

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 22A-0189E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR ITS FIRST DISTRIBUTION SYSTEM PLAN WHICH INCLUDES A MODEL NON-WIRES ALTERNATIVE SERVICES AGREEMENT AND A MODEL REQUEST FOR PROPOSALS.

**RECOMMENDED DECISION OF
HEARING COMMISSIONER MEGAN GILMAN
GRANTING MOTION TO APPROVE
SETTLEMENT, GRANTING APPLICATION AND
APPROVING INDEPENDENT EVALUATOR**

Mailed Date: February 2, 2023

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A. The Commission Orders That:26

I. STATEMENT

1. On May 2, 2022, Public Service Company of Colorado (Public Service or Company) filed a Verified Application for Approval of its Distribution System Plan (DSP) (Application). The Application was deemed complete on June 17, 2022, by operation of the Commission’s rules under § 40-6-109.5, C.R.S.

2. On July 6, 2022, the Commission issued Decision No. C22-0379-I referring the Application for hearing before Commissioner Megan Gilman. The decision also established the parties to this matter and set forth certain questions that it requested Public Service to address in the form of supplemental direct testimony.

3. Pursuant to Decision No. C22-0379-I, the following parties to this Proceeding have intervened by right: the Office of the Utility Consumer Advocate (UCA),¹ the Colorado Energy Office (CEO), and Commission Trial Staff. Permissive intervenors include the City of Boulder (Boulder); the City and County of Denver (Denver); CEC; Western Resource Advocates (WRA); COSSA/SEIA/AEE (Collectively referring to themselves as the Clean Energy Industry,

¹ Formerly the Office of Consumer Counsel.

or CEI); Holy Cross Energy (Holy Cross); Southwest Energy Efficiency Project (SWEEP); and Vote Solar.

4. On July 27, 2022, Hearing Commissioner Gilman issued Decision No. R22-0440-I, which adopts the Parties' discovery procedure proposal.

5. On August 5, 2022, the Company filed Supplemental Direct Testimony as directed by Decision No. C22-0379-I.

6. Answer Testimony was filed by Boulder, Denver, CEO, WRA, CEI, Vote Solar, SWEEP, Staff and UCA on September 28, 2022.

7. Cross-Answer Testimony was filed by Denver, WRA, Boulder, UCA, and CEI, on November 2, 2022.

8. Also on November 2, 2022, Public Service filed the Rebuttal Testimony of four witnesses.

9. On November 8, 2022, Hearing Commissioner Gilman scheduled a public comment hearing for December 1, 2022.

10. On November 22, 2022, Public Service filed a Joint Motion to Approve Unopposed Non-Comprehensive Settlement Agreement (Joint Motion). The Settling Parties—all parties except CEI—stated that they had reached a comprehensive settlement (Settlement Agreement). All parties to the settlement (including CEI) agreed in paragraph 43 of the Settlement Agreement that DER planning limits are necessary and reasonable in general, but CEI disputed the reasonableness of the Company's current DER planning limits.

11. On November 30, 2022, Public Service filed a Motion requesting the Hearing Commissioner modify the procedural schedule to provide for hearings to commence on

December 8, 2022, and continue through December 9, 2022, if necessary. The Motion requested December 1, 2022, be set as the deadline for the filing of prewritten settlement testimony; and that response time to the Motion be waived.

12. By Decision No. R22-0772-I, issued November 30, 2022, the procedural schedule was amended and a remote hearing on the proposed settlement was scheduled to begin on December 8, 2022.

13. On December 2, 2022, the following witnesses sponsored Settlement Testimony in support of the settlement: Keith M. Hay on behalf of CEO; Clare Valentine on behalf of WRA; Carolyn Elam on behalf of Boulder; Zachary D. Pollock on behalf of Public Service; and Joseph McCabe on behalf of Trial Staff.

14. All of the parties who filed Settlement Testimony indicate that the sponsored witnesses support the Settlement Agreement, and that approval of the Settlement Agreement is in the public interest.

15. On December 7, 2022, Public Service and CEI filed a stipulation representing the Stipulating Parties' resolution of the single issue that was not resolved by the Settlement Agreement filed on November 22, 2022. The Stipulating Parties stated they conferred with the other parties to this proceeding and no party indicated it opposes the stipulation.

