BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF WYOMING

IN THE MATTER OF THE APPLICATION OF)
CHEYENNE LIGHT, FUEL AND POWER	Docket No. 20003ET-25
COMPANY d/b/a BLACK HILLS ENERGY FOR	(Record No)
AUTHORITY TO INCREASE ITS CARBON)
CAPTURE COMPLIANCE SURCHARGE TO 1.43%)

APPLICATION

Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy ("Cheyenne Light"), a Wyoming corporation, submits this Application and respectfully requests an order from the Wyoming Public Service Commission ("Commission") authorizing Cheyenne Light to increase its Carbon Capture Compliance Surcharge Rate, as set forth in the tariff sheets contained in Exhibit 1 to this Application. If authorized, the Carbon Capture Compliance ("CCC") Surcharge Rate reflected in Exhibit 4 ("2026 CCC Surcharge Rate") will be published in Cheyenne Light's Wyo. P.S.C. Tariff No. 14. The requested 2026 CCC Surcharge Rate of 1.43% is calculated in Exhibit 4 and is applied on a total bill basis for all customer classes, before sales taxes and franchise fees. Cheyenne Light requests authority to implement the proposed 2026 CCC Surcharge Rate on January 1, 2026. Cheyenne Light is seeking a determination on this Application by July 1, 2025 in order to re-apply for Energy Matching Funds ("EMF") from the Wyoming Energy Authority ("WEA").

In support of this Application, Cheyenne Light states as follows:

 Cheyenne Light's legal name is Cheyenne Light, Fuel and Power Company, with a principal place of business located at 1301 W. 24th Street, Cheyenne, Wyoming, 82001.
 Cheyenne Light is a wholly owned subsidiary of Black Hills Corporation, which operates as a holding company under the Public Utility Holding Company Act of 2005. Cheyenne Light conducts business within its service area in and around the city of Cheyenne under the trade name of Black Hills Energy. Cheyenne Light is a public utility as described in Wyo. Stat. § 37-1-101, and is engaged in the generation, transmission, and distribution of electricity. Cheyenne Light is subject to the Commission's jurisdiction pursuant to Wyo. Stat. § 37-2-112 and other applicable statutes.

I. <u>Background and Procedure</u>

- 1. In 2020, the state of Wyoming enacted statutes requiring the Commission to establish low-carbon energy portfolio standards (Wyo. Stat. §37-18-101-102). Wyoming Statute §37-18-102(c)(iii) permits a utility to collect a surcharge of up to two percent to recover the incremental costs it incurs or will incur to comply with the low-carbon energy portfolio standards.
- 2. Cheyenne Light's approach to a low-carbon portfolio of resources is based on three guiding principles: (1) Minimizing customer cost impacts and maintaining safe, reliable service; (2) De-risking through demonstration projects or with commercially available technology; and (3) Evaluating emergent strategies as carbon capture technologies evolve.
- 3. In its Final Low Carbon Standard Docket, ¹ Cheyenne Light stated that amine technology was not economically feasible for the Wygen II facility, and that Carbon GeoCapture ("CGC") showed a greater potential, both economically and operationally, to achieve the carbon emission reductions desired by Wyoming Statutes §37-18-101-102. The critical technical elements of CGC are at a Technological Readiness Level ("TRL") 8 9, but the administrative components associated with potential carbon credits are at a TRL 6 8. A pilot demonstration project of CGC technology could bring the technology as a whole to a TRL 8 9, allowing it to

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¹ Docket No. 20003-251-EA-25 (Record No. 17783)

be considered by Cheyenne Light as a reliable and dispatchable low-carbon resource and as a way to achieve the carbon emission reductions desired in Wyoming Statutes §37-18-101-102.

There are two phases involved in order to demonstrate the CGC technology.

- Phase I \$9MM ~ 12 Months to complete
 - Phase Ia install piping and associated equipment to circulate fluid (in situ water) and measure/monitor, complete tight radius drilling and retest circulation. Procure CO₂ and perform parametric injection tests, and associated MRV analysis.
 - Phase Ib EPC simple/single membrane module and associated
 equipment with slip stream WYGEN II flue gas stack tie-in. Parametric
 testing of CO₂ from WYGEN II flue gas into the Class II wells. Complete
 Pre-FEED analysis and initial offtake analysis Section 45Q and structures.
- Phase II \$11MM ~ 24 Months FEED including IRS letter determination, well diligence, full scale carbon capture system.

Cheyenne Light is requesting \$4.5 million through the CCC Surcharge to provide the required 1:1 match for an EMF grant application on CGC technology. If approved, this will fund Phase 1 of the demonstration project.

4. Under a Coal to Hydrogen Grant with Babcock and Wilcox ("B&W") hosted by Black Hills Corporation, Carbon GeoCapture ("CGC") was successful in getting three Class II Wells permitted, drilled, cased and logged on Black Hills Corporation property adjacent to Wygen II in the fall of 2024, as described in the Final Low Carbon Standard Docket.

