

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.

STATEMENT OF POSITION OF ADVANCED ENERGY UNITED

TABLE OF CONTENTS

I. SUMMARY	1
II. ARGUMENT.....	3
A. The Commission Must Deny the Application Because There is No Evidence in the Record that Joining Markets+ is in the Public Interest at This Time.	3
1. Public Service has not proved that Markets+ has in place protocols that will implement a GHG Tracking and Accounting System meeting Colorado’s statutory and regulatory requirements as required by Rules 3753(a)(II) and 3755(h).	4
(a) GHG protocols for Markets+ are still under development and are not yet fully “in place.”	4
(b) Even when the Markets+ GHG tracking and accounting protocols are fully in place, the evidence shows that the protocols may be insufficient to meet Colorado legal requirements.	5
(c) Public Service’s conclusion that Markets+ would result in GHG emissions reductions is not supported by the evidence.....	7
(d) The high amount of uncertainty regarding federal actions that may impact GHG policies and accounting cautions against committing to join Markets + right now.....	8
2. Public Service has not proved that Markets+ has a plan to put in place seams management policies and practices with SPP RTO West as required by Rule 3753(a)(II).	9
(a) At best, Markets+ has a plan to make a plan to address seams issues, but no such plan is currently in place.	10
(b) Additional seams management tools that Public Service has identified in its Application do not specifically address the seams between Markets+ and other markets.	11
(c) Any speculation that a seam between Markets+ and SPP RTO West would be easier to manage than other market seams lacks evidentiary support.	12
3. Public Service has not proved with sufficient modelling and analytic support that benefits are likely to exceed costs as required by Rule 3753(a)(III).	13

(a) Public Service has failed to provide sufficient modeling and analytic support to quantify production cost benefits of joining Markets+.	14
(b) Nothing in the record establishes that reliability improvements due to Public Service joining Markets+ would exceed costs.	20
(c) The record does not demonstrate that there would be GHG emissions reductions benefits from joining Markets+.	23
(d) Public Service has failed to consider in its analysis significant costs associated with joining Markets+, including any costs associated with new transmission investment that could be triggered.	23
4. Relying on the potential to rescind a public interest determination in the future is impractical and does not protect customers.....	25
B. Colorado Policy would Best be Served by Denying the Application without Prejudice because Any Downsides to Postponing Joining Markets+ are More than Outweighed by the Risks of Joining Now.	26
1. Allowing Public Service to join Markets+ would create barriers to joining an OWM, thwarting the legislative intent of SB 21-072.....	27
2. The availability of other market options that may offer more benefits to Public Service suggests the Commission should not approve entry into Markets+ at this time.....	30
(a) Public Service’s claim that Markets+ has more benefits than EDAM is not substantiated by the record and should be given no weight.....	30
(b) The Commission should consider available information regarding the potential comparative benefits of other market options.	31
3. Other Colorado utilities may be impacted by WRAP, but the impacts are not yet understood or documented.....	32
III. CONCLUSION	34

Advanced Energy Untied (“United”), through its undersigned counsel, respectfully submits this Statement of Position in regard to Public Service Company of Colorado’s (“Public Service” or the “Company”) Application for Approval to Recover Costs Associated with Joining the Southwest Power Pool (SPP) Markets+ Market through the Electric Commodity Adjustment (the “Application”). For the reasons specified below, the Application should be denied in its entirety, without prejudice.

I. SUMMARY

The primary question before the Commission is straight-forward: has Public Service met its burden to prove that joining SPP Markets+, a day-ahead market (DAM) construct, is in the public interest by demonstrating that Markets+ meets all three of the required criteria specified in Commission Rule 3753(a)?¹ Public Service has not. Public Service has not proven that Markets+ currently has 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 Colorado state law, and evidence in the record shows that there is real risk that Markets+ participation could actually make it more challenging to meet state emissions requirements. Public Service has not proven that Markets+ currently has a plan to put in place policies and operational practices to manage the seam between it and SPP Regional Transmission Organization (RTO) Expansion (“SPP RTO West”), and speculation regarding the ease of SPP managing the seam between two of its market programs has not been supported by evidence. Public Service has not proven, with sufficient modelling and other analytical support, that the expected benefits of joining Markets+, including production cost decreases, reliability improvements, and emission reductions, are likely to exceed the expected costs. Public Service

¹ 4 Colo. Code Regs. (CCR) 723-3 (hereinafter “Rules”) 3753.

makes no meaningful showing regarding reliability improvements, and its intention to join the Western Resource Adequacy Program (WRAP), as required for Markets+ participants, raises more questions than answers. The studies that Public Service relies on to show production cost decreases and emissions reductions are outdated, based on inapplicable assumptions, and not suited to the purpose of making a determination regarding the benefits of joining a particular market, and even then show miniscule benefits to customers starting 14 years from now. The public interest showing has not been met; as such, the Rules require the Commission to deny the Application at this time.

Denying the Application without prejudice, such that Public Service could re-apply in the future, would also support Colorado public policy in other ways not specified by Rule 3753(a). Because Public Service has indicated that joining Markets+ now will create cost and time barriers to joining an Organized Wholesale Market (OWM) by 2030, denying the Application will support the legislative intent of Senate Bill (SB) 21-072². Not joining Markets+ at this juncture will also preserve Public Service's, and the State's, options to consider other DAM and OWM options, each of which may result in a better benefit-to-cost ratio than Markets+. Finally, denying the Application now would allow more time to understand and vet the potentially significant impacts to other Colorado utilities that use Public Service for balancing area services that would result from being pulled into the WRAP alongside Public Service. The Commission should accordingly deny the Application; the downsides of delay into Markets+ are more than outweighed by the policy risk.

² Colorado SB 21-072, signed June 24, 2021 (https://leg.colorado.gov/sites/default/files/2021a_072_signed.pdf).

II. ARGUMENT

A. The Commission Must Deny the Application Because There is No Evidence in the Record that Joining Markets+ is in the Public Interest at This Time.

The Commission's Rules specify that participation in a DAM by a transmission investor-owned utility (IOU) such as Public Service shall be determined to be in the public interest if the proposed DAM meets *all three* of the required public interest criteria.³ Further, the Rules governing a utility's application to join a DAM make clear that the applicant bears the sole responsibility of proof.⁴ Accordingly, the Commission can only make a determination that Public Service joining Markets+ is in the public interest if it finds that Public Service has proved that Markets+:

- (I) has 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.;
- (II) 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; *and*
- (III) has sufficient modelling 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.⁵

³ Rule 3753(a).

⁴ Rule 3753(b)(IV) ("The Transmission IOU bears the burden of proof as the proponent of the decision to participate in the DAM.").

⁵ See Rule 3753(a) (emphasis added).

As explained below, Public Service has not met its burden to prove that Markets+ currently meets *any* of these required elements, let alone all three. As such, the Commission cannot properly make a finding that joining Markets+ is in the Public Interest at this time. It must deny the Application.

1. Public Service has not proved that Markets+ has in place protocols that will implement a GHG Tracking and Accounting System meeting Colorado’s statutory and regulatory requirements as required by Rules 3753(a)(II) and 3755(h).

While SPP is developing a GHG tracking and accounting system for Markets+, the effort remains in progress, with key areas still identified for future development. More critically, the evidence presented in this proceeding shows that it remains far from clear whether the Markets+ GHG tracking and accounting system, even when complete, will enable “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.,” as required by Rule 3753(a)(II). Likewise, Public Service’s Application did not “provide a demonstration that the market improves emission-reduction benefits to Colorado customers from operation within the Western Interconnection without significantly impairing actions taken by public utilities to meet the state’s emission reduction goals,” as required by Rule 3755(h). The Commission does not have substantial evidence to make a public interest finding or to approve the Application.

- (a) GHG protocols for Markets+ are still under development and are not yet fully “in place.”

The plain language of Rule 3753(a)(I) requires that the requested DAM “has in place” GHG protocols meeting specified requirements. As such, in submitting its Application, Public Service assumed the burden to prove that Markets+ *already has in place* such protocols. But the record is clear that protocols to track and account for GHG emissions remain under development and are not yet fully “in place,” with the Markets+ GHG Task Force having identified numerous

areas of GHG tracking and accounting protocols in a “parking lot” for further development.⁶ While Public Service and intervening parties may have differing opinions regarding the *significance* of the protocol items left to be developed, it is undisputed in the record that further action is needed in order to fully put in place the GHG accounting and track protocols prior to Markets+ commencing operation.⁷ The public interest finding should fail on this basis alone.

