#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 23M-0466EG

IN THE MATTER OF THE COMMISSION'S EXAMINATION OF THIRD-PARTY PROVISION OF GAS DEMAND RESPONSE SERVICES, VIRTUAL POWER PLANTS, AND NEIGHBORHOOD ELECTRIFICATION IN PUBLIC SERVICE COMPANY OF COLORADO'S ELECTRIC AND GAS SERVICE AREAS PURSUANT TO DECISION NO. C23-0413.

# COMMISSION DECISION GRANTING, IN PART, AND DENYING, IN PART, EXCEPTIONS TO RECOMMENDED DECISION NO. R24-0009 AND CLOSING PROCEEDING

Mailed Date: April 5, 2024 Adopted Date: February 21, 2024

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# I. <u>BY THE COMMISSION</u>

#### A. Statement

1. Through this Decision, the Commission adopts Decision No. R24-0009 (Recommended Decision), issued on January 5, 2024, with modifications and clarifications contained in this Decision. The Commission also addresses the exceptions to the Recommended Decision filed on January 25, 2024, by Public Service Company of Colorado (Public Service or the Company) and jointly by the Colorado Solar and Storage Association and the Solar Energy Industries Association with Advanced Energy United (COSSA/SEIA with AEU).

# B. Discussion

2. This Proceeding was opened in the wake of Proceeding No. 22A-0309EG, where the Commission reviewed and approved, with modifications, Public Service's application addressing the strategic issues that surround the Company's implementation of demand-side management (DSM) and beneficial electrification (BE) programs. That proceeding was conducted while other key proceedings similarly revealed the urgency necessary to address the acquisition of demand response as a viable, cost-effective, and critical resource for both the electric utility and natural gas utility systems operated by Public Service. The need for alternatives to Company investments in traditional power plants, the economic imperative to optimize electric and gas distribution and transmission infrastructure, and the call for strategies to reduce exposure to volatile natural gas commodity prices were raised not only as key DSM issues, but were repeatedly identified as crucial matters in other concurrent proceedings. These cases include the Company's inaugural Distribution System Plan (Proceeding No. 22A-0189E) and its electric resource plan (ERP) that included a Clean Energy Plan (Proceeding No. 21A-0141E).

- 3. In September 2023, we were compelled to examine the provision of demand response and other essential customer programs by third-parties. We opened this Proceeding in an attempt to catalyze movement because we saw a lack of leadership from Public Service in these critical areas. As revealed by the exceptions to the Recommended Decision, our attempts to cause immediate execution of these programs have fallen short in certain respects.
- 4. The Recommended Decision adopted by this Decision acknowledges that not all of the necessary technical, due diligence, product design, and timelines for the pilots have been addressed—points raised by Public Service at the very end of this Proceeding. We have tried to lead on the issues addressed in the Recommended Decision by quickly assembling the stakeholders and laying out further guidance and objectives with their support. This Proceeding reflects how seriously this Commission wants to drive Public Service into action and how frustrated we find ourselves, knowing that critical investment and planning decisions are being made without the benefit of substantial advancements in this space. In all of the proceedings where demand response has been raised, it has appeared that Public Service has capable teams of professionals who could dramatically improve the Company's performance. We again appeal to the Company to exercise the leadership necessary to analyze and implement robust and innovative demand response for the benefit of its customers and for the advancement of Colorado's energy policies.
- 5. We have likely achieved all that we can in this Proceeding. Therefore, by this Decision, we close the Proceeding. In accordance with the discussion below, we will continue to press Public Service in the development and implementation of demand response acquisitions and programs in other future cases.

