

**STATE OF IOWA  
DEPARTMENT OF COMMERCE  
BEFORE THE IOWA UTILITIES BOARD**

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**IN RE:**

**BLACK HILLS/IOWA GAS UTILITY  
COMPANY, LLC d/b/a BLACK HILLS  
ENERGY**

**DOCKET NO. RPU-2021-0002**

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**DIRECT TESTIMONY  
OF  
JAMES B. MARTIN-SCHRAMM**

**Q. Please state your name and business address.**

A. My name is James B. Martin-Schramm and my business address is 104 Spring Street, Decorah, Iowa.

**Q. By whom are you employed and in what capacity?**

A. I am employed by the Clean Energy Districts of Iowa ("**CEDI**") as a consultant. I recently retired from Luther College where I served as a tenured member of the faculty for 28 years and as the Director of Luther's Center for Sustainable Communities.

**Q. Please describe your educational background and professional work experience.**

A. I hold a B.A. from Pacific Lutheran University, an M.Div. from Luther Seminary, and a Ph.D. in Christian Ethics from Union Theological Seminary in the City of New York. I am an ordained member of the Evangelical Lutheran Church in

America ("**ELCA**") and on the clergy roster of the Northeastern Iowa Synod of the ELCA. Most of my scholarship has focused on ethics and public policy—especially energy and climate policy. I served on the Population and Consumption Taskforce of the President's Council on Sustainable Development during the Clinton administration and have chaired the national board of the ELCA's Division for Church and Society. In 2007-2008, I was the lead author of a national energy policy statement for the Presbyterian Church (U.S.A.), *The Power to Change: U.S. Energy Policy and Global Warming*. I served on the inaugural board of the Iowa Wind Energy Association and recently joined the board of Future Energy Iowa, which promotes policies and provides education related to clean energy, energy efficiency, and the energy sector. I also currently serve on the board of the Winneshiek Energy District ("**WED**") and as a director of Luther College Wind Energy Project, LLC.

**Q. Have you previously testified before the Iowa Utilities Board ("**Board**")?**

A. I represented WED and posed questions to representatives of Black Hills Energy ("**BHE**") during the Board's hearing regarding BHE's proposed energy efficiency plan, Docket No. EEP-2013-0001. I authored multiple submissions on behalf of Luther College and Luther College Wind Energy Project, LLC in the Board's distributed generation Docket No., NOI-2014-0001. More recently, I submitted three rounds of public and confidential testimony on behalf of the Decorah Area Group ("**DAG**") in Alliant Energy's current electric rate case, Docket No. RPU-2019-0001. I testified under oath before the Board in public and confidential sessions during the Board's hearing of this rate case.

**Q. What is the purpose of your Direct Testimony?**

A. As an ethicist, I focus on affordability and fairness issues throughout my testimony. I begin by sharing information about the high and severe energy burden many BHE customers experience and discuss how the proposed increase to base rates will exacerbate these burdens. I go on to argue that BHE's proposed rate increase and its proposed System Safety Integrity Rider (SSIR) and HEAT Incentive Program rider will further increase and exacerbate these high energy burdens. I also argue that the company's proposed HEAT Incentive Program rider is unjust because it places costs to retain and recruit new customers on existing customers rather than on shareholders. Finally, I argue that BHE's proposal to shift the costs of credit card user fees to all customers is unfair.

**Q. Can you provide more information about the Clean Energy Districts of Iowa (CEDI)?**

A. CEDI is an Iowa non-profit corporation and an association of clean energy districts in Iowa. There are currently nine legally incorporated energy districts located in Allamakee, Clayton, Delaware, Dubuque, Howard, Jackson, Johnson, Linn, and Winneshiek County. A tenth is in the process of being formed in Polk County. Each energy district is oriented around three key principles:

- Local prosperity via wealth creation and retention, economic development, and job creation in the clean energy sector.
- Climate stewardship via investments in energy efficiency and renewable energy.

- Fairness, equity, and inclusivity for the citizens of each county.

Energy Districts provide local leadership to energy customers and communities during the clean energy transition. Activities include community engagement, market transformation, and technical assistance to households, farms, and businesses covering energy efficiency, distributed generation, electric vehicle transportation, as well as other topics.

**Q. Do many BHE customers live in counties with a Clean Energy District?**

A: Yes, according to BHE's "Map of Customer Count by County" 55,905 BHE customers live in a county with a clean energy district.<sup>1</sup> This figure represents 34.7% of BHE's approximately 161,000 customers in Iowa.<sup>2</sup> According to BHE's 2020 Annual Report filed with the Board, the average number of residential natural gas customers was 143,713, which is 89.3% of their 161,000 customers in Iowa.<sup>3</sup>

**Q. You claim many BHE customers are experiencing a high energy burden. How are you defining this important term?**

A. According to the U.S. Department of Energy ("**DOE**"), "[e]nergy burden is defined as the percentage of gross household income spent on energy costs. According to DOE's Low-Income Energy Affordability Data ("**LEAD**") Tool,<sup>4</sup> the national average energy burden for low-income households is 8.6%, three times higher than for non-low-income households which is estimated at 3%. In some areas,

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<sup>1</sup> Black Hills Energy, [Map of Customer Count by County](#), (RPU-2021-0002), May 3, 2021.

