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

PROCEEDING NO. 22A-0382ST

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS STEAM REGULATORY AND RESOURCE PLAN.

# RECOMMENDED DECISION APPROVING SETTLEMENT AGREEMENT AND GRANTING MODIFIED APPLICATION

Issued Date: September 18, 2024

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## I. <u>STATEMENT, SUMMARY, AND PROCEDURAL HISTORY</u><sup>1</sup>

#### A. Statement and Summary

1. This Decision approves the Unanimous and Comprehensive Settlement Agreement filed on August 20, 2024 ("Settlement Agreement" or "Agreement") without modification; grants

<sup>&</sup>lt;sup>1</sup> Headers are for ease of reference only.

Public Service Company of Colorado's ("Public Service or the Company") above-captioned Application ("Application") as modified by the Agreement and the Unopposed Joint Motion for Approval of Unanimous and Comprehensive Settlement Agreement and Waiver of Response Time filed August 20, 2024 ("Unopposed Joint Motion"); approves the Company's Regulatory and Resource Plan ("Plan") as modified by the Agreement; vacates the September 24, 2024 hearing and all remaining procedural deadlines; and closes this Proceeding.

#### В. **Procedural History**<sup>2</sup>

- 2. On September 1, 2022, Public Service filed the above-captioned Application for approval of its Plan concerning the investments in and operations of its District Steam System ("Steam System") through 2030.
- 3. In addition to the Company, the following entities are parties to this Proceeding: Public Utilities Commission Trial Staff ("Staff"), the Colorado Energy Office ("CEO"), and the City and County of Denver ("Denver").3
- 4. Throughout this Proceeding, the Public Utilities Commission ("Commission") has directed Public Service to provide additional information (and studies) numerous times, and the Company has made filings consistent with these directives, as discussed in more detail later.<sup>4</sup>
- 5. On June 11, 2024, the Commission deemed the Application complete per § 40-6-109.5, C.R.S., and referred this matter to an administrative law judge ("ALJ") for disposition.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup> Only the procedural history necessary to understand this Decision is included.

<sup>&</sup>lt;sup>3</sup> Decision No. C22-0633-I at 9 (issued Oct. 19, 2022), Although the Colorado Energy Consumers ("CEC") was granted intervention status, it was dismissed by operation of Decision No. R24-0479-I on July 17, 2024. See id. at 10; Decision Nos. R24-0479-I (issued July 9, 2024) and R24-0584-I (issued August 14, 2024).

<sup>&</sup>lt;sup>4</sup> See Decision Nos. C22-0633-I (issued Oct. 19, 2022); C22-0841-I (issued Dec. 29, 2022); C23-0265-I (issued April 25, 2023); C24-0401-I (issued June 11, 2024); Hearing Exhibits 106 to 110. Although the administrative record shows that Decision No. C23-0265-I was filed on April 21, 2023, the Decision itself indicates it was mailed on April 25, 2023. Decision No. C23-0265-I

<sup>&</sup>lt;sup>5</sup> Decision No. C24-0401-I at 5 and 7 (issued June 11, 2024)

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- 6. After the matter was referred, with the parties' input, the ALJ established deadlines and procedures and scheduled a remote evidentiary hearing for September 24, 2024.6
- 7. On August 8, 2024, the Company filed a Notice of Comprehensive and Unanimous Settlement in Principle, Unopposed Joint Motion to Vacate Testimony Deadlines and For Waiver of Response Time ("Notice").
- 8. On August 14, 2024, the ALJ granted the relief sought in the Notice, vacated certain deadlines, modified others, and clarified that the evidentiary hearing on September 24, 2024 will be to address whether the anticipated settlement agreement should be approved.<sup>7</sup>
- 9. On August 20, 2024, the Company filed the Settlement Agreement. Public Service, Staff, Denver, and CEO ("Settling Parties") are signatories to the Agreement, rendering it unanimous and unopposed.<sup>8</sup> With the Agreement, Public Service filed the Unopposed Joint Motion seeking an order approving the Agreement without modification.
- 10. On September 4, 2024, consistent with procedural directives, the Company refiled the Settlement Agreement as Hearing Exhibit 111.9
- 11. On September 6, 2024, the Settling Parties each filed testimony in support of the Settlement Agreement.<sup>10</sup>

<sup>&</sup>lt;sup>6</sup> Decision No. R24-0479-I.

<sup>&</sup>lt;sup>7</sup> Decision No. R24-0584-I.

<sup>&</sup>lt;sup>8</sup> Because CEC is no longer a party, the Settlement Agreement remains unanimous despite CEC's failure to join the Agreement.

<sup>&</sup>lt;sup>9</sup> See Notice of Filing of Unanimous Comprehensive Settlement Agreement as Hearing Exhibit 111 (explaining that the Agreement is refiled to comply with the formatting and marking requirements in Attachment B to Decision No. R24-0479-I). Hereinafter, the Settlement Agreement is cited as Hearing Exhibit 111.

<sup>&</sup>lt;sup>10</sup> Hearing Exhibits 112, 300 and 500.