#### C. **Procedural Background**

- 6. By Decision No. C23-0628, issued on September 18, 2023, the Commission opened this administrative Proceeding to explore third-party implementation of certain pilot programs in the electric and natural gas service areas of Public Service in accordance with Decision C23-0413.1 This Proceeding was intended to facilitate the development and implementation of requests for proposals (RFPs) for third-party implementation of three pilot programs: (1) virtual power plants (VPPs); (2) natural gas demand response; and (3) neighborhood electrification. The Commission further stated that the main objectives of this Proceeding included: (1) identifying the core objectives and timelines for the three pilots; (2) setting the main technical, cost and time parameters for the RFPs; (3) establishing milestones for the RFPs; and (4) setting operational and reporting milestones for the pilots.
- 7. The Commission designated Tom Plant as Hearing Commissioner, pursuant to § 40-6-101(2), C.R.S., in Decision No. C23-0628.
- 8. In Decision No. R23-0637-I, issued on September 20, 2023, Hearing Commissioner Plant requested responses to numerous questions related to the development and implementation of RFPs for the three pilots. Hearing Commissioner Plant further set a procedural schedule, including a workshop held on October 11, 2023.
- 9. Following the October 11, 2023, workshop, Commissioner Plant issued Decision No. R23-0719-I, which included an additional series of questions as follow up from the initial workshop.
  - 10. On November 21, 2023, Commissioner Plant held a final workshop.

<sup>&</sup>lt;sup>1</sup> Decision No. C23-0413, issued on June 22, 2023, Proceeding No. 22A-0309EG.

- 11. Hearing Commissioner Plant issued his Recommended Decision on January 5, 2024. The Recommended Decision principally provided guidance for Public Service's upcoming RFPs related to VPPs and gas demand response.
  - 12. Public Service filed exceptions to the Recommended Decision on January 25, 2024.
- 13. COSSA/SEIA with AEU jointly filed exceptions to the Recommended Decision on January 25, 2024.
  - 14. No responses to the exceptions were filed.

#### D. Recommended Decision

- 15. Commissioner Plant states in the Recommended Decision that, at the outset of this Proceeding, the Commission indicated its intention to move quickly to ensure that the envisioned pilots are useful to Public Service's next strategic issues application proceeding for demand-side management (DSM) and beneficial electrification (BE), which is required to be filed in 2025.
- 16. With respect to VPP pilots, Commissioner Plant concludes that it was necessary, based on the workshop discussions and filed comments, that a common understanding of certain relevant terms was necessary. The Recommended Decision therefore sets forth definitions for the following: VPP, distributed energy resources (DER), DER aggregator, an Advanced Distribution Management System (ADMS), a Distributed Energy Management System (DERMS), a Demand Response Management System (DRMS), a "prosumer," and performance-based compensation.<sup>2</sup>
- 17. Commissioner Plant notes that the participants in this Proceeding, except for the Company, agreed that a platform licensed to the utility could be up and operational by fall 2024. Commissioner Plant found that this timeframe would allow the Company to conduct the VPP pilots

<sup>&</sup>lt;sup>2</sup> Recommended Decision, pp. 6-9.

for the winter of 2024-25 and the summer of 2025 before submitting its 2025 DSM/BE strategic issues filing. He also clarified that the anticipated VPP pilots will run through 2026.<sup>3</sup>

- 18. The Recommended Decision suggests components of an RFP to acquire a DERMS and sets forth objectives for pilots to be implemented using the DERMS platform. Commissioner Plant acknowledges that the Recommended Decision does not attempt to fully articulate all of the components of the RFP, but he states that the decision instead serves to establish core objectives for a successful RFP. <sup>4</sup>
- 19. For gas demand response, Commissioner Plant stated in the Recommended Decision that Public Service should implement a gas demand response pilot in time to collect valuable data during the 2024-2025 heating season also to contribute to the 2025 DSM/BE strategic issues filing.<sup>5</sup>
- 20. The Recommended Decision lays out core objectives for the gas demand response pilot based on comments and statements by participants in the workshops. <sup>6</sup> He further identifies technical data requirements that should be part of the pilot. <sup>7</sup>
- 21. Commissioner Plant clarifies that a gas demand response program should prioritize capacity constrained areas within the Public Service's gas system and cover diverse climate regions for the evaluation of pilot program impacts. He states that there should also be an effort to evaluate capabilities of hybrid heat pump systems the ability to remotely adjust trigger set points on the

<sup>&</sup>lt;sup>3</sup> Recommended Decision, p. 17.

<sup>&</sup>lt;sup>4</sup> Recommended Decision, p. 11.

<sup>&</sup>lt;sup>5</sup> Recommended Decision, p. 24.

<sup>&</sup>lt;sup>6</sup> Recommended Decision, p. 22.

<sup>&</sup>lt;sup>7</sup> Recommended Decision, p. 23.

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heat pumps (temperatures at which the heat pump switches from electric to gas) and other mechanisms to reduce gas usage in hybrid systems.<sup>8</sup>

22. Finally, Commissioner Plant concluded that while this Proceeding continued to seek input from participants regarding a neighborhood electrification pilot program, the comments received did not provide a sufficient record to develop a pilot here. He therefore found it appropriate to defer consideration of a third-party neighborhood electrification pilot to the Company's Clean Heat Plan proceeding (Proceeding No. 23A-0392EG), where it has already been raised.

#### E. **Exceptions to the Recommended Decision**

#### 1. **Exceptions of Public Service**

- In its exceptions, Public Service states that it is generally supportive of the 23. Recommended Decision but raises several issues for discussion and clarification.
- 24. First, Public Service argues that the record lacks all the appropriate technical and cost due diligence related to a DERMS RFP.9 However, Public Service states that the "Aggregator DERMS" RFP the Company is already intending to release at the end of the first quarter of 2024 is best aligned to achieving the Commission's objectives. Public Service states that this Aggregator DERMS RFP, initially intended to support its Renewable Battery Connect program, can also address many of the key points in the Recommended Decision, including enabling payment for performance, ability to integrate legacy systems, and to be technology neutral. 10
- 25. Second, Public Service states that it agrees that the future of distribution management lies in a more complex "Grid DERMS" and that future "is something that can be

<sup>&</sup>lt;sup>8</sup> Recommended Decision, p. 23.

<sup>&</sup>lt;sup>9</sup> Public Service's Exceptions, p. 2.

<sup>&</sup>lt;sup>10</sup> Public Service's Exceptions, p. 4.

further explored as part of the Company's next Distribution System Plan to be filed in the fourth quarter of 2024."<sup>11</sup>

- 26. Third, Public Service seeks additional guidance on the VPP pilot and the related product design process. <sup>12</sup> Public Service further argues that the timeline for the VPP pilot as contemplated in the Recommended Decision is unachievable. <sup>13</sup>
- 27. Fourth, Public Service states that the Recommended Decision fails to address cost recovery associated with the implementation of the DERMS, the actual VPP, and the gas demand response pilots. Public Service asks that the Commission designate either the Demand Side Management Cost Adjustment (DSMCA) for cost recovery or authorize the Company to create a regulatory asset to defer these costs for recovery in a future rate case or DSM proceeding. <sup>14</sup>

#### 2. Exceptions of COSSA/SEIA with AEU

- 28. In their exceptions, COSSA/SEIA and AEU argue that the Recommended Decision needs additional clarity to ensure that the VPP pilot program is a success. While they support the proposal for a "prosumer tariff" as the basis for a tariff-based VPP, they seek clarification in eight areas regarding the forthcoming tariff or set of tariffs to support the VPP.<sup>15</sup>
- 29. First, the tariff should define the goals of the program in congruence with the Recommended Decision, "including facilitating the delivery of demand response, enhancing the customer experience, shaping load to better conform with supply, distribution system load management, and operational savings and efficiency."

<sup>&</sup>lt;sup>11</sup> Public Service's Exceptions, p. 5.

<sup>&</sup>lt;sup>12</sup> Public Service's Exceptions, p. 6.

<sup>&</sup>lt;sup>13</sup> Public Service's Exceptions, p. 8.

<sup>&</sup>lt;sup>14</sup> Public Service's Exceptions, pp. 7-8.

<sup>&</sup>lt;sup>15</sup> COSSA/SEIA and AEU Exceptions, pp. 3-5.

- 30. Second, eligibility requirements should be defined related to communication, dispatch, measurement and verification, and settlement of performance-based compensation capabilities.
- 31. Third, separate tariffs are needed for residential and non-residential customers, including different minimum resource and aggregation capacities as well as different availability and performance requirements.
- 32. Fourth, standard tariff(s) should set forth performance requirements and performance-based compensation. Tariff participation should be open to all customers regardless of their electricity service rate. Requirements and compensation should be locked in for a period of five years, after which time VPP participants can transition to then-applicable tariffed requirements and compensation.
- 33. Fifth, the program should have streamlined and minimized data requirements for participation.
- 34. Sixth, the receipt of other incentives, such as upfront incentives or performance payments for energy, capacity, or other grid services, should not affect eligibility in a qualified VPP or for performance-based payments. At the same time, the VPP tariff should not replace other proven means of demand response and double compensation should not be allowed.
- 35. Seventh, the VPP program should prescribe the method for setting performance-based compensation using tariff riders to reflect standard and additional values provided by certain resources, locations, times, performance requirements, or grid conditions. The performance-based compensation methodology should reflect the full value of services.
- 36. Finally, each tariff proposed should include, at a minimum, specific terms, such as: minimum and maximum number of grid events for which the utility may dispatch the VPP; months

of the year that events can occur; days of the week that events can occur; time of day events can occur; maximum duration of events; minimum advance notification of events; performance compensation rate; and performance compensation rate lock period of at least 5 years.

37. COSSA/SEIA and AEU also raise concerns about potential tariff requirements that would change a customer's underlying rate structure or net metering arrangement, particularly under a VPP pilot program implemented by a tariff as they see outlined in the Recommended Decision. They point to specific provisions in paragraph 48 of the Recommended Decision that addresses "fixed charges" and seek clarification whether the requirement is intended to apply to a customer's electric service rate or their export rate only. They further point to the forthcoming discussion about net metering scheduled in 2024 (*i.e.*, the net metering working group to be convened by the Colorado Energy Office) and suggest that the Commission should not issue any "new requirements that impact" net metering before the conclusion of that discussion. They further contend that requiring a fixed charge to apply under a VPP tariff "would be out of scope for this proceeding, unsupported by the record, and counterproductive to the goals of the proceeding and state policy goals regarding DER adoption and electrification."

# F. Findings and Conclusions

38. Pursuant to § 40-6-109(2), C.R.S., the Commission may adopt, reject, or modify the findings of fact and conclusions of the Hearing Commission or, after examination of the record, enter its own decision and order therein without regard to the findings of fact of the Hearing Commissioner.

<sup>&</sup>lt;sup>16</sup> COSSA/SEIA and AEU Exceptions, pp. 5-7.

<sup>&</sup>lt;sup>17</sup> COSSA/SEIA and AEU Exceptions, p. 6.

<sup>&</sup>lt;sup>18</sup> COSSA/SEIA and AEU Exceptions, p. 6.

<sup>&</sup>lt;sup>19</sup> COSSA/SEIA and AEU Exceptions, p. 6.

39. Based on our review of the record, the Recommended Decision, and the exceptions, we find grounds to adopt the Recommended Decision with modifications and clarifications as set forth below.

# 1. Platforms and Pilots for a Virtual Power Plant (VPP)

- 40. In its exceptions, Public Service requests that the Commission provide additional guidance as to its expectations regarding the technical provisions of the DERMS both to ensure the Company is developing an appropriate RFP and implementing the "Aggregator DERMS" consistent with Commission expectations and to ensure alignment between the Company and other stakeholders in the future. Public Service identifies its "Aggregator DERMS" as a DRMS platform that is able to manage multiple technology agnostic systems for the purposes of delivering demand response capabilities. The Company's current vision for its "Aggregator DERMS" embodies the technical capabilities to execute: (1) pay for performance; (2) legacy system integration; and (3) technology neutrality.
- 41. We grant these exceptions and modify the Recommended Decision accordingly. The Company's first stages of DERMS deployment as described in its exceptions and in this Proceeding are what we will consider the Phase I DERMS. The technical abilities of the Phase I DERMS are summarized in ¶ 35 of the Recommended Decision. What Public Service calls in its exceptions its "Grid DERMS" we will designate to be the Phase II DERMS. We clarify that the technical abilities of the Phase II DERMS would include the capabilities designed in the Recommended Decision as modified by this Decision plus capability to: (1) integrate with ADMS and SCADA systems; (2) optimize the distribution system in both efficiency and operations; (3) address and manage system constraints; (4) establish target load curve parameters and manage loads within those parameters to the extent possible; (5) identify additional distribution level

resources that would assist in managing load to meet established demand parameters; and (6) manage demand response to deliver ancillary services to the distribution grid that enhance power quality and operations of the distribution system. Our principal guidance to Public Service is that the Phase I DERMS RFP should contemplate the potential capabilities of expanding to provide advanced services in Phase II, but those services will not be a core focus of the initial Phase I deployment.

42. We agree with Public Service that ¶ 35 of the Recommended Decision should remove the technical ability of the Phase I DERMS to "optimize the distribution system in both efficiency and operations." This technical feature is likely outside of the feasibility of the Company's Phase I DERMS platform and should instead be expected as a technical ability of the Phase II DERMS. Likewise, we modify the expected pilot program objectives of the Phase I DERMS in ¶ 36 of the Recommended Decision to include facilitating the delivery of demand response, enhancing the customer experience, and shaping load to better conform with supply. Phase I will focus on dispatch to serve grid level needs, while Phase II will enable dispatch specific to distribution system needs. As such, the objectives of distribution system load management and operational savings and efficiency are deferred to the Phase II DERMS. Additional objectives of the Phase II DERMS are set forth in ¶¶ 40, 42, 44, and 45 of the Recommended Decision. These include evaluating capabilities of DERMS to improve the operating efficiency of the Distribution System, integration with ADMS, SCADA and other distribution management technologies, identifying locational values of different technologies, and the delivery of ancillary services. We clarify that these objectives are moved from the objectives of the Phase I DERMS to become the objectives for the Phase II DERMS. Over time, as Public Service works towards Phase

II DERMS implementation, we agree with the Company that the pilots will expand in scope to address more nuanced use cases such as local distribution system management or other use cases.<sup>20</sup>

- 43. In terms of the Company's efforts to procure the Phase I DERMS, we adopt the components of the DERMS RFP articulated in ¶ 33 of the Recommended Decision. These components do not specifically call out the capabilities of the Phase II DERMS.
- 44. We further expect Public Service to propose the acquisition and implementation of the Phase II DERMS in its next DSP application filing or in another appropriate venue. Public Service requested, and we granted, an extension to file its next Phase I DSP application on or before November 15, 2024.<sup>21</sup> To the extent Public Service waits to propose the appropriate scope for the Phase II DERMS in that venue, it should also address the interaction between the Phase I and II DERMS and the Phase II competitive solicitation of non-wires alternatives. We further expect the filing that addresses the Phase II DERMS will include one or more pilots that satisfy the expectations for the Phase II DERMS as set forth in the Recommended Decision as modified by this Decision. However, we remain concerned about further delay in implementing certain pilots, particularly pilots that test the implementation of the types of programs described in the exceptions of COSSA/SEIA and AEU.
- 45. In its exceptions, Public Service requests clarification on the timeline of the DERMS-supported pilots. We grant this exception by clarifying that the Phase I DERMS timeframe should be modified such that the RFP to acquire the Phase I DERMS is implemented in time to support at least the Phase I DERMS-supported pilot to begin operations by September of 2024 (*i.e.*, Public Service's VPP pilot identified in its exceptions, which the Company anticipates

<sup>&</sup>lt;sup>20</sup> Public Service Exceptions, p. 9.

<sup>&</sup>lt;sup>21</sup> Proceeding No. 23V-0609E, Decision No. C24-0014, issued January 8, 2024.

can be appropriately implemented by the winter of 2024-2025, will initially focus on bulk system benefits). Accordingly, the full deployment of the Phase I DERMS should be operational November 2025, and the Phase II DERMS capabilities should be fully operational by the first quarter of 2026.

- 46. We appreciate that Public Service acknowledges that the adoption of the Phase I DERMS is the appropriate pathway to move on from this Proceeding and that the Phase I DERMS can be addressed by the Company's in-progress RFP for such a system.<sup>23</sup> With respect to this general timeline, we accept the caveats that Public Service identifies on page 8 of its exceptions. Specifically, we agree with the Company that correctly implementing the Phase II DERMS is of equal or greater importance than quickly implementing the system, however, we want to continue to instill urgency in the objective to test and obtain reasonably detailed and informative results of performance as soon as possible. By modifying our expectation for implementation of the Phase II DERMS until the first quarter of 2026, we expect the Company to apprise stakeholders of the implementation status as part of its proposed stakeholder engagement process and to continue to work on this with urgency and purpose.
- 47. At the February 21, 2024, Commissioners' Weekly Meeting where we discussed the exceptions to the Recommended Decision adopted by this Decision, we also opened a separate miscellaneous proceeding, Proceeding No. 24M-0136E, to examine the acquisition of demand response resources in the competitive solicitations that Public Service implements as part of its electric resource plans (ERPs). Decision No. C24-0212 explains that we intended to examine in this new proceeding many of the questions regarding VPP implementation raised by the

<sup>&</sup>lt;sup>22</sup> Public Service Exceptions, p. 9.

<sup>&</sup>lt;sup>23</sup> Public Services Exceptions, p. 5.

participants in this Proceeding potentially in the context of Public Service's ERP competitive bidding process, such as through the review of a detailed RFP for demand response resources including a model contract. We intend to investigate whether a competitive bidding process that relies on third-party demand response aggregators can generate actual market information about costs and performance that could subsequently be used to determine, among other things, the appropriate provisions to apply in other VPP programs. Our contemplated investigation will immediately precede the Company's Just Transition Solicitation to be implemented as an interim ERP.<sup>24</sup> Moreover, the timing of this examination into VPP implementation through ERP competitive bidding aligns with the timeline for the Phase I DERMS.

- 48. In its exceptions, Public Service seeks to retain the flexibility to implement liquidated damage mechanisms within the ERP contracting process and to maintain its discretion over the extent of these mechanisms when negotiating contracts with ERP bidders. We will need to ensure our approach appropriately balances certainty of performance with the risks, and therefore costs, to be borne by implementors, which would likely impact the delivered cost of a solution. We clarify that this topic is one that we intend to examine in Proceeding No. 24M-0136E.
- 49. Finally, for improved accuracy, we modify the Recommended Decision by replacing the term "intermittent" with "variable" to describe the nature of certain resources with respect to a VPP.

# 2. Tariff-Based VPP Programs

50. The exceptions filed by COSSA/SEIA and AEU require us to clarify the concept of the "prosumer tariff" articulated in the Recommended Decision. First, participation in the VPP pilots is not intended to be limited by qualifications set forth in such a tariff. Instead, participation

<sup>&</sup>lt;sup>24</sup> See Decision Nos. C22-0459 and C24-0161, issued August 3, 2022 and March 13, 2024, respectively, Proceeding No. 21A-0141E.

in pilots should be available to any of Public Service's retail electric customers who have requisite technologies capable of communicating and delivering demand response. Second, we anticipate that the vast majority of VPP participants will provide demand response in exchange for performance-based payments such that there would be no change in the terms or rates for retail electric service taken by the VPP participants. In other words, VPP pilots will not impact net metering or default tariff rates for service, which appears to be a prominent concern in their exceptions.

