

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of Black Hills/Kansas Gas Utility)
Company, LLC, d/b/a Black Hills Energy ("Black)
Hills"), Compliance Filing of its Accelerated Pipe) Docket No. 18-BHCG-319-CPL
Replacement Plan Pursuant to the Commission)
Orders in Docket No. 15-GIMG-343-GIG)

COMPLIANCE FILING

In accordance with the memorandum filed by the Staff of the Corporation Commission of the State of Kansas ("Commission") on December 19, 2018, in Docket No. 15-GIMG-343-GIG, Black Hills/Kansas Gas Utility Company, LLC, d/b/a Black Hills Energy ("Black Hills") submits this report detailing progress made in the preceding year.

I. BACKGROUND

1. On April 23, 2018, Black Hills filed in this docket its *Final Accelerated Pipe Replacement Plan* ("Plan") setting forth (1) a seven-year Phase 1 plan to eliminate all bare steel mains, bare steel service lines, and bare steel yard lines in Class 3/urban locations and a ten-year Phase 2 plan to eliminate all remaining obsolete pipe in Kansas; (2) a plan for increased leak detection of obsolete plastic pipe; and (3) an annual lost and unaccounted for gas ("L&U") report for cities having over 10,000 customers.

2. On December 19, 2018, Staff filed a memorandum in Docket No. 15-GIMG-343-GIG recommending future actions to monitor the utilities' plans, including a requirement for the utilities to file an annual report by March 31 detailing progress made in the preceding year, explaining any deviation from the preceding year's projections, any deviation from initial projections, and revising remaining plan projections. Staff also recommended that utilities include in annual reports an update of parameters similar to those listed in Tables LMH-1 and LMH-2 that were included in the body of Staff's memorandum.

3. Black Hills meets periodically with Staff and the Citizens' Utility Ratepayer Board and Black Hills typically provides updates on the Plan. Black Hills submits this 2024 annual report as an update to the 2023 report filed on March 31, 2023, and provides 2023 activity and current status based on the ten-year Phase I Plan. Since beginning the Accelerated Pipeline Replacement Plan ("ARP") program during 2018, Black Hills has worked diligently to eliminate bare steel lines throughout Kansas. The current Plan includes a Phase I, ten-year urban area replacement plan to be completed by 2027 and a Phase II, fourteen-year rural area replacement plan to be completed by 2041.

Over the past six years, Black Hills has experienced significant cost increases in materials, labor, and other incidentals due to rising inflation rates, coupled with scheduling delays resulting from COVID-19 and Storm Uri. Additionally, Black Hills has acquired natural gas systems and is consistently upgrading its data integrity which have added additional quantities of bare steel to the plan. Likewise, Federal, State, and City funding for road, water, and sewer improvement projects have increased over time, impacting Black Hills' budget and the ability to strictly focus on bare steel replacement. Black Hills has also focused a portion of its replacement work on other vintage materials (poorly coated steel, Aldyl-A, PVC) and worked towards eliminating low-pressure systems across the state of Kansas as necessary to ensure safe operation of its natural gas systems. Black Hills believes the current ten-year Phase I timeline and fourteen-year Phase II timeline are reasonable and necessary.

As with any long-term plan, Black Hills understands that data will continue to improve, acquisitions will take place, and macroeconomics will have an impact as progress is made through the ARP. The timeline and estimates have taken some of those factors into account but could still result in future updates.

II. L&U FILING

4. Black Hills' Plan includes a requirement to file an annual report of L&U for communities of 10,000 or more customers. This will include the communities of Lawrence, Wichita, and Garden City. As in prior years with Staff's agreement, BHE will file the L&U report following the receipt of March data, which is at the beginning of May. Accordingly, Black Hills will file the L&U report by May 17, 2024.

III. LEAK SURVEYS

5. The Staff Memorandum recommended that utilities increase the frequency of the surveys of **all** plastic pipe to once every three (3) years. As stated in Black Hills' comments to the Staff Memorandum, filed on January 15, 2019, Black Hills currently has a process pursuant to which it surveys its obsolete piping at least once every three (3) years and all other plastic piping at least once every five (5) years. In discussions with Staff, Staff agreed that Black Hills' process meets the intended safety requirements, and that Staff had no objection to Black Hills continuing to survey other-than-obsolete piping once every five (5) years.