#### II. **DISCUSSION AND FINDINGS**

#### Α. **Relevant Law and Findings**

- 12. The Commission has broad constitutional and statutory authority to regulate public utility rates, services, and facilities. 11 Indeed, the Commission is charged with ensuring that utilities provide safe and reliable service to customers at just and reasonable rates. 12
- 13. When exercising any power granted to it, the Commission must give the public interest first and paramount consideration and must ensure that public utility rates are just and reasonable.13
- 14. As the proponents of an order, the parties to the Settlement Agreement bear the burden of proof by a preponderance of the evidence that the Agreement should be approved. 14 This standard requires the fact finder to determine whether the existence of a contested fact is more probable than its nonexistence. 15 The preponderance of the evidence standard requires substantial evidence, which is such relevant evidence as a reasonable person's mind might accept as adequate to support a conclusion. 16
  - The Commission encourages settlement of contested proceedings. 17 15.
- 16. The ALJ assesses the Settlement Agreement and issues in this Proceeding with these principles and legal standards in mind.

<sup>&</sup>lt;sup>11</sup> Colo. Const. art. XXV; §§ 40-3-101, 40-3-102, 40-6-111, and 40-3-111, C.R.S.

<sup>&</sup>lt;sup>12</sup> §§ 40-3-101, 40-3-102, 40-3-111, and 40-6-111, C.R.S.

<sup>13 § 40-3-101(1),</sup> C.R.S.; Pub. Serv. Co. of Colo. v. Pub. Utilis. Comm'n, 350 P.2d 543, 549 (Colo. 1960), cert. denied, 364 U.S. 820 (1960).

<sup>&</sup>lt;sup>14</sup> § 24-4-105(7), C.R.S.; Rule 1500 of the Commission's Rules of Practice and Procedure, 4 Code of Colorado Regulations ("CCR") 723-1.

<sup>&</sup>lt;sup>15</sup> Swain v. Colorado Dep't of Revenue, 717 P.2d 507, 508 (Colo. App. 1985).

<sup>&</sup>lt;sup>16</sup> City of Boulder v. Pub. Utilis. Comm'n., 996 P.2d 1270, 1278 (Colo. 2000), quoting CF&I Steel, L.P., 949 P.2d at 585.

<sup>&</sup>lt;sup>17</sup> Rule 1408(a), 4 CCR 723-1.

17. The Commission may determine an application or petition without a hearing and without further notice on its own motion or a party's when the application is uncontested or unopposed; a hearing is not requested or required; when the application is accompanied by a sworn statement verifying sufficient facts and has sufficient record support.<sup>18</sup>

Application and Plan, the ALJ finds that the Commission has jurisdiction and authority to decide this matter. In addition, because the Agreement is unanimous and comprehensive; the Plan, as modified by the Agreement, is supported by sworn statements verifying sufficient facts and has sufficient record support, and a hearing is not required, the ALJ finds that a hearing is unnecessary. As such, the ALJ decides this matter without a hearing based on the record. Decided the support of the ALJ decides this matter without a hearing based on the record.

#### B. Background

19. Public Service filed the Application in compliance with the Commission's decisions in the Company's 2019 Steam Rate Case, Proceeding No. 19AL-0063ST ("Steam Rate Case"). Proceeding No. 19AL-0063ST ("Steam Rate Case"). Specifically, based on an approved Settlement Agreement in the Steam Rate Case, the Company was required to file a steam regulatory and resource plan and the results of an engineering study ("Engineering Study") evaluating the Company's individual steam facilities and potential future conversion to another fuel source on or by May 1, 2022 (later extended to September 1, 2022). This was the result of concerns in the Steam Rate Case that a significant rate increase (necessitated by infrastructure investments) combined with other available more

<sup>&</sup>lt;sup>18</sup> Rule 1403(a). 4 CCR 723-1.

<sup>&</sup>lt;sup>19</sup> See Hearing Exhibits 100 to 112, 300 and 500. The Settling Parties are applauded for providing thorough and helpful Settlement Testimony upon which the ALJ heavily relied in determining that a hearing is not necessary.

<sup>&</sup>lt;sup>20</sup> Rule 1403(a), 4 CCR 723-1.

<sup>&</sup>lt;sup>21</sup> See Decision Nos. R19-0591, ¶¶ 53-57 (issued July 12, 2019) and C19-0734 at 12 (issued Sept. 5, 2019) in the Steam Rate Case; Hearing Exhibit 100 at 1, citing preceding Decisions.

<sup>&</sup>lt;sup>22</sup> See Decision No. C22-0251 at 3 (issued April 22, 2022) in the Steam Rate Case; Hearing Exhibit 100 at 1-2, citing preceding Decision.

