BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 20M-0008E

IN THE MATTER OF THE JOINT FILING OF RULE 3627 10-YEAR AND 20-YEAR REPORTS OF PUBLIC SERVICE COMPANY OF COLORADO, TRI-STATE GENERATION AND TRANSMISSION, AND BLACK HILLS ENERGY.

RECOMMENDED DECISION OF ADMINISTRATIVE LAW JUDGE ROBERT I. GARVEY ADDRESSING THE 2020 JOINT TRANSMISSION PLAN FILED PURSUANT TO THE COMMISSION'S TRANSMISSION PLANNING RULES; ADDRESSING ISSUES RELATED TO THE FILINGS AND RULES; AND RECOMMENDING RULEMAKING

Mailed Date: February 11, 2021

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I. <u>STATEMENT</u>

1. On February 3, 2020, Public Service Company of Colorado (Public Service), Black Hills Colorado Electric, LLC (Black Hills Energy or Black Hills), and Tri-State Generation and Transmission Association, Inc. (Tri-State) jointly filed in this Proceeding a biennial transmission plan as required by Rules 3625 to 3627 of the Rules Regulating Electric Utilities, 4 *Code of Colorado Regulations* (CCR) 723-3 (Transmission Planning Rules). The jointly-filed transmission plan includes a 10-Year Transmission Plan and a 20-Year Conceptual Scenario Report.

2. This Decision rules on the adequacy of the 10-Year Transmission Plan and addresses the 20-Year Conceptual Study Report in accordance with Rule 3627. This Decision also provides guidance for future ten-year transmission plan filings made pursuant to Rule 3627. This Decision further recommends that the Commission commence a rulemaking to review Rule 3627.

A. Discussion

3. The purpose of the Rule 3627 transmission planning process is to coordinate the planning for additional electric transmission in a comprehensive, transparent, and statewide manner.¹ This process allows for meaningful input by stakeholders representing governmental, environmental, financial, and other interests and promotes the state's interest in the development of a transmission system sufficient to satisfy the needs of Colorado citizens.² The plans and reports filed pursuant to Rule 3627 inform the Commission of the transmission projects each utility is

 $^{^1}$ Decision No. R12-1431, ¶ 10 at pp. 4 and 5 (mailed on December 13, 2012) in Docket No. 11M-872E et al.

 $^{^2}$ Decision No. R12-1431, ¶ 12 at p. 5 (mailed on December 13, 2012) in Docket No. 11M-872E et al.

proposing and the reasons for each project, the extent to which each utility has coordinated its planning with other transmission providers, and the outreach to interested persons undertaken by each utility.³ Further, Rule 3627(c)(IX) requires those utilities subject to rate regulation to include in the transmission plan resource zone plans, designations, and applications for certificates of public convenience and necessity pursuant to Senate Bill 07-100, codified at § 40-2-126(2), C.R.S.

1. 10-Year Transmission Plan

- 4. The 10-Year plan filed on February 3, 2020 provides background information on transmission planning in Colorado and on transmission planning-related public policy issues at 11-28 and contains a narrative about each Utility's transmission planning process and proposed transmission projects: (a) Black Hills' transmission process and projects are discussed in the Plan at 32-40 and Appendix D; (b) Public Service's transmission process and projects are discussed in id. at 50-63 and Appendix F; and (c) Tri-State's transmission process and projects are discussed in id. at 40-50 and Appendix E. The Plan also provides information on planned transmission projects for Colorado Springs Utilities, Platte River Power Authority and the Western Area Power Administration in appendices G through I.
- 5. In addition, the Ten-Year Plan contains descriptions (pp. 77-88) of Black Hills and Public Service compliance with the requirements of Senate Bill 07-100 to construct transmission to service designated energy resource zones in eastern Colorado and the San Luis Valley.
- 6. Further, the Ten-Year Plan: (a) explains how each Utility meets each of the four Rule 3627(b) compliance requirements (id. at 112-127); (b) contains the documentation required by Rules 3627(c)(I) through 3627(c)(VII) (id. at 128-145); and (c) contains a summary of each

 $^{^3}$ Decision No. R12-1431, \P 13 at pp. 5 and 6 (mailed on December 13, 2012) in Docket No. 11M-872E et al.

Utility's outreach efforts as required by Rules 3627(c)(VIII) and 3627(g)(I) (id. at 89-111 and Appendices J & K).

2. **20-Year Conceptual Study Report**

- 7. On February 3, 2020, Black Hills, Public Service, and Tri-State filed the 20-Year Conceptual Scenario Report to comply with Rule 3627(e). The 20-Year Conceptual Scenario Report is one part of a Rule 3627 biennial filing. The 20-Year Conceptual Scenario Report contains: (a) a narrative about each Transmission Utility's perspective on conceptual scenario analysis; and (b) that Utility's conceptual scenarios.4
- 8. In addition, the 20-Year Conceptual Scenario Report contains a scenario evaluated by the CCPG through its Conceptual Planning Group. This scenario is discussed in 20-Year Conceptual Scenario Report at 13 and Appendix D.
- 9. In Decision No. R18-1139, the Commission did not request a study of a Commission-identified conceptual scenario. As a result, the 20-Year Conceptual Scenario Report does not contain a Rule 3627(e)(V) study.