IV. REPORTING PLASTIC PIPE FAILURES

6. The Staff Memorandum recommended that utilities report plastic pipe failures (leaks) according to the American Gas Association Plastic Pipe Database Committee ("AGA PPDC") Plastic Pipe Failure Report. Black Hills is a member of the AGA PPDC and reports accordingly. Black Hills Kansas had zero plastic pipe failures in 2023.

V. ANNUAL COMPLIANCE UPDATE

7. Black Hills began implementing its Accelerated Replacement Plan in July of 2018. As previously stated, the Plan included two phases. The seven-year Phase I included the replacement of 22,217 bare steel yard lines, 6,725 bare steel service lines and 139 miles of bare steel main lines in Class 3 or urban areas with a total estimated cost of \$79,016,987. Black Hills revised the total

estimated costs to \$88,913,799 in Data Request No. 12 on October 2018, as reflected in the BHE Adjusted Plan on Attachment A. Black Hills revised the total estimated cost of its seven-year Phase I to \$107,400,000 in the 2022 filing of 2021 activity. In the 2023 filing, Black Hills revised its seven-year Phase I to ten years at a total estimated cost of \$129,369,764. In this filing, Black Hills has revised the total Phase I estimated cost to \$123,775,280.

8. Attachment A provides the ten-year Plan as reported in the March 2023 compliance filing as well as the progress made during 2023 and revisions to the Plan.

VI. SAFETY MANAGEMENT SYSTEM

9. Black Hills Corporation (“BHC”) has continued to develop and improve the Pipeline Safety Management System (“PSMS”) through the structured application of resources to the advancement of PSMS maturity. BHE’s leadership has prioritized the continued improvement of the conformance and effectiveness of PSMS elements with API (American Petroleum Institute) RP (Recommended Practice) 1173. In previous years, BHC focused on the improvement of Documentation and Recordkeeping, Technical Training & Operator Qualification, Emergency Response, and Incident Investigation elements within the PSMS. While continuing these ongoing efforts, BHC began additional focus on the Management Review and Stakeholder Engagement elements in the second half of 2023 and the performance of an external assessment of BHC’s PSMS.

10. The PSMS Strategic Governance Committee, a team of Director-level personnel from across BHC, approved four (4) PSMS frameworks through the management review process governing the development and scope of the Stakeholder Engagement, Risk Management, Operational Controls, and Safety Assurance elements. In addition to approving these frameworks, the organization is beginning a concerted effort to develop an integrated stakeholder engagement strategy to better align communications from senior leadership to field-level employees around a central safety vision and strategy. This effort includes strategies to integrate personal and pipeline

safety to a greater degree, development of field level engagement strategies, and improvements in communication management during emergency responses. A new stakeholder engagement effort is being developed to create field-level safety ambassadors to support bi-directional communication with field personnel and leadership with the first meeting of the safety ambassadors occurring in the first half of 2024.

11. BHC made significant progress towards fully implementing a major Incident Investigation improvement initiative in 2022 targeting systemic improvements in the coordination of deliverables, stakeholder engagement, risk management, and corrective action resolution. This improvement initiative was intended to create a centralized workflow that focuses on the management of causal findings, risks, and corrective actions stemming from incident investigations. This system was implemented in part in late 2022, with full implementation completed by July of 2023. Based on annual metrics collected from 2021 to 2023, identification of risks doubled, investigation originated safety awareness communications have increased from 50% to 93% of investigations, and the number of serious incidents have decreased by 25%. A contributing factor to the decrease of serious incidents is the increased focus on improving the resolution and closure rate of corrective actions. Open corrective action items have decreased from 56% to 13.7% from 2021 to 2023. These efforts together with improvements in systems and procedures around the performance of investigations have resulted in significant improvements in the maturity of the Incident Investigation and Lessons Learned program from 2020 to 2023.

12. BHC continues to invest in the Data Integrity Improvement Program launched in 2020, to support improving historical utility data such as the TVC (Traceable, Verifiable, and Complete) Records Project, and the current effort, mapping historical records for service lines. The TVC Records Project was completed in 2022, which significantly aids in compliance efforts for Mega Rule Part 1. Mapping historical service lines will aid in damage prevention efforts and

enhance system accuracy. Continued investments in the Data Integrity Improvement Program positively impacts the accuracy and quality of existing records, enhances the data and accuracy of risk models, improves mitigation measures that rely on risk models, and supplies accurate information for internal personnel.

