Decision No. C24-0509-I

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 22A-0230E

IN THE MATTER OF THE APPLICATION OF BLACK HILLS COLORADO ELECTRIC, LLC FOR (1) APPROVAL OF ITS 2022 ELECTRIC RESOURCE PLAN AND CLEAN ENERGY PLAN, AND (2) APPROVAL OF ITS 2023-2026 RENEWABLE ENERGY STANDARD COMPLIANCE PLAN.

INTERIM COMMISSION DECISION REQUIRING SUPPLEMENTAL INFORMATION ON PHASE II FILINGS

Issued Date: July 16, 2024
Adopted Date: July 10, 2024

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I. BY THE COMMISSION

A. Statement

1. Through this Decision, the Commission requires Black Hills Colorado Electric, LLC ("Black Hills" or "the Company") to provide supplemental information regarding several aspects of the resource portfolios presented in its Phase II filings. As explained below, the information is necessary for the Commission to render a decision on whether to approve, modify, or reject the Company's Clean Energy Plan ("CEP") pursuant to Section 40-2-125.5(4)(d), C.R.S.,

and to otherwise approve, condition, modify, or reject the Company's preferred resource plan pursuant to 4 *Code of Colorado Regulations* ("CCR") 723-3-3613(h). Black Hills shall have 14 days within which to file the supplemental information.

B. Procedural Background

2. On May 27, 2022, Black Hills filed its 2022 Electric Resource Plan ("ERP") and the 2023-2026 Renewable Energy Standard ("RES") Compliance Plan. Black Hills' ERP includes a CEP to reduce the Company's carbon dioxide emissions by a target of 80 percent by 2030 as compared to 2005 levels, consistent with § 40-2-125.5(4), C.R.S.

3. On January 13, 2023, a Unanimous Comprehensive Settlement Agreement ("Phase I Settlement") was filed. On March 22, 2023, the Commission issued Decision No. C23-0193 ("Phase I Decision") that approved in part and with modifications the Phase I Settlement.

4. Black Hills filed its 120-Day Report on April 17, 2024, setting forth the Company's its preferred resource plan ("Preferred Portfolio") pursuant to 4 CCR 723-3-3613(a) to serve as its CEP pursuant to Section 40-2-125.5(4)(d), C.R.S., as well as several other alternative resource portfolios in accordance with the Phase I Decision. The Company filed a revised version of the report on May 10, 2024, and a supplement on May 16, 2024.

5. On June 3, 2024, the following intervenors filed comments on the 120-Day Report: Trial Staff of the Commission ("Staff"), Colorado Energy Office ("CEO"), the Colorado Office of the Utility Consumer Advocate ("UCA"), the Colorado Independent Energy Association ("CIEA"), Pueblo County and Cañon City.

6. On June 17, 2024, Black Hills filed its Response Comments.

7. The Commission commenced its Phase II deliberations on July 10, 2024.

C. Discussion

8. The Preferred Portfolio the Company advances in its 120-Day Report consists of three projects: (1) a 150 MW power purchase agreement ("PPA") wind project (Bid 248-02) located in Kit Carson County, (2) a 200 MW build-transfer agreement ("BTA") solar project (Bid 114-05a) located in Pueblo County, and (3) a 50 MW BTA battery storage project (Bid 248-19) located in Pueblo County.

9. In total, the Preferred Portfolio comprises 400 MW of new storage and renewable resources. This acquisition of the Preferred Portfolio is substantial given Black Hills current system peak load is approximately 450 MW.[1] Moreover, the Company estimates the acquisition of the Preferred Portfolio will entail a present value direct cost of approximately $1.3 billion.[2] To put this in perspective, Black Hills' current rate base (*i.e.*, the net value of all of the assets the Company uses to provide electric utility service to its customers) is approximately $710 million[3] to serve approximately 100,000 customers. In short, both the portfolio of resources Black Hills advances for its ERP/CEP and its projected costs are substantial.

