Decision No. R20-0773

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 19R-0654E

IN THE MATTER OF THE PROPOSED AMENDMENTS TO RULES REGULATING ELECTRIC UTILITIES, 4 CODE OF COLORADO REGULATIONS 723-3, RELATING TO INTERCONNECTION PROCEDURES AND STANDARDS.

RECOMMENDED DECISION OF ADMINISTRATIVE LAW JUDGE STEVEN H. DENMAN AMENDING AND ADOPTING RULES

Mailed Date: November 5, 2020

TABLE OF CONTENTS

I. STATEMENT

A. Procedural History.

1. On November 25, 2019, the Colorado Public Utilities Commission issued a Notice of Proposed Rulemaking (NOPR) to amend the rules governing Interconnection Standards and Procedures (Interconnection Rules) within the Commission's Rules Regulating Electric Utilities, 4 *Code of Colorado Regulations* (CCR) 723-3.[1] This NOPR followed the issuance of a previous NOPR in Proceeding No. 19R-0096E,[2] which initially included the Interconnection Rules now the subject of this rulemaking proceeding. By Decision

[1] Decision No. C19-0951 (issued on November 25, 2019).

[2] *See* Paragraph 23 at pages 8 and 9 of Decision No. C19-0951.

No. C19-0822-I (issued October 7, 2019), the Commission severed the Interconnection Rules from further consideration in the ongoing rulemaking in Proceeding No. 19R-0096E.[3]

2. This NOPR proposed substantive changes to the Interconnection Rules. In the NOPR, the Commission noted that, "The Interconnection Rules are presently located within the Renewable Energy Standard Rules (RES Rules) at 4 CCR 723-3-3667 *et seq*. This NOPR proposes to move the Interconnection Rules to a new standalone section within 4 CCR 723-3, comprising Rules 4 CCR 723-3-3850 *et seq*."[4]

3. The Commission noticed the proposed rules, provided with Decision No. C19-0951 in legislative (*i.e*., with strikeouts and underlines) format and in final format, available to the public through the Commission's Electronic Filings (E-Filings) system.

4. The NOPR adopted a schedule for filing comments and invited interested participants to file initial comments no later than January 7, 2020 and to file reply comments no later than January 21, 2020. A public rulemaking hearing was scheduled for February 3, 2020 at 9:00 a.m. The Commission referred this matter to an Administrative Law Judge (ALJ) to preside over rulemaking hearings and for the issuance of a recommended decision.[5] The proceeding was subsequently assigned to the undersigned ALJ.

[3] Issuance of the first NOPR in Proceeding No. 19R-0096E was preceded by an investigation into rulemaking pursuant to § 24-4-103(2), C.R.S. (an outreach process), in which jurisdictional electric utilities and other interested persons submitted comments regarding potential changes to the Interconnection Rules and proposed amendments to the Commission. *See* Proceeding No. 17M-0694E. Before issuing the NOPR in the instant Proceeding, the Commission made many revisions to the proposed Interconnection Rules, addressing statutory changes and comments of participants in Proceeding No. 19R-0096E. *See* Decision No. C19-0951, Paragraph 1 at page 2.

[4] *Id*. Unless appearing in a quote, as in the above Paragraph, citations to rules in this Decision will use the form of citation to administrate rules required by the Commission Standards Manual (2016).

[5] Decision No. C19-0951, Ordering Paragraphs II.A.2 – 6 at pages 20 and 21.

5. On January 7, 2020, initial comments were filed by the City and County of Denver (Denver), the Colorado Energy Office (CEO), the Colorado Rural Electric Association (CREA), the Colorado Solar and Storage Association (COSSA) and the Solar Energy Industries Association (SEIA), Public Service Company of Colorado (Public Service), and Western Resource Advocates (WRA).

6. On January 21, 2020, reply comments were filed by Black Hills Colorado Electric, LLC (Black Hills), COSSA and SEIA, Public Service, SunShare, LLC (SunShare), Vote Solar, and WRA. On January 22, 2020, reply comments were filed by CEO and CREA. On January 31, 2020, public comments were filed by Pivot Energy.

7. Pursuant to the NOPR, the public rule-making hearing was held on February 3, 2020. Oral comments were presented by representatives of Public Service, CEO, COSSA and SEIA, Black Hills, and SunShare. The Participants at the rule-making hearing requested time before filing post-hearing comments within which to attempt to negotiate consensus rules.[6] The ALJ agreed, and by Bench Order, the ALJ set March 4, 2020, as the due date for Participants to file post-hearing comments.

8. On March 2, 2020, COSSA and SEIA filed an Unopposed Motion for an Extension of Time, seeking an extension of time to March 20, 2020 for Participants to file post-hearing comments.[7] Decision No. R20-0134-I (issued on March 2, 2020) extended the due date for Participants to file post-hearing comments to and including March 20, 2020.

[6] Interested persons, government agencies, or organizations that filed written comments or made oral comments at the public rule-making hearing will be referred to in this Decision as "Participants."

[7] Counsel for COSSA and SEIA reported that Public Service, Black Hills, WRA, CREA, CEO, and Vote Solar supported the requested extension, while Denver had no objection, and SunShare took no Position. Thus the motion was unopposed.

9. Joint Consensus Interconnection Rules (Consensus Rules) were filed on March 20, 2020, by Public Service, Black Hills, COSSA and SEIA, and WRA. The Consensus Rules included consensus definitions for certain terms in proposed Rule 3852 and consensus language for proposed Rules 3853, 3854, and 3855.

10. On March 20, 2020, post-hearing comments were filed individually by Public Service, WRA, Black Hills, COSSA and SEIA, and CEO.

11. Pursuant to § 24-4-103(4)(d), C.R.S., an administrative agency conducting a rulemaking proceeding shall adopt the rules within "one hundred eighty days after the last public hearing on the proposed rule[s]." In the case of this Proceeding that deadline was July 31, 2020.

12. By the spring of 2020, the record in this Proceeding contained a large volume of written and oral comments, as well as extensive post-hearing comments and numerous revisions to the proposed rules. In Decision No. R20-0423-I (issued on June 5, 2020), the ALJ found that holding an additional rulemaking hearing was needed to gather additional information from Participants and to help clarify certain issues, so that the ALJ could fully evaluate and consider the arguments and revised rules proposed by the Participants. Decision No. R20-0423-I posed four specific questions for Participants to answer and scheduled an additional, remote rulemaking hearing for Monday, July 27, 2020 at 9:30 a.m. If they wished, Participants could also file additional written comments no later than July 20, 2020.[8]

13. Additional written comments were filed on July 20, 2020 by CEO, WRA, Public Service, Black Hills, CREA, and COSSA and SEIA.

[8] *See* Decision No. R20-0423-I, Paragraphs 10, 11, and 12 at page 4. Because of the novel coronavirus (COVID-19) pandemic and consistent with Colorado emergency declarations and public health advisories to prevent the spread of COVID-19, the ALJ ordered that the rulemaking hearing would be held remotely. *Id.,* Paragraph 13 at page 5.

14. The additional rulemaking hearing was held on July 27, 2020 as scheduled. Oral comments were presented by representatives of COSSA and SEIA, CEO, WRA, SunShare, Public Service, and Black Hills.

B. The Decision and Amendments.

15. In rendering this Recommended Decision, the ALJ has reviewed the record in this Proceeding and has evaluated and considered all written and oral comments submitted by the Participants, even if such comments are not specifically addressed in this Decision. Moreover, the ALJ has considered all arguments presented by the Participants, including those arguments not specifically addressed in this Decision.

16. This Decision does not specifically address every comment or every proposed amendment to the Interconnection Rules, as some were clarifications and edits to existing language or format changes and many were not contested. The Consensus Rules submitted by some of the Participants have been generally adopted with minimal changes to correct grammar, to add clarity, and for consistency with other adopted rules. All revisions and amendments to the Interconnection Rules are recommended for adoption and are incorporated into Attachment A to this Decision, which is in legislative (redline and strikeout) format, while Attachment B to this Decision is a clean version of the amended Interconnection Rules.[9] This Decision primarily addresses the major proposed amendments to the Interconnection Rules that were debated in written comments and during the rulemaking hearings.

[9] Attachment A to Decision No. C19-0951 struck all the current Interconnection Rules and showed the proposed rules in redline format. Attachment A to this Decision starts with those redlines, and then shows the recommended revisions and amendments to the rules in redline format.

17. Being fully advised in this matter and consistent with the findings and discussion below, in accordance with § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record in this Proceeding along with a written recommended decision, order, and amended Interconnection Rules.

II. FINDINGS AND DISCUSSION

A. The NOPR.

18. The statutory authority for the rules proposed here is found at §§ 24-4-101 *et seq.*, 40-2-124, 40-2-130, 40-2-201 *et seq.*, and 40-4-101, C.R.S.

19. The Commission established interconnection standards in 2005 by adopting, in large part, the Federal Energy Regulatory Commission's (FERC) rules for Small Generator Interconnection Procedures (SGIP). The FERC's SGIP procedures were most recently amended in 2013 by FERC Order No. 792[10] and have been significantly revised since the Colorado rules were enacted in 2005. The Commission issued Decision No. C17-0878 on October 26, 2017, in Proceeding No. 17M-0694E to solicit proposals to update its Interconnection Rules "to conform to standards, new interconnection rules, and guidelines promulgated by the FERC,"[11] including those updated standards.

20. The first NOPR in Proceeding No. 19R-0096E addressed the requirements of Senate Bill (SB) 18-009, which requires the Commission to adopt rules allowing the installation, interconnection, and use of energy storage systems.[12] Specifically, SB 18-009 requires the Commission to incorporate the following principles into the rules: (1) barriers to the installation,

[10] FERC Order No. 792, available at https://www.ferc.gov/whats-new/comm-meet/2013/112113/E-1.pdf.

[11] Decision No C17-0878, Paragraph 19 at page 7. *See* Decision No. C19-0951, Paragraphs 12 and 22 at pages 5 and 8.

[12] SB 18-009 is codified at § 40-2-130, C.R.S. (2019).

interconnection, and use of customer-sited energy storage systems in Colorado should be limited; (2) Colorado consumers of electricity have a right to install, interconnect, and use energy storage systems on their property without unnecessary restrictions or regulations and without discriminatory rates or fees; (3) utility approval processes and required interconnection reviews shall be simple, streamlined, and affordable for customers; and (4) utilities shall not require the installation of customer-sited meters in addition to a single net energy meter for purposes of monitoring energy storage systems; except that the Commission may authorize the requirement of metering for certain large energy storage systems, as determined by the Commission.

21. As the Commission proposed in Proceeding No. 19R-0096E and in the NOPR in this Proceeding, the amended Interconnection Rules adopted in this Decision move the Interconnection Rules to a standalone section in the Rules Regulating Electric Utilities, 4 CCR 723-3. Consistent with the NOPR, the amendments propose to: (1) introduce a provision that addresses energy storage, pursuant to SB 18-009; (2) reorganize to consolidate provisions that apply generally to all interconnection requests and to separate out specific provisions that apply only to the Level 1 Process for certified inverter-based installations no larger than 10 kW; and (3) various other modifications to bring the rules up-to-date with recent FERC policies and IEEE standards.[13]

22. When an adopted rule incorporates a Commission rule or an IEEE standard by reference, the requirements of the State Administrative Procedure Act (APA) have been followed in this Decision. The APA requires that the rule identify the citation and date of the incorporated material and state "that the rule does not include any later amendments or editions" of the

[13] Decision No. C19-0951, Paragraphs 6 – 8 at pages 3 and 4.

incorporated material. (*See* § 24-3-103(12.5)(a)(II), C.R.S.) The rule must also state the address of the agency where the incorporated material is available for public inspection.

23. The amended Interconnection Rules adopted in this Decision satisfy the requirements in SB 18-009, particularly that the Commission "adopt rules allowing the installation, interconnection, and use of energy storage systems by customers of utilities."

B. Adopted Rule Amendments.

1. Rule 3850, Applicability.

24. Proposed Rule 3850 derives from the introduction to existing Rules 3850 through 3858. The rule adopts current terms for "small generation" as used throughout the Commission's Electric Rules, 4 CCR 723-3, and references certain updates to FERC policies. Public Service proposed to clarify that the interconnection procedures and standards apply to all interconnection resources not subject to the jurisdiction of FERC. CEO agreed with that clarification. COSSA and SEIA recommended that utility-specific guidelines be consistent with the rules and be reviewable by the Commission upon request. Public Service agreed with COSSA and SEIA's suggestion. COSSA and SEIA and WRA recommended clarification that the Interconnection Rules only apply to electric generation and storage operated in parallel with the utility grid.

25. These recommended changes to Rule 3850 are appropriate and will be adopted. They clarify which distributed energy resource (DER) and interconnection resources will be subject to the Interconnection Rules. Thus, demand response tools and electric vehicles that do not currently operate in parallel and do not export energy will be excluded. The added text also clarifies that the Commission can review utility standards and guidance for consistency when necessary.

2. Rule 3851, Overview and Purpose.

26. The first paragraph of proposed Rule 3851 derives from existing Rule 3667(b)(I)(D) without significant modification, while the second paragraph summarizes the purpose of these Interconnection Rules. The second paragraph of Adopted Rule 3851 incorporates revisions to Adopted Rule 3850 clarifying that the rules apply to interconnection resources that operate in parallel with and are connected to an electric utility.

3. Rule 3852, Definitions.

27. The proposed Interconnection Rules provide several new definitions to integrate energy storage technologies into the rules, in accordance with SB 18-009, and several revised definitions to promote clarity and effectiveness of the rules. Other revisions simplify or update the definitions. Consensus Rule definitions were adopted for export capacity, highly seasonal circuit, inadvertent export, minor modifications, operating mode, and party or parties. The definitions adopted in this Decision apply to Rules 3850 through 3859, 4 CCR 723-3.

4. Rule 3852(d), Energy Storage System.

28. The NOPR introduced a definition for an "energy storage system," consistent with SB 18-009. Commenters suggested that energy storage is not an electric generation source. Another commenter suggested that an energy storage system may be a utility-sited system, not just a customer-sited system. Hence, the adopted definition starts with the statutory definition in § 40-2-130(2)(a), C.R.S., and then adds certain clarifying language suggested by commenters.

5. Rule 3852(l), Interconnection Resource.

29. CEO recommended a separate definition of Interconnection Resource in order to clarify which DERs are subject to the interconnection procedures and standards in these rules and to avoid confusion if all DERs are subject to other Commission rules, such as other electric

rules or distribution system planning rules. This Decision adopts a new definition of Interconnection Resource in Rule 3852(l), and adds language to clarify which interconnection resources fall within the definition. When appropriate throughout the adopted Interconnection Rules, the term "DER" has been changed to "interconnection resource."

6. Rule 3852(m), Interconnection Tariffs.

30. COSSA and SEIA argued that terms in the proposed definition were too broad and could allow utilities to craft interconnection deadlines and procedures different from those contained in the Interconnection Rules. They proposed to require fees in interconnection tariffs to be "reasonable and verifiable" and to strike the words "and deadlines and procedures."