16. A hearing on the Settlement Agreement and Stipulation was held on December 8, 2022.

17. On December 14, 2022, Public Service filed a Motion requesting that the Commission approve the selection of DNV Energy Insights USA Inc. (DNV) to serve as Independent Evaluator.

II. TERMS OF THE SETTLEMENT

A. Terms of the Settlement Agreement

18. The Settlement Agreement, attached to this Recommended Decision as Appendix A, explains that the Settling Parties negotiated a resolution of all disputed issues in the proceeding except Public Service's distributed energy resource (DER) planning limits.

19. The Settling Parties assert that the compromise reached in the Settlement Agreement is intended to resolve all issues that were raised or could have been raised by the Settling Parties in the Phase I DSP Proceeding with respect to the Company's Application for Approval of its DSP.

20. In addition to the specific agreements discussed below, the Parties also agreed to numerous general provisions, beginning on page 23 of the Settlement Agreement, including that the provisions of the Settlement Agreement and the negotiation process undertaken to reach it are just, reasonable, and consistent with and not contrary to the public interest, supporting approval by the Commission.

21. The Joint Stipulation, attached to this Recommended Decision as Appendix B, explains that the Stipulating Parties, Public Service and CEI, resolved the single issue that was not resolved by the Settlement Agreement.

22. Together, the Settlement Agreement and Joint Stipulation resolve all issues before the Commission in this Proceeding.

B. Phase I DSP Approval

23. The Settling Parties agree that Public Service's Phase 1 DSP, as modified by the Settlement Agreement, should be approved.

24. The Settling Parties agree that the next Phase I DSP may need to be delayed up to 6 months to accommodate the provisions of this Settlement Agreement and agree not to oppose such waiver. In addition, the Settling Parties note that the Company may request a waiver from the Commission under Commission Rule 1003(a) and seek to show that there is good cause for a further extension.

C. Vision for Next DSP

25. The Parties agree that in the Company's next Phase I DSP, Public Service will present its plan for the distribution system that balances the Company's obligation to provide safe, reliable, resilient electric service at a reasonable price and doing its part to further state policy goals, pursuant to Rule 3526 (the Vision Plan). The Vision Plan will provide sufficient detail so that parties to the DSP may evaluate the Company's choices in balancing these goals and will discuss a viable path for the evolution of the distribution system in light of the Company's proposed five-year action plan, and ten-year planning horizon while accounting for realistic implementation timelines and potential evolution in grid technology.

26. The Settlement requires the Vision Plan to include a description of Public Service's existing grid architecture design, a description of how the technologies proposed in the DSP will be used to implement the Company's vision, goals, and objectives, and the relevant timeframes for each technology, a description of the evolution of the Public Service's planning and forecasting functions, and a description of how the Company uses data to inform functions, including distribution planning, feeder and substation load forecasts, DER forecasts, hosting capacity, and interconnection.

D. Forecasting

27. The Parties agree that Public Service will continue to work towards the incorporation of forecasted DERs into its distribution planning process, and to report regarding this topic in the next DSP and subsequent DSPs.

28. Public Service agrees it will continue with its deployment of the new LoadSEER tool and report in the next Phase I DSP regarding the status of LoadSEER implementation and the lessons learned from that implementation, including with regard to location-specific forecasting of DERs and Beneficial Electrification (BE). The location-specific forecasts will be validated in future years through comparison to actual conditions that emerge, and Public Service agrees to conduct a validation of the location-specific forecasts developed by the consulting firm ICF for this DSP. The Company will report regarding the results of that validation exercise in the next Phase I DSP, including what lessons can be learned with regard to location-specific BE and DER forecasts and how those lessons impact the incorporation of DER and BE into overall distribution planning.

29. The Parties agree that Public Service will provide a technical appendix providing any assumptions used for forecasting work developed with the assistance of the LoadSEER tool and other technical information as the Company may deem reasonably useful to the parties in its next Phase I DSP.

E. Non-Wires Alternatives

30. The Settlement states that for this DSP those Non-Wires Alternatives (NWA) candidate projects that continue to meet the Company's screening criteria at the conclusion of

Phase I shall proceed to Phase II, except for those involving service to Critical Infrastructure customers as defined by the Company.