<sup>2</sup> Black Hills Energy, [Application for Revision of Rates](#), (RPU-2021-0002), June 1, 2021, p. 1.

<sup>3</sup> [Annual Report of Black Hills/Iowa Gas Utility Company, LLC Year Ended December 31, 2020, Form IG-1, Gas Operating Revenues \(Account 400\)](#), accessed September 22, 2021.

<sup>4</sup> U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, ["Low-Income Energy Affordability Data \(LEAD\) Tool"](#), accessed September 20, 2021.

depending on location and income, energy burden can be as high as 30%. Of all U.S. households, 44%, or about 50 million, are defined as low-income.”<sup>5</sup>

It is important to note that transportation fuel expenses are *not* included in these calculations of household energy burdens. According to the U.S. Department of Transportation, “[h]ousing costs are the single largest expense for most households. When combined with transportation costs, they account for approximately half of the average U.S. household budget.”<sup>6</sup> Transportation costs are also higher in rural states like Iowa given lower population density and lack of access to public transportation systems. When measured as a percentage of income, lower-income households spend almost twice as much on transportation fuel compared to middle-income households.<sup>7</sup>

**Q. Are there different degrees of household energy burden?**

A. Yes, according to the American Council for an Energy-Efficient Economy (“**ACEEE**”), 25% of all U.S. households (30.6 million) face a high energy burden (i.e., pay more than 6% of income on energy bills) and 13% (15.9 million) of U.S. households face a severe energy burden (i.e., pay more than 10% of income on energy).”<sup>8</sup>

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<sup>5</sup> U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “[Low-Income Community Energy Solutions](#),” accessed September 20, 2021.

<sup>6</sup> U.S. Department of Transportation, “[Housing and Transportation Affordability](#),” accessed September 28, 2021.

<sup>7</sup> Vaidyanathan, S., P. Huether, and B. Jennings. 2021. “[Understanding Transportation Energy Burdens](#),” Washington, DC: American Council for an Energy-Efficient Economy, pp. 1-2, accessed September 28, 2021.

<sup>8</sup> American Council for an Energy-Efficient Economy (ACEEE), “[How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burden across the United States](#),” September 2020, p. ii, accessed September 20, 2021. Note: “Researchers estimate that housing costs should be no more than 30% of household income, and household energy costs should be no more than 20% of housing costs. This means that affordable household energy costs should be no more than 6% of total household income. For decades, researchers have used the thresholds of 6% as a high burden and 10% as a severe burden (APPRISE 2005),” p. ii.

**Q. How high is the energy burden for BHE customers in counties with clean energy districts?**

A. I utilized the DOE's Low-Income Energy Affordability Data (LEAD) Tool<sup>9</sup> to produce the following table. I focused on the following three Federal Poverty Levels (FPL) because applicants for the Federal Low-Income Home Energy Assistance Program (LIHEAP) must be at or below 200% of the 2021 federal poverty guidelines.<sup>10</sup> Maximum gross income at 200% FPL is \$25,650 for a household of one person and \$53,000 for a family of four.

<b>Table 1: BHE Counties with Clean Energy Districts, Energy Burden Information for Households per Federal Poverty Level (FPL).</b> <b>Energy Burden Ratings: &gt; 6% High; &gt; 10% Severe</b>					
County	<a href="#">BHE Customer Count by County</a>	County Avg Energy Burden	Energy Burden FPL Households 0% - 100%	Energy Burden FPL Households 100% - 150%	Energy Burden FPL Households 150% - 200%
Allamakee	2,498	6%	29%	16%	10%
Clayton	4,338	5%	26%	15%	10%
Delaware	3,730	5%	25%	13%	11%
Dubuque	32,659	3%	22%	10%	8%
Fayette	2,029	6%	26%	15%	10%
Howard	1,821	5%	24%	15%	10%
Jackson	4,488	4%	21%	11%	9%
Johnson	0	2%	18%	9%	7%
Winnebago	4,342	4%	18%	9%	7%
Sub-Total	55,905				

<sup>9</sup> U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, "[Low-Income Energy Affordability Data \(LEAD\) Tool](#)," accessed September 20, 2021.

<sup>10</sup> Iowa Department of Human Rights, "[LIHEAP and WAP Income Guidelines](#)," accessed September 22, 2021.

Iowa	161,000	3%	18%	8%	6%
USA	---	3%	18%	8%	6%

## Key Observations:

- The energy burden for households in the three selected federal poverty levels in CEDI counties is at or above the state and national averages--and in many cases well above the averages.
- The energy burden for households in the three selected federal poverty levels in all of the CEDI counties is either high or severe.
- In the worst case (Allamakee County), the energy burden for households in the 0% - 100% Federal Poverty Level is 61% higher than the state and national average and nearly 78% higher for households in the 100% - 150% FPL.