- (b) Even when the Markets+ GHG tracking and accounting protocols are fully in place, the evidence shows that the protocols may be insufficient to meet Colorado legal requirements.

Public Service has not demonstrated that the Markets+ GHG protocols are being designed to ensure compliance with Colorado statutory requirements regarding GHG emissions. Indeed, WRA’s witness Ms. Welter, who has personally been involved in the development of GHG accounting and tracking protocols for Markets+, raises significant concerns regarding whether they would be sufficient to ensure compliance with state law. In her Answer Testimony, she noted that “there is insufficient grounds for determining that Markets+ participation will support Colorado’s emissions reduction targets,”⁸ especially because development to date has focused on integrating

⁶ See Hrg. Ex. 1200, Answer Testimony and Attachments of Sydney Welter on behalf of Western Resource Advocates (Apr. 29, 2025) (hereinafter “Welter Answer Testimony”) at 9:6-9 (“While Markets+ stakeholders have been working for more than a year to continue to develop GHG tracking and accounting protocols, as of April 8, 2025, SPP and the Markets+ GHG Task Force have identified areas that require further development....”) and 9:10-10:13 (specifying 12 separate areas for further protocol development); Hearing Exhibit 103, Rebuttal Testimony and Attachments of Joseph C. Taylor on Behalf of Public Service Company of Colorado (May 16, 2025) (hereinafter “Taylor Rebuttal Testimony”) at 34:12-15 (“the existence of the parking lot tracking tool signals a commitment by the [GHG Task Force] to resolve these secondary issues...”); Hrg. Tr. (May 28, 2025) at 29:22-24 (In response to a question from Public Service’s counsel asking whether it is “surprising...that tracking and reporting protocols are not yet complete two years in advance of the start,” WRA witness, Ms. Welter, explained that “it takes time to continue to develop these protocols.”).

⁷ See, e.g., Taylor Rebuttal Testimony at 34:10-35:2 (In response to a question regarding whether Markets+ tracking and reporting protocols are incomplete, Public Service witness, Mr. Taylor, explained that “items identified may require further detail in the protocols or represents additions that stakeholders would like to see before the market is operational.”).

⁸ Welter Answer Testimony at 10:22-23.

the protocols with the State of Washington, which uses GHG pricing zones.⁹ She notes that “the Markets+ GHG framework is not yet complete enough to evaluate its impact on non-pricing GHG policies like those in Colorado.”¹⁰ Indeed, a recently completed report by the Brattle Group for WRA and Interwest Energy Alliance makes concrete recommendations regarding how to enhance the Markets+ GHG accounting system under development specifically to account for GHG requirements in states like Colorado.¹¹ Ms. Welter explains that if Markets+ were to adopt these recommendations in the future, it would support compliance with Colorado state policies, but further action may still be needed to ensure full compliance.¹²

In his Direct Testimony, Public Service witness Mr. Taylor points to a joint letter from it and Tri-State to the Commission regarding alignment between these entities on the Markets+ “GHG Protocols that are in development” as evidence of Public Service’s intent to use the economic resource stack methodology when accounting for GHG emissions.¹³ However, any such intentions by Public Service as documented in this letter are not binding on its future actions, and certainly are not binding on any other Markets+ participant.¹⁴ As Chair Blank raised in questions

⁹ Welter Answer Testimony at 10-17-11:2 (“To date, Markets+ GHG protocol development has focused substantially on energy dispatch and emissions accounting associated with the GHG pricing zone created by entities in Markets+ that must comply with the State of Washington statutory requirements.”).

¹⁰ *Id.* at 11:3-4.

¹¹ *Id.* at 11:5-17; Hrg. Ex. 1200, Attachment SW-2, Brattle, *Enhancing Greenhouse Gas Accounting and Dispatch Support in the CAISO and SPP Markets+* (April 23, 2025).

¹² Welter Answer Testimony at 11:5-9; Hrg. Tr. (May 28, 2025) at 33:3-15 (in response to a question from Commissioner Blank, Ms. Welter explained that while the recommended items she identified for further GHG protocol development “would certainly support compliance, ... I’m not suggesting that this addresses the full scope of issues that continue to need to be developed in Markets+ to ensure that this meets those regulatory requirements for Colorado”).

¹³ Hrg. Ex. 101, Direct Testimony and Attachments of Joseph C. Taylor on Behalf of Public Service Company of Colorado Rev. 1 (February 14, 2025) (hereinafter “Taylor Direct Testimony” at 71:16-20; Hrg. Ex. 101, Attachment JCT-4 (September 25, 2024).

¹⁴ See Hrg. Tr. (May 28, 2025) at 45:2-13 (Ms. Welter testifying that the joint letter was prepared “outside of the existing approved protocols for Markets+”); 40:9-19 (in response to a question from Chair Blank suggesting that the letter creates “a workable framework for putting in place GHG tracking and reporting protocols to ensure compliance with Colorado’s emission reduction requirements consistent” with Ms. Welter’s recommendation, she responded: “While I agree that this letter is an important step in ensuring that the Markets+ greenhouse gas design framework

at hearing, it is unknown whether other market participants, which could include independent power marketers from anywhere in the West, would abide by the terms of the Tri-State/Public Service agreement.¹⁵ While it may be tempting to rely on Public Service's stated intentions with regard to its participation in Markets+ to evaluate the market's GHG protocols themselves, such an approach would be misguided.

If Markets+ were to adopt the sorts of recommendations for its GHG protocols identified by Ms. Welter and the Brattle Group, and if the GHG compliance framework suggested by the Tri-State/Public Service letter were to become binding on other Markets+ participants, then the Markets+ GHG accounting and tracking system may potentially comply with Colorado statutory and regulatory requirements in the future. But the Commission is being asked to make a public interest finding based on what is in place at Markets+ *now*, based on the evidence presented in this record. There is no basis to make a finding that GHG protocols are in place today that ensure compliance with our State's GHG requirements.

- (c) Public Service's conclusion that Markets+ would result in GHG emissions reductions is not supported by the evidence.

In addition to concerns about the readiness of the Markets+ GHG tracking and accounting protocols, the evidence in the record suggests a more fundamental concern that participation in Markets+ may actually result in an increase in emissions associated with Public Service's system. Although Public Service declined to undertake any sort of direct analysis regarding the likely impact on GHG emissions of joining Markets+, it certainly could have done so had it chose to, as

supports compliance with Colorado rules, I am concerned with evaluating the market design in the tariff and for business proposals as it currently stands and its demonstrable ability to facilitate compliance with Colorado emission reduction regulations, which I think gets back to some of the points raised in my testimony around providing that modeling around emissions reductions.”)

¹⁵ Hrg. Tr. (May 27, 2025) at 180:23-181:21.

WRA witness Ms. Kelly explained. “A well-designed production cost study with an accurately-defined market footprint should be able to provide this information.”¹⁶

Instead of directly analyzing the GHG emissions impacts of joining Markets+, Public Service relies on the results of two other analytic efforts (the WEIS Benefits Study and the Western Flexibility Assessment) in its discussion of potential GHG emissions implications of joining Markets+. Reliance on each of these is misplaced for this purpose. The WEIS Benefits Study is problematic for this use because the form and specification of the underlying analysis in the study is questionable, the form of equation used to map the data may be inappropriate, and the exclusion of shoulder month data points suggests the model is not fit to the data.¹⁷ Similarly, the Western Flexibility Assessment has limited probative value in considering potential GHG benefits from joining Markets+ because it relies on unrealistic assumptions regarding clean energy penetration and assumes a single, efficient, and optimized real-time and day-ahead market across the entire western interconnection, which is far from the limited reality of Markets+.¹⁸

- (d) The high amount of uncertainty regarding federal actions that may impact GHG policies and accounting cautions against committing to join Markets + right now.

Intervening parties in this proceeding have raised concerns regarding the potential negative impact of federal policy on GHG emissions and GHG tracking associated with market participation. Each of Staff, CEO, and United noted different recent federal actions that call into question whether and to what extent SPP will be able to develop and implement GHG protocols

¹⁶ Hrg. Ex. 1201, Answer Testimony and Attachments of Nancy Kelly on Behalf of Western Resource Advocates (April 29, 2025) (hereinafter “Kelly Answer Testimony”) at 25:8-10.

¹⁷ Hrg. Ex. 900, Answer Testimony and Attachments of Brian Turner on Behalf of Advanced Energy United (April 29, 2025) Rev. 2 (hereinafter “Turner Answer Testimony”) at 34-35 (explaining how the statistical model and its results are confusing, the model’s corresponding equation is inappropriate to fit the data, and the pre-WEIS data set excludes April and May which causes inaccuracies in prediction methods).

¹⁸ *Id.* at 36-37 (explaining that “the WFA is a six-year old study that uses unrealistic assumptions, from an outdate baseline, to make broad conclusions about the planning and operations of the western grid at a high level. It cannot and should not be used to make detailed predictions about Colorado-specific outcomes.”).

that will support Colorado emissions policy.¹⁹ Staff witness Dr. Dahlke additionally explained that “[i]f FERC were to limit or prohibit GHG pricing or tracking within SPP Markets+, it could undermine the market’s ability to support state-mandated emissions reduction targets, potentially making continued participation less beneficial or even contrary to the public interest for states with emissions reduction goals, like Colorado.”²⁰

Public Service discounts the risk of disruptive federal policy, writing it off as a “red herring”²¹ and arguing that the Commission should not even *consider* the implications that federal actions under the new administration could have on markets in deciding this Application.²² This cavalier dismissal and lack of any analysis of or provision for federal risk is reckless. Though the precise nature of federal policy risk is unclear at this time, the unprecedented actions of the federal government pose a very real and material threat to Colorado’s climate policy, and the Commission should consider it as part of the broader public interest determination.

2. Public Service has not proved that Markets+ has a plan to put in place seams management policies and practices with SPP RTO West as required by Rule 3753(a)(II).

In order for the Commission to find that joining Markets+ is in the public interest, Public Service must additionally prove that Markets+ “has a plan to put in place policies and operational practices to optimize the efficient dispatch, exchange of energy, and unit commitment between”

¹⁹ Hrg. Ex. 500, Answer Testimony and Attachments of Steven Dahlke on Behalf of Staff of the Colorado Public Utilities Commission (April 29, 2025) (hereinafter “Dahlke Answer Testimony”) at 10:6-8, 27:10-28:6; Hrg. Ex. 800, Cross-Answer Testimony of James A. Lester on Behalf of the Colorado Energy Office (May 16, 2025) (hereinafter “Lester Cross-Answer Testimony”) at 22-24 (“CEO agrees with the other parties that recent changes at the Federal level, including various Executive Orders issued over the past few months, place the authority of FERC jurisdictional markets, including Markets+, to track, calculate, or report on [GHG] emissions as required by Rule 3753(a)(I) in question”); Turner Answer Testimony at 6:10-12, 17:5-18:9.

²⁰ Dahlke Answer Testimony at 28:1-6.

²¹ Taylor Rebuttal Testimony at 37:3, 49:8-10

²² *Id.* at 49:1-14 (explaining that “uncertainty associated with any federal interference into state matters, or with independent federal regulatory agencies, could affect the progress and implementation of many areas of our business”).

Markets+ and SPP RTO West, as the other regional market construct proposed to operate in Colorado.²³ No such plan yet exists, and the Application must fail on this ground as well.

- (a) At best, Markets+ has a plan to make a plan to address seams issues, but no such plan is currently in place.

In support of its contention that Markets+ meets the public interest requirements of Rule 3753(a)(II), Public Service points to efforts underway at SPP to develop the “Seams Strategy and Roadmap.”²⁴ But the record is clear that this Roadmap is not “a plan to put in place policies and operational practices to optimize the efficient dispatch, exchange of energy, and unit commitment between” Markets+ and any other market construct. Instead, the document only attempts to explain the *problems* created by seams, but does not attempt to identify any specific solutions. It notes:

This paper is not intended to provide solutions and recommendations as to how the documented seams elements should be addressed, but rather simply document these areas with proper context to understand what the seams elements are and that these items should be addressed as Markets+ continues to evolve to Go-Live and beyond.²⁵

Further, the Roadmap notes that “Market-to-Market coordination does not exist in the Western Interconnection,”²⁶ and identifies as a “key task” to “[e]ngage SPP RTO in the agreement process” to start addressing this lack of coordination. That Markets+ has not yet even engaged SPP RTO in the formal coordination process shows that Markets+ does not yet have “a plan to put in place policies and operational practices to” address the specific seams issues between Markets+ and SPP RTO West.

²³ See Taylor Direct Testimony at 13:2-4 (“there will be more than one energy market anticipated to be operating in Colorado (*i.e.*, Markets+ and SPP RTO Expansion...); Rule 3753(a)(II).

²⁴ Taylor Direct Testimony at 37:6-10; Taylor Rebuttal Testimony, Attachment JCT-8.

²⁵ Taylor Rebuttal Testimony, Attachment JCT-8 at Executive Summary (PDF, page 5).

²⁶ *Id.* at 13.

Black Hills, a participant in Public Service’s balancing authority, also raised significant concerns about the lack of concrete policies and procedures to address seams between Markets+ and SPP RTO West.²⁷ Its witness Mr. Egge accordingly recommended that the Application be denied and that Public Service delay joining Markets+ until a market-to-market coordination structure has been designed and approved through the SPP RTO and Markets+ stakeholder processes.²⁸

- (b) Additional seams management tools that Public Service has identified in its Application do not specifically address the seams between Markets+ and other markets.

Public Service also discusses a tool called real-time dispatchable transactions (RTDT) to help coordinate seams between markets.²⁹ While development of the RTDT tool is well underway, having received approval by SPP with FERC approval forthcoming,³⁰ this effort grew out of the SPP WEIS and is entirely independent of Markets+. ³¹ Indeed, Public Service intends to start using RTDT in April 2026, well before Markets+ would commence operations, and would expect to continue to use RTDT even if it never joins Markets+. ³² As such, while RTDT may provide valuable service to Public Service and other participating utilities, RTDT does not constitute “policies and operational practices to optimize the efficient dispatch, exchange of energy, and unit commitment between” Markets+ and SPP RTO West and, as such, is not sufficient to justify the public interest finding requirement specified in Rule 3753(a)(II).

²⁷ Hrg. Ex. 500, Answer Testimony and Attachments of Eric M. Egge on Behalf of Black Hills Colorado Electric, LLC, (April 29, 2025) (hereinafter “Egge Answer Testimony”) at 18:17-19:2.

²⁸ *Id.* at 21:4-8.

²⁹ Taylor Direct Testimony at 35:10-19.

³⁰ *Id.* at 36:1-8.

³¹ *Id.*

³² Hrg. Tr. (May 27, 2025) at 41:19-25, 42:6-8 (explaining that RTDT is expected to be implemented by April 1, 2026 and Public Service intends the use this tool before Markets+ begins operations).

Likewise, Public Service cites to the Area Control Diversity Interchange (ADI) as further evidence of seams management tools, but ADI is also unrelated to policies and practices specific to managing the seam between Markets+ and other Colorado market constructs. Public Service currently has ADI in place in its WEIS market, and plans to continue to have ADI in place.³³ Accordingly, the continued existence of ADI is not tantamount to proof that Markets+ has a plan in place to adopt policies and practices to manage the seam with SPP RTO West.

Other than the RTDT and ADI, which will exist with or without Markets+, Public Service has not provided any concrete plans to have in place specific seams management policies and practices.

- (c) Any speculation that a seam between Markets+ and SPP RTO West would be easier to manage than other market seams lacks evidentiary support.

As Public Service has itself testified, the seam between Markets+ and SPP RTO West would be real, even though both markets are programs of SPP.³⁴ While it could be tempting to assume that a seam between Markets+ and SPP RTO West would be easier to manage somehow than a seam with a different entity overseeing operations, such an assumption would be based purely on speculation at this point. As multiple witnesses testified during the hearing, there simply is no evidence in the record to draw a conclusion that a seam between SPP RTO West and Markets+ would be any less complicated to manage than other market seams.³⁵ In addition, as

³³ Hrg. Tr. (May 27, 2025) at 43:1-16 (explaining how ADI is already in place in their WEIS market and plans to continue ADI in place with SPP RTO West).

³⁴ Taylor Direct Testimony at 13:5-6 (“there will be ‘seams’ between the two markets”).