31. The Settling Parties agree to a modification of the Company's proposed timeline and process such that all non-Company parties are able to submit DSP Phase II initial and reply comments. The Settling Parties agree that the Phase II report and selection of bids, if any, will be subject to Commission approval. The Company agrees to file a Phase II report with the results of the NWA solicitation process, bid information for all bids received, and a detailed cost benefit analysis for all bids. The Phase II report will include the Company's proposal for which, if any, NWA contracts the Company proposes for execution and the rationale for selecting those bids or an explanation for why no NWA contracts are proposed to meet an identified grid need.

32. The Settling Parties agree that the Company shall use a deferral and contract period for individual NWAs for the full length of the forecasted grid need based on the ten-year forecast presented in the DSP. For example, if a forecasted need arises in year 4 of the 10-year distribution load forecast and continues through year 10, then the deferral and contract period for the NWA in question would be for services that begin in year 4 and continue through year 10.

33. The Settling Parties agree that the Company's proposed 25% NWA safety margin is appropriate for this DSP. However, the Company commits to reevaluating safety margins in future Phase I DSPs as it continues to enhance its forecasting methodology and gains additional operational experience with NWAs.

34. Public Service agrees in the Settlement that in the next Phase I DSP it shall provide the full magnitude, duration, and frequency of the load relief requirements for any proposed candidate NWA projects. The Company will also include existing demand response in the evaluation of proposed candidate projects in the next Phase I DSP accounting for

participation rates and event performance, to the extent that that demand response is coincident with the distribution system need on that specific piece of equipment.

F. Pilot Programs

35. The Parties agree that beginning in its next DSP, Public Service will report on how existing programs, approved programs, proposed programs, existing pilots, approved pilots, and proposed pilots support the Company's DSP Vision Statement.

36. The Settling Parties agree that Public Service's proposed DRMS pilot should be approved with the following modifications: It will operate over a five-year pilot period with a discrete end date to be established by the Company. The Company will provide an explanation of whether any equipment and programs associated with the DRMS pilot will be incorporated into a program, retired, or put to some other use as applicable. The DRMS pilot will be limited to approximately 1,850 batteries, totaling 10 MW of capacity; and Public Service will establish a comprehensive set of specific goals and metrics for the DRMS pilot.

37. Public Service agrees in the Settlement to solicit third-party proposals for DSP pilots and programs prior to the next DSP filing and establish reasonable guidelines for soliciting, considering, reporting on, and evaluating pilot or program proposals from third parties. The Company also agrees to explore the potential for a targeted demand area pilot or program and to either propose such a pilot in its next DSP or to explain why it did not do so. The Company acknowledges that an initial targeted demand area pilot or program could consist of targeted marketing of existing Company demand-side management and renewable energy programs, but could alternatively involve more complex designs, such as those involving contracted third-party services.

G. Bi-Directionality

38. The Settling Parties agree that further study of substation Bi-Directionality to increase overall interconnection capacity on the distribution system is warranted. The Company will evaluate the costs, benefits, feasibility, equity, and impediments to enabling one of the following substations with bi-directionality technology such as 3V0: Stock Show #1, Dove Valley #1, Titan #1, Gray Street #1, La Salle #1, Northern Colorado Area Plan, Box Elder #1, Parachute #2, and Vasquez #2.

H. Income Qualified/Disproportionately Impacted (IQ/DI) Community Engagement and Outreach

39. Public Service agrees to incorporate data from the Colorado Department of Public Health & Environment's EnviroScreen to identify Disproportionately Impacted (DI) Communities consistent with the identification process developed and used in the Company's 2022-2025 Renewable Energy Compliance Plan implementation.

40. The Settling Parties note that the Settlement Agreement in Proceeding No. 21A-0625EG (the RE Plan Settlement) requires Public Service to develop a comprehensive IQ/DI Community Engagement and Outreach Plan for its RE programming. The RE Plan Settlement states that the Company retains the right to propose expanding the areas covered by that plan, with the understanding that expanding the program may be appropriately funded from other/non-RESA supported programs. In this Settlement, Public Service agrees to adopt a DSP outreach process for engagement with DI Communities consistent with the one provided for in the RE Plan Settlement. The Company further agrees that it shall not use RESA funds for its DSP outreach and engagement.