13. BHC made the decision in early 2023 to hire an external assessor to objectively evaluate the progress of BHC's PSMS, determine the current maturity of the program, and identify opportunities to increase conformance with API RP 1173 and make the PSMS more effective. In September 2023, BHC contracted API to perform an external assessment of the PSMS to identify efforts to further develop the maturity of the PSMS elements, identify and reduce risk, improve data quality, support management review and governance, and ensure that the PSMS reflects BHC's core values and safety principles. This assessment identified several key opportunities for improvement: Beginning the Management Review process with leadership (to be performed with the Strategic Governance Committee), improving stakeholder engagement activities with particular emphasis at the field level, and improving documentation and recordkeeping strategies to make PSMS information accessible to internal personnel and contractors. BHC is currently developing a strategy to evaluate and prioritize the opportunities identified in this assessment to develop an improvement strategy through 2027.

WHEREFORE, Black Hills submits this annual compliance report as requested by the Commission in the 343 Docket.

Douglas J. Law

Douglas J. Law, KS Bar #29118

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STATE OF NEBRASKA,

LANCASTER COUNTY,

Douglas J. Law, of lawful age, being first duly sworn upon oath, deposes and says that he is attorney of the within named applicant, that he has read the above and foregoing compliance filing and the statements therein are true.

Douglas J. Law

/s/ Douglas J. Law



Tracy L. Moore 03.28.2024

Attachment A
Table 1

	BHE Adjusted Plan *	2018 Activity	2019 Activity	2020 Activity	2021 Activity	2022 Activity	Current BHE ARP Status @ 12/31/2022 (7-Year Plan)	Revised BHE ARP Status (10-Year Plan)***	2023 Activity	Current BHE ARP Status @ 12/31/2023 (10-Year Plan)
Number of Urban Areas	65	0	3	7	4	2	49	50	5	45
Miles of Bare Steel Main	146	20	30	21.4	10.5	9	55.1	69.3	9	60.3
Planned Repl Rate (Avg Miles/Yr)	21						27.6	13.9		15.1
No. of Bare Steel Service Lines and Yard Lines	28,942	1,654	3,192	3,558	2,950	2,342	15,246	15,346	1,912	13,434
Planned Service & Yard Repl Rate (Avg Line/Yr)	4,134						7,623	3,069		3,359
Years to Completion Phase 1	7 Years							10 Years		
Underground Leaks Per 100 Miles Obsolete Pipe	17.2	11.9	10.8	13.3	10.5	10.5			8.9	
Total Project Cost	\$89M	\$7.5M**	\$13.5M**	\$13.4M**	\$10.4M**	\$9.1M**	\$60.9M**	\$129.4M**	\$8,456,670	\$123,775,280
Main Replacement (Avg \$/Mile)	\$212,520	\$212,520**	\$237,600**	\$237,600**	\$252,214**	\$272,395**	\$272,395**	\$289,237**	\$291,462**	\$304,814**
Service Line Replacement (Avg \$/Each)	\$2,000	\$2,000**	\$2,000**	\$2,325**	\$2,641**	\$2,852**	\$2,852**	\$3,028**	\$3,051	\$3,191**

*Reflects updated information provided in October 2018 in KCC Data Request No. 12

**Estimates based on average costs; BHE Adjusted Plan through 2023 Activity is an 8-year average

***Reflects updated Plan provided in March 2023 compliance filing in Docket No. 18-BHCG-319-CPL

Attachment A
Table 2

	Phase I - Years 7 thru 10		2024		2025		2026		2027	
	Total Units	Total Costs by Category	Budget	Units	Budget	Units	Budget	Units	Budget	Units
Bare Steel YU-3L - Class 3	1,345	\$42,993,027	\$6,864,259	22,918	\$13,121,070	41,753	\$12,466,414	37,226	\$10,950,264	38,669
Bare Steel Main - Class 3	60	\$2,941,825,983	\$2,941,817	10.1	\$5,623,316	18.7	\$5,164,052	46.7	\$4,696,399	14.7
			\$9,806,065		\$18,744,386		\$17,213,506		\$15,654,663	

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