31. These rules will establish interconnection deadlines and procedures, and the ALJ agrees that to allow utilities the option to establish lengthier deadlines and different procedures in their interconnection tariffs would be problematic and could be confusing for interconnection customers. The words "and deadlines and procedures" will be stricken from the definition.

32. The phrase "reasonable and verifiable" is also problematic. When tariffs are filed, the Commission determines whether fees included in the tariffs are just and reasonable. As part of the Commission's determination on whether tariffed fees are just and reasonable – that is, should the tariffs be set for hearing and suspended or allowed to become effective by operation of law – the Advisory Staff and Commissioners necessarily verify whether the filing supports a conclusion that the fees are just and reasonable. If the Commission determines that the tariff and fees are not just and reasonable, the tariff is set for hearing and suspended.[14] Hence, it is redundant and unnecessary to include in the definition a requirement that fees must be

[14] *See* § 40-6-111, C.R.S.

"reasonable and verifiable." Moreover, in this context does the word "verifiable" mean something more than "just and reasonable?" If it does, the word "verifiable" is vague and overbroad. Therefore, the definition will strike the phrase "reasonable and verifiable."

7. Rules on "Large Utility" and "Small Utility."

33. COSSA and SEIA proposed new definitions for "Large" and "Small" utilities where the differentiation was serving either more or less than 75,000 meters within the utility's service territory. This proposal, they argued, would address concerns raised by some smaller electric utilities that have fewer resources to process interconnection requests. Public Service disagreed and asserted that the number of 75,000 meters is arbitrary.

34. The ALJ does not agree that the rules should differentiate between large and small utilities. Based upon the record in this rulemaking, the ALJ agrees that the selection of 75,000 meters as the dividing line between large and small utilities is arbitrary. The timeframes, deadlines, and procedures in these Interconnection Rules should be appropriate for smaller utilities and larger utilities alike. The language adopted for Rule 3853(p), Interconnection Tariffs, makes it unnecessary to adopt different interconnection rules for large versus small utilities. When appropriate, larger utilities could propose shorter timeframes in their interconnection tariffs.

8. Rule 3852(n), Material Modification.

35. COSSA and SEIA proposed that the definition of material modification includes additional exemptions. Public Service opposed COSSA/SEIA's inclusion of the direct current

(DC) / alternating current (AC) ratio (DC/AC ratio) as an exclusion within material modifications. Public Service argued that:

> While a change in DC/AC ratio does not change the maximum export, use of a DC/AC ratio above 1.2 more significantly impacts the duration of that maximum export. [This use of a DC/AC ratio above 1.2 would change] the technical evaluation of the maximum export against minimum load, which is time-of-day dependent. This also changes evaluations under PV Watts to the 120 percent rule, as the default DC/AC ratio within PV watts is 1.2.[15]

36. The added exemptions proposed by COSSA and SEIA would not have material impacts within the intent of the definition, except for a change in DC/AC ratio. The ALJ will adopt the changes proposed by COSSA and SEIA, except for the final exemption regarding the DC/AC ratio.

9. Rule 3852(x), Transmission System.

37. The proposed Interconnection Rules did not contain a definition of transmission system. Some commenters recommended using the same definition as "transmission facilities" from the existing Electric Utility Rules.[16] The ALJ believes that using the same definition for two different concepts would merely be confusing. Moreover, the definition of "transmission facilities" includes the term "transmission system," and it is unacceptable to define a term by using the term itself in the definition. COSSA and SEIA proposed a very simple definition.[17] Public Service recommended adopting the North American Electric Reliability Corporation (NERC) definition for "Transmission" with a slight modification.

[15] Reply Comments of Public Service Company of Colorado, page 11.

[16] *See* Rule 3001(kk) of the Rules Regulating Electric Utilities, 4 CCR 723-3 (2020). The Electric Utility Rules do not contain a definition of "transmission system."

[17] "Transmission system" means a utility's higher voltage network that transports bulk power over longer distances than the distribution system. COSSA/SEIA Opening Comments, Attachment A, pages 3 and 4.

38. The ALJ concludes that the definition proposed by Public Service, derived from NERC's definition of transmission is the most suitable for purposes of these Interconnection Rules. NERC's definition is closer to an industry standard than other proposed definitions of transmission system.[18]

10. Rule 3853, General Interconnection Procedures.

39. Provisions that govern all interconnection requests are currently spread throughout Existing Rule 3667. The NOPR consolidated the generally applicable provisions under proposed Rule 3853, and this Decision will do the same.

40. The NOPR used 20kW as the nameplate rating demarcation point for smaller interconnection resources and also did not explain whether the resource was DC or AC, *e.g.* in proposed Rules 3853 and 3854. Based upon the record in this proceeding, the nameplate rating demarcation point will be increased to 25 kW, which is consistent with interconnection procedures adopted in Arizona and Minnesota. For clarity, the interconnection resources will be identified as AC.[19]

11. Rule 3853(a), Pre-application Procedures.

41. Proposed Rule 3853(a)(IV) includes a new option for customers to request a pre-application report. The intent of the proposed language is to expedite the implementation of the formal interconnection requests by customers. In addition, the proposed rule sets a maximum fee for a pre-application report at $300. CREA and Black Hills recommended that the $300 fee

[18] Decision No. R20-0423-I also sought additional comments on the terms "mainline" and "Witness Test," which were not defined in the NOPR rules. After considering Supplemental Comments filed by Participants, the ALJ has determined that the rules do not require formal definitions of these terms.

[19] There is no DC electricity on the utility grid in Colorado, except for high voltage DC-to-AC conversion facilities at state borders. The use of AC makes it clear and consistent with all other generation on the utility grid.

be deleted and replaced with a fee to be set in a utility's interconnection tariff. Some commenters suggested to add language to Rule 3953(a)(IV) to increase transparency in the pre-application process, including that, when a utility cannot complete a pre-application report due to a lack of data, the utility must explain what data is not available and why.

42. The ALJ agrees with CREA and Black Hills that the $300 fee should be replaced with a fee to be set in a utility's interconnection tariff under proposed Rule 3853(p). The ALJ also will adopt language in Rule 3953(a)(IV) and Rule 3953(a)(IV)(D) to increase transparency in the pre-application report.

43. COSSA and SEIA argued that proposed Rule 3854(a)(IV)(E) should require that the utility provide the limiting conductor's ratings and length from the proposed point of interconnection to the distribution substation. Public Service opposed this suggestion and asserted that it might require setting up and performing circuit traces within the geographical information system, which could add cost and more time to the pre-application process. The ALJ agrees that the rule should not add cost and more time to the pre-application process, and the adopted rule will not require conductor length and ratings to be provided.

12. Rule 3853(d), Interconnection Requests.

44. Proposed Rules 3853(d)(I) through (V) would require new interconnection requests to be submitted when there are significant modifications to the proposed interconnection resource, but new requests would not be required for minor modifications.

45. CREA recommended that the interconnection queue order be based on the date an application is deemed complete rather than the date it is first received. The ALJ will adopt this revision, which should ensure that completed applications will be prioritized over incomplete applications, and could encourage ICs to be more attentive to their interconnection requests.

46. COSSA and SEIA propose additional specificity in proposed Rule 3853(d)(VI) to create a process for evaluating modifications to interconnection requests. These changes would explicitly define a dispute resolution process for when an interconnection customer and a utility may disagree about what modifications are material. COSSA and SEIA also proposed to allow smaller Level 1 applicants to demonstrate site control by signing the interconnection application. Public Service noted that in its Community Solar Gardens (CSGs) program, site control is considered part of the scoring criteria for CSGs in current Requests for Proposals, but it does not prohibit a new site from being selected later, unless the site was chosen for location-related reasons.