41. The Company agrees to submit a brief report to the Commission in this proceeding and as an attachment to the RFP which will include a list of community organizations that attended; number of community members that attended; slides or materials the Company shared in its educational overview; a summary of feedback from community organizations and members; and a list of any community needs identified. The report will be provided prior to the Company's RFP solicitation so that bidders can consider community input in their bid proposals. At hearing, Public Service witness Pollock acknowledged that this process may further support proposals for NWAs from community-based organizations within disproportionately impacted communities.²

I. Stakeholder Process

42. Public Service agrees to establish a technical working group to discuss DRMS requirements, flexible interconnections (including the potential use of energy storage as a possible tool to facilitate interconnection) and smart inverters, DER interconnection issues (including the ability to more timely complete interconnection requests), the interaction between Hosting Capacity Analysis (HCA) and the 15/15 Rule set forth in Rule 3033,³ unintentional islanding and potential mitigation options for unintentional islanding, and the scope and focus of solicitations for third-party pilot proposals.

43. The Settling Parties agree that the technical working group will be facilitated by an independent third-party to facilitate discussion amongst the stakeholders and will be selected by the Company subject to conferral with Staff. Settling Parties agree that the independent facilitator will not make recommendations to the Commission but will provide a report to the

² Hrg. Transcript (Dec. 8, 2022) at 55:7-10.

Commission summarizing the stakeholders' positions and proposals in the DSP docket. Stakeholders may file responses to the report filed by the independent facilitator.

J. DER Interconnection and Beneficial Electrification Upgrade Costs

44. Public Service agrees to explore potential pilots or limited programs involving alternative means for funding transformer and secondary system upgrades required for residential and small commercial customer solar deployments. In exploring such potential pilots or limited programs, the Company shall seek to appropriately balance equity and cost impact to all customers.

45. The Settling Parties agree to request the Commission to open a miscellaneous proceeding to investigate potential policy, program, and tariff changes needed to further support state policy goals related to DER and beneficial electrification adoption. As Hearing Commissioner, I recognize that new technologies, State Policy goals, and recent statutory changes will provide many opportunities for stakeholders and the Commission to explore innovative ways of managing Colorado's clean energy transition. This proceeding could also include the request of the Settling Parties in Proceeding No. 21A-0625EG to explore CSG reforms to enhance emission reductions and grid value.⁴

K. Hosting Capacity Analysis and Secure Web Portal

46. The Settling Parties agree that Public Service will proceed with its updated roadmap and timeline for HCA and development of the Secure Web Portal. The Company intends to provide an update to its publicly available HCA data and map by July 1, 2023. The

³ At hearing, Public Service witness Pollock clarified that Rule 3033 issues were limited to questions such as treatment for minimum daytime load data in pop-ups on the web portal.

⁴ Decision No. C22-0678 ¶ 76

Company agrees it will then update such data and maps on a quarterly basis thereafter within ten business days of the start of each quarter.

47. The Settlement states that by the close of 2023, the Company intends to make available detailed hosting capacity maps through the Company's secure web portal which will require an NDA to access. The detailed maps will then be updated on a quarterly basis to the secure web portal, with each updated map provided within ten business days of the quarter's end. At the hearing, Company Witness Pollock clarified that Public Service's intent is to develop its capabilities to update hosting capacity maps more frequently than the quarterly basis agreed to in the Settlement.⁵

48. The Company agrees to develop and implement a methodology for field verifying the accuracy of its HCA before the next DSP. The Settling Parties agree the Company may defer the costs of any third-party or staff augmentation used to support this validation process and will be allowed recovery of these costs over a reasonable amortization period in a subsequent rate case. The Company will report on the value of this validation process in the next DSP.

L. Climate Risk and Resiliency

49. The Settling Parties agree that Public Service shall hire a third-party consultant to help the Company further its use of data related to Climate Risks including extreme temperature, extreme winds, wildfires, drought, and floods that could be used to inform cost effective distribution investment decisions related to climate impacts. The Company will report on these efforts in the next Phase I DSP. Public Service also agrees to incorporate flood plain data and wildfire risk data into its Geographic Information System (GIS) that may help inform investment decisions.