3. Notice, Referral, and Directive for Supplemental Filing

10. By Decision No. C20-0213-I (Interim Order), issued April 7, 2020, the Commission provided notice of the filing made on February 3, 2020. The Commission also referred to an Administrative Law Judge for a recommended decision.

⁴ Black Hills' perspective and its four scenarios are discussed in the 20-Year Conceptual Scenario Report at 2-7 and Appendix A. Public Service's perspective and its four scenarios are discussed in id. at 7-13 and Appendix C. Tri-State's perspective and its three scenarios are discussed in id. at 4-7 and Appendix B.

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11. The Commission further directed Public Service, Black Hills, and Tri-State (the Utilities) to supplement the 10-Year Transmission Plan and 20-Year Conceptual Scenario Report with additional information in the following six categories:

- (1) clarification and further information regarding each utility's plans to meet requirements of §§ 40-2-125.5 and 25-7-105(1)(e)(VIII)(A), C.R.S.;
- discussion regarding whether and, if so, how each Utility intends to address policy initiatives in the Governor's "Roadmap to 100% Renewable Energy by 2040 and Bold Climate Action";
- (3) identification of anticipated organized market information as applied to each scenario;
- (4) information regarding the effects of technology advancements, specifically regarding storage capabilities over time;
- clarifications regarding use of the terms Distributed Energy Resources (DER) and Distributed Generation (DG); and
- (6) further detail concerning a scenario modeled by Public Service in which its Local Distribution Company (LDC) for natural gas is eliminated.
- 12. The Interim Order directed the Utilities, when supplementing their Joint 10-Year Transmission Plan and 20-Year Conceptual Scenario Report with the above information, to include all models used, an explanation and copy of model outputs, and narrative descriptions of common project management considerations.
- 13. On June 8, 2020, the Utilities filed a Supplemental Joint Report containing information responsive to the six categories specified by the Commission and a response to the Commission's directive to supply models, model outputs and narrative descriptions of project management considerations.
- 14. Notably, in the 10-Year Transmission Plan, Public Service states that transmission development for a Clean Energy Plan will be reviewed by the Commission "under existing

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⁵ https://drive.google.com/file/d/1K anGQpEf-edqhjz5b6D3LJIsfFV3mI3/view?usp=sharing

transmission planning processes and cost recovery." Nevertheless, Public Service states that a Clean Energy Plan "will present significant drivers for transmission planning" such as "new interconnection facilities for clean energy resources" and "Decommissioning, or redevelopment, of existing transmission facilities associated with the potential for accelerated fossil-fuel retirements."

- 15. In Decision No. R20-0608-I, the ALJ determined that the Utilities had been responsive to the Commission directives in the Interim Order to provide additional information in each of the above categories, but that they had failed to include models, modeling outputs and the required project management narratives with their supplemental information, and ordered them to do so.8
- 16. In their Joint Response to Decision No. R20-0608-I, filed on September 18, 2020, the Utilities characterize the issue of providing transmission models and their inputs and outputs as one that "has long plagued the Commission and Utilities due to confidentiality and software licensing constraints outside the Utilities' control," and claim that they have provided the information required under Rule 3627 in a format consistent with past Commission-approved Rule 3627 filings. The utilities further state that neither Black Hills nor Tri-State conducted any additional modeling in responding to the six categories of additional information required by the Commission's Interim Order. Public Service states that it did model three conceptual transmission plans to meet the requirements of §§ 40-2-125.5 and 25-7-105(1)(e)(VIII)(A), C.R.S., and that these plans were all included in both the Utilities' original and amended 10-Year Transmission

⁶ Amended 10-Year Transmission Plan For the State of Colorado To comply with Rule 3627 of the Colorado Public Utilities Commission Rules Regulating Electric Utilities at 17.

⁷ Id., at 18

⁸ Decision No. R20-0608-I at ¶ 62.

⁹ Utilities' Joint Response to Interim Decision No. R20-0608-I at 1.

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Plan. However, the Utilities reiterate that to the degree that there are modeling inputs or outputs responsive to the Commission's or ALJ's directives, they are unable to provide them due to proprietary software license agreements, and confidentiality agreements with the Western Electricity Coordinating Council (WECC).