**Q. Given this information, why are you concerned about BHE's proposed increase to base rates?**

A. On June 1, 2021, BHE sent their customers a "Notice of Proposed Rate Increase."<sup>11</sup> The company's requested increase in annual revenues for all customer classes is approximately \$10.5 million, or 17%. The notice explains how the base rate increase, if approved in full, would impact typical customer bills depending on their customer class. The typical residential customer would experience a 12.7% increase in base rates on their monthly bill. This is smaller than the total overall figure of 17%, but still a very significant increase in what are already high or severe energy burdens for many BHE customers with household incomes that are below, at, or near the Federal Poverty Level.

<sup>11</sup> Black Hills Energy, "[Notice of Proposed Rate Increase](#)," (RPU-2021-0002), June 1, 2021.

It must be noted that the percentage increases to small businesses are much higher. For example, the 28.9% increase for non-residential sales customers (that is commercial businesses) is more than twice the increase for both residential customers and for the (larger) “small volume” customer class. While my testimony revolves primarily around the high and severe energy burdens many BHE residential customers face, I do want to flag for the Board’s attention what, in my mind, is a significant imbalance in the base rate increase faced by smaller businesses versus larger gas customers. The cost increases for these smaller commercial customers are significant given the financial challenges businesses have faced and continue to face during the Covid-19 pandemic. In addition, since at least half the increase to base rates is the monthly fixed charge, BHE customers are limited in what they can do to reduce these costs in the future via energy conservation or through investments in energy efficiency to reduce consumption.

**Q. Are there other cost factors to consider?**

A. Yes, it is important to consider the impact of the proposed increase to base rates in light of higher natural gas costs for customers due to the recent polar vortex in Texas and rising market prices for natural gas. On March 24, 2021, the Board issued an “Order Approving Regulatory Asset Account and Granting Waivers” in Docket Nos. PGA-2020-0225 and ARU-2021-0001.<sup>12</sup> These dockets were established to help rate-regulated utilities recover the significant increase in costs for electric power and natural gas that resulted from the February 2021 Polar

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<sup>12</sup> Iowa Utilities Board, “[Order Approving Regulatory Asset Account and Granting Waivers](#),” (PGA-2020-0225 and ARU-2021-0001), March 24, 2021.



Vortex.<sup>13</sup> On April 15, 2021, BHE filed their plan to recover approximately \$95.4 million of incremental cost it spent to purchase natural gas during the February 2021 Polar Vortex.<sup>14</sup> To mitigate customer impact, and to limit financial hardship for the company, BHE proposed recovering these considerable costs over a 3-year (36-month) period. According to BHE, “[d]uring the three year recovery period, an average residential customer will see an average monthly increase of approximately \$12.86 (23%) and an average commercial customer will see an average monthly increase of approximately \$65.03 (29%).”<sup>15</sup> These are *significant* monthly fuel cost increases for both customer classes. There is no question that these increased fuel costs will make the energy burdens for people living in poverty significantly worse.

Meanwhile, natural gas prices are rising and may soon reach levels not seen in over a decade. The following graph produced by the U.S. Energy Information Administration reports U.S. natural gas spot prices at the Henry Hub from January 1997 through August 2021.<sup>16</sup>

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<sup>13</sup> It must be said that Black Hills Energy and their employees worked tirelessly during this period to deliver fuel, without interruption, to 100% of their Iowa customers.

<sup>14</sup> Black Hills Energy, “[Recovery Plan](#),” Docket Nos. ARU-2021-0001 and PGA-2020-0225.

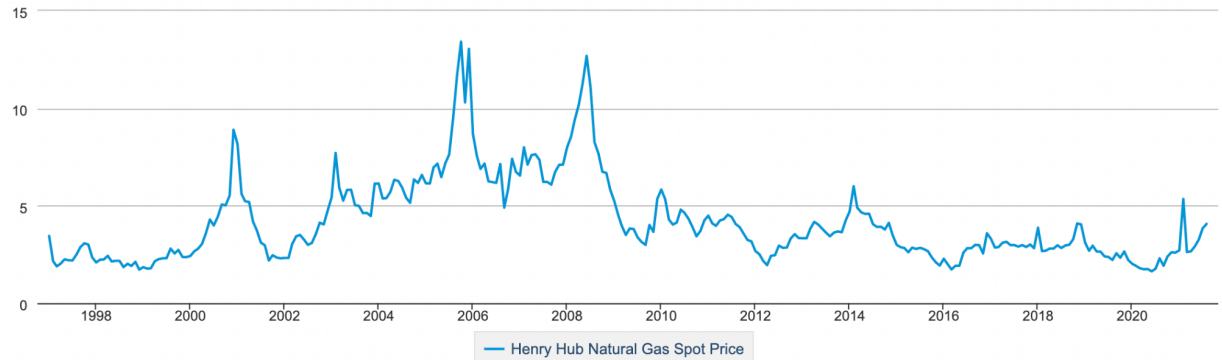
<sup>15</sup> *Id.*, p. 7.