M. Cost Recovery / Treatment of Revenues

50. The Settling Parties agree that the Company be allowed to defer its Major Grid Distribution Project NWA costs for this DSP by placing them into a regulatory asset. The Company may then seek recovery in a future rate case. The issues of the prudence of such deferred costs, the appropriate amortization period, and whether or to what extent the Company may earn a rate of return on the deferral are reserved for consideration in that future rate case and Settling Parties may take whatever positions they deem to be appropriate with regard to those issues in that future proceeding.

51. The Settling Parties agree that the Company shall not be subject to a Performance Incentive Mechanism in this DSP for implementing NWAs.

N. Federal Funding

52. The Settling Parties acknowledge that the Infrastructure Investment and Jobs Act (IIJA) offers \$10.5 billion in competitive funding for grid modernization and resilience purposes, through the Grid Resilience and Innovation Partnerships (GRIP) program. Prior to the expiration of such funding, the Company agrees to make best reasonable efforts to obtain federal funding to support the evolution of the distribution grid if the federal funding opportunity and the Company's plans are appropriately matched. Public Service will retain sole discretion to determine specific project(s) for which it will apply, as well as the timing of such application(s). The Company agrees to provide updates on its efforts related to this potential application in subsequent Phase I DSPs as applicable, including explanation of why the Company has not applied for such funding, as applicable.

⁵ Hrg. Transcript (Dec. 8, 2022) at 33:1-23.

O. Distributed Energy Resource Management System (DERMS)

53. The Company agrees to continue developing its Distributed Energy Resource Management System (DERMS) roadmap to formulate use cases and associated requirements as well as the technical requirements, standards, and policy goals for the potential acquisition and deployment of DERMS. The Company agrees to present its proposed DERMS use cases, associated requirements, and the policy goals that DERMS would be used to advance in either the next Phase I DSP or prior to the next Phase I DSP in another appropriate docket in which stakeholders can provide input prior to any solicitation.

P. Waivers, Variances and Compliance Advice Letters

54. Settling Parties recommend that the Commission grant the Company's requested waiver from Rule 3207(c) for this DSP, as the report contemplated by that rule is duplicative of the DSP and the consideration of NWAs conducted as part of the DSP.

55. Settling Parties recommend that the Commission grant the Company's requested partial waiver of Rule 3528(c) to allow for Intervenor Comments 45 days after the filing of the IE report

56. Settling Parties recommend that the Commission grant the Company's requested waiver from Rule 3541 and associated requirements so that the Company may implement the Secure Web Portal after securing Commission approval in this proceeding, as recommended in this Settlement Agreement, and then provide information via the secure web portal once it has been implemented as provided for in Section 36.2. Specifically, this temporary waiver would be of Rules 3531(a)(II)(F), 3541(a), 3541(c)(I)-(II), and 3532(d)(I)(E).

57. Settling Parties agree that Public Service should be permitted to file all necessary tariff changes to implement this Settlement Agreement and the Commission's final decision issued in this Proceeding through one or more compliance advice letters on less than statutory notice to be filed after issuance of a final written decision in this Proceeding.

Q. Joint Stipulation

58. On December 7, 2022, The Company and CEI (the Stipulating Parties) filed a Joint Stipulation, stating that the Stipulating Parties had resolved the single issue that was not resolved by the Settlement Agreement. The Stipulating Parties conferred with the other parties to this proceeding and no party has indicated it opposes this stipulation.

59. The Stipulating Parties note that they were unable to reach resolution on the issue of the Company's DER planning limits prior to the settlement deadline in this Proceeding. The Company and CEI continue to disagree on certain aspects of the application to planning limits to the interconnection of front-of-meter generation. The Stipulating Parties believe there is value in providing a resolution to this issue for the purposes of this Proceeding and have agreed to the following terms.

60. Public Service acknowledges that its DER Planning Limit for front-of-the-meter (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 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.

61. 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, including HCA maps and tabular data.

62. Consistent with PUC Rule 3853(f)(V), Public Service 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.

63. Public Service 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 customers 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 exceed safely, reliably, and prudently the 75% FTM planning limit.

64. Public Service 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.

65. 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.

66. Public Service agrees to update Section 1.3 of its Distributed Generation Technical Manual.

III. APPROVAL OF INDEPENDENT EVALUATOR

67. On December 14, 2022, Public Service filed a motion requesting that the Commission approve the selection of DNV Energy Insights USA Inc. (DNV) to serve as Independent Evaluator. Public Service conferred with all Parties to this proceeding regarding the motion. No Parties have indicated they oppose the motion. Because this Motion is not opposed, the Company requests that the Commission waive response time to this Motion pursuant to Rule 1308(c) and states that good cause exists for the granting of this relief.