17. The Utilities argue that their original and supplemental filings in this Proceeding are consistent with the Commission's decisions in Proceeding No. 16M-0063E, where it found that "base case data can be so extensive that it would be both cumbersome to provide in a transmission plan filing and then difficult for the Commission to assess if made available in any form." To this latter point, the Utilities contend that it would be possible for them to provide input files expunged of any Critical Energy Infrastructure Information (CEII), the subject of the WECC confidentiality agreements, but that doing so would require extraordinary manual effort and be of little value both because it would have been stripped of the CEII data and because the Commission does not possess licenses to the software necessary to consolidate the data into a readable format. The Utilities also state that they have considered making a "data room" available for the Commission and its staff to view the required information, but that they do not believe that this is a viable option at this time due to the Covid-19 pandemic. The Utilities therefore request that the ALJ find that they have sufficiently complied with Rule 3627 reporting requirements and the Interim Decision.

4. Comments on the Utilities' Filings

18. In comments filed in this Proceeding on May 18, 2020 and November 19, 2020, Mr. Larry Miloshevich suggests that the 10-Year Transmission Plan is deficient in that in preparing them, the Utilities used an overly-constrained definition of the term "alternatives" in the context

¹⁰ Decision No. C17-1079, at paragraphs 76-77.

of Rule 3627(c)(VI), interpreting that term to mean "alternative paths", "alternative voltages" or "alternative traditional equipment choices".¹¹

- 19. Mr. Miloshevich suggests that the Commission should interpret "alternatives" in Rule 3627(c)(VI) more broadly, to mean "alternative ways of addressing an identified grid need", regardless of the technical approach used to address such need. Mr. Miloshevich then states that the Utilities failed to consider transmission options falling into two broad classes of alternatives: What he calls "transmission innovations" (TI) and non-wire alternatives (NWA).
- 20. Mr. Miloshevich argues that the Commission should find the Utilities transmission plans to be inadequate until they evaluate NWA and TI solutions for each of their proposed projects and justify their preferred alternative on a best-cost basis.
- 21. In his written comments submitted on November 19, 2020, Mr. Miloshevich argues that Rule 3627 provides the Commission with the authority to require the Utilities to evaluate and use these technologies, and he exhorts the Commission to do so. Mr. Miloshevich further explains that NWAs are technologies and/or methods that address grid needs by means other than conventional solutions such as new or upgraded transmission lines or substation equipment, and that they may include "geo-targeted energy efficiency, demand-side management, demand response, distributed generation, energy storage, and other technologies which, when used individually or in combination, can reduce or shape load or generation to eliminate or postpone the need for traditional transmission assets in a technically viable manner."¹²

¹¹ May 8, 2020 comments of Mr. Larry Miloshevich, pp. 3-4.

¹² Larry Miloshevich, Transmission Plan Inadequate on Two Counts (May 18, 2020) at p. 4.

5. **Advanced Transmission Technologies**

- 22. On October 22, 2020, the Commission conducted a Commissioners' Information Meeting (CIM) on Advanced Transmission Technologies, at which invited subject matter experts made presentations and answered questions on a set of transmission innovations including (1) underground high-voltage direct current (HVDC) transmission lines utilizing railroad rights of way; (2) dynamic ratings for transmission lines, which allow greater power transfer capacity under favorable ambient conditions; (3) a variety of power flow control technologies, which offer utilities substantially greater control in power routing; and (4) transmission system topology optimization software, which can be utilized to control system configuration for optimal efficiency and reliability.
- At the CIM, the subject matter experts explained that these technologies can 23. provide transmission system solutions at costs significantly below the more conventional approaches commonly selected by transmission planners.
- 24. In his written comments submitted on November 19, 2020, Mr. Miloshevich submitted each of the presentations from the Advanced Transmission Technology CIM into the record of this Proceeding.

6. **Coordination of Transmission and Electric Resource Planning**

25. In Decision No. C20-0661-I, issued on September 15, 2020 in Proceeding No. 19R-0096E¹³, the Commission referenced the Utilities' June 8, 2020 response to the Interim

¹³ Proceeding No. 19R-0096E, "In the Matter Of The Proposed Amendments to Rules Regulating Electric Utilities, 4 Code Of Colorado Regulations 723-3, Relating to Electric Resource Planning, the Renewable Energy Standard, Net Metering, Community Solar Gardens, Qualifying Facilities, and Interconnection Procedures and Standards."

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Decision in this proceeding. Specifically, the Commission noted that Public Service had offered the following:

Public Service recognizes that better and earlier integration of transmission planning into the resource planning process will be critical going forward as it looks to achieve 80 percent carbon reduction by 2030 as part of its next ERP. Since the 2016 ERP, Public Service's Transmission Planning and Resource Planning groups have been actively collaborating on how to better align their respective processes for future ERPs. This includes earlier identification to Public Service's transmission planners of the size and location of potential resources needed to meet public policy initiatives, so that Public Service can better plan the transmission necessary to accommodate these new resources and reconsideration of what Senate Bill 07-100 provided for transmission to be built in advance of identified generation resources in the identified Renewable Energy Zones.