10. Black Hills' ratepayers further pay some of the highest electricity rates in the state,[4] and in the Company's recently filed electric rate case—which does not include costs associated with the Preferred Portfolio—the Company asks for an almost 20 percent increase in residential rates.[5] On top of this, Black Hills serves communities with lower median incomes than other parts

[1] Pueblo County's Comments, p. 4.
[2] Black Hills' Response Comments, p. 6.
[3] *See* Proceeding No. 24AL-0275E, Hr. Ex. 100 (Advice Letter No 871) p. 5.
[4] Pueblo County's Comments, p. 2.
[5] *See* Proceeding No. 24AL-0275E, Hr. Ex. 100 (Advice Letter No 871) p. 6 (noting an estimated monthly change in residential bills of 18.4 percent).

of Colorado, and its relatively small customer base means that new costs are recovered over fewer individuals.[6]

11. Given these economic realities, we take seriously the concerns raised by Pueblo County, Cañon City, and others in comments on the 120-Day Report urging the Commission to prioritize customer costs and bill impacts.[7] It would be unconscionable for us to move forward with such large investments in Black Hills' system unless and until we are more confident the investments will result in a reasonable cost to customers. This in turn, requires more information regarding the Phase II bid evaluation and selection Black Hills conducted, including whether there are more cost effective means to achieve the state's emission reduction targets.

12. One of our primary concerns, for example, is that Black Hills might not be pursuing the most cost-effective solar projects, potentially causing significant customer rate impacts past 2030. Both UCA and Pueblo County argue Black Hills fails to use the most economical solar project in the Local Economic Development Portfolio. In the Local Economic Development Portfolio, the wind project (Bid 248-02) is replaced with a PPA solar project (Bid 248-01).[8] UCA and Pueblo County request that instead of Bid 248-01 the Commission use Bid 334-03 (a 150 MW PPA solar project), which the parties assert is by far the cheapest solar project.[9] UCA argues that Black Hills unnecessarily adds transmission costs to Bid 334-03 but that if these transmission costs are removed this solar project will result in either no increase or even a reduction in costs to customers while providing good geographic diversity compared to all the other solar projects.[10] Instead of the Company's transmission approach, UCA recommends that the Company

[6] Hr. Ex. 101 (Wagner Direct) Rev. 1, p. 16; Pueblo County's Comments, pp. 2-4.
[7] *See, e.g.*, Pueblo County's Comments, p. 6; City of Cañon's Comments, p. 1.
[8] *See* 120-Day Report, p. 57.
[9] Pueblo County's Comments, p. 6.
[10] UCA's Comments, p. 7.

treat the existing transmission as a gen tie in that if the transmission line trips, then the solar project is also tripped so that it does not overload the remaining transmission. UCA asserts that this is similar to how Public Service Company of Colorado is proceeding with the Rocky Mountain and Arroyo 2 solar projects, which are both served by a four-mile long gen-tie. This treatment, UCA reasons, would allow Bid 334-03 to have a much more economical price.[11]

13. In its response to the comments on the 120-Day Report, Black Hills argues the Company was intentional in identifying necessary transmission system upgrades and that removing these transmission costs for just Bid 334-03 as UCA argues "would be discriminatory to all other bids that were modeled with estimated transmission upgrade costs."[12] The Company further asserts that under UCA's proposal to treat the transmission line as a gen tie in order to avoid transmission upgrades, customers would be at risk financially for lost production from the project due to a transmission outage that trips the generating project.[13]

14. We share UCA's concern that Black Hills failed to fully consider the potential for allowing some level of individual project curtailment and just added substantial transmission costs in ways that made certain bids uneconomic. Indeed, there appears to be several other solar projects besides Bid 334-03 that would be economic except for the added transmission costs. There is no analysis in the Company's Phase II filings of the additional curtailment costs these resources would incur if the expensive transmission upgrades necessary to provide firm transmission service were pared back. Thus, it is unclear to us whether planning for additional curtailments is a more cost effective approach than assuming every resource needs expensive transmission upgrades for firm transmission service.

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[11] UCA's Comments, pp. 7-8.
[12] Black Hills' Response, p. 12.
[13] Black Hills' Response, p. 12.

15. In addition to the concerns parties such as UCA and Pueblo County raise, we find some of the critical data in the Highly Confidential Bid Evaluation Scorecard (Appendix A to the 120-Day Report) to be confusing and unsupported. For instance, we would expect the capacity factors of solar projects located in the same general area to be relatively equal. However, Appendix A appears to show material differences in capacity factors of solar projects with no explanation for these differences. This has profound impacts on the levelized price of energy for the respective solar projects and, in turn, which projects the model selects for the various portfolios.