68. Section 16 of the Settlement Agreement provided that, “The Company agrees to propose an Independent Evaluator for this DSP after consultation with Staff by the latter of the Phase I hearing in this proceeding or December 9, 2022.” Public Service states it has issued a Request for Proposals seeking a firm to serve as the Independent Evaluator. After reviewing the responses, the Company determined that it wished to select DNV. Public Service consulted with Staff on December 2, 2022, and Staff indicated it did not oppose the selection of DNV.

69. Public Service notes that DNV has experience with NWAs and the evaluation of NWA proposals. Since 2020, DNV has served as the NWA Coordinator for the State of Maine. DNV also has experience working directly with utilities to assess the potential for NWAs and

develop and implement NWA procurement frameworks. DNV has carried out this type of work in California, Florida, Maine, Maryland, New York, and Canada.

70. The motion being unopposed, I find good cause to grant this motion and waive response time.

IV. FINDINGS AND CONCLUSIONS

71. The Settling Parties have the burden of proving by a preponderance of the evidence that the Settlement Agreement is just and reasonable and in the public interest.

72. The Commission has an independent duty to determine matters that are within the public interest. *See Caldwell v. Public Utilities Commission*, 692 P.2d 1085, 1089 (Colo. 1984).

73. I have reviewed the full administrative and evidentiary record, including: the direct, cross-answer, and rebuttal testimony filed by the Parties; the settlement testimony filed by the individual Settling Parties; the terms and conditions of the Settlement Agreement; and the Joint Stipulation. I have duly considered the positions of all parties in this matter and weighed the evidence presented.

74. Based on the entire record, I find that approval of the Settlement Agreement and Joint Stipulation with slight modification is in the public interest. The Settlement Agreement and Joint Stipulation propose fair and timely resolution of all contested issues and substantial evidence shows that their terms will benefit customers, the Settling Parties, and generally support Colorado's energy goals. However, after consideration of the full record, the following areas require some modifications.

75. Regarding the Settlement Agreement's modification that NWA candidate projects that to meet the Company's screening criteria at the conclusion of Phase I shall proceed to Phase

II, except for those involving service to Critical Infrastructure customers as defined by the Company, I note that neither the company nor the commission defines critical infrastructure customers.⁶ Given the late introduction and lack of clarity around this term, it would be appropriate for the Company to continue to refine with stakeholders prior to the next DSP what specific types of customers or facilities would qualify as Critical Infrastructure customers to avoid circumstances in the future that may lack consistency or transparency related to this approach. Additionally, if the Company chooses to take the same approach in the next DSP, it should address the possibility that certain DER deployments as part of an NWA may have the potential to improve reliability or redundancy at critical infrastructure facilities; a concept not addressed by the current approach.

76. The Settlement agreement states that the Company's proposed 25% NWA safety margin is appropriate for this DSP. At hearing, Company Witness Pollock confirmed that for this initial DSP, the Company believed it was important to maintain some sort of reserve margin, similar to other aspects of generation and transmission planning on assets. He added that the intent is to take the lessons learned from the first DSP, and potentially look at revising that safety margin in future DSPs.⁷ While I appreciate the flexibility that Public Service has offered regarding revising safety margins for future DSPs, I stress that safety margins should be case specific, and not one number (such as 25%) moving forward. The application of an overly broad or overly aggressive safety margin could serve to exclude many NWA approaches that may otherwise serve the need and provide customer savings over traditional infrastructure investment,

⁶ At hearing, Public Service witness Mino clarified that the Company does not have a strict definition of what, "critical customers," are, but adds that the company interprets them as wastewater and water treatment plants, and could include major hospitals, major airports, and military bases. Hrg. Transcript (Dec. 8, 2022) at 99:20-100:1.

⁷ Hrg. Transcript (Dec. 8, 2022) at 25:2-8.

so it is important to use a data-driven approach to ensure proper competitiveness of all options. This is an area I expect the stakeholders to work together on prior to the next DSP filing.