Public Service's Transmission Planning and Resource Planning departments are coordinating efforts to generally identify the actions that will be necessary to meet Public Service's carbon reduction goals under § 40-2-125.5(3)(I), C.R.S. As part of that process, Transmission Planning has conducted analyses of the potential standalone generation injection capabilities of various locations on Public Service's transmission system. Identifying stand-alone generation injection capability is the first step to understand how the existing transmission system might accommodate development of new clean energy resources such as wind and solar. Identifying and maximizing opportunities to utilize the existing transmission system can potentially reduce future transmission costs.

Looking beyond the existing transmission system, in the Joint 10-Year Transmission Plan, Public Service identified and described conceptual new transmission plans that have been developed through the coordinated planning process and that could lay the framework for new transmission infrastructure to support Clean Energy Plan goals. These conceptual plans include the Weld-Rosedale-Box Elder - Ennis 230 & 115 kV Transmission Lines and the Weld County Transmission Expansion, the Lamar Front Range Transmission Project, and the San Luis Valley Project. Using the stand-alone injection capabilities described above along with these conceptual new transmission plans, Public Service is assessing different pathways for how it could achieve the carbon reduction targets of § 40-2-125.5(3)(I), C.R.S through combinations of actions including early coal retirements, reduced coal operations, additional renewable resources (utility scale and distributed) additional storage technologies, and continued expansion of energy efficiency programs, while also maintaining a high level of system reliability.

Through a coordinated effort, Transmission Planning and Resource Planning are utilizing the stand-alone generation injection locations and the conceptual new transmission plans to develop portfolios for analysis that meet the Company's clean energy goals. Preliminary analyses are being conducted using generic cost and performance information for renewable, storage, and other generation technologies, which, in combination with coalrelated actions, could be part of a Public Service Clean Energy Plan that will be brought

forward to the Commission for approval in the future. Ultimately, the specifics of Public Service's preferred Clean Energy Plan will not be known until Public Service completes its Phase II competitive solicitation evaluation process as part of its next ERP and reports the results of that process to the Commission. This is anticipated to occur in 2022.¹⁴

- 26. The Commission concluded that additional comments were necessary regarding the consideration of new transmission investment in the ERP process before any revisions to the transmission-related provisions in the ERP Rules set forth at 4 CCR 723-3-3600, et seq. The Commission cited concerns raised by participants in that ongoing rulemaking proceeding that the Commission's transmission planning process may be irrelevant from the perspective of a bidder in an ERP competitive solicitation, particularly when Public Service must file a Clean Energy Plan as part of its next ERP. The Commission further raised the possibility that, without modifications to the ERP Rules addressing new transmission investment, the most cost-effective development of new generation resources may be precluded due to the lack of a full presentation of transmission investments that could be operational in time to fulfill resource needs as late as 2030, the end of the resource acquisition period for a Clean Energy Plan. Accordingly, the Commission put out for comment certain backstop provisions in the ERP Rules to achieve the identification of new transmission investments that could be operational in time to fulfill resource needs as late as 2030. In addition, for the purpose of soliciting such additional comments, the Commission took administrative notice of the Utilities filings in this Proceeding.
- 27. In response to Decision No. C20-0661-I, Public Service filed comments on behalf of itself and many of the parties to Proceeding No. 19R-0096E proposing an alternative approach (the "Joint Transmission Proposal" to integrating transmission planning considerations into the

¹⁴ Supplemental Joint Report for the State of Colorado to comply with Rule 3627 of the Colorado Public Utilities Commission Rules Regulating Electric Utilities, pp. 11-12.

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ERP process.¹⁵ The parties to the Joint Transmission Proposal advocated that the most recently accepted or approved "Rule 3627 Report" (presumably the most recent 10-year transmission plan submitted by the utility pursuant to the Commission's Transmission Planning Rules) serve as the anchor for the ERP Phase I process and ultimate Phase I decision regarding bid-eligible planned transmission projects. This report would be the starting point for assessment of transmission projects to which a developer could propose interconnection without the bid being burdened with costs from the transmission project. As part of its Phase I submission, a utility would provide a proposed list of "bid-eligible" transmission projects with appropriate support for the designations and including projected in-service dates for those projects. This list would include projects already granted a CPCN, projects for which a CPCN is pending, and "planned" transmission projects that have been studied and are feasible from the utility's perspective. Intervenors would have the right to propose alterations to the utility's proposed list, subject to the requirement that any additions to that list would have to have been formally studied in a FERC-approved planning process (e.g., the Colorado Coordinated Planning Group) and eligible for ownership by the filing utility, regardless of whether such projects had been included in a rule 3627 Report.