- 51. We further clarify that a "prosumer" on Public Service's electric system is a retail customer that provides resources to the Company's grid. Not all participants in a VPP program will be prosumers, and this differentiation may be beneficial when designing pilots for those retail customers who can reliably provide differing levels of capacity and similarly, may receive differing levels of compensation. Some threshold of capacity and control will likely distinguish a prosumer participant in a pilot from a standard participant.
- 52. With these clarifications, we deny the exceptions raised by COSSA/SEIA and AEU that reference the prosumer tariff discussed in the Recommended Decision. We deny the specific "Proposed Additions" they set forth in their exceptions that presume all VPP participants will be subject to the terms of a prosumer tariff.<sup>25</sup> Similarly, we deny the request to delete the portions of the Recommended Decision outlined as "Proposed Deletions."<sup>26</sup>
- 53. However, we agree with COSSA/SEIA and AEU that a pilot that entails a prosumer tariff is essential when the Phase II DERMS is operational and can support such a pilot. We also recognize that to implement a tariff approach, a separate proceeding would be needed for approval

<sup>&</sup>lt;sup>25</sup> COSSA/SEIA and AUE Exceptions, pp. 3-5.

<sup>&</sup>lt;sup>26</sup> COSSA/SEIA and AUE Exceptions, pp. 5-8.

of the tariff in accordance with the requirements in Title 40 of Colorado statutes. While we decline at this time to direct Public Service to file an advice letter to introduce tariff sheets to implement such a prosumer pilot using tariffs, we nevertheless confirm the merit of prosumer tariffs and address certain specific requests put forward by COSSA/SEIA and AEU in their exceptions.

- 54. For instance, Public Service should propose separate prosumer tariffs for residential and non-residential customers, including different aggregation capacities.<sup>27</sup> We clarify that the Recommended Decision intends for separate tariffs establishing qualifications and for separate capacities for these tariffs in ¶ 48 of the Recommended Decision. We also modify the Recommended Decision to emphasize that the pilots should have streamlined and minimized data requirements for participation.<sup>28</sup>
- 55. Likewise, we adopt certain suggestions offered by COSSA/SEIA and AEU in their exceptions regarding the setting of performance-based compensation for the forthcoming pilots.<sup>29</sup> Specifically, Public Service's VPP programs should address local and system peak demand reduction and a "clean peak service," and the pilots should further use telemetry for settlement. We expect that the Phase II DERMS will be necessary to support pilots that provide voltage support and other ancillary services, to avoid or defer transmission or distribution upgrades or capacity expansion, and to provide either a specific locational value or a non-wires alternative project. We therefore adopt those suggestions with the understanding that those pilots will not be implemented within the Phase I DERMS.

<sup>&</sup>lt;sup>27</sup> COSSA/SEIA and AUE Exceptions, p. 4.

<sup>&</sup>lt;sup>28</sup> COSSA/SEIA and AUE Exceptions, p. 4.

<sup>&</sup>lt;sup>29</sup> COSSA/SEIA and AUE Exceptions, pp. 4-5.