³⁵ Hrg. Tr. (May 28, 2025) at 19:5-16 (Mr. Turner testified in response to Commissioner questioning, “I think that there is an assumption that a single operator will assist in mitigating those seams. But to be honest, I am not aware of the evidence to support that assumption.”); 49:11-15 (WRA witness Ms. Kelly testified in regard to whether “having the seam managed by the same operator would lead to a better outcome” that “I don’t think that that’s clear at all at this point in time.”); and 118:8-25 (Staff witness Dr. Dahlke noted that “[a]ll else being equal, I think a single operator can help reduced complexity, but stated that he was “not prepared to agree” that Colorado would be better off with a single market operator, or that Colorado might have a better chance in the future of realizing potential benefits with a single market operator).

Mr. Egge testified, Black Hills has not yet determined whether it would become a direct participant of Markets+ with regard to its load in Public Service's balancing authority. If Black Hills does not follow the same course as Public Service, it seems possible that seams issues with Markets+ could be more difficult to manage than the utilities currently experience during operation of the WEIS, and the costs of addressing the additional complications are unknown.³⁶ There simply is no evidence in the record to determine that seams management with SPP RTO West would be less complicated than with any other market operator; any Commission decision that rests upon such an assumption would be unsupported.

3. Public Service has not proved with sufficient modelling and analytic support that benefits are likely to exceed costs as required by Rule 3753(a)(III).

Public Service has the burden to prove that there is sufficient modelling and other analytical support showing that the benefits of Markets+ are likely to exceed costs in each of three areas: (i) production cost decreases, (ii) reliability improvements, and (iii) emissions reductions. The Application fails to make the required showing. The modelling and other analytical support Public Service has provided to demonstrate production cost savings is woefully insufficient, and even taking Public Service's analysis at face value, its customers would not enjoy *any* net savings from Markets+ for 14 years. Public Service has not demonstrated either "reliability improvements" or "emissions reductions" from joining Markets+, and has failed to quantify entire categories of costs associated with participation. The Commission does not have the record to support a public interest finding based on benefits likely exceeding costs and must deny the Application accordingly.

³⁶ See Egge Answer Testimony at 14:16-23; Hrg. Tr. (May 28, 2025) at 6:23 (Mr. Egge testifying as to uncertainty regarding benefits relative to costs).

- (a) Public Service has failed to provide sufficient modeling and analytic support to quantify production cost benefits of joining Markets+.

In its Application, Public Service presents estimates of the production cost savings, and associated costs and benefits that would flow to customer rates, from joining Markets+. However, the primary analytic support for these estimates, the Western Markets Exploratory Group (WMEG) study prepared by E3 in 2023, is outdated, not specific to Public Service, and uses footprints that are not reflective of anticipated Markets+ participation. Additionally, even using this flawed analysis, Public Service estimates that its customers' initial investment in Markets+ would not begin to pay off until 2039, and even then the purported benefits would be imperceptible on customer bills.

- (1) *Public Service's analysis and modeling regarding production cost savings of joining Markets+ is flawed and ill-suited for use in this Application.*

In support of its contention that the Application meets the requirements of Rule 3753(a)(III), Public Service presents only one modeling or analytic effort: the WMEG study.³⁷ The evidence in the record clearly shows, however, that the WMEG study is outdated, incomplete, and not designed for the purpose of providing a cost-benefit analysis for any particular market choice. A Commission decision that rested a public interest finding on the results of the WMEG study would, therefore, be lacking in substantial evidentiary support.

First, the WMEG study, which is now almost two years old,³⁸ uses market footprints that are dramatically different to current reality of the market choices available to Public Service.³⁹ Company witness, Mr. Taylor, explained that “[t]he Alt Split 2 footprint is the closest representation of the projected Markets+ footprint that was studied for WMEG,” but, as Mr. Turner

³⁷ See Taylor Direct Testimony at 13:16-19.

³⁸ See Turner Answer Testimony at 29:9 (stating that “the WMEG study is now almost two years old”).

³⁹ See *id.* at 30:1-9.

explained in testimony, this contention appears flatly incorrect.⁴⁰ While the Alt Split 2 does include Colorado and Arizona (in which major utilities currently intend to join Markets+), it also includes New Mexico and Nevada (in which the primary utilities intend to join the Extended Day-head Market (EDAM)).⁴¹ The Alt Split 2 footprint also excludes the entire Northwest (in which Bonneville Power Authority and several other utilities intend to join Markets+), which are instead included in Alt Split 4, along with Nevada.⁴² As such, Alt Split 2 is a poor representation of likely utility participation in Markets+, and results based on studying this footprint have limited probative value.⁴³

In addition to the footprint issues, Public Service's reliance on the WMEG study is flawed for other reasons. While Public Service extracted net costs and benefits from the WMEG study for its own rate impact analysis, the WMEG study use of wheeling revenues in calculating costs and benefits is particularly problematic. As Mr. Turner explained in Answer Testimony:

Wheeling and congestion costs are some of the most uncertain elements that were modeled in the study because the transmission availability and congestion management and revenue policies and practices are still largely to be determined and the zonal analysis is poor at capturing these effects. GridLab specifically recommended that the **“lost ‘wheeling revenue’ category complicates the findings of the study, and its impacts should be removed when considering the implications of the WMEG study work on a utility’s participation in EDAM or Markets+.”**⁴⁴

⁴⁰ Turner Answer Testimony at 30:3-5.

⁴¹ Turner Answer Testimony at 30:5-7.

⁴² *Id.* at 30:7-9 (“Alt Split 4 includes the Northwest and excludes Nevada and appears closer to the likely Markets+ footprint.”).

⁴³ See Kelly Answer Testimony at 11:3-5, 11:17-12:10; Turner Answer Testimony at 30:1-9.

⁴⁴ Turner Answer Testimony at 30:12-18, citing GridLab, Western Markets Exploratory Group Study Fact Sheet, at 3 (Jan. 2024), https://gridlab.org/wpcontent/uploads/2024/01/GridLab_WMEG-FactSheet.pdf (emphasis in original).

As Mr. Turner further testified, if the problematic wheeling and congestion revenues are removed from Public Service’s analysis, “the production costs are actually \$33 million greater in the APP4/Alt Split 2 scenario” that Public Service selected as compared to business as usual.⁴⁵

In addition, Public Service made several adjustments to the WMEG study results in order to estimate costs and benefits of market entry using the new “APP4” scenario. These adjustments include: only selecting one data point from the analysis (the “net cost vs. BAU” in 2026); adjusting this figure to try to account for the significant differences between the footprint studied in APP4 and the likely real-world Markets+ footprint, an exercise which relied on questionable assumptions regarding transfer capacity; and extrapolating its one data point into future years by scaling its 2026 net benefits by the Company’s projected load growth.⁴⁶ The level of distortion created by these cascading adjustments entirely undermines the soundness of its conclusions.⁴⁷

Despite these limitations in the WMEG study, Mr. Taylor’s Rebuttal Testimony twice quotes from Decision No. C24-0600, in which the Commission commented on the WMEG study, in order to try to bolster its case that the study provides sufficient analytic support to comply with Rule 3753(a)(III).⁴⁸ But looking at the quoted text from the Commission’s decision in fuller context actually undermines Public Service’s position. The Commission wrote:

Additionally we respond to Joint Commenters’ assertions regarding the Recommended Decision’s discussion of the market benefits study performed by E3 for the Western Markets Exploratory Group. We agree with Joint Commenters’ contention that market specific determinations must be made in separate, adjudicated proceedings. The Recommended Decision’s discussion of initial results of market benefits studies *merely* illustrated that study results available so far demonstrate common-sense understandings of the impact of market footprints.⁴⁹

⁴⁵ Turner Answer Testimony at 31:1-4 (emphasis in original).

⁴⁶ Turner Answer Testimony at 31:5-32:16.

⁴⁷ *See id.*

⁴⁸ Taylor Rebuttal Testimony at 22:10-11 and 25:12-13; Proceeding No. 22R-0249E, Decision No. C24-0600 at 10 (August 22, 2024).

⁴⁹ Proceeding No. 22R-0249E, Decision No. C24-0600 at 10 (August 22, 2024) (emphasis added).

Far from suggesting that the WMEG study would support a specific application to join Markets+, the Commission instead just affirmed the non-controversial point that the selection of footprints used in market impacts study would naturally influence the study's results. The full quote would instead suggest the Commission should be skeptical of Public Service's decision to use an unrepresentative footprint, and knowingly flawed analysis, to substantiate its claims.