47. The ALJ concludes that these revisions will add transparency and will make more information available to interconnection customers. Adding a process for evaluating modifications to interconnection requests will also be helpful for both the utilities and the ICs. These suggested revisions will be adopted.

13. Rule 3853(f), Interconnection Agreements.

48. Proposed Rule 3853(f)(I) is a new provision clarifying that an interconnection agreement is required when an interconnection customer's interconnection resource operates in parallel with the utility's system. Proposed Rule 3853(f)(III) adds language that brings the process to a close when the utility provides an executed agreement to the interconnection customer. Proposed Rule 3853(f)(IV) adds a provision to ensure that the interconnection customer abides by rules, tariffs, and the interconnection agreement. Proposed Rule 3853(f)(V) adds provisions to clarify that the interconnection customer is responsible for the costs of utility upgrades or facilities that are necessary for the interconnection, but not required to serve other

customers, and that the utility must identify such upgrades and facilities up front in the interconnection agreement.

49. COSSA and SEIA argued that Rule 3853(f)(V) requires an interconnection customer to be responsible for the utilities' reasonable and necessary cost of upgrades necessary to interconnect the resource. However, COSSA and SEIA noted that some utilities are now issuing "no capacity notices" and foreclosing interconnection applications at particular popular sites. COSSA/SEIA propose revisions to this rule to prohibit utilities from refusing to study the costs of upgrades to facilitate interconnection, so long as the interconnection customer is willing to pay for the necessary studies. SunShare agreed with COSSA and SEIA's revision to prohibit utilities from issuing "no capacity notices."[20]

50. Public Service disagreed with COSSA and SEIA's proposed redlines requiring fixed costs for interconnection facilities because it would be, at times, inconsistent with the principle of cost causation. Regarding "no capacity notices," Public Service asserted that since it filed Closing Comments on March 20, 2020, it has been working with COSSA and SunShare to resolve issues relating to no capacity notices.

51. The ALJ agrees with COSSA and SEIA and SunShare that utilities should not be allowed to refuse to study the costs of upgrades to facilitate interconnection, so long as the interconnection customer is willing to pay for the necessary studies. The ALJ was encouraged to learn that Public Service has been working with COSSA and SunShare to resolve the issues related to no capacity notices. The proposed revisions to Rule 3853(f)(IV) will be adopted.

[20] SunShare suggested moving COSSA and SEIA's revision from Rule 3853(f) to Rule 3853(e)(V), regarding evaluating Interconnection Agreements. However, the ALJ rejects to moving this language to Rule 3853(e)(V), because this revision relates to the responsibility of interconnection customers to pay certain utility costs, not to the evaluation of interconnection requests.

14. Rule 3853(g), Reasonable Efforts.

52. Proposed Rule 3853(g) is the same as existing Rule 3667(e)(I). COSSA and SEIA recommend that proposed Rule 3853(g) be modified to require that a utility notify both the interconnection customer and the Commission when the utility is unable to meet a deadline. COSSA and SEIA believe such a requirement would encourage utilities to meet deadlines and would provide the Commission with information for future enforcement decisions, such as assessing civil penalties when utilities miss deadlines.

53. Public Service asserts that any reporting to the Commission should be reasonable and combined with existing reporting already required to avoid unnecessary duplication and administrative burden.

54. The ALJ agrees with COSSA and SEIA in part. Rule 3853(g) will be modified to include a reciprocal notification requirement when either the utility or the interconnection customer is unable to meet a deadline in the Interconnection Rules. The proposed requirement that the utility must notify the Commission when it fails to meet a deadline is unnecessary, since adopted Rule 3853(q), to be discussed *infra*, will require utilities to report a significant amount of information regarding interconnection requests, including processing times for various activities under the Interconnection Rules.

55. The proposed notification requirement, if adopted, could also be unworkable as a practical matter. As described in comments, this notification proposal has no procedures or process connected to it. Apparently, such notifications would be filed with the Commission, but not in an existing proceeding. What sort of proceeding would this notification be? As an initial filing, the Commission's Administrative Staff would assign a proceeding number to every such notification. Will the Commission be required to give notice of the filing? What happens then to

the proceeding?[21] To adopt such a notification requirement could create more confusion and questionable expense of the resources of the Commission and its Staff, the utilities, and interconnection customers without advancing the goals of the proposal. Moreover, adopted Rule 3853(h), to be discussed *infra*, will set forth a dispute resolution process tailored to the interconnection process. In the event an interconnection customer believes that Rule 3853(h) is inadequate to resolve its dispute with a utility, the Rules of Practice and Procedure contain ample, workable, and time-tested procedures for bringing disputes between regulated utilities and customers before the Commission and resolving them.[22]

15. Rule 3853(h), Disputes.

56. Proposed Rule 3853(h) is the same as Existing Rule 3667(e)(II). COSSA and SEIA recommended that proposed Rule 3853(h) be modified to allow Commission Staff (Staff) to assign a dispute resolution service if the parties cannot agree upon one themselves. COSSA and SEIA's proposed Rule 3853(h)(IV) would prohibit utilities from recovering from ratepayers the costs to resolve interconnection disputes. They argue that if utilities are reimbursed for any dispute costs they have no incentive to resolve disputes quickly, while making utility shareholders pay for dispute costs puts pressure on utilities to avoid such costs or to resolve disputes expeditiously.

57. CEO recommended that proposed Rule 3853(h) be modified by designating an interconnection "ombudsperson" to help track and facilitate the resolution of disputes.

[21] *See e.g.,* Rules 1202 (Pleadings), 1206 (Commission Notice), 1211 (E-Filings System), 1300 (Commencement of Proceedings) of the Rules of Practice and Procedure, 4 CCR 723-1 (2020).

[22] *See e.g.,* Rules 1301 (Informal Complaints and Mediation), 1302 (Formal Complaints and Show Cause Proceedings), and 1308 (Responses: Generally – Complaints) of the Rules of Practice and Procedure, 4 CCR 723-1 (2020).

58. Public Service noted that the integrated nature of a utility's power system, in order to ensure reliability during both normal operations and in response to disturbances, can be highly technical and unique to a system. Public Service disagreed with COSSA and SEIA's recommendation, asserting that mutual agreement for the selection of a dispute resolution service is essential to ensure that this complexity can be fully recognized and represented within dispute resolution.

59. Black Hills strongly disagreed with COSSA and SEIA's proposal that investor-owned utilities should be precluded from recovering any costs associated with interconnection disputes. Black Hills argued that their proposal: (1) failed to provide any legal argument why a utility's interconnection services are not prudently-incurred costs, recoverable from customers; (2) failed to assess any impact on provision of safe and reliable service if utilities were precluded from recovering their costs for interconnections; and (3) inappropriately attempted to punish investor-owned utilities, as compared to other Colorado utilities, without any basis.

60. With the substantial utility reporting requirements (*see* adopted Rule 3853(q) *infra*), the ALJ concludes that the proposed modifications to Rule 3853(h) are not necessary. The new reporting requirements should provide valuable background information to the Commission related to issues surrounding interconnections. There is no competent objective evidence in the record to support COSSA and SEIA's argument that prohibiting a utility from recovering dispute resolution costs will provide any real incentive to avoid such disputes or to resolve them quickly. The costs to resolve such disputes are recognized operating expenses recoverable from

ratepayers, just like a utility's costs of regulatory litigation are recovered from ratepayers.[23] This proposal also appears to prejudge which party should prevail in an interconnection dispute before any dispute resolution process is started or litigated.