The Joint Transmission Proposal envisions a process in which project developers 28. submitting bids in response to utility RFPs could specify interconnection with planned transmission resources in addition to existing transmission resources or with transmission resources for which a CPCN has been granted or is pending. This creative proposal has the potential to resolve the "chicken-and-egg" problem that has previously impeded the integration of generation resource planning with transmission planning. But the very need for the Joint

¹⁵ See Joint Responsive Comments to Decision No. C20-0661-I (filed October 9, 2020) and Updated Joint Transmission Proposal and Joint Final Comments to Decision No. C20-0661-I (filed October 30, 2020) in Proceeding No. 19R-0096E.

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Transmission Proposal suggests that the Commission's transmission planning rules have become obsolete.

B. Findings and Conclusions

1. Adequacy of the 10-Year Transmission Plan

- 29. Rule 3627(h) states that upon review of a transmission plan, the Commission will issue a written decision regarding compliance with these rules and the adequacy of the existing and planned transmission facilities to meet present and future energy needs in a reliable manner. The Commission may also provide further guidance to be used in the preparation of the next biennial filing.
- 30. Rule 3627(i) further states that utilities shall make reference to the most recently filed 10-year transmission plan in any subsequent CPCN application for individual projects contained in that plan. Notably:

Given sufficient documentation in the biennial ten-year transmission plan for the project under review and if circumstances for the project have not changed, the applicant may rely substantively on the information contained in the plan and the Commission's decision on the review of the plan to support its application. The Commission will take administrative notice of its decision on the plan. Any party challenging the need for the requested transmission project has the burden of proving that, due to a change in circumstances, the Commission's decision is no longer applicable or valid.

31. In determining adequacy of the 10-Year Transmission Plan, the ALJ considered the plan filed on February 3, 2020, the supplemental filing made on June 8, 2020, the Utilities' Joint Response to Decision No. R20-0608-I, and the written comments filed by Mr. Miloshevich. The ALJ also referred to Decision Nos. R17-0580 and C17-1079¹⁶ issued in Proceeding No.

¹⁶ Decision No. C17-1079 adopted Decision No. R17-0580 with modifications, ultimately finding the 2016 10-Year Transmission Plan to be adequate pursuant to Rule 3627.

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16M-0063E regarding the Utilities' 2016 transmission plan filings pursuant to Rule 3627 and Decision No. R18-1139¹⁷ issued in Proceeding No. 18M-0080E regarding the Utilities' 2018 transmission plan filings also pursuant to Rule 3627 with regard to past determinations of the adequacy of a transmission plan.

- 32. By the Interim Decision, the Commission elected not to solicit written comments or schedule a workshop pursuant to Rule 3627(h) and instead directed the ALJ to review the original filings, comments, responses, and refiled reports with the supplemental information required by the Interim Decision, and, as necessitated by the ALJ's review, schedule any comment periods and workshops or hearings.¹⁸ The ALJ concludes based on his review of the plan filed on February 3, 2020, the supplemental filing made on June 8, 2020, the Joint Response to Decision No. R20-0608, and the written comments filed by Mr. Miloshevich that no further comments and no workshop or hearing are required in this Proceeding in order to render a recommended decision consistent with the adequacy findings set forth in Decision Nos. R17-0580, C17-1079, and R18-1139 and the Commission's directives for securing supplemental information in the Interim Decision.
- 33. The ALJ further considered in rendering this Decision the recent developments regarding transmission planning, investment, and technologies outside of this Proceeding, specifically the October 22, 2020 CIM on Advanced Transmission Technologies and the filing of the Joint Transmission Proposal in Proceeding No. 19R-0096E. These developments indicate that the standards, objectives, and essential needs of transmission planning in Colorado have evolved beyond the manner in which the Transmission Planning Rules sought to improve the coordination

¹⁷ Decision No. C18-1139 found the 2018 10-Year Transmission Plan to be adequate pursuant to Rule 3627.

¹⁸ Decision No. C20-0213-I, issued April 7, 2020, Proceeding No. 20M-0008E, p. 9.

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of electric generation and transmission planning at the time when those rules were initially promulgated.¹⁹ As discussed further below, the information presented at the October 22, 2020 CIM and Mr. Miloshevich's comments also raise doubts regarding the use of transmission plans submitted under the Transmission Planning Rules in streamlining applications for CPCNs for transmission projects over and above the many points raised in Decision No. R17-0580 in support of a rulemaking to modify those rules.²⁰

- 34. Notwithstanding the apparent shortcomings of the Transmission Planning Rules and the transmission plans they cause the Utilities to file on a biennial basis, the ALJ concludes that the 10-Year Transmission Plan filed in this Proceeding complies with the requirements of Rule 3627 and is adequate to meet the present and future energy needs of Colorado in a reliable manner consistent with the Commission's review of the Utilities' two previous plans from 2016 and 2018, as addressed by Decision Nos. R17-0580 and C17-1079 and Decision No. R18-1139, respectively.
- 35. Mr. Miloshevich's comments submitted in this Proceeding suggest that the advanced transmission technologies discussed at the October 22, 2020 CIM and the NWAs he addresses offer potentially significant cost savings in certain applications as alternatives to more conventional approaches to mitigating reliability, power-quality and load growth-related issues on a utility's transmission system. However, the Utilities have presented scant evidence that they are even aware of, much less that they regularly evaluate these alternatives. For example, of the three utilities subject to reporting under Rule 3627, only Tri-State mentions consideration of Advanced Transmission Technologies as a part of its transmission planning process.²¹ But even Tri-State's

¹⁹ Decision No. R11-0077, issued January 21, 2011, Proceeding No. 10R-526E, p. 3.

²⁰ Decision No. R17-0580 pp. 159-165.

²¹ Supplemental Joint Report for the State of Colorado To comply with Rule 3627 of the Colorado Public Utilities Commission Rules Regulating Electric Utilities (June 8, 2020) at p. 30.

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narrative description fails to describe that utility's process for identifying or evaluating potential applications. And while the Utilities' filings mention the possible integration of energy storage as a NWA in the future as costs decline, with the exception of a single reference by Public Service to the newly created Energy Storage Work Group of the CCPG (which it says will analyze the costs and benefits of NWA and storage at the transmission level),²² the Utilities are silent on the applicability of other NWAs.

While Mr. Miloshevich's criticisms of the 10-Year Transmission Plan question 36. whether the Utilities have fully considered all potentially cost-effective alternatives and presented best-cost plans, the ALJ notes that when the Transmission Planning Rules were promulgated, the Commission refrained from defining the depth of analyses and evaluations of alternatives for the transmission projects included in the filed plan.²³ The Hearing Commissioner that adopted the rules by Decision No. R11-0077 further clarified that he declined "to specify in the rules the rationale to be used by the utilities for evaluating their alternatives. The rules only contemplate that the jurisdictional utilities will provide the rationale that they used to select their preferred alternatives. The rationale should be defined with input from stakeholders."24 For these reasons, the ALJ declines to deem the 10-Year Transmission Plan inadequate as suggested by Mr. Miloshevich. Nonetheless, the ALJ does provide guidance below requiring additional specificity and detail from the utilities in the description of the alternatives they evaluate and in supporting their rationale for selecting their preferred alternatives.

²² Amended 10-Year Transmission Plan for the State of Colorado To comply with Rule 3627 of the Colorado Public Utilities Commission Rules Regulating Electric Utilities (February 3, 2020) at p. 111.

²³ Decision No. C11-0318, issued March 23, 2011, Proceeding No. 10R-526E, pp. 14-15.

²⁴ Decision No. R11-0077, issued January 21, 2011, Proceeding No. 10R-526E, p. 26.

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- 37. Additionally, a finding that the 10-Year Transmission Plan filed by the Utilities in this Proceeding is adequate should not serve to streamline any CPCN application for projects included in the plan, because the Commission should attach little weight to the information regarding those individual projects, particularly with respect to best-cost.
- 38. When the Transmission Planning Rules were initially promulgated, Commissioner James K. Tarpey, the Hearing Commissioner assigned to Proceeding No. 10R-526E, clarified that:

Even though transmission plans will not carry a rebuttable presumption of need, the utilities shall reference the most recent biennial ten-year transmission plan in any subsequent CPCN application for individual projects contained in that plan. The CPCN application may rely on the information contained in the plan and the decision of the Commission on review of the plan, absent a change in circumstances. See Rules 3206(h) and 3627(i). The weight given to such information will depend on the quality of information presented and other factors discussed in this Recommended Decision. In other words, given sufficient documentation in the biennial ten-year transmission plan for the project under review and if circumstances for the project have not changed, the applicant may rely substantively on the information contained in the plan and the Commission's decision on the review of the plan to support its application.

39. In this Proceeding, the ALJ acknowledges the sensitivity of the Critical Energy Infrastructure Information contained in the inputs to and outputs from the Utilities' transmission modeling software, and the fact that access to the models themselves are governed by licensing agreements. The ALJ concludes that without access to this information, it is simply not possible for the Commission to evaluate whether the proposed Transmission plans adequately provide for the efficient utilization of the transmission system on a best-cost basis as required by Rule 3627(b)(I). The limited access to the modeling further runs counter to another intent of the Transmission Planning Rules: to improve the transparency required for meaningful stakeholder input and Commission review of transmission planning.

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40. As the Utilities well know, the Commission's Rules of Practice and Procedure contain provisions for the treatment of confidential and highly-confidential information. The provisions of Rule 1100(i) govern Staff access to confidential information under annual nondisclosure agreements. Accordingly, the ALJ further finds the Utilities' arguments regarding the confidentiality of modeling inputs and outputs to be without merit.

41. Because the Utilities have failed to provide modeling inputs and outputs, they may not rely on the filings submitted in this Proceeding in subsequent CPCN proceedings as otherwise envisioned by Rule 3627(i).

2. Guidance in the Preparation of the Next Filing

42. Pursuant to Rule 3627(h), the Commission may provide "guidance to be used in the preparation of the next biennial filing." Decision No. R17-0580 clarified that "... absent a Commission decision that limits the applicability of guidance, it makes sense for reasons of continuity and consistency that Rule 3627(h) guidance is carried forward to all future filings, at least for so long as the guidance produces useful and relevant information."²⁵ The same decision further provided that "(a) guidance must be consistent with, and cannot change the substantive requirements of, Rule 3627; (b) guidance may 'include one or more issues the Commission would like the Utilities to consider in connection with development of the next ten-year plan' or all future ten-year plans; (c) 'guidance should instruct parties on how to best comply with the [Rule 3627] requirements' and 'how the required contents of a ten-year plan might be best presented"²⁶

43. Based on the information submitted in this Proceeding, guidance to the Utilities is warranted in the interpretation of Rules 3627(b)(I) and 3627(c)(VI), which concern, respectively:

²⁵ Decision No. R17-0580 at paragraph 316.

²⁶ Id. at paragraph 325.

- (1) "[t]he efficient use of the transmission system on a best-cost basis"; and (2) "[t]he related studies and reports for each new transmission facility identified in the transmission plan including alternatives considered and the rationale for choosing the preferred alternative." In particular, if the identification of transmission alternatives is overly constrained in that it fails to consider less conventional or emerging technical options to addressing transmission issues which, nonetheless, have been demonstrated elsewhere to have reliably and cost-effectively addressed such problems, a given transmission plan cannot be found to provide for "[t]he efficient use of the transmission system on a best-cost basis," and therefore cannot be found to comply with Rule 3627 for the purpose of using the plan in subsequent CPCN proceedings.
- 44. Accordingly, the Commission directs the Utilities to apply a more expansive definition of the word "alternative" as used in Rule 3627(c)(VI). Allowing the Utilities to limit their consideration of alternatives solely to alternate paths, voltages, or conventional power quality mitigation solutions (*i.e.*, limiting consideration to conventional approaches only) would be to deny technological advancements that may offer superior and potentially less costly solutions to maintain or expand the transmission system. Consideration of only a limited scope of alternatives prevents the Commission from ascertaining whether the transmission plans presented by the Utilities will actually provide for the "efficient utilization of the transmission system on a best-cost basis."
- 45. For these reasons, and to assure that the information is included in the future, all subsequent 10-year transmission plan filings must contain:
 - A narrative description of the types of technologies each utility considered in its assessment of alternatives. The list of such technologies shall include but not be limited to non-wires alternatives and the advanced transmission technologies presented in the October 22, 2020 CIM (and included in the record of this proceeding)

- A narrative description of the utility's methodology to identify potential applications for the full scope of alternative technologies considered;
- A list of planned projects for which NWA, an advanced transmission technology or other alternative was actively evaluated;
- A list of planned projects where NWA, an advanced transmission technology or other alternative was selected for implementation; and
- A narrative describing the utility's rationale in each case where a conventional solution is selected rather than an alternative for each project included in the list required above.

3. Consideration of Stakeholder Input

- 46. Rule 3627(g) states that "[g]overnment agencies and other stakeholders shall have an opportunity for meaningful participation in the planning process" and further that "[d]uring the development of the ten-year transmission plan when objectives and needs are being identified, each utility shall actively solicit input from the appropriate government agencies and stakeholders to identify alternative solutions." Further, as noted above, in Decision No. R11-0077, the Hearing Commissioner declined to specify in rule a rationale for selecting between transmission alternatives, but explicitly left that decision-making process to the utilities with input from stakeholders.
- 47. Appendix K to the Utilities' Transmission plan contains written input received from stakeholders following Rule 3627 Webinars conducted in August and September 2019 by Public Service, as well as the Company's response to that input. The Plan also discusses the CCPG process for soliciting and considering input from stakeholders and lists the CCPG meetings in which stakeholders participated. However, the 10-year plan contains no information on requests or suggestions made by any stakeholder present at CCPG meetings, nor how any such input was considered. The ALJ is therefore unable to determine whether or how any such input was considered.

48. Accordingly, the ALJ provides the guidance that all future 10-year plans shall include a record of or copies of stakeholder input from all transmission-related meetings in which stakeholders participate, with accompanying narratives describing the Utilities' consideration of alternatives proposed by stakeholders, any analysis conducted in response to stakeholders' requests, utility decisions regarding stakeholder recommendations or requests, and the utility rationale for such decisions.

4. Continued Need for Rulemaking

- 49. In Decision No. R17-0580, ALJ Mana Jennings-Fader built a compelling case for the Commission to consider opening a rulemaking to modify the Transmission Planning Rules. Briefly summarized, the motivations ALJ Jennings-Fader offered for such a rulemaking were:
 - The existence of FERC-mandated regional planning (under FERC Orders 890 and 1000) raises the question of the relevance of Commission-mandated transmission planning;
 - Despite coordinated regional transmission planning by WestConnect and WECC and statewide planning by CCPG designed to ensure system reliability, each utility develops, and builds in accordance with, its own individual transmission plan based on its identified present and future system needs. Each utility's focus is on maintaining its system reliability in the context of Colorado law pertaining to authority to construct and to operate transmission facilities, the rate impacts of transmission construction, and the potential for CPCN denials of or disallowance of costs for transmission facilities that exceed well-defined needs;
 - At the time her Recommended Decision was issued, none of the three high-voltage transmission projects approved and constructed in Colorado following the promulgation of the transmission planning rules originated in a Commission-approved ten-year plan.
 - Commission decisions on prior ten-year plans yielded widely-differing interpretations of what the transmission planning rules were intended to achieve, and what they require to be contained in subsequent ten-year plans.
 - The transmission planning rules send mixed signals on whether their focus is on coordinated planning for the state or on each individual utility's transmission system.

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50. According to ALJ Jennings-Fader, a rulemaking would allow the Commission to consider rule changes that are responsive to rule deficiencies identified by stakeholders, that incorporate and resolve inconsistencies in prior Commission guidance, and that assure that the guidance reflects and implements the Commission's intent. For example, Rule 3627(h) grants the Commission leeway regarding the rigor of its review over the ten-year transmission plans, but Rule 3627(i) grants utilities the ability to rely on these plans in subsequent CPCN proceedings, with the burden of any challenge to a Commission-approved plan falling on the challenging party.

51. ALJ Jennings-Fader concluded that:

"Leaving the recurring Rule 3627 and ten-year plan issues to be addressed in often conflicting and rarely clear guidance on a ten-year plan-by-ten-year plan basis is inefficient, ineffective, and inelegant. It wastes the time and resources of the Commission, the Utilities, and interested persons. The conflicting and unclear guidance leads the Utilities and interested persons (including Staff) to participate in the transmission planning processes with wildly differing views of the process and the expected outcomes, which creates issues that the Commission must consider (at least on some level) when it reviews a filed ten-year plan."²⁷

- 52. ALJ Jennings-Fader's conclusion that "the Commission, the Utilities, interested persons, and the public interest would be well-served by the Commission opening a rulemaking on the Transmission Planning Rules"28 continues to resonate upon review of the filings and comments submitted in this Proceeding.
- 53. Numerous drivers have emerged recently that are contributing to rapidly changing demands on the transmission system. These include: low and declining costs for renewable resources, many of which have been and will continue to be constructed distant from load centers; the flurry of recent utility decisions to retire coal-fired power plants;²⁹ the advent of NWA and

²⁷ Decision R17-0580 at ¶462.

²⁸ Id. at ¶467.

²⁹ 10-Year Transmission Plan at pp. 43, 52, 106.

advanced transmission technologies that may offer lower-cost alternatives to conventional transmission solutions in some applications;³⁰ and the decarbonization of the Colorado economy in accordance with H.B. 19-1261.31 These drivers add to and amplify ALJ Jennings-Fader's call for a rulemaking on the Transmission Planning Rules.

II. **ORDER**

The Commission Orders That:

- 1. The 10-Year Transmission Plan jointly filed on February 1, 2018 and supplemented on June 8, 2020 by Black Hills Colorado Electric, Inc., Public Service Company of Colorado, and Tri-State Generation and Transmission Association, Inc. (the Utilities) is adequate and is in compliance with Rule 3627, 4 Code of Colorado Regulations 723-3.
- 2. The 20-Year Conceptual Scenario Report filed by the Utilities on February 1, 2018 and supplemented on June 8, 2020 complies with Rule 3627(e).
 - 3. The Utilities shall comply with the guidance contained in this Decision.
- 4. This Recommended Decision shall be effective the day it becomes the Decision of the Commission, if that is the case, and is entered as of the Mailed Date above.
- 5. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.
 - If no exceptions are filed within 20 days after service or within any a) authorized extended period of time, or unless the decision is stayed by the Commission upon its own motion, this Recommended Decision shall

³⁰ Comments of Larry Miloshevich at 4-5.

³¹ 10-Year Transmission Plan at 2.

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become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

- b) If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, this proceeding is bound by the facts set out by the Administrative Law Judge.
- 6. If exceptions to this Decision are filed, they shall not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.

(SEAL)

ATTEST: A TRUE COPY

Doug Dean, Director

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

ROBERT I. GARVEY

Administrative Law Judge