Moreover, industry experts have specifically discouraged regulators from using the WMEG study as a basis for approving an application to join a specific market. As noted in the Answer Testimony of Mr. Turner, "the independent non-profit consultancy GridLab produced a Fact Sheet on the WMEG study in January 2024 that urges regulators that 'the WMEG study should not be relied upon as the sole basis to provide the justification for a utility deciding to join a specific market.'" Yet, Public Service is asking the Commission to do exactly that.

(2) *Public Service's transfer capacity assumptions further call into question the results of its conclusions regarding benefits.*

Black Hills' witness Mr. Egge explains in his Answer Testimony that transmission connectivity to other Markets+ participants is substantially more limited than portrayed by Public Service.⁵⁰ If Black Hills' contention is correct, this would further seriously call into question Public Service's estimation of the benefits of joining Markets+, which is based on 478 MW of transmission connectivity to Markets+ participants, as opposed to the 30 MW of export capability assumed by Black Hills.⁵¹ Mr. Egge contends that with this limited connectivity, "Public Service's BA may act as a market island, effectively only optimizing resources among Markets+ Participants

⁵⁰ Egge Answer Testimony at 16:1-6 (explaining how the only transmission path identified in Public Service's application "do not enable meaningful trade with the announced non-Public Service BA Markets+ participants.").

⁵¹ See, e.g., Taylor Direct Testimony at 53:8 ("A study of likely transfer capabilities under the expected Markets+ footprint resulted in an estimated export capability of 478 MW"); Egge Answer Testimony at 16:1-6 (explaining that the Four Corners interface has only 30 MW of export capability).

within the Public Service BA.”⁵² As Mr. Turner explained in reaction to this, “especially if Black Hills does not itself become a Markets+ participant, then Public Service’s ability to optimize efficient dispatch and exchange of energy within Markets+ would be severely curtailed, by as much as 84%.”⁵³ This casts further doubt on Public Service’s assumptions regarding what benefits it would realize through Markets+ participation.

(3) *Even using Public Service’s questionable analysis, customers would not see savings from Markets+ participation for 14 years, and even then, the benefits would be modest.*

Even if the Commission were to accept Public Service’s flawed analysis at face value, the Application makes clear that Public Service’s customers would not see any net benefit from Markets+ participation until 2039. In Attachment MRG-4 to the Direct Testimony of Company witness Mr. Grubert, Public Service provided a table that indicates the total costs that Public Service would recover from customers if it joins Markets+ and if it does not.⁵⁴ Hearing Exhibit 902, a modified version of this table introduced at the evidentiary hearing, calculates the annual difference between these two values, showing that customers would not see annual benefits exceed costs until 2032. However, due to the high up-front costs associated with Public Service joining Markets+, customers would remain underwater – with aggregate costs exceeding aggregate benefits – all the way until sometime in 2039, 12 years after Public Service expects to begin Markets+ participation.

⁵² Egge Answer Testimony at 16:10-12.

⁵³ Turner Cross-Answer Testimony at 16:14-16.

⁵⁴ Hrg. Ex. 102, Direct Testimony and Attachments of Michael R. Grubert on Behalf of Public Service Company of Colorado, (hereinafter “Grubert Direct Testimony”), (February 14, 2025), Attachment MRG-4.

- (4) *The Commission should not rely on the Siemens PTI study as evidence of any actual costs or benefits associated with joining Markets+.*

A generic study by Siemens PTI regarding the costs and benefits to Colorado of alternative regional electric market structures, a summary report for which was introduced for the first time at the hearing,⁵⁵ does not provide evidence that the benefits of Public Service joining Markets+ would outweigh the costs. First, the benefits amount referenced during the hearing associated with DAM participation in Colorado utilities were speculative in general, as the details of a potential DAM were unknown at the time of the report's creation.⁵⁶ Further, the report did not attempt to model a footprint similar to Markets+, nor did it consider the situation in which some Colorado utilities joined a DAM and others did not. The speculation that the modeling for this study might "sort of kind of maybe confirm[]" Public Service's findings,⁵⁷ should have no bearing on the Commission's determination as to whether Public Service has met its burden to prove that joining Markets+ is in the public interest.

And, even in the years where benefits to customers exceed costs under Public Service's calculation, the benefits that would flow to customers would be very small. As shown in Attachment MRG-4, for every year from 2032 to 2042, the benefit to customers would only be around 0.02% to 0.05% of the total revenue requirement, which is on the order of *one one-*

⁵⁵ Hrg. Ex. 1505, Colorado Public Utilities Commission, *Colorado Transmission Coordination Act: Investigation of Wholesale Market Alternatives for the State of Colorado: §§ 40-2.3-101 to 102, C.R.S.* (Dec. 1, 2021) at 25 ("the PUC retained Siemens Power Technologies International (Siemens PTI) to conduct a study on the costs and benefits to electric utilities, other generators and Colorado electric utility customers of alternative organized wholesale electricity market structures").

⁵⁶ *Id.* at 20 ("Because there is not a DA market operating in the West, or anywhere else in the country, the exact extent of the services provided by these market alternatives is not currently known.")

⁵⁷ Hrg. Tr. (May 28, 2025) at 113:10-17.

hundredth of a cent (\$0.0001) per kWh.⁵⁸ Indeed, Public Service’s witness Mr. Bacher agreed during the evidentiary hearing that impact to customers is “essentially...a wash”.⁵⁹

By Public Service’s own analysis, no net savings would flow to its customers until 14 years after joining Markets+ and even then, the savings would essentially be a “wash”. Public Service has not proven with analytical support that the benefits associated with production cost decreases of Markets+ are likely to exceed costs in any meaningful way.

- (b) Nothing in the record establishes that reliability improvements due to Public Service joining Markets+ would exceed costs.

Public Service has made no showing that the benefits associated with reliability improvements from joining Markets+ at this juncture would exceed costs. Its primary reliance on potential benefits from joining WRAP to meet this regulatory requirement are misplaced; WRAP participation is available to Public Service independently of Markets+. Further, Public Service has not established that WRAP participation would even ensure reliability improvements, at least not without substantial investments in new transmission infrastructure, the costs of which have not been estimated.

- (1) *Speculative and unsupported claims of benefits from participation in WRAP should not be used to establish that Markets+ would result in reliability improvements.*

In attempting to demonstrate compliance with the “reliability improvements” element of Rule 3753(a)(III), Public Service relies to a large extent on potential reliability benefits that it would enjoy by virtue of participation in the WRAP.⁶⁰ While participation in WRAP is mandatory

⁵⁸ See Hrg. Ex. 102, Attachment MRG-4, at Row No. 21; see also Hrg. Tr. (May 27, 2025) at 83:20-21 (Company witness Mr. Bacher testifies that the positive rate impact is “in the decimal places of cents per kilowatt-hour”).

⁵⁹ Hrg. Tr. (May 27, 2025) at 90:14-18.

⁶⁰ See Taylor Direct Testimony, at 42:6-7. Rev 1 (“Markets+ will enhance short-term reliability through the WRAP program and through must-offer requirements.”); 43:1-8.

for Markets+ member utilities,⁶¹ WRAP is a stand-alone program that Public Service could choose (or the Commission could order the Company) to join without participating in Markets+ if doing so would be beneficial.⁶² As WRA’s witness Ms. Kelly explained in Answer Testimony, WRAP participation is much broader than Markets+ participants, including many members that are committed to joining EDAM.⁶³ As such, any potential reliability benefits from joining WRAP should not be conflated with potential reliability benefits from participation in Markets+.

Even if potential WRAP benefits could be used to comply with the requirements of Rule 3753(a)(III), the record does not actually establish that any reliability benefits would actually accrue to Public Service, at least not without substantial (and unquantified) cost. While it may be tempting to speculate that participation in a resource adequacy program would, by design, bring resource adequacy benefits to Public Service,⁶⁴ there is simply nothing in the record that actually substantiates such a speculation.⁶⁵ The Commission cannot rest any aspect of the public interest finding on speculation alone.

The record also shows that Public Service actually has very little understanding of how participation in the WRAP would impact either its planning efforts or the operation of its system in real time, indicating that any purported benefits are highly speculative at this time. Public Service has not been engaged in WRAP program development in recent years, and remains

⁶¹ *Id.* at 8:19-9:2 (“Participation in Markets+ also requires membership in the Western Resource Adequacy Program (WRAP).”).

⁶² *See* Kelly Answer Testimony at 23:19-20 (“While participation in WRAP is a Markets+ requirement, Public Service could always elect to participate in WRAP independent of its participation in Markets+.”).

⁶³ *Id.* at 23:21-22.

⁶⁴ *See, e.g.,* Hrg. Tr. (May 28, 2025) at 66:10-14 (Chairman Blank opining whether it seems fair that “the Company’s entry into Markets+ could be a solution, or at least a partial solution, to some of the problems we may be seeing in this RA report.”).

⁶⁵ *See, e.g., id.* at 68:7-10 (CEO’s witness Mr. Lester testified that “I don’t recall seeing that type of benefit in the Company’s direct filing for this case. So I would be curious to why they didn’t include that as potential benefits.”).

seemingly unaware of many programmatic details regarding its potential participation.⁶⁶ The Company has not presented any sort of analysis regarding how the WRAP would impact its Commission-regulated energy resource planning processes. There is no indication that any recent aspect of WRAP's ongoing development has taken Public Service's potential participation into account,⁶⁷ further raising questions regarding how much Public Service would in fact benefit. Public Service apparently has not even addressed the question internally of whether it would consider participation in WRAP absent the Markets+ mandate to do so.⁶⁸

Moreover, there is nothing in the record that attempts to quantify either the benefits or the costs of WRAP participation, making a comparison between the two impossible. Indeed, Public Service testified that it has not "analyzed the costs and benefits to the customers of joining WRAP".⁶⁹ Yet, Public Service indicated that infrastructure investments would likely be necessary to take full advantage of the WRAP.⁷⁰ While such investments are likely to be costly, Public Service has undertaken no analysis to consider what transmission upgrades may be needed or how much such upgrades may cost.⁷¹ As such, there is no evidentiary basis on which the Commission can make a finding that the reliability improvement benefits of joining WRAP (and, by extension, Markets+) are likely to exceed the costs.

⁶⁶ Hrg. Tr. (May 27, 2025) at 21:11-14 (Company witness Mr. Taylor testified that the Company stopped engagement in the development of WRAP in 2022 or early 2023), 21:21-24 (testifying that the Company is "not currently" participating in WRAP committee meetings), and 23:16-24:8 (testifying that he is unaware of the timing or details of certain study processes).

⁶⁷ *Id.* at 23:10-11 (Mr. Taylor noted that any Public Service data being used in WRAP studies "would probably be a few years old").

⁶⁸ *Id.* at 24:16-17 (Mr. Taylor testified that the question of whether to consider joining WRAP independent of Markets+ is "not a decision that has been asked internally yet").

⁶⁹ *Id.* at 24:18-20.

⁷⁰ *Id.* at 32:1-6 (explaining that transmission may be one solution to meet WRAP requirements)

⁷¹ *See id.* at 101:22-102:11 (Mr. Taylor agreeing that long-term transmission expansion is expensive and agreeing that a specific transmission analysis associated with Markets+ has not been undertaken yet).

- (2) *Speculation regarding the potential reliability advantage of access to real-time data cannot substantiate a finding that the benefits of Markets+ exceed its costs.*

Some witnesses at the evidentiary hearing were asked to posit on the potential benefit of access to additional real-time data that may accompany joining Markets+. While, these witnesses speculated that access to such data could have tangential benefits for customers and other third parties,⁷² there is no evidence in the record to substantiate such a claim.⁷³ Accordingly, any theoretical benefits associated with such data cannot properly be relied upon by the Commission to support a finding that joining Markets+ is in the public interest.

- (c) The record does not demonstrate that there would be GHG emissions reductions benefits from joining Markets+.

As detailed above in Sections II(A)(1)(b)-(d), the evidentiary record does not support Public Service's conclusion that participation in Markets+ would result in a reduction of GHG emissions associated with Public Service's operation of its electric system compared to the status quo. Accordingly, Public Service has not met its burden to provide sufficient modelling and other analytical support to show that there would be *any* expected emission reduction benefits, and certainly has not established that benefits are likely to exceed the expected costs.

- (d) Public Service has failed to consider in its analysis significant costs associated with joining Markets+, including any costs associated with new transmission investment that could be triggered.

Public Service readily admits that additional transmission may need to be built in order to experience the benefits of Markets+ participation. For example, Mr. Taylor in his Direct Testimony identifies as a "mid-term" seams strategy the need to develop an actionable

⁷² See Hrg. Tr. (May 28, 2025) at 68:21-69:1 (CEO witness Mr. Lester agreed that it is "possible" that the availability of real-time pricing data through Markets+ participation could have certain benefits to customers and third parties.)

⁷³ See *id.* at 70:22-24 (CEO witness Mr. Lester confirming that the Company has not provided any evidence in this proceeding about real-time pricing).

transmission plan to connect the Public Service system with other Markets+ utilities.⁷⁴ Apparently, this planning process has not yet even begun, as Mr. Taylor explained during the evidentiary hearing.⁷⁵ Public Service, accordingly, has no sense right now of the scale or the estimated price-tag of the transmission projects that may ultimately be included in the “actionable transmission plan.” Considering that new transmission projects proposed by Public Service can run in the billions of dollars,⁷⁶ building out transmission in order to enable more efficient participation in Markets+ could come at a heavy cost to ratepayers. And, as Mr. Turner explained in written testimony, “expanding regional transmission offers such an array of benefits that restricting the transmission planning objective solely to increasing transfers to other Markets+ participants is likely the least efficient and most expensive way to expand connectivity.”⁷⁷ In addition, Public Service could potentially experience significant costs associated with meeting WRAP requirements, due to potential changes to current planning and operational reserves, penalties, and additional transmission investment.⁷⁸ Because Public Service left out these potentially very major costs entirely in its analysis, there really is no basis to conclude that has the expected benefits of joining Markets+ are likely to exceed the expected costs

⁷⁴ Taylor Direct Testimony at 38:1-2.

⁷⁵ Hrg. Tr. (May 27, 2025) at 44:3-16 (Mr. Taylor explaining that there has not been any work begun on the actionable plan).

⁷⁶ *See, e.g.*, Hrg. Ex. 400, Answer Testimony and Attachments of Leslie Henry-Sermos on Behalf of the Office of the Utility Consumer Advocate (Apr. 29, 2025) at 9:8-13, 11:1-11.

⁷⁷ Turner Cross-Answer Testimony at 18:17-19; *see also* Turner Answer Testimony at 26:12-27:4 (“Public Service gets it exactly backward – market footprints should follow an efficient grid planning. Transmission planning as a band-aid to ‘fix’ bad market footprints is a recipe for less efficiency, higher costs, and lower reliability.”).

⁷⁸ *See, e.g.*, Egge Answer Testimony at 17:13-15 (noting WRAP penalty provisions); Hrg. Tr. (May 28, 2025) at 65:25-66:9 (Mr. Lester explaining uncertainty regarding potential penalties for failure to meet WRAP requirements); Hrg. Tr. (May 27, 2025), 32:1-6 (Mr. Taylor explaining that expanded transmission is one option to help meet WRAP requirements), and 24:18-23 (Mr. Taylor testifying that Public Service has not analyzed the costs and benefits of joining WRAP).

4. Relying on the potential to rescind a public interest determination in the future is impractical and does not protect customers.

As explained above, the record is devoid of substantial evidence to find that any of the required factors in Rule 3753(a) have been satisfied, let alone all three. While Trial Staff has testified that the Commission could accordingly deny the Application,⁷⁹ it also proposed an alternative path by which the Commission approves the Application now, but could revoke the public interest determination in the future if certain circumstances emerge, including if market costs increase, if anticipated benefits are not demonstrated, if federal policy interferes with Colorado's GHG emissions policy, or if market seams create efficiency, manipulation, or reliability risks.⁸⁰ The Commission should reject this proposal, a position that is shared by Public Service.

First, the record is unclear on how a revocation of the public interest finding could work in practice, and what potential implications the revocation would have. Staff has not substantiated that this "guardrail" would or could actually affect any particular action by the Company,⁸¹ and Public Service notes that the proposal "lacks any consistent discernable process" for how it may work.⁸² Staff's witness Dr. Dahlke did not explain under what sort of proceeding such a determination could be made, or who could initiate such a proceeding,⁸³ and noted during the evidentiary hearing that "I don't think we are at a point where we have a defined process."⁸⁴ And

⁷⁹ Staff suggests multiple times that "the Commission could reasonably deny the Company's application" on the basis of the insufficient benefits assessment "alone." *See* Dahlke Answer Testimony at 9:17-18; 26:15-18; 46:3-4. *See also* Turner Cross-Answer Testimony at 10:10-12:15 (summarizing Trial Staff's many critiques of the Application and its arguments that the public interest standard has not been satisfied).