#### 2. **Gas Demand Response Pilot**

- 56. In its exceptions, Public Service states that it cannot wait for a final decision in this Proceeding before moving forward with the release of an RFP to implement a gas demand response pilot. The Company states that it raises this timing issue for the purpose of transparency and the Commission's awareness.<sup>30</sup>
- 57. We clarify that one purpose of this Proceeding was to spur the implementation of a gas demand response pilot and therefore we do not intend for it to cause a delay in the release of an RFP.
- 58. We also affirmatively adopt the findings, conclusions, and directives in the Recommended Decision that address the gas demand response pilot.
- 59. First, we agree with the guidance that the pilot should target capacity-constrained areas within the Public Service's gas system, ideally those areas where non-pipeline alternatives (NPAs) are being investigated by the Company already, with some variation of areas across climate areas to allow for a good understanding of performance in different conditions within the Company's service territory.
- 60. Second, we emphasize that the Company should endeavor to collect useful information on the homes participating in the pilot, including size, mechanical systems, numbers of thermostats, etc., as well as relevant information on the gas demand response events, including outdoor temperature during the event, results for each premise versus other control events without a demand reduction action and other relevant data. This data is essential so that results of the pilot can be effectively correlated and can provide meaningful insights into performance, especially

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<sup>&</sup>lt;sup>30</sup> Public Service Exceptions, p. 9.

across a service territory that serves three different climate zones with potentially significant variation in building systems and features.

61. Third, we modify the Recommended Decision as it relates to study questions for the pilot. Specifically, we agree with Public Service's suggested study question as follows:

What is the potential reduction of peak natural gas demand usage through demand response program designs and technologies, including but not limited to, different temperature setbacks, elevations, and different weather conditions?

However, the potential reductions should also take into account different mechanical systems and different housing stock. Another study area we raise is identification of the ideal contractual structures and performance models if the program is designed and managed, in large part, by a third party.

- 62. Fifth, we clarify our expectation that the pilot should include hundreds of participants so that the results are accurate and useful, especially so that there can be meaningful representation from the many unique segments discussed, including climate, mechanical system, home size, etc.
- 63. Finally, the pilot should entail a useful number of events in the heating seasons so that the results can be useful in examining potential avoided additional infrastructure investment and holistically include the variations such as temperature setback and different weather conditions as identified by the Company. Additionally, the events should include several of the coldest days during the heating season as well as on the hours within those days of highest gas usage, which may be in the 6 a.m. to 8 a.m. period. Like with many similar programs, a balance must be struck in exercising the program to identify results and performance in different circumstances, while not overwhelming or unnecessarily inconveniencing participants, which could cause dissatisfaction with their participation in the pilot. This includes thoughtful execution around events that will

provide meaningful learnings and data and appropriate communications to enhance customers' experience with the pilot.

#### 3. Neighborhood Electrification Pilot

64. We adopt the findings, conclusions, and directives related to the neighborhood electrification pilot in the Recommended Decision.

#### 4. Cost Recovery

decision in this Proceeding on the recovery of the costs associated with the implementation of the DERMS, the actual VPP, and the gas demand response pilots. We agree with the Company's statement in its exceptions that this case is a miscellaneous, non-adjudicatory proceeding without formal parties and evidentiary rights. Furthermore, the granting of certain exceptions as discussed above place many of the Company's next steps into future proceedings where the questions surrounding cost recovery will be timely and appropriately addressed.

# II. ORDER

#### **A.** The Commission Orders That:

- 1. The exceptions to Decision No. R24-0009, filed January 25, 2024, by Public Service Company of Colorado, are granted, in part, and denied, in part, consistent with the discussion above.
- 2. The exceptions to Decision No. R24-0009, filed January 25, 2024, by the Colorado Solar and Storage Association and the Solar Energy Industries Association with Advanced Energy United, are granted, in part, and denied, in part, consistent with the discussion above.
- 3. Decision No. R24-0009 is adopted with the modifications and clarifications set forth in this Decision.

- 4. This Proceeding is closed.
- 5. The 20-day time period provided pursuant to § 40-6-116, C.R.S., to file an Application for Rehearing, Reargument, or Reconsideration shall begin on the first day after the effective date of this Decision.
  - 6. This Decision is effective upon its Mailed Date.

# B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING February 21, 2024.



ATTEST: A TRUE COPY

Rebecca E. White, Director THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

**ERIC BLANK** 

MEGAN M. GILMAN

TOM PLANT

Commissioners