61. CEO's proposal to designate an ombudsperson to help track and facilitate the resolution of interconnection disputes is also unneeded. The proposal had no procedure for appointing an ombudsperson, no indication of who would appoint the ombudsperson, and no indication of how it would be funded. The adopted Rule 3853(g) on disputes, existing Commission rules on complaints and mediation, and the competence and experience of the Commission's Staff and Administrative Law Judges are quite sufficient to facilitate the resolution of interconnection disputes.

62. Minor revisions have been made to adopted Rule 3853(h) for clarification.

16. Rule 3853(i), Interconnection Metering.

63. Proposed Rule 3853(i) is based on existing Rule 3667(e)(III), but the NOPR added a cross-reference to the Commission's proposed new Net Metering Rules, which are still under consideration and have not yet been adopted.[24]

64. Public Service argued that the proposed rule goes beyond SB 18-009, because that Act does not address load metering. Since SB 18-009 does not address load metering, Black Hills agreed with Public Service that the load metering language should be removed.

---

[23] *See Mountain States Telephone and Telegraph v. Public Utilities Comm'n.*, 576 P.2d 544, 547 (Colo. 1978) ("On the basis of the constitutional and statutory grant of legislative authority, the PUC has always allowed Mountain Bell to charge off as a proper operating expense attorneys' fees and legal costs incurred in its efforts before the PUC to increase rates.")

[24] *See* Decision No. C20-0661-I (issued on September 15, 2020) in Proceeding No. 19R-0096E, which severed the Renewable Energy Standard and Net Metering Rules from the other proposed electric utility rules. Because the Net Metering Rules have not been finalized and adopted, the reference in Rule 3853(i) to the Net Metering Rules has been changed to "other Commission rules."

65. The ALJ agrees with Public Service and Black Hills that SB 18-009 does not address load metering. The ALJ will remove the load metering language from adopted Rule 3853(i).

66. Public Service recommended that the exemption of energy storage systems from additional metering requirements should be lowered from 500 kW to 20 kW, because 500 kW energy storage systems could cause significant impacts on distribution feeder circuits. Public Service argued that visibility is a critical component in grid modernization initiatives, requiring an understanding of the gross generation and load levels in order to plan and to operate a stable grid effectively and efficiently.

67. Black Hills agreed with Public Service that the additional metering exemption threshold should be lowered to 20 kW from 500 kW. For Black Hills, the introduction of energy storage systems on its grid is a new and evolving process, necessitating a measured approach to exempting metering requirements. According to Black Hills, as more information is obtained on the impact of these systems on its grid, raising this metering over time could be appropriate.

68. Based on the record in this rulemaking, the ALJ agrees that the exemption of energy storage systems from additional metering requirements should be lowered from 500 kW to 25 kW AC. (This revision is consistent with revisions of 20 kW to 25 kW in other adopted Interconnection Rules.)

69. CEO noted that Rule 3853(i) contains the phrase "cost effective retail renewable distributed generation." CEO believed this text is legacy language from the Renewable Energy Standard Rules and is outside the scope and purpose of this interconnection rulemaking.

70. The ALJ agrees with CEO, and the phrase, "cost effective retail renewable distributed generation," will be removed from the adopted Rule 3853(i).

17. Rule 3853(o), Insurance.

71. Proposed Rule 3853(o) derives from existing Rule 3667(e)(XI), but deletes the requirements that interconnection customers must carry liability insurance for bodily injury and that the utility be named as an additional insured, but only implies that interconnection customers pay for the insurance and that insurance coverage be for each occurrence. Under the proposed rule, a utility could only require an applicant to purchase insurance covering "Utility Damages" and with coverage limits less than the existing rule. In the NOPR, the Commission believed that the modifications to the existing insurance rule were consistent with best practices in other states. The NOPR sought comments on whether the proposed insurance provisions are appropriate.[25]

72. Public Service recommended that the insurance levels not be changed significantly at this time. Its concern appears to be that the insurance levels in the existing rule may have already been evaluated and adopted within Xcel operating companies. It proposed adding language to state that the "interconnection customer is not required to provide general liability insurance coverage as part of this agreement." While Public Service found that the proposed rule provides some flexibility for the interconnection customer, it was concerned that the language was both ambiguous and potentially restrictive on the utilities. Black Hills agreed with Public Service.

73. CREA generally opposed the proposed rule decreasing the required amounts of insurance and specifically opposed eliminating all insurance requirements for inverter-based generating facilities smaller than 1 MW and for non-inverter-based facilities smaller than 50 kW. CREA asserted that the current insurance requirements are appropriate and should not be significantly modified. Black Hills agreed with CREA.

[25] Decision No. C19-0951, Paragraph 54 at page 13.

74. WRA argued that interconnection customers need not carry insurance to protect the utility or utility equipment, as long properly written interconnection rules are applied rigorously by the utility. The ALJ rejects this argument as without merit, as the stated rationale is illogical and specious. Whether the interconnection rules were written properly or applied rigorously by the utility may be in the eye of the beholder, but in any event could only be determined after damage to utility property has occurred. Such a rule, if adopted, would likely result in more litigation over: (1) whether the interconnection rules were written properly; (2) whether the rules were applied rigorously by the utility; (3) who was liable for any damages to utility property; and (4) if liability is found, the amount of monetary damages. The insurance requirements of adopted Rule 3853(o) are intended to avoid these potential problems.

75. CEO supports proposed Rule 3853(o), and suggested several clarifications and minor edits. First, for non-inverter-based Generating Facilities, no amount or requirement is listed for systems with a nameplate rating of less than 50 kW; explicit clarification here would be beneficial. CEO suggests that the statement "no additional insurance" provides greater clarity than "no insurance," and recommends this clarification.

76. The ALJ finds that the proposed insurance requirements in Rule 3853(o) are necessary and important to protect interconnection customers, the utilities, utility consumers, and the public interest. The ALJ agrees with the clarifications proposed by CEO. Adopted Rule 3853(o) will also clarify that interconnection customers shall pay for the required insurance coverage and that the required coverages be for each occurrence.

18. Rule 3853(p), Implementation by Tariff.

77. Proposed Rule 3853(p) would establish requirements for tariff filings from the utilities that set forth certain interconnection fees and deadlines. Tariff filings would

accommodate utility-specific costs and procedures, which were particular concerns for the rural cooperatives in Proceeding No. 19R-0096E, while allowing for appropriate statewide standardization in the provisions set forth in the Interconnection Rules. Specifically, the rule proposed that a tariff be required to address fees, timelines, material modifications, maximum rated capacity, and insurance.[26]

78. COSSA and SEIA opposed proposed Rule 3853(p) and suggested limiting interconnection tariffs to cover only utilities' fees, costs, or charges associated with interconnection applications or other procedures. COSSA and SEIA stressed, however, that any utility specific documents should not circumvent the timelines or procedures in the Interconnection Rules.

79. Public Service was concerned that proposed Rule 3853(p) would elevate into Commission rules, program elements that are now more appropriately handled in program policies and guidelines.

80. Black Hills recommended that Rule 3853(p) be revised to allow utilities to propose appropriate fees for Commissioning Tests (under Rule 3853(j)) in their Commission-approved interconnection tariffs. Black Hills noted that the costs for undertaking Commissioning Tests may differ between utilities. The ALJ agrees for that reason that it is appropriate to include fees for undertaking Commissioning Tests in interconnection tariffs.

81. CEO was concerned that, if certain baselines or parameters were not established in this proceeding, then utility tariff filings will become litigated proceedings addressing these topics, resulting in a patchwork of utility-specific policies.

[26] Decision No. C19-0951, Paragraph 55 at pages 13 and 14.

82. Adopted Rule 3853(p) is intended to address the large versus small utility versus cooperative electric association issues raised by some commenters, and it will provide flexibility for certain unique electric utilities. The adopted rule also clarifies the information that a utility needs to file in the interconnection tariff.

83. A "Rule" is an administrative "agency statement of general applicability and future effect implementing, interpreting, or declaring law or policy or setting forth the procedure or practice requirements of any agency."[27] The Commission's rules set forth general requirements consistent with that definition, while tariffs are utility-specific.[28]

84. In the past, the Commission has adopted rules setting forth general criteria and requirements to be included in tariffs and requiring that utilities file tariffs in compliance with the rules. For example, the Commission's rules for filing line extension tariffs and gas transportation tariffs followed this process.[29] After the general (and less complex) line extension rules became effective, each electric and natural gas utility was required to file line extension tariffs to comply with the rules.[30] After the first gas transportation rules became effective, each natural gas utility filed gas transportation tariffs to comply with the rules.[31] Thus, adopted Rule 3853(p) is not unusual or unreasonable because it sets forth the general criteria and requirements to be

[27] *See* § 24-4-102(15), C.R.S. (2019).

[28] *See* Rules 1210 of the Rules of Practice and Procedure (Tariffs and Advice Letters), 4 CCR 723-1; Rule 3108 of the Rules Regulating Electric Utilities (Tariffs), 4 CCR 723-3; Rule 4108 of the Rules Regulating Gas Utilities and Pipeline Operators (Tariffs), 4 CCR 723-4.

[29] *See e.g.*, Rule 3210, 4 CCR 723-3, and Rule 4210, 4 CCR 723-4 (line extension); Rules 3303(c), 3304(e), and 3305(d), 4 CCR 723-3, and Rule 4303, 4 CCR 723-4 (meter testing); and Rule 4205, 4 CCR 723-4 (gas transportation).

[30] *See e.g.,* Rule 31 of the Rules Regulating the Service of Electric Utilities, 4 CCR 723-3 (2001); Rule 30 of the Rules Regulating the Service of Gas Utilities, 4 CCR 723-4 (2001).

[31] The first Gas Transportation Rules were adopted on April 17, 1991 and became effective on May 30, 1991. Rule 2.1 of the Gas Transportation Rules, 4 CCR 723-17 (1991), required all Colorado Local Distribution Companies to file tariffs including their rules, regulations, terms, conditions, and rates and charges for gas transportation service.

addressed in interconnection tariffs and requires that utilities file tariffs complying with the Interconnection Rules.

85. If the Commission finds that a utility's interconnection tariff is improper and fails to comply with the Interconnections Rules, the Commission could set the tariff for hearing and suspend its effectiveness; as a result of the hearing process, a just and reasonable interconnection tariff would be established. If the Commission finds that a utility's interconnection tariff is proper and complies with the Interconnections Rules, the Commission could allow the tariff to become effective.[32] CEO was concerned that these tariff filings will become litigated proceedings. However, this process for the Commission to determine just and reasonable tariffs is normal under Colorado's file-and-suspend scheme for regulating public utility rates, charges, classifications, practices, rules, and regulations. As an independent regulatory agency, this Commission is quite experienced in and accustomed to setting utility filings for hearings when necessary and then rendering a fair decision that adjudicates just and reasonable results.

19. Proposed Rule 3853(q), Reporting.

86. The NOPR did not propose a rule on reporting requirements. CEO recommended that the Commission adopt, as proposed Rule 3853(q), the reporting framework provided in the Interstate Renewable Energy Council's (IREC's) Model Interconnection Procedures with several modifications.[33] IREC recommends that each utility should report the relevant interconnection data to the Commission two times per year, including relevant totals for both the year and the

[32] *See* § 40-6-111, C.R.S. (2019).

[33] Decision No. R20-0423-I requested additional comment on the proposed reporting rule, noting that, "In its post-hearing comments CEO proposed, for the first time, Rule 3853(q), which would require each utility to submit an interconnection report to the Commission twice per year on a number of interconnection-related topics." *See* Decision R20-0423-I, Paragraphs 11.a and 12 at page 4; Ordering Paragraph 1 at page 7.

most recent reporting period, and make its interconnection reports available to the public on its website.[34]

87. Public Service asserted that it had a total of 54,270 private solar installations, which number continues to grow daily. Characterizing the reporting rule as arduous and laborious, Public Service opposed the rule, arguing that the extensive reporting required would create a regulatory burden, as its systems are not currently designed to provide such detailed reporting information. From Public Service's written and oral comments at the second rulemaking hearing, the ALJ could not determine whether the reporting requirements were in fact burdensome, arduous, and laborious.

88. Black Hills opposed proposed Rule 3853(q), arguing that it deviated materially from the requirements of FERC Order No. 792, which contains no such similar reporting concept.

89. In the NOPR, the Commission invited Participants to submit alternative proposed rules. Based upon the record in this rulemaking, the ALJ concludes that reporting of this interconnection data two times per year will further increase transparency and will provide beneficial background information to the Commission and Staff when they address interconnection issues. Black Hills noted that it already reports to the Commission much of the information contained in proposed Rule 3853(q) on a monthly basis. Adopted Rule 3853(q) includes most of CEO's proposed reporting requirements with certain modifications intended to promote fairness. If a utility needs more time to update systems to be able to fulfill the reporting requirements in Rule 3853(q), it can always file an appropriate pleading showing good cause for an extension of time.

[34] *See* IREC's Model Interconnection Procedures, Attachment 9.

20. Rule 3854, Level 1 Process.

90. Provisions governing "Level 1" interconnections are dispersed throughout existing Rule 3667. In the NOPR, these rules were consolidated under proposed Rule 3854. Proposed Rule 3854(a)(IV) replaced the components of the initial Level 1 review with the screens applied in the Level 2 process. This change allows for existing Rules 3667(f)(IV)(A) through (D) to be eliminated. Proposed Rule 3854(b) contains the same outline for a Level 1 interconnection application as found in existing Rule 3667(g) with additional information required for energy storage systems.

91. Public Service asserted that timeframes in proposed Rule 3854 should be consistent with the updated FERC SGIP and be based on business days, noting that the SGIP timeframes represent compromised timeframes that were developed by an extensive input process facilitated by the FERC. Public Service argued that the timeframes represent the maximum allowable time and need to be suitable for a wide range of technologies and interconnection volumes over a variety of utility characteristics and designs. Public Service proposed to add Rule 3855(a)(V), permitting utilities to use more advanced screening within the Level 1 process. Black Hills agreed with that addition.

92. Public Service asserts that a certificate of completion provides the needed written notification that wiring has been installed and then inspected by the authority having jurisdiction prior to allowing parallel operation of the system. Public Service argues that any change that does not provide similar written assurance of safety prior to allowing parallel operation with the utility would not be acceptable. COSSA and SEIA suggested that the "Certificate of completion" be removed throughout the interconnection process, arguing that a Certificate of competition is

just a form in which the interconnection customer attests to having completed the electrical wiring inspection and the associated permit must also be provided.

93. CEO recommended that the increase in the upper limit for system size to be processed under Level 1 should be extended to 25 kW, as specified in the IREC Model Interconnection Procedures. CEO noted that corresponding changes should be referenced in other subparagraphs of Rule 3854(b).

94. WRA recommended that the timeline for screening Level 1 applications should be seven business days. This change should be made in Rule 3854(a)(IV). WRA also recommended that Level 2 applications should be screened within 15 business days, consistent with proposed Rule 3855(b).

95. COSSA and SEIA supported CEO's recommendation to raise the Level 1 process to 25 kW inverter-based systems, consistent with what they believe to be best practices from other states that use 25 kW or higher for their Level 1 threshold.

96. Based on the record in this rulemaking, adopted Rule 3854 changes 20 kW to 25 kW AC. The proposed small utility language in proposed Rule 3854(a) has been deleted as inconsistent with the FERC SGIP. Deadlines have been stated in business days and have been conformed to the FERC SGIP when appropriate. In some instances, for example when the proposed rules stated 15 days and IREC suggested 7 days, 10 business days were adopted as a reasonable compromise. The certificate of completion has been retained, as it focuses on wiring and inspections by the authority with local jurisdiction.

21. Rule 3855, Level 2 Process (Fast Track).

97. The introduction to proposed Rule 3855 updates the introduction to existing Rule 3667(c), which was adopted without modification in the initial promulgation of the

RES Rules in Proceeding No. 05R-112E. The eligibility criteria for the Level 2 Process have been modified substantially in proposed Rule 3855(a).

98. Public Service proposed to add subparagraph (V) to Rule 3855(a), asserting that similar language was adopted in Minnesota.

> The technical screens shall not preclude the utility from utilizing tools that perform screening functions using different methodology given that the analysis is aimed at preventing the same voltage, thermal and protection limitations as the initial and supplemental review screens under 3855.[35]

Black Hills agreed. Adopted Rule 3855(a) includes revisions for clarity and adds Rule 3855(a)(V), which the ALJ finds to be reasonable.

99. Proposed Rule 3855(b) derives from existing Rule 3667(c)(II). Proposed Rule 3855(b)(I) adds a provision that requires the Level 2 "supplemental review" for highly seasonal circuits. Proposed Rule 3855(b)(V) has been updated to reference the most current IEEE standards.

100. WRA proposed to add a new subparagraph (XII) to Rule 3855(b) that would screen for proposed interconnection resource installations that are larger than the customer's existing or augmented electrical service provided by the utility:

> The nameplate capacity of a proposed interconnection resource, in combination with the nameplate capacity of any previously interconnected interconnection resource, shall not exceed the capacity of the customer's existing electrical service unless there is a simultaneous request for an upgrade to the customer's electrical service, regardless of exporting or non-exporting designations for any of the interconnection resources.

WRA argued that safety and reliability would be jeopardized if the DER could export more energy than the electrical service allows at the location. Public Service and Black Hills

[35] Public Service Closing Comments at p. 17.

supported the new subparagraph. Adopted Rule 3855(b) includes revisions for clarity and adds Rule 3855(b)(XII), which the ALJ finds to be reasonable.

101. Proposed Rule 3855(c) is based on existing Rule 3667(c)(II)(E), regarding the "customer options meeting" in the event a proposed interconnection fails the Level 2 screens. The provisions are largely unchanged, except that proposed Rule 3855(c)(II)(B) now would require the utility to offer the customer a supplemental review with a good faith estimate of the costs and time of such review. The supplemental review is addressed in detail in proposed Rule 3855(d), which is based on existing Rule 3667(c)(III).

102. CEO recommended adding to Rule 3855(c)(I) language to require the utility to provide detailed information to the IC in writing on the reason(s) for failure.

103. Adopted Rule 3855(c) and (d) include revisions for clarity and adds CEO's proposed language to Rule 3855(c)(I), which the ALJ finds to be reasonable.

22. Rule 3856. - Level 3 Process (Study Process)

104. Proposed Rule 3856 tracks existing Rule 3667(d) with certain changes discussed in the NOPR. The introduction to the rule is based on existing Rule 3667(d)(I), and proposes to increase the maximum size for the interconnection resource eligible for the Level 3 Process from 10 MW to 20 MW.

105. Proposed Rule 3856(a)(IV) adds a provision to existing Rule 3667(d)(II)(D), setting a deadline for the utility to provide an executable interconnection agreement if the utility and the customer were to reach a mutual agreement on the lack of need for studies related to "simpler projects."

106. WRA recommended that the restriction in Proposed Rule 3856 limiting applications to 20 MW be removed, arguing that the Study Process is a very thorough vetting of

a proposed project, and as such can handle proposals for any size application. WRA argued there is no need for a limitation in the rules, because if the proposed project is too large, the utility would not approve it.

107. COSSA and SEIA proposed a clarification that the decision to enter into the Level 3 study process should be at the discretion of the interconnection customer, since responsibility for the costs falls to the customer. SunShare agreed.

108. COSSA and SEIA also proposed, in a new Rule 3856(a)(V), to permit Level 3 studies, including "feasibility studies," "scoping studies," and "facilities studies," to be combined and run in parallel.

109. Public Service opposed COSSA/SEIA's proposal, arguing that the requirement to combine all studies into a single study is not the industry norm or how Public Service performs interconnection studies. According to Public Service industry practice, as reflected in the FERC SGIP process, is to perform preliminary studies to determine facility needs and potential impacts prior to performing a detailed study to determine exactly what must be done.

110. Black Hills opposed including timelines in the Level 3 Study Process. Black Hills asserted that currently it works with interconnection customers to develop mutually agreeable study timelines, meeting the needs of its customers and balancing the imposition of unnecessary utility costs. If timelines are included in the Level 3 Study Process, Black Hills argued that the timelines should be addressed in utility interconnection tariffs and that the utility should be able to seek reasonable time extensions, when unknown circumstances outside of the utility's reasonable control may warrant extensions of time.

111. Adopted Rule 3856 removes the language limiting applications to 20 MW. The ALJ agrees that the Level 3 Study Process should be a thorough vetting of a proposed project

and should be able to handle proposals for any size application. The ALJ agrees with WRA that, if the proposed project is too large, the utility would likely not approve it.

112. Adopted Rule 3856(a)(V) will adopt COSSA and SEIA's proposal to permit a single Level 3 study to be combined to include feasibility studies, scoping studies, and facilities studies. Adopted Rule 3856(a)(VI) will require a utility to offer a developer the opportunity to pay full fees upfront and proceed straight to the system impact study. Adopted Rule 3856(c) is otherwise as proposed in the NOPR with minor revisions for clarity.

113. Proposed Rule 3856(b)(I) is based on existing Rule 3667(d)(III)(A). Given the enhancements to the Level 2 supplemental studies in other proposed rules, Rule 3856(b)(I) would give the utility the option to use those studies in lieu of the Level 3 feasibility study. Proposed Rule 3856(b)(VI) is a new rule that sets a deadline for the utility to provide an executable interconnection agreement in the event that no further Level 3 studies are necessary following the feasibility study.

114. Public Service reiterated that timeframes memorialized in rules should be consistent with the updated FERC SGIP and be based on business days.

115. COSSA and SEIA proposed to add "reasonable and verifiable" to proposed Rule 3856(b)(II). SunShare agreed. Public Service objected, asserting that the feasibility study agreement includes non-binding good faith estimates of the costs to perform the study that is reviewable by the customer prior to signing of the study agreement. As such, adding "reasonable and verifiable" is not required.

116. Adopted Rule 3856(b)(II) will not adopt a requirement that feasibility study costs must be "reasonable and verifiable." The ALJ agrees with Public Service's argument that it is not required in the Level 3 rule. Moreover, as discussed *supra*, the phrase "reasonable and

verifiable" is also rejected because it is problematic and may be vague and overbroad. Otherwise the ALJ adopts Rule 3856(b) as proposed in the NOPR with minor revisions for clarity.

117. Proposed Rule 3856(c) retains existing Rule 3667(d)(IV) without substantive revision. However, similar to proposed Rule 3856(b)(VI), proposed Rule 3856(c)(VI) sets a deadline for the utility to provide an executable interconnection agreement in the event that no other Level 3 study (*i.e.,* the facilities study) is required.