⁸⁰ Dahlke Answer Testimony at 8-16.

⁸¹ Turner Cross-Answer Testimony at 13:15-17.

⁸² Taylor Rebuttal Testimony at 9:13-14.

⁸³ *See* Turner Cross-Answer Testimony at 13:17-19; Taylor Rebuttal Testimony at 9:14-21.

⁸⁴ Hrg. Tr. (May 27, 2025) at 104:16-17.

several critical questions remain, including whether the Commission even has the legal authority to order Public Service to exit a market once it has committed to joining.⁸⁵

Further, making a revocation decision that would unwind market participation – even if procedurally possible – would be substantively complicated.⁸⁶ As Mr. Turner has explained, a market exit could have profound implications on resource and transmission adequacy in both the planning and operational timeframes, and could have significant impacts on other market participants as well, not to mention multi-state political issues and controversy.⁸⁷ Company witness Mr. Berman has also explained that a provisional revocation could result in significant uncertainty, inefficiencies, and regulatory delay if Public Service were to again seek approval for market participation, as issues would need to be re-litigated.⁸⁸

Moreover, customers would be unlikely to benefit from a conditional, revocable approval of the Application. As discussed above, even under Public Service’s overly-optimistic analysis, Public Service’s customers would not enjoy net benefits from Markets+ until 2039; any revocation of the public interest standard before then would just mean that customers bear substantial upfront costs without receiving anything in return.⁸⁹

B. Colorado Policy would Best be Served by Denying the Application without Prejudice because Any Downsides to Postponing Joining Markets+ are More than Outweighed by the Risks of Joining Now.

As outlined above, there is no substantial evidence in the record to find that Public Service joining Markets+, at this juncture, is in the public’s best interest, and the Commission must deny the Application on those grounds. Denying the Application at this time would also support other

⁸⁵ Turner Cross-Answer Testimony at 13:20-21

⁸⁶ *Id.* at 14:5-6.

⁸⁷ *See id.* at 6-12.

⁸⁸ Hrg. Ex. 105, Rebuttal Testimony and Attachment of Steven P. Berman on Behalf of Public Service Company of Colorado (May 16, 2025) at 10:19-11:6.

⁸⁹ *See* Turner Cross-Answer Testimony at 13:7-12.

Colorado policy objectives. It would prevent thwarting the legislative intent of SB 21-072 by not creating barriers to Public Service joining a fully organized wholesale market (OWM), keep Public Service's options open to join other markets that may bring greater benefits to its customers, and protect non-regulated Colorado utilities from potential unintended – and, as of now, poorly understood – consequences of being pulled into WRAP. While Public Service has gone to great lengths to justify the need to commit to Markets+ immediately,⁹⁰ it substantially overstates the urgency. Risks associated with temporarily losing voting seats in Markets+ committees and potential complications of joining a day-ahead market mid-stream are simply outweighed by the risks of the unknown and the practical foreclosure of opportunity that would come with approval of the Application at this time.

1. Allowing Public Service to join Markets+ would create barriers to joining an OWM, thwarting the legislative intent of SB 21-072.

SB 21-072 requires transmission utilities in Colorado, including Public Service, to join an OWM, such as an RTO, that meets specified requirements by 2030, unless the utility secures approval from the Commission to waive or delay these requirements.⁹¹ Evidence in this proceeding shows that allowing Public Service to join Markets+ now would make it significantly more difficult for Public Service to eventually join an OWM by creating sunk costs that would need to be overcome and by creating additional timing pressure. Approval of the Application would thus likely discourage Public Service from pursuing, or even meaningfully considering, OWM options by 2030, thereby undermining the legislative intent of SB 21-072.

⁹⁰ See, e.g., Taylor Rebuttal Testimony at 12:10-14:15.

⁹¹ See § 40-5-108(2)(a)(I), C.R.S.

The record in this proceeding demonstrates that the benefits of joining an OWM are likely to be substantially more significant than for joining Markets+. As Mr. Turner summarized during the evidentiary hearing:

[I]t is well understood that an RTO does offer substantially more benefits [than Markets+]. The balancing authority consolidation, de-pancaking of transmission rates, truly optimized dispatch, and unit commitment across a wide footprint are just a step change above the benefits available to just a day-ahead market or day-ahead and real-time market. And that should be one of the considerations that the Commission makes now.⁹²

Yet, Public Service has shown significant reluctance to pursue joining an RTO by 2030, citing its concern about having to “give up control of its transmission, of its resource generation planning,” as well as the interconnection process as top concerns.⁹³ It is unknown at this time whether these concerns are or are not legitimate, as there has been no public examination of the issue. Until then, Public Service should still be required to pursue joining an OWM, if there is one available that meets Colorado statutory requirements, and the Commission should not allow joining Markets+ to erect unnecessary barriers to SB 21-072 compliance.

Evidence in this proceeding has made clear that Markets+ participation would make it significantly more difficult for Public Service to consider joining an OWM. As noted above, even under its optimistic assumptions and without considering all costs, in 2030 Public Service’s customers still be nine years away from enjoying net benefits from Markets+ participation. And, as Mr. Taylor testified during the evidentiary hearing, Public Service would need to justify overcoming the initial Markets+ investment costs if it were to join an OWM.⁹⁴ These up-front

⁹² Hrg. Tr. (May 28, 2025) at 14:24-15:7.

⁹³ Hrg. Tr. (May 27, 2025) at 17:1-2, 18:18-24.

⁹⁴ Hrg. Tr. (May 27, 2025) at 95:1-6 (“Were the company to apply to join a statutory OWM, beginning in 2030, the benefits of joining that OWM would have to be significant enough to offset the financing costs that we have paid, or would have paid, or would have to pay, to exit Markets+, before those financing costs are paid off.”)

costs would therefore become a weight on the scale against OWM participation, making it all the harder to meet the legislative intent of SB 21-072.

In addition, joining Markets+ at this time would seem to both postpone and complicate the decision of whether to pursue joining an OWM by the statutory deadline. Mr. Taylor testified that Public Service is not currently intending to join SPP RTO West and “[i]n the future we’ll evaluate whether we move forward into the statutory OWM.”⁹⁵ But because the Commission Rules requires an application 18 months in advance of joining an OWM⁹⁶ and transitioning into an OWM is likely to take 12-18 months after Commission approval,⁹⁷ Public Service would need to file a new application no later than in mid-2028 to meet the statutory deadline. That means that Public Service would have at most only several months of experience with Markets+ before asking the Commission for permission to change course, if Public Service were to pursue joining an OWM by the statutory deadline. This would seem to create an additional hurdle to joining a full market, which would likely bring significantly more benefits than Markets+. On the other hand, denying the Application now, without prejudice, may preserve Public Service’s and the Commission’s options, leaving open a more viable pathway to join an OWM by 2030, as the Colorado General Assembly intended.

In effect, Public Service seems to be seeking validation in this proceeding of the arguments it may very well make in a request for a waiver of the requirements to join an OWM pursuant to SB 21-072, prior to and without actually filing such a waiver request as required by Rule 3756. The Commission should accordingly take a cautious approach in ruling on the Application, ensuring it does not pave an easy path for Public Service to avoid its legislative obligations.

⁹⁵ *Id.* at 18:2-6.

⁹⁶ Rule 3754(c).

⁹⁷ Hrg. Tr. (May 27, 2025) at 18:16-17.

2. The availability of other market options that may offer more benefits to Public Service suggests the Commission should not approve entry into Markets+ at this time.

Public Service’s claims that Markets+ offers more benefits than other market options is unsupported by the record and should not be relied upon by the Commission in deciding the Application. Indeed, there is ample indication in the record to suggest that other market options could potentially offer more benefits to Public Service and its customers, which cautions against approving an application to join Markets+ until both benefits and costs are better understood.

- (a) Public Service’s claim that Markets+ has more benefits than EDAM is not substantiated by the record and should be given no weight.

