BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

* * * * *

IN	THE	MATTER	OF	THE
APP	LICATIO	ON OF PUE	BLIC SEI	RVICE
CON	IPANY	OF COLOR	ADO FO	R ITS
DISTRIBUTION SYSTEM PLAN				

PROCEEDING NO. 22A-0189E

JOINT STIPULATION OF PUBLIC SERVICE COMPANY OF COLORADO, THE COLORADO SOLAR AND STORAGE ASSOCIATION, SOLAR ENERGY INDUSTRIES ASSOCIATION, AND ADVANCED ENERGY ECONOMY

This stipulation is entered into by Public Service Company of Colorado ("Public Service") and the Colorado Solar and Storage Association, Solar Energy Industries Association, and Advanced Energy Economy (collectively, "CEI"), collectively the "Stipulating Parties," pursuant to Rule 1407 of the Colorado Public Utilities Commission's ("Commission") Rules of Practice and Procedure, 4 CCR 723-1, which provides:

The Commission encourages parties to offer into evidence a written stipulation resolving any fact or matter of substance or procedure that is at issue. An oral stipulation may be made on the record, but the Commission may require that the stipulation be reduced to writing, signed by the parties or their attorneys, and filed with the Commission. The Commission may approve, recommend modification as a condition of approval of, or disapprove any stipulation offered into evidence or on the record.

This stipulation represents the Stipulating Parties' resolution of the single issue that was not resolved by the Unopposed Non-Comprehensive Settlement Agreement filed

on November 22, 2022. The Stipulating Parties have conferred with the other parties to this proceeding¹ and no party has indicated it opposes this stipulation.²

The Stipulating Parties stipulate and agree as follows:

GENERAL STIPULATION TERMS

- 1. The Company and CEI were unable to reach resolution on the issue of the Company's distributed energy resource ("DER") planning limits prior to the settlement deadline in this Proceeding.
- 2. The Company and CEI continue to disagree on certain aspects of the application to planning limits to the interconnection of front-of-meter generation.
- 3. The Company and CEI believe there is value in providing a resolution to this issue for the purposes of this Proceeding.
- 4. To that end, the Company and CEI have agreed to the terms set forth below and stipulate and agree that they will abide by such terms.
- 5. To the knowledge of the Company and CEI, no parties oppose the terms set forth below.
- 6. The terms set forth below are in the public interest and should be adopted by the Commission.

¹ In addition to Public Service and CEI, the Parties consist of: Trial Staff of the Colorado Public Utilities Commission ("Commission") ("Staff"), Colorado Energy Consumers ("CEC"), the Colorado Energy Office ("CEO"), the Colorado Office of the Utility Consumer Advocate ("UCA"), the City of Boulder ("Boulder"), the City and County of Denver ("Denver"), Holy Cross Energy ("Holy Cross"), Southwest Energy Efficiency Project ("SWEEP"), Vote Solar, and Western Resource Advocates ("WRA").

² The Stipulating Parties have not received responses yet from Holy Cross or Denver.

PLANNING LIMITS TERMS

- 7. The Company acknowledges that its DER Planning Limit for front-of-themeter ("FTM") distributed generation is based on 75% of an individual feeder's continuous rating, not a blanket 10 MVA for all feeders. The Company acknowledges that it will also allow behind-the-meter DER, including distributed generation, to interconnect up to the continuous rating of the feeder whether or not the 75% Planning Limit for FTM distributed generation has been met at increased risk to the Company. However, the Company and CEI reserve their rights to take whatever positions they deem appropriate regarding DER planning limits in future proceedings, including in response to additional data and investigation.
- 8. The Company agrees to include in its Hosting Capacity tabular results each feeder's full continuous rating and the FTM DER Planning Limit (based on 75% of the feeder's continuous rating) for each feeder starting in their 2023 HCA publications.
- 9. Consistent with PUC Rule 3853(f)(V), the Company agrees that whenever an FTM interconnection application is submitted on a feeder which would cause the DER Planning Limit to be exceeded on that feeder, the Company will provide the interconnection customer with a cost estimate for upgrading the system, including the cost of adding a new feeder or upgrading the existing feeder, to comply with the DER Planning Limit.
- 10. The Company agrees to implement a Feasibility Study Process, consistent with PUC Rule 3856(a)(II) and 3856(b) to determine options for interconnection viability prior to the System Impact Study process and, if relevant, in addition to the Level 2 Supplemental Study process. The Company will also provide an "Augmented Feasibility Study" to interconnection customer with: (1) potential viable alternative interconnection