77. Further, the Company's commitment to include existing demand response in the evaluation of proposed candidate NWA projects is a welcome change to the current approach. It is unfortunate that the Company chose not to include an existing resource within the first DSP, which seems as though it would have provided a more current and accurate view the system, so I expect that this will be done transparently and fully for the next DSP.

78. Specifically with regard to the web portal, Public Service's testimony has raised concerns regarding the Company's ability to track whether the web portal and hosting capacity analysis are advancing the integration of distributed energy resources. The goal of deploying these tools should be to increase the ease and efficiency, while minimizing the timeline and costs, associated with integration and interconnection of distributed energy resources. Ideally, these resources should also allow for tracking progress in achieving these objectives. Additionally, testimony filed throughout this Proceeding indicates the projected cost of the web portal has increased in, although at hearing, Public Service witness Pollock stated that recent work had come in under budget.⁸ The Settlement Agreement adopts Public Service's proposal for the web portal consistent with its supplement direct testimony, including solicitation of feedback from web portal users by email. Public Service also agrees to make reasonable efforts to align the publicly available data in its web portal with that available in Minnesota, and to provide a monthly feeder DER queue. In the next DSP, I direct Public Service to specifically address the effectiveness of the web portal for advancing the integration of distributed energy resources, based on feedback received from users and to explore other potential metrics, such as the number of interconnection applications that are being accepted versus rejected, streamlining of timelines for interconnection applications, etc.

79. As highlighted within this record, the Company's timelines for processing different steps of the interconnections are concerning. While this proceeding may not be the proper venue, this appears to be an important matter for the Commission to pursue to ensure that customers and companies requesting to interconnect to the Company's system encounter a

⁸ Hrg. Transcript (Dec. 8, 2022) at 46:8-18.

process that is efficiency, transparent and provides proper recourse when appropriate standards, including the Commission's own rules, are not met.⁹ At hearing, Public Service witness Pollock also explained that there may be opportunities for the Company to explore using web portal data for beneficial electrification.¹⁰ As part of the information it will provide in the next DSP to describe the evolution of its planning and forecasting functions (§ 4.4 of the Settlement Agreement), I further direct Public Service to address within the next DSP whether it is finding uses for the information developed for the web portal internally.

80. I also find that the Company's record in delivering past pilots is relevant in ensuring that pilots approved herein are designed to learn from past experience and have the greatest chance of providing high value experience and data to the Company, stakeholders, and the Commission itself to ultimately provide benefit to ratepayers. In reviewing the final report on pilot projects approved in Proceeding No. 15A-0847E, the Commission noted significant Company management failings in the conduct of those pilots. Although no decision was warranted following the Commission's September 23, 2020, deliberations on the final report, the Commissioners articulated the following guidelines regarding approval of future pilots:

- a) When considering similar projects in the future, the Commission should articulate its expectations that such projects will be thoroughly thought through in advance of any equipment procurement to best promote project success.
- b) As a general practice, cost recovery for such projects should not be approved prior to publication and staff review of the project final report and any necessary follow-up investigation.
- c) The Commission should look for opportunities to signal that future approval of expenditures on similar research projects will require a demonstration

⁹ For example, the Commission is currently investigating the interconnection practices of Colorado's regulated electric utilities as they affect distributed energy resources. The investigation has led to a Staff report with recommendations that the Commission can take to improve the interconnection process. The investigation is ongoing.

¹⁰ Hrg. Transcript (Dec. 8, 2022) at 41:20-42:6.

by the utility that the research to be conducted has not already been completed elsewhere, or in the alternative, that the value to ratepayers of the direct, hands-on experience to be gained by Company personnel exceeds project cost. To that end, the Commission should consider taking administrative notice of this report in similar future proceedings, as appropriate.

81. In this Proceeding, both the Settlement Agreement and the Company's testimony in support of that agreement state that the Company will establish a comprehensive set of specific goals and metrics for the DRMS pilot and that the Company will identify and implement a secondary use case for DRMS in the pilot period.¹¹ I find that these provisions are in direct conflict with the first of the guidelines for pilot approval presented above and risk delivery of a pilot in which the expectations are unclear. In addition, it appears that the request to approve the DRMS pilot does not meet Commission Rule 3533(a)(II)(A-K) absent additional information. Execution of a DRMS has the potential to create significant opportunities and savings, however, the magnitude of those will rely significantly on the degree to which the Company and its vendor maximize opportunities for its deployment. While deployment of battery controls is a great fit for DRMS, the lack of clarity about intent to include other DERs and to grow the battery controls from an initial group of 1,850 units leaves considerable questions about if the Company plans to make direct efforts to maximize the value of the DRMS in the near-term on behalf of ratepayers. Additional information on the Company's plans prior to acquiring firm pricing or a contract could ensure greater transparency and ability to meet stakeholder expectations.