In Mr. Taylor’s Direct Testimony, he claims that “Markets+ provides more benefits overall and in relation to costs relative to the other markets studied, including EDAM.”⁹⁸ But this conclusory statement does not survive even the barest scrutiny. First, as discussed above in Section II(A)(3)(a), Public Service did not apparently “study” any other market options at all in any meaningful sense.⁹⁹ Instead, it relies on the outdated and ill-suited WMEG analysis, using a footprint that bears little resemblance to the anticipated footprint of Markets+ that Public Service intends to join, and not considering any benefits other than production cost benefits. Second, as also discussed above in Section II(A)(3)(d), Public Service’s Application fails to grapple at all with significant categories of cost, such as new transmission investment, that may be triggered by joining Markets+. As such, it has no basis on which to claim that Markets+ has “more benefits....in relation to costs” than any other option that Public Service may consider.

⁹⁸ Taylor Direct Testimony at 18:14-16.

⁹⁹ Hrg. Tr. (May 27, 2025) at 52:4-17 (Mr. Taylor testifies during cross examination that Public Service did not undertake any process that examined multiple benefits and costs associated with EDAM and Markets+, and instead relied only on the WMEG study).

Despite Public Service’s excuse that it relied upon the WMEG study as “the best available information,”¹⁰⁰ Public Service could certainly have sought information that would have greater probative value. Had Public Service actually wanted to understand the comparative benefits between Markets+ and EDAM, it certainly could have conducted the analysis itself and presented it to the Commission. Although Public Service argues that doing so would have been “difficult and time consuming,”¹⁰¹ the fact that a third party conducted exactly such a study – one that specifically calculated costs and benefits for Public Service joining each of EDAM and Markets+, based on Public Service’s own loads and resources assumptions – during the pendency of this proceeding suggests how doable such an analysis would have been.¹⁰² Public Service should not boldly claim that Markets+ offers “more benefits overall” than EDAM while failing to offer real evidentiary support, and then protest that comparisons between different market options are not feasible or required.

- (b) The Commission should consider available information regarding the potential comparative benefits of other market options.

When making its decision in this proceeding, the Commission should consider all available information regarding the potential benefits of other market options that Public Service would likely forego by joining Markets+ at this juncture. As testified to by both United and WRA, the EDAM market is not only available to Public Service today, but that market is also undergoing major governance change that will alleviate the long-standing objection of many Western utilities, including Public Service. The Pathways Initiative has already resulted in increased governance

¹⁰⁰ Taylor Rebuttal Testimony at 25:16-18.

¹⁰¹ *Id.* at 25:10-11; *see also* 25:15-18 (“While more years of analysis would be desired, it is not available”).

¹⁰² *See* Aurora Energy Research, *Western market regionalization: PSCo Day-Ahead market benefits analysis* (May 22, 2025), filed as an attachment to public comments submitted by Environmental Defense Fund (May 24, 2025). An updated May 30, 2025 version of the report is available online at <https://library.edf.org/AssetLink/878nb6y301c156127nnt2l773i1s4884.pdf>.

independence in EDAM’s FERC-approved tariff, and the initiative is working toward a fully independent, west-wide governance structure by January 2028.¹⁰³ Although Public Service has raised concerns regarding the governance and independence of such a market,¹⁰⁴ the Pathways initiative has in fact addressed such concerns. And, because this independent governance has yet to be formed, Colorado could have a leadership role in forming the contours of the market, thereby ensuring that its policies and protocols are fully aligned with State policy.

It is also worth noting that while the Commission declined to require that applications to join a DAM always include an analysis comparing other market options, its rationale for that decision may not apply in this particular case. In particular, in Decision No. C24-0600, the Commission did not require market-to-market comparative analyses for DAMs because they “raise fewer concerns” than full RTOs.¹⁰⁵ While this conclusion may be true when viewed in isolation, if a utility were to use entry into a DAM as a cover for *not* pursuing entry into an RTO, that dynamic may end up raising more issues, because of the lost opportunity to realize the significantly greater potential benefits of an RTO. As noted above, approving Public Service’s participation in Markets+ would likely make it significantly harder for the utility to then join an OWM by 2030, as contemplated by SB 21-072. This dynamic suggests that comparing market options now is much more important than the Commission previously contemplated in the rulemaking proceeding.

3. Other Colorado utilities may be impacted by WRAP, but the impacts are not yet understood or documented.

Discussions during the evidentiary hearing highlighted that Public Service’s decision to join Markets+ – and hence to join WRAP – could have meaningful impacts to other utilities to which Public Service provides balancing services. But those impacts were not considered in the

¹⁰³ Welter Answer Testimony at 26:24-27:4; Turner Answer Testimony at 43:4-19.

¹⁰⁴ See, e.g., Taylor Rebuttal Testimony at 17:7-12.

¹⁰⁵ Proceeding No. 22R-0249E, Decision No. C24-0600 at ¶19.

Application and are not well understood. In response to questions from Chairman Blank, CEO witness Mr. Lester testified that he was not aware of “any binding state or regional standard for unregulated municipal utilities, distribution co-ops, or power marketers that would put in place a consistent approach to determining planning reserve margins in Colorado” or any binding “standard setting ELCC values for the unregulated utilities in Colorado.”¹⁰⁶ Mr. Taylor in turn testified that Public Service is leaning towards establishing binding commitments on the other utilities in its balancing authority to meet their proportional share of the resource adequacy requirements imposed by WRAP, but that the form of such requirements has not yet been determined.¹⁰⁷

It seems likely compliance with proportional shares of WRAP requirements would impose new costs on at least some of the cooperative associations and power marketers currently in Public Service’s balancing authority area. But the costs and other implications are far from known at this stage. Indeed, it is possible that some of the entities that Public Service provides balancing services to are entirely unaware that such mandatory compliance obligations and associated costs may be forthcoming.

The policy and political implications of this potential change are significant, but neither the Commission nor the affected non-regulated utilities have grappled with these implications. Perhaps more importantly, the Colorado General Assembly, which has explicitly struggled with the issues of resource adequacy policy for both investor-owned and other utilities in the State as recently as 2023,¹⁰⁸ has not debated whether and how electric cooperative associations, Black Hills, and other utilities should be subject to the requirements of WRAP, especially against their

¹⁰⁶ Hrg. Tr. (May 28, 2025) at 63:13-25.

¹⁰⁷ Hrg. Tr. (May 27, 2025) at 183:2-24.

¹⁰⁸ See House Bill 23-1039 (establishing a requirement that electric load-serving entities periodically report about the adequacy of their electric resources).

will. Public policy would therefore caution against moving too quickly; denying the Application without prejudice would provide time for Public Service to work with its partner utilities, the Commission, and potentially the General Assembly to better understand how WRAP requirements would impact all of them and State policy objectives.

III. CONCLUSION

In its Application and throughout the proceeding, Public Service attempts to portray its decision to join Markets+ as an urgent low-cost, low-risk venture that will eventually bring benefits to its customers. This is not the case. Approving the Application at this stage comes with significant risks and significant costs – both known and unknown – and it is not necessary. It would allow Public Service to undertake participation in a market construct that would bring minimal benefits, significant known costs, unknown future costs, and unknown reliability implications. Approval could also risk GHG objectives and potentially thwart the realization of State legislative intention to participate in a full OWM. Allowing Public Service to join Markets+ would also involve a new resource adequacy scheme with several unknowns, and will bring legal and cost implications for other utilities, which have simply not been explored in any depth yet.

The record is clear. Public Service has not met its burden to prove that joining Markets+ at this point in time is in the public interest. The Application must be denied.

Dated this 12th day of June, 2025.

/s/ Sarah M. Keane

Sarah M. Keane # 51109

Sarah Judkins #48406

Kaplan Kirsch LLP

1675 Broadway, Suite 2300

Denver, CO 80202

Telephone: 303.825.7000

sjudkins@kaplankirsch.com

skeane@kaplankirsch.com

Attorneys for Advanced Energy United

CERTIFICATE OF SERVICE

I hereby certify that on this 12th day of June 2025, a copy of the **STATEMENT OF POSITION OF ADVANCED ENERGY UNITED** in Proceeding No. 25A-0075E was e-filed with the Colorado Public Utilities Commission through the Commission's E-Filing system and a copy was thereby served upon all parties shown on the Commission's certificate of service accompanying such filing.

/s/ William Trull
William Trull
Paralegal
Kaplan Kirsch LLP
1675 Broadway, Suite 2300
Denver, CO 80202
Telephone: 303.825.7000
btrull@kaplankirsch.com