<sup>16</sup> U.S. Energy Information Administration (EIA), “[Natural Gas: Henry Hub Natural Gas Spot Price](#),” accessed September 30, 2021.

## Henry Hub Natural Gas Spot Price

 DOWNLOAD

Dollars per Million Btu



I want to point out two things. First, U.S. consumers of natural gas have enjoyed significantly lower natural gas prices over the past decade compared to the prior decade. Nevertheless, large percentages of the households of CEDI counties currently have high or severe energy burdens. Second, natural gas prices are 99% higher year-to-date due to a combination of supply concerns and rising demand. Goldman Sachs analysts see the potential for another doubling of price if the coming winter is colder than usual.<sup>17</sup> In other words, market trends are already exacerbating the energy burden for those living below, at, or near the Federal Poverty Level.

**Q. Do you have other affordability concerns about BHE's rate increase proposal?**

A. Yes, the company is also proposing two riders that will add new billing items and further increase monthly costs for customers. According to BHE's "Notice of Proposed Rate Increase," the proposed System Safety and Integrity Rider ("**SSIR**"):

<sup>17</sup> CNBC, "[Natural gas prices are rising and could be the most expensive in 13 years this winter](#)," September 10, 2021, accessed on September 20, 2021.

[I]s intended to provide regulatory review and approval of safety-related integrity projects made after the conclusion of the rate review, but prior to construction in future years, and to provide a return on investment as the investments are made. The SSIR rider would be adjusted annually without customer notice and would appear on the customer bill as a separate charge in addition to the base rates shown in this notice.<sup>18</sup>

BHE's proposed SSIR charge for 2022 varies by customer class:<sup>19</sup>

General Service Residential	\$0.66 per month
Non-Residential General Service	\$2.85 per month
Small Volume	\$14.99 per month
Large Volume	\$163.28 per month

The proposed HEAT Incentive Program (“**HEAT**”):

[I]s intended to provide residential heating and appliance rebates and builder incentives to offset the incentives and discounted winter rates offered by Iowa electric utilities, which have resulted in low customer growth for Black Hills Energy. The HEAT rider would be adjusted annually without customer notice and appear on the customer bill as a separate charge and is in addition to the base rates shown in this notice. The charge would be based on a fixed amount of annual incentives reviewed and approved by the IUB.”<sup>20</sup>

BHE proposes an annual cap on the HEAT Program costs of \$2.0 million. Each residential and non-residential BHE customer would pay \$1 per month for the program.<sup>21</sup>

It is important to note that BHE's “Notice of Proposed Rate Increase” does not disclose the proposed monthly cost of these riders to BHE customers, nor

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<sup>18</sup> Black Hills Energy, “[Notice of Proposed Rate Increase](#),” (RPU-2021-0002), June 1, 2021.

<sup>19</sup> BHE [Frost Direct](#), Table 4, (RPU-2021-0002), June 1, 2021, p 32.

<sup>20</sup> Black Hills Energy, “[Notice of Proposed Rate Increase](#),” (RPU-2021-0002), June 1, 2021.

<sup>21</sup> BHE [Frost Direct](#), (RPU-2021-0002), June 1, 2021, p 18. Note: “The proposed annual cap was calculated based on the average number of monthly Residential and Non-Residential General Service Customer bills over a calendar year at a HEAT Charge rate of \$1.00 per customer per month (approximately 160,000 HEAT Customers x 12 Months x \$1.00 = \$1.92 million).”

does it remind BHE customers that the company, for the next three years, is recovering costs from acquiring and delivering natural gas during the 2021 Texas Polar Vortex that will result in an average monthly increase of \$12.86 (23%) for residential customers and an average monthly fuel cost increase of approximately \$65.03 (29%) for commercial customers. With natural gas prices currently on the rise, BHE customers are going to experience a significant increase in their monthly bills and the corresponding energy burden is going to be experienced disproportionately by BHE customers living in households below, at, or near the Federal Poverty Level.

I would like to point out that the “Mission, Vision & Values” section of the Black Hills Energy website does not refer to affordability or reasonably-priced energy services.<sup>22</sup> It is, however, the mission of the Iowa Utilities Board “to ensure that *reasonably priced*, reliable, environmentally responsible, and safe utility services are available to all Iowans.”<sup>23</sup> Customers of rate-regulated utilities in Iowa look to the Board to address the affordability of energy services. Several customer comments already filed in this docket express this concern to the Board.

**Q. Do you have additional concerns about BHE’s proposed System Safety and Integrity Rider?**

A. Yes, one of my concerns is that the SSIR rider would be adjusted annually without customer notice. The company does plan to furnish the Board by August 1 with “all pertinent information and supporting data related to the SSIR

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<sup>22</sup> Black Hills Energy, “[Mission, Vision & Values](#),” accessed September 21, 2021.

<sup>23</sup> Iowa Utilities Board, “[Mission & Vision Statements](#),” accessed September 21, 2021. (Emphasis added)

Programs and Eligible SSIR Costs; e.g., program description and scope, program costs, in-service date, etc.”<sup>24</sup> I see no reason why the company cannot provide a summary of this filing to all customers concurrent with their detailed filing with the Board. Customers have a right to know when the company proposes to incur expenses that will increase their bills.

In addition, while BHE is requesting an SSIR for an initial term of five years (2022 through 2026), with an exhibited need for ten years, the company’s proposal does not include *a cap* on annual maximum costs to be recovered over this period of time.<sup>25</sup> BHE witness Steven C. Coleman describes in considerable detail the various pipeline regulations that pertain to BHE and how new rules, laws, and resolutions adopted in the last two decades have ratcheted up these requirements to insure system safety and integrity.<sup>26</sup> BHE witness Tyler Frost emphasizes that the Company will utilize the SSIR to “accelerate the pace and investment in the system to proactively remove at-risk assets.”<sup>27</sup> Given that BHE is required to make these investments to comply with federal and state regulations, and given the increased scope and standards of the necessary improvements, it is reasonable to believe the Company will have to expend considerable resources to meet its obligations. While BHE is not asking for a blank check with the proposed SSIR, it will be vital that the Board review BHE’s annual filing and approve only reasonably-priced projects. In addition, I

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<sup>24</sup> BHE [Frost Direct](#), (RPU-2021-0002), June 1, 2021, p 29.

<sup>25</sup> *Id.*, p. 27.

<sup>26</sup> BHE [Coleman Direct](#), (RPU-2021-0002, June 1, 2021, pp. 10-13.

<sup>27</sup> BHE [Frost Direct](#), (RPU-2021-0002), June 1, 2021, p. 20.

recommend the Board impose a cost cap as it has in recent advanced ratemaking dockets to protect ratepayers.

Finally, it is worth noting that a cost recovery mechanism for system safety and integrity already exists in the form of the System Safety Maintenance Adjustment (“**SSMA**”). BHE witness Tyler Frost compares this mechanism with the proposed SSIR in his direct testimony. He explains:

[T]he differences between the SSMA and the proposed SSIR are limited to (a) eligible projects, (b) recovery factors focusing on weighted-average cost of capital (“WACC”) versus weighted-average cost of debt, (c) recovery methodology focusing on recovery coincident with capital spend versus in arrears, and (d) the timing of annual reports.<sup>28</sup>

From the Company’s perspective one of the major benefits of the SSIR is “recovery coincident with capital spend versus in arrears.”<sup>29</sup> Under the SSMA, BHE has to wait up to five years to recover their spending to ensure pipeline safety and integrity when the Company includes this spending in their next rate case. Under the SSIR, BHE does not have to wait to collect the Board-approved funds to provide this spending and it can adjust the SSIR annually without customer notice. Given this provision and other terms in the proposed SSIR, it is clear that BHE shareholders benefit more from the SSIR than BHE customers. Under the SSMA, the Company’s investments in pipeline safety and integrity must be included in the next rate case, with a maximum of five years between general rate proceedings (IAC 19.18(3)d).<sup>30</sup> Given this provision and other terms

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<sup>28</sup> *Id.*, p. 22.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*, Table 3, Comparison - Investment Mechanisms, pp. 22-23

in the proposed SSIR, It is clear that BHE customers benefit more from the SSMA than BHE shareholders.

BHE witness Tyler Frost argues that BHE customers will benefit from the SSIR because the SSIR “mitigates the need for frequent rate cases,” and that “the proposed SSIR mechanism gradually increases the customer rates over time as investments occur. This gradualism avoids ‘rate shock’ by allowing recovery of major programmatic spend over time instead of all at once.”<sup>31</sup> Given that this is BHE’s first rate case in over a decade, it is hard to grasp the Company’s concern about “frequent rate cases.”

As the Board considers BHE’s proposed SSIR rider, I respectfully encourage the Board to reject the rider because it fails to properly balance the interests of ratepayers and shareholders. The SSMA mechanism already exists to recover the relevant system safety and integrity expenses. Annual review of detailed expense proposals by BHE is not a minor undertaking for Board staff and the Board itself. As we have seen, new riders like the Renewable Energy Rider (“**RED**”) in RPU-2019-0001 have generated a considerable amount of work for the Board and its staff. While the SSMA requires rate case reviews at least every five years, this is a reasonable interval between rate cases that have come more frequently for other utilities like Interstate Power and Light and, in this case, quite a bit longer (over a decade) for Black Hills Energy. Rather than create new cost-recovery mechanisms with less oversight and transparency, the Board should utilize the existing SSMA mechanism, which maximizes transparency to customers and ensures sufficient time for regulatory review of expenses.

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<sup>31</sup> *Id.*, p. 24.