118. CEO recommended the rule be revised such that once a system impact study agreement is executed between the utility and the interconnection customer, the utility must complete the system impact study and provide it to the customer within a specified time. Public Service recommended maintaining the current approach of mutually-agreed timeframes within the study agreement, in order to provide needed flexibility to address program changes and to address unusual circumstances and transmission impacts when legitimate safety and reliability concerns exist.

119. COSSA and SEIA proposed a new rule differentiating timeframes for large and small utilities to perform a system impact study. For the reasons discussed *supra,* no rules will be adopted differentiating between large and small utilities for timeframes or other procedures.

120. Adopted Rule 3856(c)(I) will include the requirement that, within 30 business days of executing a system impact study agreement, the utility shall perform a system impact study using the screens set forth in Rule 3856(c).

121. Otherwise, the ALJ has adopted Rule 3856(c) as proposed in the NOPR with minor revisions for clarity. Ensuring certainty for both interconnection customers and the utilities is important in the Level 3 feasibility study process, and establishing reasonable timeframes will assist to accomplish this objective.

122. Proposed Rule 3856(d) includes the Level 3 facilities study provisions in existing Rule 3667(d)(V) without any changes.

123. CEO recommended that Rule 3856(d) establish a time limit for a facilities study to be completed and proposed that the facilities study be completed within 45 business days of the interconnection customer's delivery of the executed facilities study agreement. According to CEO, this is consistent with the IREC Model Interconnection Procedures and industry best practices.

124. CEO argued that Rule 3856(d)(III) should set a parameter around the accuracy of a utility when estimating the cost of equipment, engineering, procurement, and construction work (including overhead) needed to implement the conclusions of the system impact studies. CEO recommended that Rule 3856(d)(III) be modified to implement binding cost envelopes or to require careful tracking of costs that exceed a specified margin.

125. COSSA and SEIA proposed that the interconnection customer should have the option of constructing utility assets, when necessary. Public Service objected, arguing that construction of utility assets by an interconnection customer would bypass utility methods and processes for designing, building, and maintaining a safe and reliable grid.

126. Noting that proposed Rule 3856(d)(VII) requires a utility to provide an executable interconnection agreement within five business days of completing a facilities study, CREA recommended extending this deadline to 15 business days. CREA argued that, because specific costs of necessary upgrades in the agreement may need to be identified, it may not be possible to meet this timeline in many cases.

127. Adopted Rule 3856(d)(I) will include the requirement that, within 45 business days of executing an appropriate agreement, the utility shall perform a facilities study using the

screens set forth in Rule 3856(d). Adopted Rule 3856(d)(III) sets forth the items to be included in the facilities study and includes CEO's recommendation that costs for completing actual upgrades may not be exceeded by 125 percent of the cost estimate, which should afford utilities with greater flexibility.

128. Otherwise, the ALJ has adopted Rule 3856(d) as proposed in the NOPR with minor revisions for clarity.

23. Rule 3857, Certification Codes and Standards

129. Proposed Rule 3857 is based on Existing Rule 3667(h). In the NOPR, the Commission updated the listed codes and standards to reflect recent and relevant sources. In addition, the Commission proposes adding the inclusion of UL 1741 SA (the standard for testing advanced DERs with grid support functions).

130. The intent of this list of codes and standards in the Interconnection Rules has never been clear. This list of codes and standards first appeared in the initial RES rules in Rule 3665 Attachment 3, which was part of the consensus rules adopted by the Commission.[36] In a 2008 rulemaking, the title of Rule 3665 was changed to "Small Generation Interconnection Procedures," the Level 1 10 kW Inverter Process, was renumbered to Rule 3665(g), and the list of Certification Codes and Standards was renumbered to Rule 3665(h).[37]

131. After reviewing the legislative history of rules containing this list of Certification Codes and Standards, the ALJ concludes that initially the list was intended as a screening device for when the Level 1 10 kW Inverter Process and the Level 2 - Fast Track Process could

[36] *See* Decision No. C05-1461 in Proceeding No. 05R-112E (issued December 15, 2005), Paragraph Nos. 158 and 159 at pages 55 and 56, and Attachment A at page 25.

[37] *See* Decision No. C10-0080 in Proceeding No. 08R-424E (issued January 27, 2010), Attachment A, pages 38, 52 – 54.

be used. If the Small Generating Facility met the size criteria and the codes, standards and certification requirements of the documents in the list, then these processes could be used going forward in the utility's evaluation of the interconnection of a small generating facility. It is clear to the ALJ that the list was not intended to be an enforceable requirement for interconnections.

132. An introduction to Adopted Rule 3857 has been added to clarify the intent and purpose of the list of codes and standards.

24. Rule 3859, Filing of Interconnection Manual.

133. The NOPR contained no proposed Rule 3859. In its Reply Comments, WRA proposed the addition of a new rule, similar to a rule adopted in Arizona, to require utilities to file their interconnection manuals and that the Commission approve the manuals.[38] At the February 3, 2020 rulemaking hearing, Public Service argued that its interconnection manuals are publicly displayed on its website, and that WRA's proposed manual filing rule was unnecessary. Black Hills opposed any rule that required utilities to file their interconnection manuals.

134. The ALJ will adopt Rule 3859, which requires that, within 90 days after the effective date of the Interconnection Rules, each utility subject to these rules shall file with the Commission, information about its Interconnection Manual in an advice letter and tariff filing pursuant to Rule 1210 of the Rules of Practice and Procedure, 4 CCR 723-1. This information should include an electronic link to the utility's filing, along with the date on which it was last updated. Rule 3859 also requires each utility to update the filed information about its Interconnection Manual within 30 days after changes have been made to its manual. Requiring utilities to file their Interconnection Manuals and updates to their manuals is intended to ensure

[38] *See* Reply Comments of Western Resource Advocates, at page 7; *see also* Final Comments of Western Resource Advocates, at page 3; Arizona Administrative Code R14-2-2601 *et seq*.

increased transparency for developers, interconnection customers, the Commission and its Staff and should thereby provide benefits to the interconnection process in Colorado.

135. The Interconnection Manual and update filings required by Rule 3859 are only informational filings. Rule 3859 *does not* require that the Commission approve the filed Interconnection Manuals and updates to Interconnection Manuals.

C. Conclusion.

136. Attachment A of this Recommended Decision contains the rule amendments adopted by this Decision with modifications to the Interconnection Rules proposed in the NOPR indicated in redline and strikeout format (including modifications in accordance with this Recommended Decision).

137. Attachment B of this Recommended Decision contains the rule amendments adopted by this Decision in clean and final format.

138. The ALJ finds and concludes that the Interconnection Rules proposed in the NOPR, as modified by this Recommended Decision, are just and reasonable and should be adopted.

139. Pursuant to the provisions of § 40-6-109, C.R.S., it is recommended that the Commission adopt the attached Interconnection Rules.

III. ORDER

A. The Commission Orders That:

1. The Interconnection Rules contained in 4 *Code of Colorado Regulations* 723-3, set forth in legislative (redline and strikeout) format in Attachment A and in clean format in

Attachment B, are adopted. Both attachments are also available in the Commission's E-Filings system at:

https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=19R-0654E

2. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

3. If this Recommended Decision becomes a Commission Decision, the relevant rules are adopted on the date the Recommended Decision becomes a final Commission Decision.

4. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the participants and the representative group of participants, who may file exceptions to it.

a) If no exceptions are filed within 20 days after service of this Recommended Decision or within any extended period of time authorized, or unless the decision is stayed by the Commission upon its own motion, the Recommended Decision shall 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 participants 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, the Commission is bound by the facts set out by the administrative law judge and the participants cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

5. 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.

(S E A L)

ATTEST: A TRUE COPY

Doug Dean

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

STEVEN H. DENMAN

Administrative Law Judge