be fully relied upon to understand expectations regarding GHG impacts.

3. Rule 3753(a)(II) also requires that the Day Ahead Market “has a plan to put in place policies and operational practices to optimize the efficient dispatch, exchange of energy, and unit commitment between markets, if there is more than one regional market construct operating or proposed to operate in Colorado.” While I appreciate the majority’s opinion that having some Colorado utilities participate in SPP RTO West and some in SPP Markets+, with the same market operator, itself is progress to minimizing or working through seams issues between the two, such a perspective is unsupported by the record in this proceeding. There does not appear to be a solid plan for better integration of these markets, nor a timeline upon which to do so provided in this record.

4. Rule 3753(a)(III) also requires that for a public interest determination, there must be “sufficient modeling and other analytical support showing that the expected benefits of joining that market, including production cost decreases, reliability improvements, and emissions reductions, are likely to exceed the expected costs.” First, it is important to realize we are working only with cost estimates, with an unknown actual cost to the Company’s ratepayers. Second, the production cost modeling appears to utilize the unprecedentedly high forecasts from Proceeding No. 24A-0442E (the Company’s Just Transition Plan or “JTS” proceeding),<sup>77</sup> which was substantially reduced in Rebuttal in that Proceeding, yet those reductions were not incorporated into these projections. If lower forecasts were used, as might be supported by the Company’s own revisions in the JTS Proceeding upon which the forecast used here was based, as well as some of the Commission’s expressed reservations in that Proceeding on the forecasts, net

---

<sup>77</sup> See Proceeding No. 24A-0442E, Hr. Ex. 101, Attachment JW1-5.

costs and customer rates would increase from the projections provided on this record.<sup>78</sup> Additionally, even based on the modeling provided by the Company in Hearing Exhibit 102, Attachment MRG-4, the Company's participation in Markets+ is not expected to produce cumulative net benefits until the year 2040.<sup>79</sup> In the year 2030, when the Company is statutorily required to join an OWM, participation in Markets+ will have resulted in a net *cost* of approximately \$26M, outweighing any benefits.<sup>80</sup> Further, the uncertainty associated with the total cost of joining Markets+, which is expressed as an "estimate", the uncertainty associated with who other participants will be, how future participants will influence costs,<sup>81</sup> and the high forecasts used by the Company certainly lead to the potential for net costs that are higher than shown in the Company's modeling.

5. The Company specifically identified reliability benefits to joining the WRAP as an additional benefit of joining Markets+. This qualitative addition seems irrelevant in the discussion to join Markets+, because the Company could join the WRAP independent of joining Markets+. So, while it is accurate that such benefits could come from the necessity to join the WRAP in order to participate in Markets+, it is disingenuous to point to this as a benefit of Markets+, as the WRAP benefits could be achieved for a significantly lower cost in just joining WRAP itself.

6. It is without dispute that the Company is required to join an OWM by 2030 by SB 21-072. However, in this proceeding, the Company made several statements making it seem that the Company was already planning on, instead, applying for a waiver of the requirement to join an OWM. While part of the majority's reasoning for moving forward with Markets+

---

<sup>78</sup> See Hr. Tr. May 27, 2025, 152:6-16.

<sup>79</sup> Hr. Ex. 102, Attachment MRG-4.

<sup>80</sup> *Id.*

<sup>81</sup> Hr. Tr. May 27, 2025, 80:25-81:7.

participation was to take a step closer to a full market, this record seems to indicate the opposite – that the Company may utilize participation in Markets+ as an alternative to, not as a step to, joining a full wholesale market. It is notable that modeling completed by the Commission’s staff ascribes the greatest benefits for customers to a full wholesale market, rather than other options like day ahead markets. The Company provided no commitment that the costs being paid, including for things like IT systems and integration would continue to be useful in an OWM. Further, since the involvement in Markets+ will produce cumulative net costs rather than net benefits by 2030, it is unclear why it would be in the public interest to join a market that is not reasonably expected to produce net benefit by the date the Company is statutorily obligated to move in a different direction. Further, the Company stated its expectation that it would incorporate the current net cost of Markets+ participation into any analysis on the costs or benefits of then moving to a wholesale market. Given the Company’s other statements expressing their displeasure with certain aspects of joining an OWM and its apparent expectation to submit a waiver to the Commission as an alternative to an application to join a full wholesale market, such accounting may be interpreted as a way to bolster the Company’s case, years in advance, to seek a waiver instead of following the statutory requirement. While Commission rules did not explicitly require the Company to evaluate participation in other markets, by comparison, in its application, this financial interaction may practically make such an evaluation necessary, as the Company intends to use the financial outcomes of this decision to influence that future decision. Therefore, I have not found on this record that entrance into Markets+ would aid the Company as a step in a continuum to joining an OWM and instead have found the record to show that it is more likely to be used to enhance their stated interest to *not* do so.