**Q. Do you have additional concerns about BHE's proposed HEAT Incentive Program?**

A. Yes, I am concerned that the proposed HEAT incentives for Residential and Non-Residential General Service customers may duplicate and/or undermine existing incentives offered under BHE's current state-mandated and ratepayer-funded energy efficiency program (EEP-2018-0001). I am also concerned that the proposed HEAT incentives for residential multi-unit builders to assist with the cost of installation of natural gas piping are a futile effort to prop up an industry that is apparently failing to compete with electric utilities that provide energy services in a more cost-effective and environmentally sustainable manner.

**Q. What are your specific concerns about the proposed HEAT incentives for Residential and Non-Residential customers?**

A. According to BHE witness, Tyler Frost:

The proposed HEAT Program, if approved by the Board, will provide Customer Retention Incentives ("HEAT Incentives" or "Incentives") to Residential and NonResidential General Service Customers in the BH Iowa Gas Service Area who purchase and install certain new natural gas burning space heating or new water heating appliances.<sup>32</sup>

Frost summarizes the proposed HEAT incentives for natural gas space heating in Table 1 in his direct testimony and the proposed incentives for natural gas water heating in Table 2.<sup>33</sup> It is worth comparing these incentives to those BHE currently offers through its Board-approved energy efficiency program.<sup>34</sup> I have

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<sup>32</sup> *Id.*, p. 7.

<sup>33</sup> *Id.*, p. 9.

<sup>34</sup> Black Hills Energy, [Iowa Residential Rebates](#) and [Iowa Gas Commercial Rebates](#), accessed September 21, 2021.



produced the following three tables to provide a side-by-side comparison of these incentives:

<b>Table 2</b> <b>BHE EEP and HEAT Incentive Comparisons for Furnaces</b>					
<b>EEP-2018-0001 Furnace Incentives</b>	<b>EEP Efficiency Requirement AFUE</b>	<b>EEP Rebate</b>	<b>HEAT Installed Nameplate Input BTUs / Hour</b>	<b>HEAT Efficiency Requirement AFUE</b>	<b>HEAT Rebate</b>
Residential and Commercial	≥ 94% AFUE	\$150	≤ 100K	80% - 94%	\$150
Residential and Commercial	≥ 94% AFUE	\$150	≤ 200K	80% - 94%	\$300
Residential and Commercial	≥ 94% AFUE	\$150	≥ 200K	80% - 94%	\$450
Residential and Commercial	≥ 96% AFUE	\$200	≤ 100K	≥ 95%	\$300
Residential and Commercial	≥ 96% AFUE	\$200	≤ 200K	≥ 95%	\$600
Residential and Commercial	≥ 96% AFUE	\$200	≥ 200K	≥ 95%	\$900

**Key Observations:**

- While BHE's current energy efficiency program provides a \$150 rebate for furnaces with a 94% or greater AFUE regardless of nameplate capacity, *the proposed HEAT incentive would provide a \$150 rebate for furnaces with less than a 94% AFUE all the way down to an 80% AFUE*. Note that the \$150 HEAT rebate is for furnaces with an installed nameplate capacity of ≤ 100K Btus/per hour. The HEAT incentive rebate doubles for furnaces with ≤ 200K nameplate capacity, and it is tripled for any furnaces ≥ 200K even though their efficiency can be as low as 80% AFUE.

- Similarly, While BHE's energy efficiency program provides a \$200 rebate for furnaces with a 96% or greater AFUE, the proposed HEAT incentive would provide a \$300 rebate for furnaces with a 95% or greater AFUE; the rebate doubles for furnaces with  $\leq 200K$  nameplate capacity, and triples for any furnaces  $\geq 200K$ .
- In summary, the proposed energy efficiency requirements for HEAT incentives are less rigorous than BHE's current energy efficiency incentives and, in most cases, are financially more generous. Customers that utilize these incentives to purchase furnaces with AFUE ratings below those incentivized by BHE's energy efficiency program will wind up using more natural gas and paying more for that gas over the lifetime of the furnace.

<b>Table 3</b> <b>BHE EEP and HEAT Incentive Comparisons for Residential Water Heaters</b>					
<b>BHE EEP-2018-0001 Water Heater Incentives Residential</b>	<b>EEP Efficiency Requirement UEF</b>	<b>EEP Rebate</b>	<b>HEAT Installed Nameplate Input BTUs / Hour</b>	<b>HEAT Efficiency Requirement UEF</b>	<b>HEAT Rebate</b>
Storage Water Heater			< 80K	$\leq 0.57$	\$75
Storage Water Heater			$\geq 80K$	$\leq 0.57$	\$150
Storage Water Heater	$\geq 0.64$	\$125	< 80K	$> 0.57$	\$150
Storage Water Heater			$\geq 80K$	$> 0.57$	N/A
Storage Water Heater	$\geq 0.80$	\$300	< 80K	$\geq 0.81$	N/A
Storage Water Heater			$\geq 80K$	$\geq 0.81$	N/A

Tankless Water Heater	$\geq 0.87$	\$300		$\geq 0.81$	\$300
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## Key Observation:

- As with the furnace rebates above, the energy efficiency requirements for HEAT incentives for residential water heaters are less rigorous than BHE's current energy efficiency incentives and they are financially more generous. Customers that utilize these incentives to purchase storage water heaters with UEF ratings below those incentivized by BHE's energy efficiency program will wind up using more natural gas and paying more for that gas over the lifetime of the water heater.