16. Furthermore, the levelized price of the annual energy payments of certain solar bids listed on Appendix A to the 120-Day Report—*e.g.*, Bid 248-12 and Bid 248-09—appears to be higher than expected based on such factors as the nameplate capacity, the fixed PPA price, and the construction/build transfer price.[14] Bid 248-09 has a construction/build transfer price that is relatively low, yet the bid's levelized price of annual energy payments relatively high. A similar situation exists with Bid 248-12. Black Hills does not explain these seemingly incongruous results in the 120-Day Report, and the Commission is left to wonder whether the cost of these bids is somehow overstated.

17. Given the combination of Black Hills' relatively small customer base consisting of several communities with lower median incomes, the Company's high electricity rates, and these questions regarding the Company's Phase II bid evaluation and selection, we find it necessary to obtain additional information before rendering our Phase II decision in this Proceeding. In particular, we direct Black Hills to provide additional information regarding Bid 248-09 and Bid 248-12. This additional information must explain how the levelized price of the annual energy

[14] For clarity, by "levelized price of the annual energy payments," the Commission refers to Column X in the Calculations Tab of Appendix A to the 120-Day Report.

payments for these bids was calculated and why the levelized price of these bids is relatively high compared other factors such as their construction price and fixed PPA price.

18. In addition, for Bid Nos. 334-03, 341-02, and 341-04,[15] Black Hills shall provide estimates of the likely curtailments and their estimated costs if the transmission investments necessary to provide firm transmission service are not built. This should be accompanied by revised annual transmission payments that reflect the customer costs for interconnecting the project but do not include the cost of transmission upgrades necessary to provide constant firm transmission service. As UCA suggests, allowing for some curtailment in ways that avoid new transmission may be the best path forward.

19. More generally regarding transmission, the Commission will continue to evaluate the accuracy of the transmission costs put forth in bid evaluation and selection and whether there are ways to proactively manage down transmission costs. These issues are critical both in terms of the transmission costs that customers ultimately pay but also to ensure fairness and transparency in the Phase II process, which in turn enhances competition. Black Hills shall provide additional analysis and an explanation on these two points as it relates to the Phase II process overall and not just the bids enumerated in this Decision. In addition, Black Hills shall opine on whether Public Service's entry into the SPP Markets Plus Day Ahead Market and the entry of Tri-State Generation and Transmission Association, Inc. ("Tri-State") into the SPP RTO West Market could eventually eliminate the estimated wheeling charges for the potential projects in this Proceeding.

20. To help resolve the confusion regarding the material differences in capacity factors for solar bids, Black Hills shall provide (for informational purposes) an additional column in

[15] We acknowledge some of these bids might not have advanced to computer based modeling. Even in this event, Black Hills must still provide the required curtailment analysis but shall also specify why any such bids were not advanced to computer based modeling.

Appendix A showing the levelized price calculations for all available solar bids assuming all projects located in similar areas had the same net capacity factor, unless there was a specific reason for the difference. The Company must explain any such reason for different capacity factors.

21. Black Hills shall also provide the all-in revenue requirement and rate impact analysis through 2040 associated with the Local Economic Development Portfolio and a portfolio in which the Company simply fills any resource need with seasonal market purchases. As we noted above, we are concerned about significant customer rate impacts past 2030, whereas the rate analyses presented in the 120-Day Report only go through 2030. Longer-term rate analyses are thus necessary.[16]

22. Black Hills shall explain whether it recently has reached out to Public Service Company of Colorado or Tri-State to pursue expansion, joint ownership, or joint participation of any generation project. This type of joint ownership approach, which has successfully been used for other generating facilities in Colorado, could generate additional benefits for all parties.

23. We request that Black Hills further explore developing additional resource portfolios upon allowing some curtailments of the apparently more economical PPA bids and upon reconsidering capacity factors, construction costs, joint ownership, and transmission issues consistent with our above discussion. We are hopeful this effort will achieve modeled prices and customer rate impacts that are significantly closer to the apparently lower-cost bids included in Appendix A and to the levels that other utilities are expecting while at the same time satisfying the State's emissions reduction targets.