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economical alternatives may cause steam customers to exit the Steam System, resulting in system costs being allocated across a declining customer base.<sup>23</sup>

- 20. When Public Service filed the Application, it had approximately 121 steam customers (or metered locations), primarily composed of commercial customers located in downtown Denver.<sup>24</sup>
- 21. This Proceeding presents the first or one of the first serious Commission discourses as to the future of the Company's downtown Steam System, the oldest continuously operating steam system in the world.<sup>25</sup> As explained below, this Proceeding has presented opportunities for the Company, the Commission, and stakeholders to investigate the economics of customer-sited gas and electric resistance boilers as alternatives to the Company's steam service, and other alternative potential low-carbon technologies, namely heat pumps and ambient loop systems.<sup>26</sup>
- 22. To facilitate this discourse, the Commission directed Public Service to consult with Intervenors to come to a consensus approach to developing information that will enable the Commission to determine whether air-source heat pumps, district geo-exchange, or other geothermal technologies are viable alternatives for the Steam System's customers.<sup>27</sup> The Commission also directed the Company to develop and present an additional analysis of steam rates through 2030 assuming a 7.5 percent annual reduction in steam sales, which the Company completed and filed on December 5, 2022.<sup>28</sup>
- 23. In response to Commission directives, the Company initiated an informal collaborative process with the parties resulting in a consensus approach to study the additional

<sup>&</sup>lt;sup>23</sup> See Hearing Exhibit 112, 7: 18-20—8: 1-2.

<sup>&</sup>lt;sup>24</sup> See Hearing Exhibit 101, 8: 18-20.

<sup>&</sup>lt;sup>25</sup> Hearing Exhibit 112, 6: 13-16.

<sup>&</sup>lt;sup>26</sup> *Id.* at 6: 16-10—7: 1-2.

<sup>&</sup>lt;sup>27</sup> Decision No. C22-0633-I at 7-9.

<sup>&</sup>lt;sup>28</sup> *Id.* at 8-9; Hearing Exhibit 105. *See* Hearing Exhibit 111 at 3.

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technologies in which the Commission expressed interest.<sup>29</sup> Under this consensus approach, the Company agreed to conduct two studies, ("Additional Technologies Studies"). 30 The first study ("Heat Pump Study") would address the feasibility and cost to adopt customer-sited air source heat pump or ground source heat pump technologies.<sup>31</sup> The second study ("Ambient Loop Study") would consider options, the feasibility, and cost of converting the Steam System (or portions thereof) to an ambient temperature district heating/cooling system ("ambient loop system," "ambient temperature system" or "ambient temperature district system") coupled with customersited water source heat pumps.<sup>32</sup>

- On April 25, 2023, the Commission approved the proposed Additional 24. Technologies Studies and directed Public Service to file supplemental direct testimony:
  - discussing the findings of the studies and their significance in the context of the existing Steam System and the previously completed studies of the technical and financial viability of current steam customers migrating to on-site gas-fired and electric boilers;
  - providing comparisons of the lifecycle costs ("from both the customer and system perspectives") and payback periods for each of the five technology options (on-site electric boilers, on-site gas boilers, on-site air-source heat pumps, on-site groundsource heat pumps, and an ambient temperature district system with associated on-site heat pumps), with the required testimony on potential heat pump adoption incorporating the impacts of both federal and state subsidies and tax credits for each technology as appropriate; and
  - providing an update to the Company's strategic vision for the future of the Steam System in light of the findings from the Additional Technologies studies, including, to the extent that the Company's strategic vision for the system anticipates conversion to an ambient temperature district system, a discussion of the potential for strategic growth of the system.<sup>33</sup>

<sup>&</sup>lt;sup>29</sup> See Hearing Exhibit 111 at 4.

<sup>&</sup>lt;sup>30</sup> As used in this Decision, the terms the Additional Technologies Studies refer to Hearing Exhibit 108, Attachment JTS-4 (Heat Pump Study) and Hearing Exhibit 108, Attachment JTS-5 (Ambient Loop Study).

<sup>&</sup>lt;sup>31</sup> See Hearing Exhibit 111 at 4; Hearing Exhibit 108, Attachment JTS-4.

<sup>&</sup>lt;sup>32</sup> See Hearing Exhibit 111 at 4; Hearing Exhibit 108, Attachment JTS-5. As envisioned, such an Ambient Loop System would conceivably serve existing steam service customers through the use of a community ground source heat exchanger that delivers geothermally tempered fluid to each customer facility. See Hearing Exhibit 111 at 4.

<sup>&</sup>lt;sup>33</sup> Decision No. C23-0265-I.

25. On May 6, 2024, the Company filed the Additional Technologies Studies with supporting witness testimony responding to the above items.<sup>34</sup> Public Service also provided testimony reviewing changes in state and local policies impacting the Steam System since the Company's direct filing and updates as to its engineering consultant and legal costs associated with the Plan, including the costs of conducting and completing the Engineering Study and Additional Technologies Studies submitted in this proceeding.<sup>35</sup>

26. On June 11, 2024, the Commission directed Public Service to file additional supplemental direct testimony providing information addressing certain estimated costs associated with upgrading the natural gas system to facilitate the conversion of steam customers to gas, and information on steam customers' building performance standard requirements.<sup>36</sup> The Commission required this to help it evaluate the appropriate baseline to use in assessing the incremental costs of the heat pump systems assessed in the two studies.<sup>37</sup> The Company addressed these directives via filings made on July 17, 2024.<sup>38</sup>

#### C. Settlement Agreement<sup>39</sup>

27. As noted, the Agreement, is unanimous and unopposed.<sup>40</sup> The Agreement is intended to comprehensively address all issues that have been or could have been raised in this Proceeding.<sup>41</sup> The Settling Parties agree that the Agreement is just, reasonable, and consistent with and not contrary to the public interest.<sup>42</sup>

<sup>&</sup>lt;sup>34</sup> See Hearing Exhibits 106 to 108.

<sup>&</sup>lt;sup>35</sup> See Hearing Exhibit 106.

<sup>&</sup>lt;sup>36</sup> Decision No. C24-0401-I at 5-6 citing Hearing Exhibit 101 at 28-29.

<sup>&</sup>lt;sup>37</sup> *Id*. at 6.

<sup>&</sup>lt;sup>38</sup> See Hearing Exhibits 109 to 110.

<sup>&</sup>lt;sup>39</sup> The Agreement includes numerous general provisions that are common in Commission settlement agreements. *See* Hearing Exhibit 111 at 14-17. This Decision does not outline those provisions, as unnecessary.

<sup>&</sup>lt;sup>40</sup> Hearing Exhibit 111 at 1.

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> *Id.* at 14-15.

1. Plan Approval

28. The Settling Parties agree that the Commission should enter an order approving the

Plan, as set forth in the Application and supported through the Company's Direct Testimony and

Attachments and its First, Second and Third Supplemental Direct Testimony and Attachments

(found at Hearing Exhibits 101 to 110), as modified by the Agreement.<sup>43</sup> Under the Plan, Public

Service's Steam System will continue without additional steam production resources, and its

existing Denver Steam Plant ("DSP") Unit One and Two boilers will be maintained beyond their

book depreciation lives through 2030, (subject to the Agreement's modifications).<sup>44</sup>

29. In support of this significant Agreement term, Public Service explains that the

Engineering Study assesses the likelihood that customers will replace steam service by installing

their own natural gas boiler or electric resistance boiler.<sup>45</sup> Using those results, the Company

performed a payback analysis to evaluate how long it will take for customers to recover the costs

of infrastructure necessary to convert from steam to a gas or electric resistance boiler. 46 Based on

this analysis, Public Service concluded that it is most economically feasible for the majority of

steam customers to remain on the Steam System.<sup>47</sup> Public Service also analyzed various load loss

scenarios to determine the range of sales levels that could be realized by 2030, including

assumptions about total annual sales and peak demand, consistent with Commission directives.<sup>48</sup>

Based on its analyses, Public Service concluded that its steam business could continue to operate

as is without major changes for the foreseeable future. 49

<sup>&</sup>lt;sup>43</sup> See id. at 9.

<sup>44</sup> Id.

<sup>&</sup>lt;sup>45</sup> Hearing Exhibit 112, 13: 12-14.

<sup>&</sup>lt;sup>46</sup> *Id.* at 13: 14-18.

<sup>&</sup>lt;sup>47</sup> *Id.* at 14: 2-4.

<sup>&</sup>lt;sup>48</sup> *Id.* at 14: 9-14, citing Hearing Exhibit 102, 18: 10-22—19: 1-8.

<sup>&</sup>lt;sup>49</sup> *Id.* at 14: 14-17, citing Hearing Exhibit 102, 19: 9-17—34: 1-9; Hearing Exhibit 103, at 16-19.

30. As a result of its various analyses, the Company's Plan recommends maintaining the existing steam production resources and distribution system; periodically evaluating the Steam System's peak demand to determine whether DSP Unit One can be retired; monitoring the location of customers leaving the Steam System to determine if it can retire branches of the Steam System; and not proactively encouraging customers to leave the Steam System to support rate sustainability.<sup>50</sup>

31. The results of the Additional Technologies Studies the Commission required do not alter the Company's original conclusions and Plan proposals.<sup>51</sup> The Company explains that the Additional Technologies Studies found that for steam customers, replacing steam with air source heat pumps alone is not technically feasible at this time, as a backup heat source would be necessary; that it is not feasible to use geothermal heat for water source heat pumps due to limited available open land in downtown Denver and the difficulty and cost of drilling heat exchange wells; that it is technically feasible for customers to install water source heat pumps paired with an ambient loop; and that repurposing the Company's chilled water network to provide ambient loop service is the most feasible option, but comes with a high cost and technical challenges.<sup>52</sup> Based on all of this, the Company concluded that the Additional Technologies Studies did not offer viable alternatives, but that an ambient loop system to serve downtown Denver customers has potential promise, though it will likely take many years to fully design, develop and implement.<sup>53</sup>

<sup>&</sup>lt;sup>50</sup> Hearing Exhibit 112, 14: 14-17, citing Hearing Exhibit 101, 36: 6-16 and Hearing Exhibit 102, 33: 9-19—34: 1-8.

<sup>&</sup>lt;sup>51</sup> Hearing Exhibit 112, 16: 11-15.

<sup>&</sup>lt;sup>52</sup> *Id.* at 15: 16-22—16: 1-3, citing Hearing Exhibit 106, 15: 3-16.

<sup>&</sup>lt;sup>53</sup> *Id.* at 16: 4-8.

32. Public Service also submits that the Agreement will result in substantial savings by establishing certainty and avoiding unnecessary litigation, and is in the public interest.<sup>54</sup> Staff generally agrees.<sup>55</sup>

33. Staff describes the Agreement as establishing a balanced path forward for the Company's Steam System while addressing both immediate and long-term needs.<sup>56</sup> Staff explains that the feasibility studies determined that it would cost approximately \$1.064 billion to \$1.229 billion for the air source heat pump option, including \$599 million in customer conversion costs and \$360 to \$480 million in utility infrastructure costs.<sup>57</sup> Costs for the ground source heat pump and ambient loop system options are similarly high, ranging from \$729 to \$854 million for both options, each coming with \$364 million in customer conversion costs and \$300 to \$400 million in utility infrastructure costs.<sup>58</sup> Converting to natural gas boilers is estimated to cost \$161 million, including \$154 million in customer conversion costs and \$7 million in utility infrastructure costs.<sup>59</sup> Likewise, converting to electric boilers is estimated to cost between \$782 and \$987 million, with \$167 million in customer conversion costs and between \$450 and \$600 million in utility infrastructure costs. 60 And, Public Service estimates that it will also incur unrecovered Steam System costs associated with total plant-in-service and decommissioning (minus accumulated depreciation) of approximately \$99.3 million.<sup>61</sup> Staff explains that the incredibly high cost to convert the Steam System, as compared to the much lower cost to maintain and upgrade the

<sup>&</sup>lt;sup>54</sup> *Id.* at 29: 1-10.

<sup>&</sup>lt;sup>55</sup> See Hearing Exhibit 300, 5: 3-5.

<sup>&</sup>lt;sup>56</sup> Hearing Exhibit 300, 9: 8-10.

<sup>&</sup>lt;sup>57</sup> *Id.* at 11: 17-18—12: 1.

<sup>&</sup>lt;sup>58</sup> *Id.* at 12: 2-5, citing Hearing Exhibit 106, 35: 1-2 (Table RAM-D-3).

<sup>&</sup>lt;sup>59</sup> *Id.* at 12: 11-14, citing Hearing Exhibit 106, 35: 1-2 (Table RAM-D-3).

<sup>&</sup>lt;sup>60</sup> *Id.* at 12: 14-17—13: 1, citing Hearing Exhibit 106, 35: 1-2 (Table RAM-D-3).

<sup>&</sup>lt;sup>61</sup> *Id.* at 13: 1-4.

System, was a major factor in the decision to continue operating the Steam System. 62 Indeed, continued operation is estimated to cost \$100,000 per year, \$10 million in contingency (in case of replacements) and \$2.1 million in operating costs. 63

34. Staff submits that allowing Public Service to continue to operate the Steam System (consistent with the Agreement) provides time to further explore alternative systems without imposing significantly higher costs on customers. 64 Similarly, Staff asserts that the Agreement's approach to allow the Company to continue to operate the Steam System while performing life-extension activities is cost-effective, and ensures reliable service through 2030, thereby balancing the near-term operational needs with the longer-term goal of exploring cleaner energy solutions.65 Denver generally agrees, noting that the Agreement establishes a framework upon which to further explore the most promising option (ambient loop system), in a cost-effective manner that avoids unnecessary harm or adverse impacts arising from a less structured approach. 66

#### 2. **Compliance with Commission Directives**

35. The Settling Parties agree that Public Service has complied with all the Commission's requirements to present the results of studies examining alternatives to the Steam System by providing:

- the Engineering Study required in the Steam Rate Case with information on each steam customer's options to convert from steam service to on-site electric resistance or natural gas boilers, along with supporting information;
- the Additional Technologies Studies required by Decision No. C23-0265-I to address the feasibility and cost of customer-sited air source heat pump or ground source heat pump technologies and the feasibility and cost of converting the Steam System (or portions of it) to an ambient temperature district heating/cooling system that

<sup>&</sup>lt;sup>62</sup> *Id.* at 13: 8-14.

<sup>&</sup>lt;sup>63</sup> *Id.* at 11: 3-6.

<sup>&</sup>lt;sup>64</sup> See id. at 11: 6-7.

<sup>&</sup>lt;sup>65</sup> *Id.* at 14: 4-11.

<sup>&</sup>lt;sup>66</sup> Hearing Exhibit 500, 4: 23-24—5: 1-6.

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includes the potential for geothermal or geo-exchange technologies as customer-sited water source heat pumps; and

- additional information required by Decision No. C24-0401-I on certain estimated costs associated with upgrading the natural gas system to facilitate the conversion of steam customers to gas, as well as information on steam customers' state and Denver-specific building performance requirements.<sup>67</sup>
- 36. Similarly, the Settling Parties agree that the Company's presentation of steam alternatives and related information complies with all relevant Commission directives. 68
- 37. In support, Public Service submits that Table AGT-D-1 in Hearing Exhibit 101 outlines where in the record the Company provided information that comply with the requirements from the Steam Rate Case. <sup>69</sup> In addition, Hearing Exhibit 106 outlines where in the record that the Company provided the information required by Decision No. C23-0265-I. <sup>70</sup> Hearing Exhibits 109 and 110 provide the information required by Decision No. C24-0401-I. <sup>71</sup>

#### 3. Future Alternatives to Steam Service

38. Based on the information Public Service provided in this Proceeding, the Settling Parties agree that a potential alternative to steam service is an ambient temperature system to serve downtown Denver customers with customer-sited water source heat pumps. 72 This could provide heating and cooling needs to certain Steam System customers, along with other downtown Denver electric or natural gas customers. 73 The Settling Parties submit that the Commission should consider this alternative in the future as potentially supporting the state's and Denver's decarbonization policies and goals, including those in §§ 25-7-102(2)(g)(I) and 40-3.2-108(10), C.R.S., Denver's Building Performance Policy in Denver Revised Municipal Code, § 10, Art. XIV;

<sup>&</sup>lt;sup>67</sup> Hearing Exhibit 111 at 9-10.

<sup>&</sup>lt;sup>68</sup> *Id.* at 10.

<sup>&</sup>lt;sup>69</sup> See Hearing Exhibit 112, 18: 1-7. Table AGT-D-1 is in Hearing Exhibit 101, 14: 1.

<sup>&</sup>lt;sup>70</sup> Hearing Exhibit 106, 14: 6 (Table RAM-D-1).

<sup>&</sup>lt;sup>71</sup> See Hearing Exhibit 112, 18: 18-21.

<sup>&</sup>lt;sup>72</sup> Hearing Exhibit 111 at 10.

<sup>&</sup>lt;sup>73</sup> *Id*.

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and the state's Building Performance Standard program in 5 CCR 1001-32 (known as the Air Quality Control Commission's Regulation 28).<sup>74</sup>

39. The Agreement requires Public Service to continue to explore options for pilot programs or demonstration projects to further assess ambient loop system cost and feasibility. The Settling Parties acknowledge that § 40-4-121(3), C.R.S., requires the Company to file an application for approval of at least one pilot program to provide thermal energy service in its natural gas service area. The Agreement requires that the Company's application under § 40-4-121(3), C.R.S., present its analysis, underlying data, and conclusions as to the pilot to convert portions of the Company's Steam System in downtown Denver to an ambient temperature system ("Denver Ambient Loop Project"). This does not, and is not intended to, prejudice the Company's ultimate recommendations on the particular thermal energy pilot project or projects that the Commission should approve. Rather, this is intended to ensure that Public Service assess whether the Denver Ambient Loop Project should be a pilot and to provide the Commission and interested parties data to consider the Denver Ambient Loop Project. This Agreement term does not prevent the Company from pursuing the Denver Ambient Loop Project in a separate, future application.

40. The Company explains that it filed the above-referenced application per § 40-4-121(3), C.R.S., on August 29, 2024, which has been assigned Proceeding No. 24A-0369G. 81 Public Service believes it has complied with the above Agreement term to provide its analysis and underlying data and conclusions as to the Ambient Loop Project (in Proceeding No. 24A-0369G),

<sup>&</sup>lt;sup>74</sup> *Id*.

<sup>&</sup>lt;sup>75</sup> *Id.* at 11.

<sup>&</sup>lt;sup>76</sup> *Id*.

<sup>&</sup>lt;sup>77</sup> *Id*.

<sup>&</sup>lt;sup>78</sup> *Id*.

<sup>&</sup>lt;sup>79</sup> *Id*.

<sup>&</sup>lt;sup>80</sup> *Id* 

<sup>&</sup>lt;sup>81</sup> Hearing Exhibit 112, 20: 13-18.

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but notes that the Proceeding just commenced and that parties to that Proceeding have not had a full and fair opportunity to review and explore the Application and supporting information.<sup>82</sup>

- 41. Staff submits that these terms are consistent with legislative mandates and allow the Company to explore low-carbon energy systems through pilots and feasibility studies, which minimizes upfront risks to customers.<sup>83</sup>
- 42. Denver views the ambient loop option as the most promising path forward when compared to other options that have been explored and submits that pursuing a pilot project is a prudent next step in developing an ambient loop.<sup>84</sup> It has already entered into a memorandum of understanding with the Company to jointly develop the Denver Ambient Loop Project (to be decided in Proceeding No. 24A-0369G).<sup>85</sup>

## 4. Future Filing Requirements

43. The Agreement requires Public Service to file its next Steam Resource Plan ("next Plan") no later than November 1, 2028, covering the calendar years 2030 through 2034 (or beyond). 86 The next Plan must discuss potential alternatives, including, at minimum: a base case that reflects the Steam System's (or portions thereof) continued operation; a least-cost proposal to meet steam customers' energy needs while supporting the state's economy-wide greenhouse gas emissions reduction targets in § 25-7-102(2)(g)(I), C.R.S.; and a proposal to

<sup>&</sup>lt;sup>82</sup> See Id. at 21: 14-23—22: 1-3.

<sup>83</sup> Hearing Exhibit 300, 15: 6-18—16: 1-2.

<sup>84</sup> Hearing Exhibit 500, 5: 12-14; 5: 17-19.

<sup>85</sup> See id. at 21: 1-14.

<sup>&</sup>lt;sup>86</sup> Hearing Exhibit 111 at 11.

transition the Steam System and its customers to a lower-carbon-emitting alternative energy service.<sup>87</sup>

- 44. Under the Agreement, if the Company's next Plan proposes to transition the Steam System to an alternative energy service, the next Plan should establish clear expectations, timelines, and structures to move from concept to implementation. 88 At a minimum, the Agreement requires Public Service to address the following:
  - Technical Assessment: An assessment of available technologies and the Company's preferred alternative(s) to provide lower-carbon-emitting utility service to steam customers, including incorporating updates or lessons learned related to any pilots or demonstration projects undertaken.
  - Regulatory Assessment: An assessment of the Company's options and preferred regulatory proposal(s) for the Steam System, including considering potentially consolidating gas, electric, and/or steam services.
  - Cost Assessment: A review of cost projections related to the Company's proposals for the Steam System, including for the Company's steam, electric, and gas utilities, and the appropriate allocation of such costs among customers or groups of customers within each such utility.
  - Customer Transition Assessment: An assessment of the impact to steam customers for the proposed pathway(s) for the Steam System, including proposed timelines and regulatory approaches to manage their transition.
  - Carbon Emissions Assessment: An assessment of the impact on overall carbon emissions forecasted to result from each alternative in the Company's proposal for the Steam System.<sup>89</sup>
- 45. In support, Denver explains that Public Service has to file the next Plan because the current Plan continues the Steam System through 2030 only, and that the next Plan should build on the foundational work done in this Proceeding by setting a clear proposal to transition the Steam

 $<sup>^{87}</sup>$  Id. at 11-12, noting in fn. 10 that an individual proposal submitted pursuant to Agreement ¶ 23 (discussed above) may meet the compliance obligation of more than one of the minimum proposal requirements. Id. at 12, fn. 10. For instance, the requirement to provide the second proposal (i.e., the least-cost proposal) could potentially meet the requirement to provide the third proposal (i.e., the transition proposal). Id.

<sup>&</sup>lt;sup>88</sup> *Id.* at 11-12.

<sup>&</sup>lt;sup>89</sup> Id.

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System to an alternative service. 90 Denver explains that the numerous assessments for the next Plan filing recognize that transitioning the Steam System is a complex endeavor and that there are many issues that need to be resolved before an alternative energy service is implemented. 91

## 5. Workshops

46. The Agreement requires Public Service to host a minimum of three technical workshops with interested entities to address its proposals to comply with Agreement ¶¶ 23 to 24 (future filing requirements), including updates on the consultants engaged and their scopes of work before filing its next Plan, but no earlier than May 1, 2026. 92 During these workshops, the Company must also provide status updates to discuss steam customer load and customer departures to Steam System alternatives. 93

47. Public Service explains that Staff, CEO and Denver are all "interested entities" as referenced in the above Agreement term, and that there may also be other interested entities, such as those impacted by a transition plan that involves the Company's natural gas and electric systems. <sup>94</sup> Given the successful collaboration in this Proceeding, Public Service submits that the contemplated workshops serve the public interest. <sup>95</sup>

#### 6. Deferred Accounting

48. The Settling Parties agree the Commission should approve Public Service's request to defer expenses associated with preparing and litigating this proceeding, including engineering

<sup>&</sup>lt;sup>90</sup> Hearing Exhibit 500, 6: 1-8.

<sup>&</sup>lt;sup>91</sup> *Id.* at 6: 19-22.

<sup>&</sup>lt;sup>92</sup> Hearing Exhibit 111 at 13.

<sup>93</sup> Id

<sup>&</sup>lt;sup>94</sup> Hearing Exhibit 112, 24: 10-17.

<sup>&</sup>lt;sup>95</sup> *Id.* at 24: 18-22—25: 1-2.

consultant costs, legal, and administrative costs ("Deferred Case Expenses"), into a regulatory asset without interest, to be brought forward for recovery in a future proceeding.<sup>96</sup>

- 49. The Agreement states that at this time, the Settling Parties do not oppose the Company's plan to seek to recover its Deferred Case Expenses through a standalone advice letter filing outside of a rate case proceeding, where such an approach may assist with ensuring that the Company's current Steam System customers have cost responsibility for their equitable share of the Deferred Case Expenses before they depart the Steam System, and may avoid the need to propose a base rate increase through a rate case proceeding. The Agreement provides that the Settling Parties may take positions that they deem appropriate on any such advice letter filing, based on the specific Company requests in that proceeding.
- 50. Public Service explains that it incurred a total of \$336,522 for the Additional Technology Studies (\$169,802 for the Heat Pump Study and \$166,720 for the Ambient Loop Study").99 The Company incurred costs of \$1,355,286 relating to the Engineering Study and estimates its other case-related expenses to be \$177,250, noting that case-related expenses are ongoing and not fixed at this point. 100 Public Service submits that these term are consistent with past Commission decisions allowing for deferred accounting treatment of outside legal costs associated with policy and resource planning proceedings, and that because the Commission approved the budgets and scopes of the Additional Technology Studies, it should authorize the requested deferred accounting treatment. 101

<sup>&</sup>lt;sup>96</sup> Hearing Exhibit 111 at 13.

<sup>&</sup>lt;sup>97</sup> *Id.* at 14.

<sup>&</sup>lt;sup>98</sup> *Id*.

<sup>&</sup>lt;sup>99</sup> Hearing Exhibit 112, 26: 19-20—27: 1-3.

<sup>&</sup>lt;sup>100</sup> *Id.* at 26: 15-19. The Company's estimated other case-related expenses was as of May 6, 2024 when the Company filed its Second Supplemental Direct Testimony (Hearing Exhibits 106 to 108). *Id.* at 26: 17-19. *See* Hearing Exhibit 106, 45: 12-13.

<sup>&</sup>lt;sup>101</sup> Hearing Exhibit 112, 27: 4-12.

51. Staff submits that the above Agreement terms are a structured and fair approach for the Company's recovery of the significant expenses it has already incurred in this Proceeding, as it minimizes the immediate financial impact on customers. <sup>102</sup> It submits that the Agreement offers transparency and accountability by requiring the Company to file a separate advice letter and allowing the parties to review the costs carefully before recovery is approved. <sup>103</sup> In addition, Staff asserts that by deferring these expenses into a regulatory asset without interest, the Agreement helps prevent or minimize additional financial burden on customers. <sup>104</sup>

## D. Findings, Analysis, and Conclusions

52. For the reasons discussed below, the ALJ finds that the preponderance of the evidence supports approving the Agreement without modification. Indeed, as discussed in detail above, the Settling Parties provided ample support for the Settlement Agreement through their Settlement Testimony. For many of the reasons the Settling Parties provide in their Settlement Testimony, (and as discussed above), the ALJ finds that the Agreement offers a balanced approach that permits the Company to continue to explore cost-effective lower-carbon emitting alternatives to the Steam System consistent with legislative mandates, while simultaneously maintaining reliable and cost-effective service and avoiding imposing unreasonable and unjust costs on customers associated with a rushed transition using exceedingly costly options. Indeed, given that the Company has only approximately 121 steam customers, the potential cost that such customers would have to bear for the many options explored may prompt many customers to terminate steam service, thereby compounding the cost burden on remaining customers.

<sup>&</sup>lt;sup>102</sup> Hearing Exhibit 300, 17: 17-21—18: 1-4.

<sup>&</sup>lt;sup>103</sup> *Id.* at 18: 14-19.

<sup>&</sup>lt;sup>104</sup> Id. at 18: 19-21.

<sup>&</sup>lt;sup>105</sup> Supra, ¶ 29-37; 40-42; 45; 47; 50-51. See generally, Hearing Exhibits 112, 300, and 500.

 $<sup>^{106}</sup>$  Supra, ¶¶ 31 and 33. See generally, Hearing Exhibits 112, 300, and 500.

53. The evidence establishes that transitioning the Steam System is a complex endeavor with numerous challenges to overcome, and that rushing this transition does not serve the public interest. Notably, the Agreement does not allow the desired transition to languish. Rather, the Agreement includes numerous safeguards that require the Company to build on the work it has already done to move closer to transitioning customers to an alternative energy service in a costeffective manner. 107 The Agreement's workshops create added accountability and may create opportunities to avoid disputed litigation on the Company's next Plan. The Agreement's Deferred Case Expenses terms provide accountability and transparency by ensuring the Commission and interested entities may fully evaluate the Company's Deferred Case Expenses; avoid an immediate rate impact; minimize the rate impact (by not allowing the Company to collect interest on the Deferred Case Expenses); and create a reasonable approach for the Company to seek to recover its

54. For the reasons and authorities discussed, the ALJ finds that the preponderance of the evidence establishes that the Settlement Agreement reflects a just and reasonable compromise between the Setting Parties to resolve all issues that have been or could have been raised here; is in the public interest; and is just, reasonable, and not discriminatory. As such, the ALJ recommends that the Settlement Agreement be approved without modification, that the Application be granted, and the Plan be approved, consistent with the Agreement's modifications.

expenses, a good portion of which it incurred based on Commission directives.

55. In accordance with § 40-6-109, C.R.S., the ALJ transmits to the Commission the record in this Proceeding along with this written Recommended Decision and recommends that the Commission enter the following order.

<sup>&</sup>lt;sup>107</sup> See Hearing Exhibit 111 at 10-13.

#### III. ORDER

#### A. The Commission Orders That:

- 1. The September 24, 2024 evidentiary hearing and all remaining procedural deadlines are vacated.
- 2. The Unopposed Joint Motion for Approval of Unanimous and Comprehensive Settlement Agreement and Waiver of response Time filed August 20, 2024 is granted.
- 3. The Unanimous and Comprehensive Settlement Agreement filed on August 20, 2024 ("Settlement Agreement" or "Agreement") is approved without modification.
- 4. Public Service Company of Colorado's ("Public Service") above-captioned Application ("Application") and Steam Regulatory and Resource Plan, as modified by the Agreement, are granted and approved.
  - 5. The Settlement Agreement is included with this Decision as Appendix A.
- 6. No more than five business days after this Recommended Decision becomes a Commission Decision (if that is the case), Public Service must file compliance advice letter(s) and tariff sheets consistent with the Settlement Agreement's and this Decision's requirements, on not less than two business days' notice. The compliance filings must be made in a new advice letter proceeding and comply with all applicable rules. In calculating the proposed effective date, the date the filing is received at the Commission is not included in the notice period and the entire notice period must expire before the effective date. The advice letter and tariff sheets must comply in all substantive respects to this Decision to be filed as a compliance filing on shortened notice.
  - 7. Proceeding No. 22A-0382ST is closed.
- 8. 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.

- 9. 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.
- 10. 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.
- 11. 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.

12. 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.



ATTEST: A TRUE COPY

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

MELODY MIRBABA

Administrative Law Judge