<b>Table 4</b> <b>BHE EEP and HEAT Incentive Comparisons for Commercial Water Heaters</b>					
<b>BHE EEP-2018-0001 Water Heater Incentives Commercial</b>	<b>EEP Efficiency Requirement UEF</b>	<b>EEP Rebate</b>	<b>HEAT Installed Nameplate Input BTUs / Hour</b>	<b>HEAT Efficiency Requirement UEF</b>	<b>HEAT Rebate</b>
Storage Water Heater			< 80K	$\leq 0.57$	\$75
Storage Water Heater			$\geq 80K$	$\leq 0.57$	\$150
Storage Water Heater	$\geq 0.94$	\$125	< 80K	$> 0.57$	\$150
Storage Water Heater			$\geq 80K$	$> 0.57$	N/A
Storage Water Heater	$\geq 0.94$	\$300	< 80K	$\geq 0.81$	N/A
Storage Water Heater			$\geq 80K$	$\geq 0.81$	N/A
Tankless Water	$\geq 0.94$	\$300	Tankless on	$\geq 0.81$	\$300

Heater			Demand		
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## Key Observation:

- As with the residential water heater rebates above, the energy efficiency requirements for HEAT incentives for commercial water heaters are less rigorous than BHE's current energy efficiency incentives and they are financially more generous. Customers that utilize these incentives to purchase commercial water heaters with UEF ratings below those incentivized by BHE's energy efficiency program will wind up using more natural gas and paying more for that gas over the lifetime of the water heater.

Finally, it is not clear whether BHE customers, in some cases, would be able to tap both the EEP and HEAT incentives when and if they decide to replace a natural gas-fired furnace or hot water heater. If they are able to "double-dip" this will likely lead to more BHE customers investing in less efficient space and water heating equipment. As a result, the proposed HEAT incentives will likely lead many BHE customers to purchase more natural gas over the long term, which is more in the interests of BHE shareholders than BHE ratepayers. I respectfully encourage the Board to reject the proposed HEAT incentives for existing BHE customers.

**Q. What are your conclusions and recommendations regarding the proposed HEAT incentives for existing residential and non-residential customers?**

- A. First, the HEAT incentives could undermine the existing EE programs, which are legislatively mandated to pass cost-effectiveness tests. Given their lower efficiency requirements, the proposed HEAT incentives would not likely pass

those tests and thus should be disallowed. Second, these incentives are designed to retain existing customers and to discourage them from switching to electric heat pumps for hot water and space heating, which are increasingly cost-effective and more climate-friendly. I encourage the Board not to support these HEAT incentives that will lock natural gas customers into the 15-20 year life spans of new natural gas equipment when both the economic and ecological future lie elsewhere with heat pump technology powered by 100% renewable electricity.

**Q. What are your specific concerns about the proposed HEAT Incentives to residential multi-unit builders to assist with the cost of installation of natural gas piping?**

A. BHE witness Tyler Frost summarizes this incentive in the following way:

The Company . . . proposes to provide a per-unit financial contribution to Residential builders of multi-unit housing on a project-specific basis that would offset the initial cost of venting of gas appliances and gas piping to individually metered apartments or condominium units. The Company would provide the contribution only if the total investment required for the project, including any contribution, meets the Company's IRR economic test. In other words, the Incentives will only be available when the project produces sufficient revenue to justify the total investment required, including the contribution, which will ensure that existing customers do not subsidize the multi-unit housing project.<sup>35</sup>

Whereas the goal of the proposed HEAT incentives for residential and non-residential general service customers is to *retain* existing customers, the goal of this incentive aimed at builders of residential multi-unit buildings is to *acquire* new customers. While the IRR test is supposed to ensure “that existing customers do not subsidize the multi-unit housing project,” it will be customer

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<sup>35</sup> BHE [Frost Direct](#), (RPU-2021-0002), June 1, 2021, pp. 7-8.

dollars that will furnish the incentive to these builders. Thus, the company gets their internal rate of return but BHE customers fund the incentive. BHE shareholders should bear the costs of acquiring new customers rather than existing ratepayers.

In addition, as with the HEAT incentives to retain existing customers, these incentives for multi-unit housing projects will lock new natural gas customers into the 15-20 year life spans of their natural gas equipment when both the economic and ecological future lie elsewhere with heat pump technology powered by 100% renewable electricity. Given that many Iowans live in gas-constrained parts of the state, and given the emphasis in Iowa's Energy Plan to increase the production of renewable energy, it makes more sense to switch to clean renewable electricity when and where it is cost-effective to do so and not to increase energy burdens through continued reliance on natural gas systems.