24. In addition to our concerns set forth above, CIEA recommends the Commission require Black Hills to provide additional information regarding the bid evaluation and selection.

[16] *See also* Pueblo County's Comments, pp. 7-9.

CIEA argues that Black Hills does not explain the breakdown by PPA versus utility ownership with respect to the number of bids that were advanced to computer modeling and thus the Commission does not know whether the modeling was biased against PPAs. CIEA argues that the Commission should require the Company to present the data of the breakdown of ownership versus PPA bids that were advanced to computer modeling.[17] In addition, CIEA suggests that the utility-owned projects might be relying on overly optimistic assumptions regarding how easily Black Hills can transfer PTCs. CIEA recommends that the Commission require a detailed explanation from the Company as to its assumptions on PTC transfers.[18]

25. In light of our other directives for more information regarding Black Hills' bid evaluation and selection, we find it appropriate to grant CIEA's requests for a breakdown of ownership versus PPA bids that were advanced to computer modeling and for a detailed explanation as to is assumptions on PTC transfers. On this last point, Black Hills must explain its assumptions as to both PTCs and any investment tax credits.[19]

26. Finally, given that we are already requiring Black Hills to provide additional information, we direct Black Hills also to identify and disclose new backup bids in response to concerns raised by Staff. The Phase I Settlement Agreement contemplates that Black Hills will identify the three most competitive bids by technology type to be backups. As Staff notes in its comments, however, Black Hills only identifies one backup for the wind project and one storage backup. While Black Hills technically identifies three solar backup bids, the Company plans to combine two of these bids into a single backup option.[20] In addition, despite the Company's

[17] CIEA's Comments, pp. 6-7.
[18] CIEA's Comments, p. 8.
[19] We acknowledge CIEA's requests are not limited to these two items. For instance, CIEA also asks that Black Hills produce the annuity tail method results for the ERP with no Social Cost of Carbon Portfolio. The Commission will address this request, along with the rest of CEIA's recommendations, in a subsequent decision.
[20] Staff's Comments, pp. 12-13.

assertions in the 120-Day Report that the identified backups are the next most competitive bids by resource type, Staff notes the Company only identifies BTA solar backups, despite the availability of lower-cost PPA bids.[21]

27. In the context of our rate impact concerns, we decline to allow Black Hills to limit backup bids to utility-owned projects, and we see no reason why the Company cannot provide three backup options as the Phase I Settlement contemplates. The Company must prioritize identifying cost effective resources as opposed to resources that fit within a desired ownership type. Thus, the Company shall identify the three most competitive backup projects by technology type,[22] regardless of ownership. To be clear, even if the backup would replace a utility-owned resource, the identified backup projects shall be the most competitive bids—whether those are PPA or BTA.

28. Black Hills shall provide the information set forth above within 14 days of the effective date of this Decision.

29. Under Commission Rule 3613(h), the Commission has 90 days from the filing of the 120-Day to issue a written Phase II Decision. The Commission waives this regulatory deadline to ensure we have sufficient time to reach the appropriate outcome in this Proceeding.

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[21] *Id.* at 12-13.

[22] If multiple bids are required to replace one of the selected projects—as is the case with Bid 223-01b and Bid 223-03b replacing one solar project—these bids only count as one backup project. The Company must have three total backup projects, regardless of whether this requires more than three backup bids. The Company must disclose three backup solar projects and three backup storage projects. During our deliberations on July 10, 2024, the Commission agreed not to pursue any wind project due to their relatively high costs. However, if after reconsideration of construction costs, joint ownership, and transmission issues certain wind projects become more cost effective, Black Hills shall also identify three backup wind projects.

II. ORDER

A. It Is Ordered That:

1. Black Hills Colorado Electric, LLC shall have 14 days within which to file supplemental information regarding its bid evaluation and selection, consistent with our discussion above.

2. This Decision is effective upon its Issued Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING July 10, 2024.

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THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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Commissioners

ATTEST: A TRUE COPY

Rebecca E White

Rebecca E. White,
Director