82. Accordingly, I order that the Company file, in this Proceeding, a report that fully presents the use cases (both primary and secondary) for the DRMS, as well as a comprehensive set of goals and metrics and an evaluation plan for the pilot. The report should meet the requirements in the Commission's DSP rules and should include sufficient detail to identify

¹¹ Settlement Agreement, ¶¶ 20.4, 21; Hearing Exhibit 111, Settlement Testimony of Zachary Pollock, p.23

interim and final objectives with a timeline for each and, wherever possible, measurable goals to allow for a thorough and streamlined review of performance.

83. Cost recovery for all DRMS-pilot related expenditures may be recoverable in a future rate case proceeding or multiple future rate case proceedings and may well hinge on the Company's ability to report out on interim or final objectives. Any future review of expenditures would be subject to prudence review provided that the Company has filed a report on its progress related to expected interim or final objectives on the pilot in advance of or in conjunction with that proceeding.

84. With regard to the third guideline above, the Company testified at hearing that it has conducted extensive research into other utilities' experiences with DRMS and discussed with DRMS vendors the difficulties experienced in prior DRMS deployments. The Company indicates that this research will help it to avoid repeating mistakes that have been made elsewhere¹². While important, this testimony does not address the question of whether the proposed DRMS pilot will test novel use cases that have not already been demonstrated elsewhere. Given that DRMSs have been previously used to dispatch battery systems, my view is that the term "demonstration project" is a more apt description than "pilot" for what the Company proposes here. Nonetheless, given that 1) the Company testifies that it will be "testing" whether or not it can move battery management into a "more sustainable management system" (the DRMS), 2) there is likely significant value in the Company gaining operational experience in using the DRMS, 3) the estimated budget needed to implement the DRMS is quite small, 4) the fact that the Company is proposing to defer cost recovery to a future rate case rather than the creation of a regulatory asset, and 5) the fact that all parties support the DRMS pilot, I

¹² Hearing Transcript, pp. 61-62.

recommend that the Commission approve the DRMS pilot subject to the requirements in paragraph 82.

85. I further find that the parties have established by a preponderance of the evidence that the Settlement Agreement is just, reasonable, in the public interest, and should be accepted by the Commission.

86. Having approved the Settlement Agreement and Joint Stipulation, I also find good cause to grant the waivers discussed above. Granting the waivers will allow the DSP process, which is evolving, to proceed more efficiently.

V. ORDER

A. The Commission Orders That:

1. The Settlement Agreement filed by Public Service on November 22, 2022, and attached to this Recommended Decision as Appendix A, is approved, consistent with the discussion above.

2. The Joint Stipulation, filed by Public Service and the Colorado Solar and Storage Association, Solar Energy Industries Association, and Advanced Energy Economy (collectively, CEI), filed on December 7, 2022, and attached to this Recommended Decision as Appendix B, is approved, consistent with the discussion above.

3. The Joint Motion to Approve Settlement Agreement filed by Public Service Company of Colorado (Public Service or Company) on November 22, 2022, is granted, consistent with the discussion above.

4. The Application for Approval of Public Service's Phase I Distribution System Plan filed on May 2, 2022, is approved as amended by the Settlement Agreement and Joint Stipulation, consistent with the discussion above.

5. The Motion to approve the selection of DNV Energy Insights USA Inc. (“DNV”) to serve as Independent Evaluator, filed on December 14, 2022, is granted, consistent with the discussion above.

6. The waivers requested by the parties are granted, consistent with the discussion above.

7. 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.

8. 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.

a) If no exceptions are filed within 20 days after service 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 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, the Commission is bound by the facts set out by the administrative law judge and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

9. 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)



THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

MEGAN M. GILMAN

Hearing Commissioner

ATTEST: A TRUE COPY

A handwritten signature in cursive script, appearing to read "G. Harris Adams".

G. Harris Adams,
Interim Director