In summary, both HEAT incentives appear designed to lock customers into long-term investments in a fuel source with growing technological challenges and climate liabilities, while laying the financial burden for these incentives on existing ratepayers rather than shareholders. The Board is not obligated to help a company grow their customer base or even maintain their market share.

**Q. Do you have any additional concerns related to BHE's proposed rate increase?**

A. Yes, I oppose BHE's proposal to eliminate the fee for payments for the use of credit cards and, instead, to include these costs in base rates. It is not fair to require all BHE customers to pay charges for a service utilized by only some

BHE customers. The fact is that wealthier households often pay their utility bills with credit cards to earn points or miles, whereas many people in poorer households often don't qualify for a credit card or, if they do, often have to pay very high interest rates for the privilege of having a credit card. One study by economists from the Federal Reserve Bank of Boston estimated that households that use a credit card receive \$1,133 in financial benefits every year from people who pay their bills by check or cash.<sup>36</sup> Shifting credit card fees into base rates amounts to a hidden subsidy for those able to secure credit.

I also encourage the Board to seriously consider establishing a principle for gas and electric ratemaking that effectively discourages the use of riders. Riders appear to be increasingly utilized by both gas and electric utilities to circumvent traditional rate-basing approaches, reduce transparency, and shift economic benefits from ratepayers to shareholders. The result is tremendous confusion among customers who cannot understand the rate proposals or their monthly bills, and increasingly costly and burdensome oversight processes for regulators. Setting a higher bar for when riders are appropriate may help to discourage their use and to return transparency and efficiency to the ratemaking process.

**Q. Can you summarize your recommendations for the Board regarding the components you have addressed in BHE's rate increase proposal?**

**A.** Yes. I respectfully encourage the Board:

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<sup>36</sup> Aaron Klein, "[America's poor subsidize wealthier consumers in a vicious income inequality cycle](https://www.nbcnews.com/tech/privacy/aaron-klein-america-poor-subsidize-wealthier-consumers-in-a-vicious-income-inequality-cycle-ncna101121)," NBCNews.com, February 6, 2018, accessed September 28, 2021.

1. To consider how the entire rate increase proposal will exacerbate the high and severe energy burdens many BHE customers struggle with and to remember that a key aspect of the Board's mission is "to ensure that *reasonably priced*, reliable, environmentally responsible, and safe utility services are available to all Iowans." (Emphasis added)
2. To consider whether the proposed percentage increases to base rates are fair given that non-residential general service customers (small businesses) will experience a base rate increase twice as high as that faced by small volume customers (larger businesses). In addition, shifting more of the base rate increase from the monthly fixed charge towards the volumetric charge would provide customers with greater flexibility to reduce these costs in the future via energy conservation or through investments in energy efficiency to reduce consumption.
3. To consider how the Board's recent decision to approve cost-recovery for the 2021 Polar Vortex will exacerbate additional cost increases if the Board approves BHE's proposal to increase base rates and to implement the two new proposed riders.
4. To reject the proposed SSIR rider because it fails to properly balance the interests of ratepayers and shareholders. Rather than create a new cost-recovery mechanism with less oversight and transparency, the Board should utilize the existing SSMA mechanism, which maximizes transparency to customers and ensures sufficient time for regulatory review of expenses.



5. To reject the proposed HEAT incentives for Residential and Non-Residential General Service customers because they may duplicate and/or undermine existing incentives offered under BHE's current state-mandated and ratepayer-funded energy efficiency program (EEP-2018-0001). In addition, they will lock customers into higher bills due to the reduced efficiency of the natural gas-fueled equipment they were encouraged to purchase via the HEAT incentive.
6. To reject the proposed HEAT incentive for multi-unit housing projects because BHE shareholders should bear the costs of acquiring new customers rather than existing ratepayers. In addition, as with the HEAT incentives to retain existing customers, these incentives for multi-unit housing projects will lock new natural gas customers into the 15-20 year life spans of their natural gas equipment when both the economic and ecological future lie elsewhere with heat pump technology powered by 100% renewable electricity.
7. To reject BHE's proposal to eliminate the fee for payments for the use of credit cards and, instead, to include these costs in base rates. Shifting credit card fees into base rates amounts to a hidden subsidy for those able to secure credit.

**Q. Does this conclude your prepared direct testimony?**

A. Yes.

**AFFIDAVIT OF James B. Martin-Schramm**

STATE OF IOWA

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:

COUNTY OF WINNESHIEK

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I, James B. Martin-Schramm, being first duly sworn on oath, depose and state that I am the same James B. Martin-Schramm identified in the foregoing Direct Testimony, that I have caused the Direct Testimony, including any original exhibits, to be prepared and am familiar with the contents thereof; and that the Direct Testimony, including any original exhibits, is true and correct to the best of my knowledge, information and belief as the date of this Affidavit.

Subscribed and sworn to before me,  
a Notary Public in and for said County  
and State, this 22nd day of September, 2021.



RACHEL MOSER  
Iowa Notarial Seal  
Commission No. 759126  
My Commission Expires  
July 13, 2024

Notary Public

My commission expires on 07/13/2024