pathways using the same site with indicative pricing; and (2) the Company's reasonable engineering judgment (without additional technical study) as to if it is potentially possible for interconnection customer to safely, reliably, and prudently exceed the 75% FTM planning limit. The results of the Augmented Feasibility Study will be provided to the interconnection customer in a brief written narrative provided in advance of a customer options meeting. In the event that the Company's reasonable engineering judgment indicates that further study could determine that it may potentially be feasible to safely, reliably, and prudently exceed the 75% FTM planning limit, interconnection customer may request that the Company perform a supplemental detailed study to evaluate if the distribution system can support the project exceeding those limits in a safe, prudent, and reliable manner based on the Company's reasonable engineering judgment. Such study shall be performed at interconnection customer's sole cost and expense and the Company will determine the scope of the study and a best estimate of the time required to complete it and communicate such to interconnection customer. The Parties agree that this supplemental study procedure is intended to be a demonstration of this concept, and will terminate for new requests with the end of the current RES Plan compliance period. Such supplemental study shall allow, but not require the Company to consider minimum daytime load ("MDL") when considering whether a feeder could possibly accommodate FTM DER of the 75% FTM planning limit. The Parties understand that any interconnection applications received by the Company subsequent to commencement of a supplemental study will be given consideration, pursuant to Commission Rules, with the added assumption that the supplemental study applicant is online.

11. The Company agrees to conduct at least two demonstration projects by December 31, 2024 to demonstrate how flexible interconnection ("FI") and/or smart

inverters with autonomous advanced settings can safely and reliably increase a feeder's DER hosting capacity by managing DER output. The Company agrees to propose an FI plan more broadly in a way that would allow for more advanced FI compared to standalone autonomous inverter settings in its next DSP. At this time, CEI only agrees to uncompensated curtailments³ during specific critical hours that are necessary to facilitate flexible interconnection for the demonstrations. An estimate of the maximum number of potential curtailment hours must be identified in the demonstration interconnection agreements. The Company and CEI acknowledge that prior to implementing FI, changes to operational and business practices (e.g., interconnection agreements) terms may be required. The Company and CEI agree to work through these changes collaboratively and in good faith. The Company shall include a report on the analysis and field results in its FI proposal in its next DSP filing.

- 12. The Company agrees to include a two-year planned and unplanned outage history in future DSP filings for feeders that have active Community Solar Garden ("CSGs") interconnections. The outage data will include the cause of the event (if known), the number of customers impacted by the event, and the beginning and ending date and hour of each event.
- 13. The Company agrees to update Section 1.3 of its Distributed Generation Technical Manual as follows:

CSGs Front-of-the-meter generation will be limited to 75% of the feeder's overall hosting capacity which is determined by limiting elements the feeder's individual continuous rating unless the Company finds through additional interconnection studies that the planning limit can be safely, reliably, and prudently exceeded. This is to ensure that capacity is available for commercial and residential customers on the affected feeder who may want to add on-site solar. This capacity for

-

³ Curtailments are undelivered renewable energy.

Appendix B Decision No. R23-0080 Proceeding No. 22A-0189E Page 6 of 7

commercial and residential customers is 25% of the available hosting capacity. This ensures existing customers on an existing system are treated equitably and non-adjacent customers do not utilize all of the local hosting capacity.

DATED this 7th day of December, 2022.

Respectfully submitted,

By: /s/ Christopher M. Irby

Christopher M. Irby, #35778 Assistant General Counsel Xcel Energy Services Inc. 1800 Larimer Street, Suite 1400 Denver, Colorado 80202-5533

Phone: (303) 294-2504

Email: cristopher.m.irby@xcelenergy.com

And

Zeviel Simpser #51892
Partner
Dorsey & Whitney LLP
1400 Wewatta Street, Suite 400
Denver, Colorado 80202-5549

Phone: 303-626-3249 Fax: 303-629-3450

Email: Simpser.Zev@dorsey.com

ATTORNEYS FOR PUBLIC SERVICE COMPANY OF COLORADO

Appendix B Decision No. R23-0080 Proceeding No. 22A-0189E Page 7 of 7

COLORADO SOLAR AND STORAGE ASSOCIATION ("COSSA"), THE SOLAR ENERGY INDUSTRIES ASSOCIATION ("SEIA"), AND ADVANCED ENERGY ECONOMY ("AEE")

/s/ Jacob J. Schlesinger
Jacob J. Schlesinger, #41455
Lee L. Ewing, #55524
Keyes & Fox LLP
1580 Lincoln St., Suite 1105
Denver, CO 80203
(970) 531-2525
(720) 796-8004
jschlesinger@keyesfox.com
lewing@keyesfox.com

ATTORNEY FOR THE COLORADO SOLAR AND STORAGE ASSOCIATION ("COSSA"), THE SOLAR ENERGY INDUSTRIES ASSOCIATION ("SEIA"), AND ADVANCED ENERGY ECONOMY ("AEE")