Black Hills, CGC, Membrane Technology and Research, Inc., and Black & Veatch submitted a concept paper to the WEA on November 1, 2024, seeking an EMF grant to complete

a demonstration project on CGC technology utilizing the Class II Wells. In the grant application, Black Hill indicated the required 1:1 match would be provided through Cheyenne Light's CCC Surcharge, dependent upon Commission approval. Black Hills was notified on November 12, 2024 that the concept paper was not accepted due to inability to demonstrate assurance in matching contribution.

To continue these partnerships and efforts in exploring carbon capture technology,

Cheyenne Light is requesting the Commission approve this Application by July 1, 2025. Such a

determination would allow Cheyenne Light the ability to resubmit to the WEA for Energy

Matching Funds in time for the WEA's next review process. The WEA continuously accepts

concepts papers throughout the year and reviews submissions received prior to one of its three

deadlines: March 1, July 1, and November 1.² Energy Matching Funds are limited, which is why

Cheyenne Light is targeting the next WEA deadline and requesting a determination on this

Application by July 1, 2025.

5. Cheyenne Light commits to file a compliance filing with the Commission on the status of the EMF grant application by December 1, 2025. If the WEA does not award a grant for Carbon GeoCapture, Cheyenne Light will request to reset the CCC Surcharge to 0.00% for all customers, effective January 1, 2026.

II. Proposed 2026 Carbon Capture Compliance Rate

Cheyenne Light's Carbon Capture Compliance Rate model utilizes four steps as set forth in Cheyenne Light Tariff Sheet No. 59:

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² https://wyoenergy.org/energy-matching-funds/

Step 1: Determine the deferred balance, on a monthly basis for actual costs through March, and forecasted costs through December of the current calendar year, including symmetrical interest;

Step 2: Determine the forecast costs for the next calendar year and calculate symmetrical interest for the future cost period. These costs combined are the projected costs;

Step 3: Calculate the total compliance costs by adding the deferred balance and the projected costs;

Step 4: Calculate the surcharge rate by dividing the total compliance costs by the forecast revenues for the future calendar year;

The forecast costs included in Step 2 are \$4.5 million, which will provide the required 1:1 match for an EMF grant application to complete Phase I of the CGC demonstration project. The proposed 2026 CCC Surcharge Rate is 1.43%, effective January 1, 2026. If the EMF grant is not awarded, Cheyenne Light will request to reset the CCC Surcharge to 0.00% for all customers, effective January 1, 2026.

III. Exhibits

The following Exhibits are provided in support of this Application:

Exhibit 1 Tariff Sheets - Clean

Exhibit 2 Tariff Sheets - Legislative

Exhibit 3 Report of Tariff Change

Exhibit 4 2026 Surcharge Calculation

Exhibit 4A: Calculation of Deferred Balance

Exhibit 4B: Calculation of Projected Balance

Exhibit 4C: Customer Impact

Workpaper 1: Compliance Costs

Exhibit 5 Confidential Surcharge Invoices

IV. **Notifications**

The name, title, and address of the individuals to receive notice and correspondence regarding this Application are as follows:

Jerrad Hammer Director, Regulatory Black Hills Service Company, LLC 7001 Mt. Rushmore Rd Rapid City, SD 57702 Tel: (605) 399-5136

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V. Conclusion

Based on the Application and supporting data contained in Exhibit 4, good cause exists for the Commission to grant Cheyenne Light's request for the proposed 2026 CCC Surcharge Rate, effective January 1, 2026.

WHEREFORE, Cheyenne Light, Fuel & Power Company respectfully requests the Public Service Commission of the State of Wyoming:

1. Find the recovery of costs as set forth in this Application is in the public interest; and

2. No later than July 1, 2025, enter an Order without formal hearing authorizing Cheyenne Light to implement its tariff sheet attached hereto as Exhibit 1, with an effective date of January 1, 2026.

> CHEYENNE LIGHT, FUEL AND POWER COMPANY d/b/a BLACK HILLS ENERGY

By: <u>Jenal Hammer</u> Jerrad Hammer

Director, Regulatory

Address of Applicant:

Cheyenne Light, Fuel & Power Company 1301 W. 24th Street Cheyenne, WY 82001

Counsel for Applicant:

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STATE OF SOUTH DAKOTA)
) SS
COUNTY OF PENNINGTON)

Jerrad Hammer, being duly sworn, do hereby depose and state that I am the Director of Regulatory for Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy,

Applicant in the foregoing Application; that I have read such Application; and that the facts set forth therein are true and correct to the best of my knowledge, information, and belief.

Dated this day of April, 2025.

Jerrad Hammer Director, Regulatory

Subscribed and sworn to before me this day of April, 2025.



Notary Public

My commission expires June 22, 2029

My Commission Expires: