

November 10, 2022

**PUBLIC DOCUMENT**

Will Seuffert  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, Minnesota 55101-2147

RE: **PUBLIC Comments of the Minnesota Department of Commerce,  
Division of Energy Resources**  
Docket No. E015/M-22-547

Dear Mr. Seuffert:

Attached are the **PUBLIC** comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Minnesota Power's Petition for Approval to Recover Reagent Costs through the Fuel and Purchased Energy Rider

Hillary A. Creurer, Regulatory Compliance Administrator with Minnesota Power, filed the Petition on October 20, 2022.

The Department will provide a recommendation after reviewing Minnesota Power's Reply Comments.

The Department is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ ANDREW GOLDEN  
Financial Analyst

/s/ HOLLY SODERBECK  
Financial Analyst

AG, HS/ja  
Attachment



## Before the Minnesota Public Utilities Commission

### PUBLIC Comments of the Minnesota Department of Commerce Division of Energy Resources

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Docket No. E015/M-22-547

#### I. INTRODUCTION

In its [Petition](#), Minnesota Power (Minnesota Power or the Company) requested the Minnesota Public Utilities Commission (Commission) allow the Company to recover reagent costs<sup>1</sup> through the Fuel and Purchase Energy Rider (FPE Rider).

Minnesota Power proposed to allocate reagent costs similar to Midcontinent Independent System Operating (MISO) costs in the FPE Rider.

#### II. BACKGROUND

The Company filed its most recent [Petition](#) for Approval of its Annual Forecasted Rates for its Rider for Fuel and Purchased Energy Charge for the calendar year 2023 on May 2, 2022 (AA Petition).<sup>2</sup> The Company did not include reagent costs as part of the Fuel and Purchased Energy Charge in the AA Petition. The Company noted it is not permitted to recover reagent costs through the Fuel Clause, per Commission [Order](#) dated March 12, 2018 in Docket No. E015/16-664 (2016 Rate Case). Minnesota Power noted it expected to submit a Petition to the Commission to move reagent costs out of Base Rates and into the Fuel Clause (which is the FPE Rider).<sup>3</sup>

The Company also recently filed a Petition requesting the Commission allow the Company to recover the impacts of a contract change with Hibbing Public Utilities in the FPE Rider.<sup>4</sup>

#### III. PETITION SUMMARY

The Company requested the Commission allow the Company to recover reagent costs through the Fuel and Purchased Energy Rider (FPE Rider). The Company currently recovers reagent costs through base rates.

The Company stated it uses reagents to reduce pollutants from its power plants to comply with federal and state air quality regulations.

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<sup>1</sup> The Company uses reagents to reduce pollutants from its power plants to comply with federal and state air quality regulations.

<sup>2</sup> Docket No. E015/AA-22-216.

<sup>3</sup> AA Petition, p. 9.

<sup>4</sup> Company's September 22, 2022 [Petition](#) in Docket No. E015/M-22-501.

Since the Commission denied the Company's similar request in the 2016 Rate Case, the Company stated the following reasons why the past decision may not be applicable to the current Petition:<sup>5</sup>

- The Fuel Clause Adjustment (FCA) mechanism has been significantly reformed (Company cited to Docket No. E999/CI-03-802 for support),
- The Company's dispatch strategy moved to increasing reliance on economic dispatch, leading to greater variability in reagent costs,
- The Company's generation mix continues to evolve,
- Higher market energy prices observed in 2021 and to-date in 2022 have caused greater than anticipated generation at Boswell Energy Center (BEC), resulting in increasing variability in reagent use,
- The Commission granted Otter Tail Power Company's request to recover reagent costs in its fuel clause in its 2022 rate case.

#### A. *REAGENTS*

The Company stated it uses reagents including ammonia, urea, carbon, and lime to reduce emission while Boswell units are operating and that the consumption of reagents is directly correlated to the number of operating hours and generation levels (load) a plant is dispatched in a particular year.<sup>6</sup>

The Company stated market conditions such as inflation can cause reagent price variability. Minnesota Power also noted it has contracts, which fix the price for lime and carbon, and a price index for ammonia. Reagent vendors also add a fuel surcharge for delivery.

The Company provided Boswell Energy Center Unit 3 (BEC3) has transitioned to economic operations and Boswell Energy Center 4 (BEC4) is in must run operations. MISO has the option to dispatch BEC4 between its minimum and maximum generation level, resulting in material variances in its annual generation depending on market conditions. The Company notes BEC3's economic dispatch results in even wider variance in annual generation than seen at BEC4.

#### IV. **DEPARTMENT ANALYSIS**

The Department reviewed the Company's Petition and additional information provided through Information Requests. The following provides the Department's analysis of Minnesota Power's request to move reagent cost recovery from base rates in the rate case to the FPE Rider.

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<sup>5</sup> Instant Petition, pp. 1 -2.

<sup>6</sup> Instant Petition, pp. 4-5

A. *STATUTE REQUIREMENTS*

[Minnesota Statute § 216B.16](#), subd. 7 provides the Commission **may** permit a public utility to file rate schedules containing provisions for the automatic adjustment of charges for public utility service in direct relation to changes, in part, prudent costs incurred by a public utility for sorbents, reagents, or chemicals used to control emissions from an electric generation facility, provided these costs are not recovered elsewhere in rates. The Statute also notes the utility must track and report annually the volumes and costs of sorbents, reagents, or chemicals using separate accounts by generating plant.

The Department agrees the statute allows the Commission to approve reagent cost recovery through the FPE Rider. However, the statute does not require the Commission to do so. As discussed in more detail in the following sections, the Commission denied Minnesota Power's similar request in Docket No. E015/GR-16-664.

B. *FUEL CLAUSE ADJUSTMENT REFORM*

The Commission denied Minnesota Power's previous request to move recovery of reagent costs from base rates to the FCA Rider (which is the FPE Rider) in the Company's previous rate case (Docket No. E015/GR-16-664). In the previous rate case, the Department opposed fuel-clause recovery, arguing that limiting recovery of reagent costs to base rates gives Minnesota Power an incentive to minimize these costs between rate cases. The Administrative Law Judge agreed and recommended the Commission deny the Company's request to recover reagent costs through the fuel clause. The Commission agreed with the ALJ and the Department.<sup>7</sup>

Minnesota Power did not make a similar request in its ongoing rate case in Docket No. E015/GR-21-335. However, Minnesota Power is making the request in the instant petition, stating, in part, the mechanism for the FCA changed, citing to the Investigation into the Appropriateness of Continuing to Permit Electric Energy Cost Adjustments (Docket No. E999/CI-03-802).

The Company further explained the mechanism change:<sup>8</sup>

Prior to 2020, the FCA was calculated based on actuals after the month was completed. Once the FCA rate was calculated, it was applied to customer bills the following month. Minnesota Power used the first two of the previous three months to determine the factor to apply to customer bills which smoothed out any big swings in fuel and purchase costs. Annually, Minnesota Power provided documentation to prove prudence of

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<sup>7</sup> Commission's March 12, 2018 [FINDINGS OF FACT, CONCLUSIONS, AND ORDER](#) in Docket No. E015/GR-16-664.

<sup>8</sup> Department Attachment 1 (Company Response to DOC IR No. 5).

costs that had already been charged to the customer. The Department of Commerce would review the documentation for prudence of costs incurred annually.

Some of the issues that were identified by the Department of Commerce in regards to the prior FCA mechanism was that actual costs were being recovered before the Department of Commerce had a chance to review them. Actual costs were only reported annually after the year was complete. The Department of Commerce proposed the FCA mechanism should be changed as the utilities did not have any incentives to keep costs low since actuals were flowed to customers two months after they were incurred.

A new FCA mechanism was created, also known as FAC Reform, which involved submitting a forecast of costs before the year and once reviewed and approved, the forecasted rates would be charged to the customers. During the year, actual costs are incurred and an over-/under-collected amount is calculated to determine what costs Minnesota Power recovered due to billing forecasted rates versus actual costs incurred. Then once the year is complete, Minnesota Power files a "True Up filing" based on actuals and requests to refund or charge true up rates based on the difference between actuals to forecasts. Once approved, the true up rates are applied to customer bills.

The Department does not believe the change in FAC Reform significantly impacts the reasons the Department, Administrative Law Judge, and Commission previously denied the same request from Minnesota Power, since utilities are more incented to manage costs that fixed in base rates in a rate case. The Department also notes the "FAC Reform" occurred December 2017. The Commission issued its [Order](#) in Docket No. E999/CI-03-802 on December 19, 2017 and also issued an [Order](#) revising implementation dated December 12, 2018. Therefore, the FAC Reform occurred prior to Minnesota Power's initial filings in its ongoing rate case in Docket No. E015/GR-21-335 and Minnesota Power did not make this request in that docket, which would have allowed more parties consider this change being proposed by the Company.

*C. REAGENT COSTS, PRICES, AND GENERATION MIX*

The Company stated another reason for its Petition is greater variability in reagent cost, reagent use, and evolution of its generation mix.

The Company provided the biggest drive of variation in reagent costs, year-over-year, is the generation level of the facility. The Company provided several factors included in the forecasted generation level:

- planned outages,
- economic dispatch operations for BEC3 (which began in 2021), and
- LMP [locational marginal price] market conditions.<sup>9</sup>

*i. Reagent Cost*

According to the Company's forecasts, the reagent costs have fluctuated over the years, but are increasing over 2022 and 2023 before going back down and have little variation in 2025 and 2026, as shown in the following table.<sup>10</sup>

**Table 1: Reagent Costs**

Year	Boswell Unit 3	Boswell Unit 4 <sup>11</sup>	Total
<b>2016 Base Rates</b>	<b>1,480,607</b>	<b>5,044,161</b>	<b>6,524,768</b>
2016 Actuals	1,179,578	2,566,070	3,745,648
2017 Actuals	1,016,045	2,204,162	3,220,207
2018 Actuals	1,144,439	2,434,559	3,578,998
2019 Actuals	787,945	2,081,245	2,869,190
2020 Actuals	874,806	1,901,941	2,776,747
2021 Actuals	1,358,318	1,917,995	3,276,313
<b>2022 Test Year</b>	<b>827,624</b>	<b>1,800,353</b>	<b>2,627,977</b>
2022 Forecast	2,352,851	1,836,260	4,189,111
2023 Forecast	2,587,662	3,437,367	6,025,029
2024 Forecast	1,288,437	2,356,795	3,645,232
2025 Forecast	1,369,094	2,401,724	3,770,818
2026 Forecast	1,445,491	2,325,585	3,771,076

The Company also provided the reagent cost amount currently included in the Company's base rates (since the 2016 general rate case) and the Company's actual reagent costs from 2016 through 2021. The Company has over-collected reagent costs in base rates in 2016, 2017, 2018, 2019, 2020, and 2021. The following table details the amount of reagent costs in base rates which exceeded actual costs, for each year.

<sup>9</sup> Department Attachment 2 (Company Response to DOC IR No. 1).

<sup>10</sup> Department Attachment 2 (Company Response to DOC IR No. 1).

<sup>11</sup> The costs for BEC4 are only for Minnesota Power.

**Table 2: Reagent Costs in Base Rates less Actual Reagent Costs**

<b>Year</b>	<b>Boswell Unit 3</b>	<b>Boswell Unit 4<sup>12</sup></b>	<b>Total</b>
2016	301,029	2,478,091	2,779,120
2017	464,562	2,839,999	3,304,561
2018	336,168	2,609,602	2,945,770
2019	692,662	2,962,916	3,655,578
2020	605,801	3,142,220	3,748,021
2021	122,289	3,126,166	3,248,455
<b>Total</b>	<b>2,522,511</b>	<b>17,158,994</b>	<b>19,681,505</b>

The Company over-collected reagent costs in base rates by \$19.7 million in 2016 through 2021.

The Company is forecasting it will under-collect reagent costs, if its 2022 test year amount is included in base rates, as the Company proposed in its ongoing rate case. The following table compares the 2022 test year amount, reported by the Company, to the Company's forecasts for 2022 through 2026 as an estimation of under-collection. However, it is important to note Table 3 used forecasted values, whereas Table 2 used actual values.

**Table 3: 2022 Test Year Reagent Costs Less Forecasted Reagent Costs**

<b>Year</b>	<b>Boswell Unit 3</b>	<b>Boswell Unit 4<sup>13</sup></b>	<b>Total</b>
2022 Forecast	(1,525,227)	(35,907)	(1,561,134)
2023 Forecast	(1,760,038)	(1,637,014)	(3,397,052)
2024 Forecast	(460,813)	(556,442)	(1,017,255)
2025 Forecast	(541,470)	(601,371)	(1,142,841)
2026 Forecast	(617,867)	(525,232)	(1,143,099)
<b>Total</b>	<b>(4,905,415)</b>	<b>(3,355,966)</b>	<b>(8,261,381)</b>

It's also important to note that, while the forecasted reagent costs are below the Company's stated 2022 test year reagent costs (presumed as the base rate amount), it is a forecast, or an estimate. In addition, the 2022 test year reagent costs is the Company's own forecast and the Company is able to file a rate case as needed. Additionally, the Department notes that after several years of Minnesota Power significantly over recovering reagent costs in bases rates, now that reagent costs may be higher than its amount in bases rates (which the Department is still evaluating) Minnesota Power now requests recovery on a flow through method via the FPE Rider.

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<sup>12</sup> The costs for BEC4 are only for Minnesota Power.

<sup>13</sup> The costs for BEC4 are only for Minnesota Power.

**The Department requests the Company provide in Reply Comments the amount of reagent costs the Company expects to be included in base rates in Docket No. E015/GR-21-335. The Department requests the Company explain if the amount is from the Company's proposed 2022 Test Year amount or if any intervening parties in the Petition recommended adjustments to reagent costs.**

**The Department also requests the Company provide the amount of actual 2022 reagent costs used, by month, through at least September 30, 2022 or October 31, 2022 if available, and forecasts for the remainder of 2022, in Reply Comments.**

*ii. Reagent Price*

Reagent cost to Minnesota Power is based on commodity pricing. The Company provided the reagent price is typically contracted but can increase in a given year based on factors such as inflation, fuel costs, delivery fees, and chemical makeup of the reagent.<sup>14</sup>

The Company's reagents include ammonia, lime, limestone, carbon, and urea. The Company does not include urea in its 2022 Test Year Budget because the Company anticipated its inventory amount was sufficient to cover any usage without additional purchase. The Company has not purchased urea in 2022, as of November 2022.<sup>15</sup> The company has contracts with vendors for ammonia, lime, limestone, and carbon.

*a. Ammonia*

The Company's contract with Hawkins, Inc. for ammonia (Hawkins Contract) began July 1, 2022 and ends April 20, 2025.

**The Department requests Minnesota Power provide, in Reply Comments, the price it paid for ammonia prior to July 1, 2022 and contracts prior to July 1, 2022 for Ammonia, broken out by fuel surcharge, commodity price, etc.**

*b. Lime and Limestone*

The Company stated the price for lime increased [TRADE SECRET DATA HAS BEEN EXCISED] for 2023.<sup>16</sup> The Company's contract with Graymont LLC for lime began March 1, 2018 and ends February 23, 2023 (Graymont Contract). The parties amended the contract with

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<sup>14</sup> Department Attachment 2 (Company Response to DOC IR No. 1).

<sup>15</sup> Department Attachment 3 (Company Response to DOC IR No. 7).

<sup>16</sup> Department Attachment 4 (Company Response to DOC IR No. 6).



updated prices on March 1, 2022.<sup>17,18</sup> The Company provided the Graymont contract, with amendments each year for prices. The following table provides the changes in price for each year.

**Table 4: Lime Price, by Year, per Graymont Contract<sup>19</sup>**

Exhibit	A	A-1	A-2	A-3	A-4	A-4 % change from A-3	A-4 % change from A
[TRADE SECRET DATA HAS BEEN EXCISED]							

The Graymont Contract, Exhibit D, provides the fuel surcharge information. However, the Department does not have enough information to know the total fuel surcharge amount paid by Minnesota Power.

**The Department requests the Company provide, in Reply Comments, the Company's calculation for the price increase for lime for 2023.**

**The Department requests the Company provide, in Reply Comments, the Company's anticipated contract or purchase arrangement for lime after February 23, 2023.**

*c. Carbon*

The Company's contract with ADA Carbon Solutions LLC (ADA Contract) for carbon is from January 1, 2016 through December 31, 2023.

Amendment 1 to the Agreement provides the pricing information, which is reiterated in the following table.

<sup>17</sup> Department Attachment 5 (Company Response to DOC IR No. 3).

<sup>18</sup> For reference, intervening parties filed Direct Testimony in Docket No. E015/21-335 on April 18, 2022.

<sup>19</sup> Department Attachment 5 (Company Response to DOC IR No. 3).

**Table 5: Carbon Pricing, \$/lb<sup>20</sup>**

	2016	2017	2018	2019	2020	2021	2022	2023
[TRADE SECRET DATA HAS BEEN EXCISED]								

The Contract provides the Buyer (Minnesota Power) is responsible for the cost of shipping the product from the Seller's facility to Buyer's facility.<sup>21</sup>

**The Department requests the Company provide, in Reply Comments, itemized costs for each reagent (i.e., broken down by product name, shipping costs, fuel surcharge, etc.) for 2016 through 2021 actuals and 2022 through 2026 forecasts.**

*iii. Reagent Use*

The Company provided BEC3 transitioned to economic operations and BEC4 is in must run operations and also stated, "Minnesota Power's generation is experiencing greater dispatch levels of its Boswell units than what was anticipated in the 2021 rate case."<sup>22</sup> The Company provided fluctuation in load and fuel impacts reagent use.<sup>23</sup>

The Company anticipates the 2023 dispatch for Boswell Energy Center at **[TRADE SECRET DATA HAS BEEN EXCISED]**, an increase of **[TRADE SECRET DATA HAS BEEN EXCISED]** from 2022 anticipated generation levels.

The Company calculates reagent costs based on reagent purchase prices and usage rates on a \$/MWh basis. The Company includes the costs when developing BEC3 and BEC4 energy offer submitted to MISO.<sup>24</sup>

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<sup>20</sup> Department Attachment 5 (Company Response to DOC IR No. 3).

<sup>21</sup> Department Attachment 5 (Company Response to DOC IR No. 3).

<sup>22</sup> Instant Petition, p. 6.

<sup>23</sup> Department Attachment 2 (Company Response to DOC IR No. 1).

<sup>24</sup> Department Attachment 6 (Company Response to DOC IR No. 4).

**The Department requests Minnesota Power provide, in Reply Comments, the annual net generation (net MWh), for BEC3 and BEC4 from 2016 to 2021 actuals and from 2022 to 2026 forecasts.**

*D. OTTER TAIL POWER COMPANY*

Minnesota Power notes in its Petition, a recent order from the Commission regarding Otter Tail Power's reagent cost recovery method.

As stated in Otter Tail Power's rate case, it is the Department's position that moving reagent costs to the FPE Rider would likely reduce the Company's incentive for efficiency and cost minimization.<sup>25</sup> The Administrative Law Judge (ALJ), in its Report, contemplated a "one-time experiment" for allowing reagent costs in the FCA, as a way to allow the Commission to test the proposition that the meaningful incentives to contain reagent costs will be lost if the costs are included in the FCA.<sup>26</sup> The Commission concurred with the ALJ, and approved recovery of reagent costs through the FCA. The Commission stated, "if reagent costs do begin to rise disproportionately, the Commission will have the opportunity to investigate further and modify recovery in future EAR [FCA] proceedings."<sup>27</sup>

The Department notes a significant difference between the ALJ's consideration of a "one-time experiment" for Otter Tail Power and Minnesota Power's request is the method for the request. Otter Tail Power submitted its proposal through a general rate case proceeding. Minnesota Power submitted its proposal through a miscellaneous docket. The Department again notes Minnesota Power did not make this request in its ongoing rate case. A general rate case proceeding is a more appropriate method for considering this request as it allows for extensive review and participation from interested parties to brief the issue and participate in deliberation.

**The Department requests Minnesota Power provide, in Reply Comments, the reasoning and support for requesting to change recovery of reagent costs through the instant Petition as opposed to a general rate case proceeding.**

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<sup>25</sup> *In re the Application of Otter Tail Power Co. for Authority to Increase Rates for Electric Service in Minn.*, MPUC Docket No. E017/GR-20-719, Ex. DOC-\_\_\_ at 23 ([Johnson Surrebuttal](#)). Note: Otter Tail Power refers to its fuel adjustment rider as Energy Adjustment Rider (EAR).

<sup>26</sup> *In re the Application of Otter Tail Power Co. for Authority to Increase Rates for Electric Service in Minn.*, MPUC Docket No. E017/GR-20-719, [FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATION](#), at 84, Office of Administrative Hearings, September 20, 2021.

<sup>27</sup> *In re the Application of Otter Tail Power Co. for Authority to Increase Rates for Electric Service in Minn.*, MPUC Docket No. E017/GR-20-719, [FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDATION](#), at 29, Minnesota Public Utilities Commission, February 1, 2022.

## **V. REQUEST FOR SUPPLEMENTAL INFORMATION**

The Department appreciates the opportunity to review Minnesota Power's Petition. However, the Department requests Minnesota Power provide the following information in Reply Comments, to supplement the Petition:

- **the amount of reagent costs the Company expects to be included in base rates in Docket No. E015/GR-21-335 and explain if the amount is from the Company's proposed 2022 Test Year amount or if any intervening parties in the Petition recommended adjustments to reagent costs,**
- **the amount of actual 2022 reagent costs used, by month, through at least September 30, 2022 or October 31, 2022 if available, and forecasts for the remainder of 2022,**
- **the price paid for ammonia prior to July 1, 2022 and contracts prior to July 1, 2022 for Ammonia, broken out by fuel surcharge, commodity price, etc.,**
- **the Company's calculation for the price increase for lime for 2023,**
- **the Company's anticipated contract or purchase arrangement for lime after February 23, 2023,**
- **itemized costs for each reagent (i.e., broken down by product name, shipping costs, fuel surcharge, etc.) for 2016 through 2021 actuals and 2022 through 2026 forecasts,**
- **the annual net generation (net MWh), for BEC3 and BEC4 from 2016 to 2021 actuals and from 2022 to 2026 forecasts, and**
- **the reasoning and support for requesting to change recovery of reagent costs through the instant Petition as opposed to a general rate case proceeding**

Once Minnesota Power provides this information, the Department will submit response comments as quickly as possible.

## **VI. DEPARTMENT RECOMMENDATIONS**

The Department will provide a recommendation after reviewing Minnesota Power's reply comments. The Department requests Minnesota Power provide the information specified above.



Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

**Docket Number:** E015/M-22-547  
**Requested From:** Minnesota Power  
**Type of Inquiry:** Financial

☐ Nonpublic ☒ Public  
**Date of Request:** 10/27/2022  
**Response Due:** 11/7/2022

**SEND RESPONSE VIA EMAIL TO:** [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

**Assigned Analyst(s):** Andrew Golden and Holly Soderbeck

**Email Address(es):** [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

**Phone Number(s):** 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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**Request Number:** 5  
**Topic:** Reformed FCA Mechanism  
**Reference(s):** Petition, pp. 6-7

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**Request:**

- A. Please list the changes to the FCA mechanism before and after reform, resulting from Commission investigation in Docket No. E999/CI-03-802.
- B. For changes listed in Part A, please explain how the items supports changing treatment of reagent costs.

**Responses:**

- A. Prior to 2020, the FCA was calculated based on actuals after the month was completed. Once the FCA rate was calculated, it was applied to customer bills the following month. Minnesota Power used the first two of the previous three months to determine the factor to apply to customer bills which smoothed out any big swings in fuel and purchase costs. Annually, Minnesota Power provided documentation to prove prudence of costs that had already been charged to the customer. The Department of Commerce would review the documentation for prudence of costs incurred annually.

Some of the issues that were identified by the Department of Commerce in regards to the prior FCA mechanism was that actual costs were being recovered before the Department of Commerce had a chance to review them. Actual costs were only reported annually after the year was complete. The Department of Commerce proposed the FCA mechanism should be changed as the utilities did not have any incentives to keep costs low since actuals were flowed to customers two months after they were incurred.

A new FCA mechanism was created, also known as FAC Reform, which involved submitting a forecast of costs before the year and once reviewed and approved, the forecasted rates would

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To be completed by responder

**Response Date:** November 7, 2022  
**Response by:** Ryan LaCoursiere  
**Email Address:** [rlacoursiere@mnpower.com](mailto:rlacoursiere@mnpower.com)  
**Phone Number:** 218-355-3678



Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

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**SEND RESPONSE VIA EMAIL TO:** [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

be charged to customers. During the year, actual costs are incurred and an over-/under-collected amount is calculated to determine what costs Minnesota Power recovered due to billing forecasted rates versus actual costs incurred. Then once the year is complete, Minnesota Power files a "True Up filing" based on actuals and requests to refund or charge true up rates based on the difference between actuals to forecast. Once approved, the true up rates are applied to customer bills.

- B. Changing to a new FCA Mechanism did not change the fundamental calculation of the FCA Rates charged to customers. The fuel costs, purchase costs, and sales recovered through the FCA were the same between the old mechanism and the new mechanism. The process of recovering actual costs in the old mechanism versus recovering forecasted costs based on an approved forecast and having a true up after actuals are calculated was the only change in FCA.

Minnesota Power is not proposing a change to the treatment of reagent costs due to the change in FCA mechanism as both mechanisms support the change in the treatment of reagent costs. Minnesota Power is simply stating with FAC Reform there is an opportunity for in-depth and careful review of actual costs during the true-up filing. The main reasons for the change in the treatment of reagent costs is the Company's dispatch strategy has moved to increasing reliance on economic dispatch, higher market energy prices observed in 2021 and to-date in 2022 have caused greater than anticipated generation at Boswell Energy Center ("BEC" or "Boswell"), resulting in increased variability in reagent use, and Otter Tail Power Company's ("Otter Tail Power") 2020 rate case, the Commission granted Otter Tail's similar request to recover reagent costs in its fuel clause. More detail on the above reasons can be found on Page 1 and 2 of the "Approval to Recover Reagent Costs through the Fuel and Purchased Energy Rider" filing (Docket E015/M-22-547).

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To be completed by responder

Response Date: November 7, 2022  
Response by: Ryan LaCoursiere  
Email Address: [rlacoursiere@mnpower.com](mailto:rlacoursiere@mnpower.com)  
Phone Number: 218-355-3678



Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
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**Assigned Analyst(s):** Andrew Golden and Holly Soderbeck

**Email Address(es):** [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

**Phone Number(s):** 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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**Request Number:** 1  
**Topic:** Reagent Costs  
**Reference(s):**

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**Request:**

- A. Please provide a table, in spreadsheet format, with Minnesota Power's reagent costs, by facility:
- a. 2016 to 2021 actuals
  - b. 2016 cost in base rates
  - c. 2022 cost in base rates (MN Power recommended and any intervenor recommendation)
  - d. 2022 to 2026 forecasts
- B. Please explain and support variances greater than 10% in Part A

**Responses:**

- A. See DOC IR 01.01 ATTACH for the information requested in items a. through d.
- B. See DOC IR 01.01 ATTACH for year-over-year percentage change from 2016 actuals through 2026 forecast. Variances in reagent costs are caused by multiple factors. The budgeted reagents cost is based on a forecasted generation level for each Boswell unit. The biggest driver of variation in reagents costs, year-over-year, is the generation level of the facility. The forecasted generation level includes planned outages, economic dispatch operation for Boswell Unit 3 which started in 2021, and LMP market conditions. The budgeted reagent cost is also based on commodity pricing. This pricing is typically a contracted cost but can increase in a given year based on various external factors such as inflation, fuel costs, delivery fees, and chemical makeup of the reagent. The budgeted reagent cost is also based on pollution control equipment operation. Fluctuation in load and fuel have impacts on reagent use. Boswell Unit 4 installed a NID system to reduce emissions in 2016. The 2016 Base Rate/Budget amount included for Boswell Unit 4 was provided by the engineering firm based on equipment specifications. As that system has been in use for multiple years, that system has been optimized to reduce reagent cost.

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To be completed by responder

**Response Date:** November 7, 2022  
**Response by:** Rhonda Munger  
**Email Address:** [rmunger@mnpower.com](mailto:rmunger@mnpower.com)  
**Phone Number:** (218) 313-4496

Minnesota Power  
Docket No. E015/M-22-547

	Year-over-Year			Year-over-Year		
	Boswell Unit 3	% Change Cost	>10% Variance Explanation	Boswell Unit 4*	% Change Cost	>10% Variance Explanation
<b>2016 Base Rate/Budget</b>	\$ 1,480,607			\$ 5,044,161		
<b>2016 Actual Cost</b>	\$ 1,179,578			\$ 2,566,070		
<b>2017 Actual Cost</b>	\$ 1,016,045	-14%	production/operation change	\$ 2,204,162	-14%	generation and commodity increase
<b>2018 Actual Cost</b>	\$ 1,144,439	13%	commodity increase	\$ 2,434,559	10%	
<b>2019 Actual Cost</b>	\$ 787,945	-31%	generation and commodity decrease	\$ 2,081,245	-15%	generation decrease
<b>2020 Actual Cost</b>	\$ 874,806	11%	commodity increase	\$ 1,901,941	-9%	
<b>2021 Actual Cost</b>	\$ 1,358,318	55%	generation increase due to market pricing	\$ 1,917,995	1%	
<b>2022 Test Year</b>	\$ 827,624			\$ 1,800,353		
<b>2022 Forecast</b>	\$ 2,352,851	73%	generation increase due to market pricing	\$ 1,836,260	-4%	
<b>2023 Forecast</b>	\$ 2,587,662	10%	anticipate a decrease in market pricing which will ultimately cause a decrease in	\$ 3,437,367	87%	anticipate strong market pricing to continue anticipate a decrease in market pricing which will ultimately cause a
<b>2024 Forecast</b>	\$ 1,288,437	-50%	generation	\$ 2,356,795	-31%	decrease in generation
<b>2025 Forecast</b>	\$ 1,369,094	6%		\$ 2,401,724	2%	
<b>2026 Forecast</b>	\$ 1,445,491	6%		\$ 2,325,585	-3%	

\*MP Cost Only





Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

**Docket Number:** E015/M-22-547  
**Requested From:** Minnesota Power  
**Type of Inquiry:** Financial

☐ Nonpublic ☒ Public  
**Date of Request:** 10/27/2022  
**Response Due:** 11/7/2022

**SEND RESPONSE VIA EMAIL TO:** [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

**Assigned Analyst(s):** Andrew Golden and Holly Soderbeck

**Email Address(es):** [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

**Phone Number(s):** 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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**Request Number:** 7  
**Topic:** Reagent Costs – 2023 Forecast  
**Reference(s):** Petition, pp. 4-5

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Minnesota Power identified urea as a reagent used to reduce emissions in Boswell 4, but costs for this reagent are not included in the 2022 Test Year Budget Reagent Costs.

**Request:**

- A. Please explain and provide additional detail regarding the inclusion of urea as a line item.

**Responses:**

- A. Urea is utilized for Nitrous Oxide (NOx) control on Bowell Unit 4. When the 2022 Test Year Budget was developed Minnesota Power anticipated the amount in inventory was sufficient for the forecasted generation in 2022. Year-to-date Minnesota Power has not purchased any urea.

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To be completed by responder

**Response Date:** November 7, 2022  
**Response by:** Rhonda Munger  
**Email Address:** [rmunger@mnpower.com](mailto:rmunger@mnpower.com)  
**Phone Number:** (218) 313-4496



Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

Docket Number: E015/M-22-547  
Requested From: Minnesota Power  
Type of Inquiry: Financial

☐ Nonpublic ☒ Public  
Date of Request: 10/27/2022  
Response Due: 11/7/2022

SEND RESPONSE VIA EMAIL TO: [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

Assigned Analyst(s): Andrew Golden and Holly Soderbeck

Email Address(es): [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

Phone Number(s): 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

---

Request Number: 6  
Topic: Reagent Costs – 2023 Forecast  
Reference(s): Petition, p. 7

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Minnesota Power included \$2.6 million for reagent costs in its 2022 Test Year and is forecasting reagent costs of \$6 million in 2023. Petition, p. 7.

**Request:**

- A. Please provide the updated forecast for reagent costs in 2022.
- B. Please provide the additional detail for the forecasted 2023 reagent costs, including which factors are driving the increased forecast (i.e., inflation, economic operations reliance, energy prices, dispatch levels, etc.).

**Responses:**

- A. The forecasted costs for reagents as of September 30, 2022 are \$2,352,851 for Boswell Unit 3 and \$1,836,260 for Boswell Unit 4 (Minnesota Power only), which is an increase from 2022 test year of approximately \$1,589,111.
- B. One driving factor for the increased cost of reagents in 2023 is due to an increase in forecasted generation. Anticipated 2023 dispatch for the Boswell Energy Center is [TRADE SECRET DATA BEGINS [REDACTED] TRADE SECRET DATA ENDS] (Minnesota Power only) which is an increase of [TRADE SECRET DATA BEGINS [REDACTED] TRADE SECRET DATA ENDS] from the generation levels anticipated in the 2022 test year. In addition there is a commodity price escalation of [TRADE SECRET DATA BEGINS [REDACTED] TRADE SECRET DATA ENDS] on lime for 2023.

*The information labeled as trade secret herein includes information related to Company generation and contractually-negotiated terms used by the Company and is trade secret information as defined by Minn. Stat. § 13.37, subd. 1(b). This information has independent economic value from not being generally known to, and not being readily ascertainable by proper means by, other parties who could obtain economic value from its disclosure or use. The disclosure of this information could adversely impact contract negotiations, potentially increasing costs for these services for our customers. Thus, the Company maintains this information as trade secret.*

---

To be completed by responder

Response Date: November 7, 2022  
Response by: Rhonda Munger  
Email Address: [rmunger@mnpower.com](mailto:rmunger@mnpower.com)  
Phone Number: (218) 313-4496

**Assigned Analyst(s):** Andrew Golden and Holly Soderbeck

**Email Address(es):** [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

**Phone Number(s):** 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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**Request Number:** 3

**Topic:** Reagent Price Contracts

**Reference(s):** Petition, p. 5

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**Request:**

- A. Please provide a copy of Minnesota Power's contracts in place for all reagents.
- B. For each reagent contract, please provide:
  - a. Contract begin date
  - b. Contract end date
  - c. Fixed prices included in contract
  - d. Variable prices included in contract

**Responses:**

- A. Please see DOC IR 03.01 ATTACH PUB for the public version of the Chemical Supply Agreement to purchase ammonia from Hawkins, Inc.

Please see DOC IR 03.02 ATTACH PUB for the public version of the Chemical Supply Agreement to purchase lime from Graymont LLC.

Please see DOC IR 03.03 ATTACH PUB for the public version of the Chemical Supply Agreement to purchase carbon from ADA Carbon Solutions, LLC.

Due to the limited amount of urea needed to control NO<sub>x</sub> Minnesota Power no longer purchases this reagent in bulk, rather it is priced upon request.

B. Below is a summary table with the information requested in items a. through d.

	Ammonia	Lime	Carbon
a. Contract begin date	July 1, 2022	March 1, 2018	January 1, 2016
b. Contract end date	April 30, 2025	February 23, 2023	December 31, 2023
c. Fixed Price		Found in Amendment No. 5	Found in Amendment No. 1
d. Variable Price	Found in Exhibit A Found in Exhibit D	Found in Exhibit D	Found in Section 6

*The information labeled as trade secret herein includes information related to specific vendors and contractually-negotiated terms used by the Company and is trade secret information as defined by Minn. Stat. § 13.37, subd. 1(b). This information has independent economic value from not being generally known to, and not being readily ascertainable by proper means by, other parties who could obtain economic value from its disclosure or use. The disclosure of this information could adversely impact contract negotiations, potentially increasing costs for these services for our customers. Thus, the Company maintains this information as trade secret.*

## CHEMICAL SUPPLY AGREEMENT

This CHEMICAL SUPPLY AGREEMENT (this “Agreement”) is made and entered into as of the 01 day of May, 2022 (the “Effective Date”), by and between Hawkins, Inc. (“Seller”), and ALLETE, Inc., a Minnesota corporation (“Buyer”). Together, Seller and Buyer are “Parties” to this Agreement and either Seller or Buyer individually is a “Party” to this Agreement.

NOW THEREFORE, in consideration of the mutual covenants and obligations stated in this Agreement, the receipt and sufficiency of which the Parties acknowledge, Seller and Buyer hereby agree as follows:

### SECTION 1. SALE AND PURCHASE OF PRODUCT

- 1.1. Subject to the terms and condition of this Agreement, Seller shall sell to Buyer, and Buyer shall purchase from Seller from time to time, each of the product(s) set forth below in the amounts and at the price set forth below:

<b>“Product(s)”</b>	Those Products listed in Exhibit A
<b>“Price”</b>	The pricing structure for each Product as set forth in Exhibit A. The applicable volume rebate schedule is also included in Exhibit A.
<b>Quantity of Product(s)</b>	Nothing in this Agreement shall require Buyer to purchase certain amounts of any Product from Seller, unless otherwise set forth in Exhibit A.
<b>Destination</b>	Buyer location-specific requirements are attached herein as Exhibit C.
<b>Other</b>	The Product’s Specification is attached herein as Exhibit B. No changes to this specification will be allowed without prior written consent by Seller and Buyer. Delivery requirements, including but not limited to timing, shall be included in Exhibit B.

### SECTION 2. TERM

- 2.1. The “Term” of this Agreement shall begin on the Effective Date and shall continue thereafter to and including April 30, 2025 unless extended or earlier terminated in accordance with this Agreement.

### SECTION 3. CHEMICAL ORDERS

- 3.1. Buyer may submit to Seller, via email, a written order for a specific amount of chemicals to be purchased by Buyer and delivered by Seller (“Order”).
- 3.2. Orders shall be sent to: [customer.service@hawkinsinc.com](mailto:customer.service@hawkinsinc.com)
- 3.3. Acknowledgements/Notices of shipment shall be sent to the specific individual and site listed as the contact person in Exhibit A for each chemical.

With a copy to:  
ALLETE, Inc.  
30 West Superior Street  
Duluth, MN 55802  
Attn: Purchasing Department

- 3.4. Seller may change its contact information for Orders, and Buyer may change its

contact information for acknowledgements and notices of shipment, in each case by written Notice to the other Party.

**3.5.** As more fully set forth in Section 20 (Complete Agreement), the terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgements or any such form or document even if signed by both Parties hereto.

#### **SECTION 4. WARRANTY**

**4.1.** Warranty. Seller represents warrants that the goods and services furnished will be free from defects in materials and workmanship, merchantable and in full conformity with the applicable specifications set forth in Exhibit B, and Seller's description, promises or samples, and that such goods will be fit for the Buyer's intended use provided Seller has reason to know of such use, and that Seller will convey the good title to the goods, free and clear from all liens, claims and encumbrances. No implied warranties of Seller are excluded or disclaimed. Seller shall give prior notice to Buyer of any significant change(s) in materials, manufacturing processes, or test methods for mutual assessment of the probable effect on Buyer's processes or product performance. Seller warrants that the manufacture of the goods and any component part hereunder, and the use or resale of such goods do not infringe the claims of any U.S. or foreign patent, copyright, trademark or trade secret. Seller represents and warrants that the production and furnishing of the goods hereunder comply with all applicable laws, permits, rules and regulations, and further, that the delivery of such goods complies with all applicable laws, permits, rules and regulations regarding packaging, marking and shipping of the goods. Seller also represents and warrants that the goods are listed on the TSCA Inventory maintained by the U.S. Environmental Protection Agency under the Toxic Substances Control Act, and that Seller shall provide Buyer with documentation confirming such listing upon request.

**4.2.** Compliance. Seller represents and warrants that, if Seller is legally required to comply with the provisions of the following, all goods and services furnished under this Agreement shall be produced in compliance with and Seller shall abide by provisions of the following which are incorporated herein by reference to the extent that such provisions are applicable to Seller and this Agreement: Employee Non-Discriminatory and Equal Opportunity requirements contained in Executive Orders No. 11246, 11758 and any subsequent related orders; Certification of Nonsegregated Facilities, as required by Order of the U.S. Secretary of Labor cited at 32 Federal Register 7437 and any subsequent related orders; Employer Information Report (EEO-1, Standard Form 100) under Section 60-1.7 of Title 41 of the Code of Federal Regulations and any subsequent related regulations; Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era as mentioned in 38 United States Code Section 1787 and the Vietnam Era Veterans Readjustment Act and subsequent related law; laws relating to Utilization of Minority Business Enterprises and Minority Business Enterprises Subcontractor Program as provided in Section 800 of Title 10 of the Code of Federal Regulations and any subsequent related regulations and orders; and laws relating to Employment of the Handicapped under Section 503 of the Rehabilitation Act of 1973 and subsequent related law.

**4.3.** Environmental Laws. Seller shall observe and comply with all federal, state or local laws, statutes, codes enactments, ordinances, rules, regulations, permits, consents, approvals,

authorizations, licenses, judgments, orders, writs, decrees, injunctions, common laws (including without limitation the common law respecting nuisance and tortious liability), or other requirements having the force and effect of law or regulation, relating to the protection of human health and safety, occupational health and safety, the environment, or natural resources and wildlife, including, without limitation (i) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), (ii) the Solid Waste Disposal Act, (iii) the Resource Conservation and Recovery Act (RCRA), (iv) the Toxic Substances Control Act (TSCA), (v) the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), (vi) the Clean Water Act, (vii) the Clean Air Act, (viii) the Occupational Safety and Health Act (OSHA), (ix) the Safe Drinking Water Act, (x) the Minnesota Environmental Response and Liability Act (MERLA), and (xi) the Department of Transportation rules on hazardous materials, all as amended and in effect from time to time (“Environmental Laws”).

Seller shall consult with the Buyer in all cases where there is a question, or additional clarification is needed regarding compliance with Environmental Laws or permits.

**4.4. Safety and Health.** Seller specifically represents and warrants that all goods and services provided herein meet current safety standards established and promulgated under the Federal Occupational Safety and Health Act (OSHA) of 1970, or under any applicable law of a state in lieu thereof, for the protection of employees who will be affected by the use or performance of said articles and services. In Minnesota the rules governing safety include, but are not limited to, the Minnesota Occupational Safety and Health Codes and the Minnesota Manual on Uniform Traffic Control Devices, Appendix B. Additionally, the Contractor shall abide by and be signatory to Minnesota Power’s *Contractor Safety Orientation Manual*. A copy of Minnesota Power’s *Safety Manual* is available upon request.

**4.5. Buyer’s Property.** Buyer has a strong regard for environmental stewardship and human health and safety. Consistent with this policy, Seller is responsible for conducting its activities on Buyer’s property in such a manner as to protect human health and safety and the physical environment which may be associated with the Agreement. Seller represents and warrants that all operations, products, services and reports are conducted or completed in compliance with all applicable Environmental Laws.

Seller has a duty to understand when its actions or contemplated actions may have an effect on any environmental requirements stated or implied herein and shall demonstrate competency in environmental compliance.

**4.6. Remedy.** In the event Seller (i) offers or supplies any defective goods or services or any goods or services not in accordance with Buyer’s location-specific requirements, specifications, or Seller’s express or implied warranties hereunder, (ii) breaches any warranties or covenants, or (iii) fails to timely supply conforming goods or services hereunder, Buyer may, at its option: (a) reject such goods or services; (b) terminate this Agreement or any part hereof, including but not limited to a product-specific termination or a location-specific termination; (c) return such goods and charge Seller all costs, expenses and damages related to the return; (d) cover and charge Seller for any loss, costs and damages incurred; (e) require Seller to replace or otherwise correct, without expense to Buyer, any such goods or services; or (f) retain such goods and charge Seller for any damages. All rights and remedies stated herein shall be in addition to any rights and remedies provided by law, and shall survive any inspection, test, acceptance and payment. In addition to the rights set

forth in this Section 4, Buyer may upon written notice to Seller, terminate this Agreement in whole or part, including but not limited to a product-specific termination or a location-specific termination (a) if reasonable grounds for insecurity arise as to Seller's expected performance (including timely performance) within ten (10) days after Buyer's written demand for adequate assurance.

## **SECTION 5. SHIPPING AND DELIVERY; ACCEPTANCE**

**5.1. Information to be Provided by Seller.** Upon execution of the Agreement, Seller shall provide to Buyer the following information.

- 5.1.1. Seller's safety training program
- 5.1.2. Seller's certifications applicable to the goods and services provided hereunder
- 5.1.3. Seller's transportation and delivery spill response plans
- 5.1.4. Seller's driver training program, including DOT Hazardous Materials training, applicable to the goods and services to be provided hereunder
- 5.1.5. A list of personal protective equipment for the transportation vehicles to be used for delivery of the goods to be furnished hereunder as well as documentation that drivers' delivery of said goods have met all associated OSHA requirements for the use of the same

**5.2. Packaging, Packing Lists and Bills of Lading.** Seller shall be responsible for proper packaging, loading and tie-down, as applicable, to prevent damage during transportation. Seller must bill all returnable containers on a separate memo invoice; return transportation charges will be collect and for Seller's account. Buyer's weight and/or count will be accepted as final and conclusive on all shipments not accompanied by such packing list.

**5.3. Timing of Delivery.** Time of the essence. Seller shall furnish sufficient labor and management forces, plant and equipment and shall work such hours (including night shift, overtime, weekend and holiday work) as may be required to assure timely delivery as set forth in Exhibit B.

**5.4. Title and Risk of Loss.** Title and risk of loss and damage to all goods shall remain in Seller until receipt of the goods at Buyer's location. Title shall pass to Buyer upon Buyer's acceptance of goods at Buyer's location.

**5.5. Inspection and Acceptance.** All goods furnished to Buyer hereunder shall be subject to Buyer's inspection and acceptance or rejection within a reasonable time after delivery irrespective of payment date. The making or failure to make any inspection of, payment for, or acceptance of the goods shall in no way impair Buyer's right to reject or revoke its acceptance of non-conforming goods or to avail itself of any other remedies to which Buyer may be entitled, notwithstanding knowledge of the nonconformity, its substantiality or ease of discovery. Buyer shall have a reasonable time to submit claims of count, weight, quantity, loss or damage to delivered goods.

**5.6. Testing and Lab Analyses.** Buyer reserves the right to sample all goods furnished hereunder to ensure the goods are compliant with specifications set forth in Exhibit B. Seller shall provide Buyer copies of Seller's ongoing quality assurance tests and quality control lab



analyses.

## **SECTION 6. TAXES, FEES AND ROYALTIES**

**6.1.** All taxes, fees and royalties are included in the price of the goods and services as set forth in Exhibit A, other than any applicable state sales tax, which shall be to Buyer's account.

## **SECTION 7. INVOICING AND PAYMENT**

**7.1.** Seller shall invoice Buyer for each shipment of goods hereunder, and, unless otherwise specified, payment shall be 60 days after the date of an accepted invoice submitted as required by Buyer. Buyer shall timely pay all undisputed amounts stated on Seller's invoice. All amounts due hereunder shall be subject to setoff and recoupment. Payment shall not constitute acceptance for goods and services or waiver of any claims related thereto.

## **SECTION 8. INSURANCE**

**8.1.** Without limiting any of the other obligations or liabilities of Seller, Seller shall provide and maintain such insurance as shall protect Seller and Buyer from claims which may in any way arise out of or be in any manner connected with the performance of the Agreement, whether such claims arise out of the act of failure to act of Seller, Buyer, or of the direct or indirect delegee, appointee or employee of either. Such insurance shall be as specified below unless additional insurance is required by the purchase order, and, except for worker's compensation, all insurance policies shall name Buyer and its Indemnitees under Section 11.2 as additional insureds with insurance companies that are (a) authorized to do business under the laws of the State(s) in which Seller conducts business related to this Agreement, and (b) rated A- or better by A.M. Best rating service in amounts not less than:

<b>Type of Coverage</b>	<b>Limits</b>
8.1.1. Workers' Compensation	Statutory
Coverage, including coverage under the United States Longshoremen's and Harbor Workers' Compensation Act, the Jones Act and the Federal Employers' Liability Act, where applicable.	
8.1.2. Employers' Liability Coverage	\$1,000,000
8.1.3. Commercial General Liability, occurrence form, providing bodily injury, personal injury, and property damage liability coverage, including but not limited to Broad Form Property Damage with no explosion, collapse and underground (XCU) exclusions, contractual liability coverage for the indemnity promise contained herein, and including MCS-90.	
General Aggregate	\$4,000,000
Products - Completed Operations Aggregate	\$2,000,000
Personal & Advertising Injury	\$2,000,000
Each Occurrence	\$2,000,000
Contractual	\$2,000,000
Fire Damage (any one fire)	\$50,000

Medical Expense (any one person)	\$5,000
8.1.4. Comprehensive Automobile Liability, covering all automobiles, trucks, tractors, trailers, motorcycles, mobile equipment or other automotive equipment whether owned, hired, or leased or used by the Seller, and including MCS-90.	
Bodily Injury/Property Damage	\$1,000,000
Combined Single Limit	
8.1.5. Professional Liability	\$1,000,000
8.1.6. Pollution Liability	\$5,000,000

## **SECTION 9. TERMINATION**

**9.1.** Termination for Convenience. Buyer shall have the right to terminate the Agreement or any part thereof, including but not limited to a product-specific termination or a location-specific termination, upon sixty (60) days written Notice to Seller; provided, however, that such termination shall not be effective as to any Orders placed prior to such termination.

**9.2.** Termination by Buyer for Default. Buyer shall have the right to terminate or suspend this Agreement, by written Notice to Seller, in whole or in part, including but not limited to a product-specific termination or a location-specific termination, in the case of a breach of this Agreement by Seller, if such breach is not cured by the later of (i) seven (7) days after written Notice from Buyer and (ii) the expiration of a time period established in a plan provided by Seller to Buyer within three (3) days of Seller's receipt of such Notice, and acceptable to Buyer in its sole discretion, to commence a cure within seven (7) days after receipt of such Notice and diligently and continuously pursue a cure thereafter (a "Seller Event of Default"). Seller shall have the right to terminate or suspend this Agreement, by written Notice to Buyer, in whole or in part, in the case of (a) a failure by Buyer to make any payment due hereunder (other than the disputed portion of any amount due hereunder that is being disputed in good faith) if such failure is not cured within ten (10) days after written Notice from Seller. For the purpose of this Section 9.2, Seller shall be conclusively deemed to have breached this Agreement in the event Seller becomes insolvent or makes an assignment for the benefit of a creditor or commits an act of bankruptcy or files or has filed against it a petition in bankruptcy or reorganization proceedings.

## **SECTION 10. FORCE MAJEURE**

**10.1.** Definition of Force Majeure. "Force Majeure" means an event or condition that prevents or delays the performance by a Party of its obligations under this Agreement to the extent beyond the reasonable control, and without the fault or negligence, of the Party claiming relief, and which by the reasonable exercise of due diligence such claiming Party is unable to prevent or overcome. Force Majeure is defined as fire, floods, earthquake, hurricane, tornado, explosion, accident, war or war-like operations (whether or not a state of war is declared), riot, Acts of God, acts of terrorism, insurrection, enactment of new applicable law or order, or changes in applicable law that prevent performance, and breakdowns of or damage to Buyer's plants, equipment, facilities, or power systems interconnected with generating stations (including shutdowns for unplanned maintenance as may be necessary to mitigate or eliminate the imminent threat of such breakdowns or damage). Force Majeure shall not include delays caused by unfavorable weather that is not

abnormal for the season and geographic area, unsuitable ground conditions, inadequate construction force, strikes or labor disturbances involving the personnel of Seller or any of its subcontractors, market conditions or the failure of either Party to place orders for equipment or materials sufficiently in advance to ensure delivery when needed.

**10.2.** Effect of Force Majeure. If Force Majeure prevents either Party from performing any of its obligations under this Agreement, and if such Party gives to the other Party Notice of the Force Majeure (which Notice (i) shall identify the event of Force Majeure and, to the extent known, the expected length of time during which the event of Force Majeure will be in effect and the plan of the Party experiencing the Force Majeure to correct or remove it and (ii) be delivered promptly after the start of the Force Majeure event), then the obligations of the Party giving such Notice are excused to the extent made necessary by the Force Majeure and during its continuance, which time period shall be called the “Force Majeure Period.” An event of Force Majeure shall excuse the obligations of the notifying Party only to the extent that the Party takes all commercially reasonable actions necessary to overcome the Force Majeure with all reasonable dispatch. Only the Party suffering a Force Majeure may claim Force Majeure relief; provided, however, that the other Party shall be excused from its obligations that depend upon the performance of the obligations excused by the Force Majeure event. An attempt by the Party suffering an event of Force Majeure to perform its obligations notwithstanding the Force Majeure shall not constitute a waiver of the right to claim Force Majeure if such attempt proves unsuccessful. Notwithstanding the foregoing, the Party affected by Force Majeure, in its sole discretion, shall not be required to submit to unreasonable conditions or restrictions imposed by any governmental authority or contract counterparty, or to make significant capital expenditures, to overcome the Force Majeure. In the event, and to the extent, a Force Majeure prevents Buyer from accepting goods and services, Seller’s sole remedy shall be an extension of the Term of this Agreement for the time period lost by reason of the Force Majeure.

## **SECTION 11. INDEMNIFICATION**

**11.1.** Intellectual Property. Seller shall, at its own expense, hold harmless, protect and defend Buyer against any claim, suit or proceeding brought against Buyer which is based on a claim, whether rightful or otherwise, that the goods or any part thereof, furnished under this Agreement, constitute(s) an infringement of any U.S. intellectual property rights, and Seller shall pay all damages, costs, and expenses arising from such claim.

**11.2.** General Indemnification by Seller. Seller shall completely indemnify, defend, and hold Buyer, its officers, agents and representatives (“Buyer Indemnitees”) harmless from and against all claims for personal injury, property damage, wrongful death or other damages, losses and expenses, including attorneys’ fees (“Claims”), arising out of, or resulting from, Seller’s negligence or willful misconduct. It is expressly understood and agreed that this obligation to completely indemnify, defend and hold harmless shall apply and be enforceable for all Claims except to the extent caused by the negligence or willful misconduct of the Buyer Indemnitees. If a Claim is made by an employee of Seller against a Buyer Indemnitee, Seller shall and hereby agrees to indemnify the Buyer Indemnitee to the same extent as if the Claim was made by a non-employee of the Seller without regard to any limitation on Seller’s liability for injuries to its employees, whether established by judicial decision, statute or otherwise. This provision shall also be enforceable in addition to and beyond any insurance coverages required for the protection of Buyer as permitted by law.

## **SECTION 12. CHOICE OF LAW; VENUE**

This Agreement and the rights of all parties hereunder shall be construed under and governed by the laws of the State of Minnesota. The Parties agree to submit to the exclusive jurisdiction of the State and Federal courts sitting in St. Louis County, Minnesota, and waive any objections to such location based on jurisdiction, venue or inconvenient forum.

## **SECTION 13. ASSIGNMENTS**

Buyer reserves the right to assign this Agreement to successors, assigns, affiliates or subsidiaries without further notice to or consent of Seller. No part of this Agreement may be assigned or subcontracted by Seller without Buyer's written consent.

## **SECTION 14. CONFIDENTIALITY**

Except as permitted or directed in writing by Buyer, Seller shall not during the term of this Agreement or thereafter divulge, furnish or make accessible to anyone or use in any way any confidential, trade secret, or proprietary information (including but not limited to personnel, financial or other matters) of Buyer that Seller has acquired or become acquainted with in the performance of any of its obligations under this Agreement, whether such information is developed by the Seller or others. Seller shall promptly notify Buyer of any request by any entity for information covered by this Agreement. Unless otherwise agreed to by the Parties in writing, all information of Buyer that Seller acquires or becomes acquainted with in the performance of any duty under this Agreement shall be considered confidential, trade secret or proprietary information belonging to Buyer.

## **SECTION 15. NOTICES**

Except as otherwise specifically provided by this Agreement, any notice provided for pursuant to this Agreement or given or made in connection with this Agreement ("Notice") shall be in writing and shall be deemed properly and sufficiently given or made if delivered in person with receipt acknowledged in writing by the recipient, or sent by registered or certified mail return receipt requested, to the respective Parties at the addresses specified below:

If to Seller, addressed to:

Hawkins, Inc.  
2831 Rosegate  
Roseville, MN 55113  
Attn: Legal Counsel

If to Buyer, addressed to:

ALLETE, Inc.  
30 West Superior Street  
Duluth, Minnesota 55802  
Attn: Manager of Purchasing and Contracts

## **SECTION 16. SELLER AS AN INDEPENDENT CONTRACTOR**

It is agreed and understood that during the performance of this Agreement, Seller shall be considered an independent contractor, and not an agent of Buyer.

## **SECTION 17. WAIVERS**

The failure of either Party to require strict performance of any provision of this Agreement by the other Party, or the forbearance to exercise any right or remedy under this Agreement shall not be construed as a waiver by such Party of the right to require strict performance of any such provision or the relinquishment by such Party of any such right or remedy it might have with respect to any subsequent breach of such provisions. All waivers shall be signed in writing, designated a waiver, and signed by the waiving Party, and shall recite the rights waived.

## **SECTION 18. HEADINGS AND SECTION NUMBERS; CONSTRUCTION**

**18.1. Headings Not to Affect Construction.** The headings of the sections of this Agreement are inserted for convenience only and shall have no effect on the construction, interpretation or meaning of this Agreement.

**18.2. References to Section Numbers.** All references in this Agreement to a section of this Agreement will be interpreted to refer to the entire section, including subsections.

## **SECTION 19. AMENDMENTS**

Any and all amendments, supplements and modifications to this Agreement shall be effective only if in writing and signed by the Parties.

## **SECTION 20. COMPLETE AGREEMENT**

This Agreement is the complete and total expression of all agreements, contracts, covenants and other promises between Seller and Buyer related to the sale of goods and services set forth herein to Buyer. The terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgement or any other such form or document even if signed by both Parties. No preprinted terms and conditions or other preprinted provisions contained in or attached to or referred to in any purchase order submitted by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller shall operate to amend, modify, supplement or supersede the provisions contained in this Agreement, and any provision or statement in any purchase order issued by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller that purports to make the terms of such document exclusive or binding shall be void as it relates to this Agreement.

## **SECTION 21. COUNTERPARTS**

Buyer and Seller may execute this Agreement in two or more counterparts, each of which shall constitute an original document and all of which taken together shall constitute a single Agreement.

## **SECTION 22. SURVIVAL**

The provisions of Sections 4 (Warranty), 5, (Shipping and Delivery; Acceptance), 6 (Taxes, Fees and Royalties), 7 (Invoicing and Payment), 8 (Insurance), 9 (Termination), 11 (Indemnification), 12 (Choice of Law; Venue), 13 (Assignments), 14 (Confidentiality), 15 (Notices), 16 (Seller as Independent Contractor), 18 (Headings and Section Numbers; Construction), 20 (Complete Agreement), 22 (Survival), and 23 (Severability) shall survive expiration or termination of this Agreement.

### **SECTION 23. SEVERABILITY**

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or any other jurisdiction, but this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

### **SECTION 24. EQUAL EMPLOYMENT OPPORTUNITY**

When this Agreement is used for procurement in support of utility business, Supplier and its Subcontractors shall abide by the requirements of §§ 41 CFR 60-1.4(a) (as amended by E.O. 13665 regarding pay transparency), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. These regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.

**THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**

**IN WITNESS WHEREOF**, the Parties have duly executed this Agreement in their respective corporate names as of the 28th day of June, 2022.

Hawkins, Inc., as Seller

By: John Ampe III  
Name: John Ampe III  
Title: Sales Manager

ALLETE, Inc., as Buyer

By: Rachel Kritzeck  
Name: Rachel Kritzeck  
Title: Procurement Analyst

## EXHIBIT A

### PRODUCTS, VOLUMES AND PRICING

#### SECTION 1. PRICING

**1.1.** The delivered cost to Buyer is made up of three separate line items: the per pound Price of the Product, transportation cost, and the applicable fuel surcharge.

1.1.1. The Product Price defined below is valid up until the dates defined in the table below in the Price Valid Through Date column.

1.1.2. The transportation cost for each chemical is fixed on a quarterly basis.

1.1.3. A fuel surcharge will apply to the transportation price based on current diesel fuel costs. The fuel surcharge only applies to the transportation price for each chemical at the time of delivery. See Exhibit D for the Fuel Surcharge table.

**1.2.** The delivered cost to Buyer is subject to change according to the following:

1.2.1. Following the Price Valid Through Dates, the Price per pound may be adjusted consistent with the frequency defined in the table below as the Price Adjustment Period. Any change in commodity costs affecting the Product Price per pound will be communicated by Seller to Buyer's Purchasing Department. Seller will provide Buyer with documentation of its supplier costs upon request.

1.2.2. Changes to the quarterly Transportation Cost will be communicated by Seller to Buyer's Purchasing Department and will be implemented the following quarter.

[TRADE SECRET DATA BEGINS]

<i>Product</i>	<i>Price per pound</i>	<i>Transportation Cost</i>	<i>Price Valid Through Date</i>	<i>Price Adjustment Period</i>
Ammonia Hydroxide 19% PN 36141				
Sulfuric Acid 93% Burner Grade PN 801775				
Sodium Hypochlorite 12.5% PN 815407				
Sodium Hydroxide 50% Membrane - Rapids Energy				
Sulfuric Acid 93% - Rapids Energy				

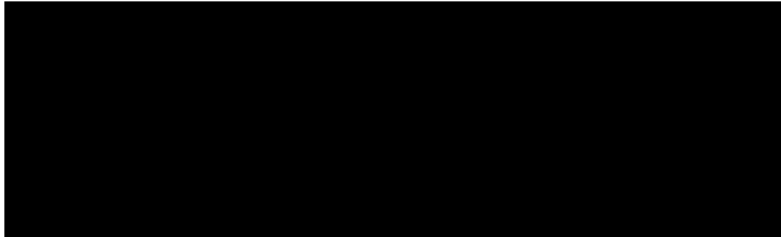
TRADE SECRET DATA ENDS]



## SECTION 2. VOLUME REBATE MATRIX

2.1. In the event that Buyer purchases greater than 26,000,000 pounds from Seller during any one-year period that commences May 1<sup>st</sup> and ends April 30<sup>th</sup> and which period is encompassed by the Term of this Agreement ("Rebate Period"), Seller shall issue a rebate check to Buyer in the amount that corresponds to the amount purchased during the Rebate Period as defined in the table below.

[TRADE  
SECRET  
DATA  
BEGINS



TRADE  
SECRET  
DATA  
ENDS]

## EXHIBIT B PRODUCT SPECIFICATIONS

### Ammonium Hydroxide 19% Product Specifications:

Component	Specification
Ammonia, wt%	18.0 - 20.0
Specific Gravity	0.9250 – 0.9325
Appearance	Clear, Colorless
Iron (as Fe)	2 ppm max
Arsenic (as As)	0.25 ppm max
Heavy Metals (as Pb)	5 ppm max
Lead (as Pb)	0.25 ppm max

### Sulfuric Acid 66' Burner Grade Product Specifications:

Component	Specification
H <sub>2</sub> SO <sub>4</sub> , wt%	93.0 – 95.0
Appearance	Colorless
Physical State	Liquid
Sulfur Dioxide (as SO <sub>2</sub> )	50 ppm max
Arsenic (as As)	0.2 ppm max
Iron (as Fe)	25 ppm max
Nitrates (as NO <sub>3</sub> )	15 ppm max
Chlorides (as Cl)	10 ppm max
Selenium (as Se)	20 ppm max
Lead (as Pb)	5 ppm max
Mercury (as Hg)	5 ppb max

Burner Grade

### Sodium Hydroxide 50% Membrane Grade Product Specifications:

Component	Specification
Total Alkalinity (as NaOH), wt%	49.5 – 51.5
Sodium Oxide (as Na <sub>2</sub> O)	38.3 – 40.0
Sodium Carbonate (as Na <sub>2</sub> CO <sub>3</sub> ), wt%	max 0.05
Sodium Chloride (as NaCl), wt%	max 0.01
Iron (as Fe)	3 ppm max
Arsenic (as As)	3 ppm max
Lead (as Pb)	2 ppm max
Mercury (as Hg)	0.1 ppm max
Specific Gravity	1.5256 – 1.5444

Membrane grade, low salt – meets Food Chemicals Codex/Certified ANSI/NSF 60

Synonyms: caustic soda

**Sodium Hypochlorite 12.5% Product Specifications:**

Component	Specification
Physical State	Liquid
Color	Greenish-yellow
pH	>10
Specific Gravity	1.2 – 1.25
Sodium Hypochlorite, wt%	12.3 – 15.0
Reverse Alkalinity, wt% (as NaOH)	0.3 – 1.0
Available Chlorine, wt%	11.7 – 14.3
Available Chlorine, g/L	142 – 174

Hawkins, Inc registered name (Azone-15) EPA Reg. # 7870-5

Synonyms: liquid chlorine, bleach

## EXHIBIT C BUYER LOCATION-SPECIFIC REQUIREMENTS

### Boswell Energy Center

All truck drivers hauling chemicals to Boswell Energy Center are directed to pull into the Information Center and park prior to the site access gate. Either the truck driver or Information Center Personnel will contact an Environmental Systems Operator for assistance and access to the site and unloading assistance. If a delivery arrives after Information Center receiving hours, contact #'s are posted on signs at the Information Center. Drivers are prohibited from entering the site (passing thru the gate) without an ESO escort.

### Contact List for an ESO Chemical Unloading Escort

Minnesota Power Site	Chemical	Onsite Contact Position	Contact #	Unloading Hours
Boswell Energy Center	Ammonia	Unit 3 Control Room Operator	218-313-4660	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Sulfuric #3 Cooling Tower	Unit 3 Control Room Operator	218-313-4660	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Sulfuric #4 Cooling Tower	Unit 4 Control Room Operator	218-313-4661	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Urea ½	Unit 4 Control Room Operator	218-313-4660	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Bleach (Bulk)	Unit 4 Control Room Operator	218-313-4661	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Bleach (Totes)	Unit 1/2 Control Room Operator	218-313-4660	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Caustic (Bulk)	Unit 4 Control Room Operator	218-313-4661	Daylight Hours only No exceptions Prior to 2:30 PM preferred
Boswell Energy Center	Sulfuric Acid Totes (40%)	Unit 4 Control Room Operator	218-313-4661	Daylight Hours only No exceptions Prior to 2:30 PM preferred

**NOTE:** If there any environmental concerns or questions please contact one of the following individuals:

**Contact List for any Environmental Questions or Concerns**

Name	Extension	Phone #	Email
Andrew Paul	4290	218-259-9708	apaul@mnpower.com
Teresa Larson	4466	218-491-3985	tlarson@mnpower.com
Misty Hanson	4482	218-256-1245	mahanson@mnpower.com

**Rapids Energy Center**

**Contact List for a Plant Attendant Chemical Unloading Escort**

Minnesota Power Site	Chemical	Onsite Contact Position	Contact #	Unloading Hours
Rapids Energy Center	Sulfuric Acid	Rick Fannin or Control Room Operator	218-256-0457 or 218-326-3801	Daylight Hours Only 7:00am to 6:30pm
Rapids Energy Center	Sodium Hydroxide	Rick Fannin or Control Room Operator	218-256-0457 or 218-326-3801	Daylight Hours Only 7:00am to 6:30pm

**NOTE:** If there any environmental concerns or questions please contact one of the following individuals:

**Contact List for any Environmental Questions or Concerns**

Name	Extension	Phone #	Email
Rick Fannin	6927	218-256-0457	rfannin@mnpower.com

**Hibbard Renewable Energy Center**

**Contact List for a Plant Attendant Chemical Unloading Escort**

Minnesota Power Site	Chemical	Onsite Contact Position	Contact #	Unloading Hours
Hibbard Renewable Energy Center	Sulfuric Acid	Control Room Operator	218-628-3627 x5732	Daylight Hours Only 7:00am to 5:00pm

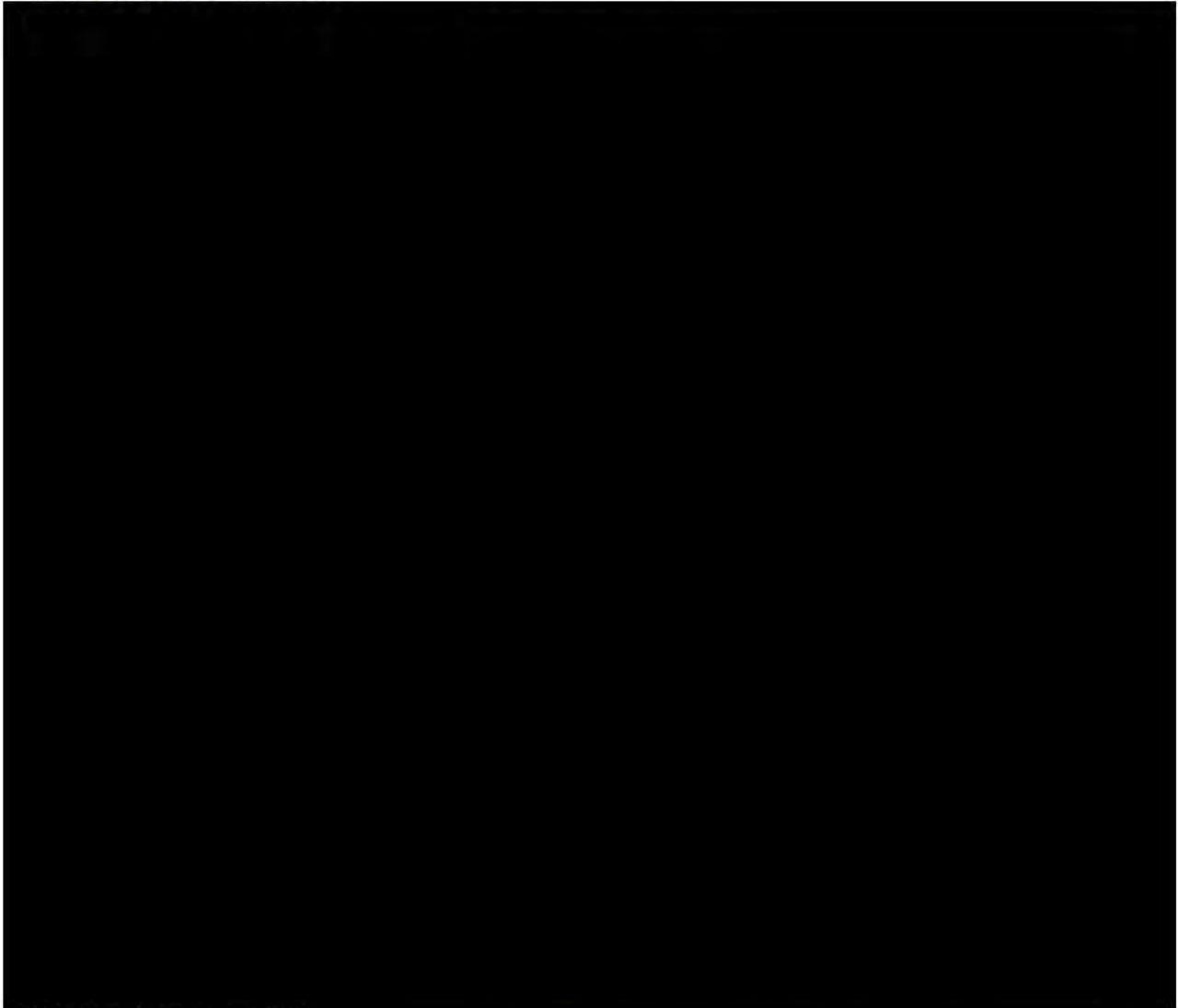
**NOTE:** If there any environmental concerns or questions please contact one of the following individuals:

**Contact List for any Environmental Questions or Concerns**

Name	Extension	Phone #	Email
Jacob Weerts	5726	218-336-5726	jweerts@mnpower.com
Ron Ulseth	5791	218-256-8437	rulseth@mnpower.com
Cherese Hietala	3401	218-310-5306	chietala@mnpower.com

**EXHIBIT D**  
**FUEL SURCHARGE**

[TRADE SECRET DATA BEGINS

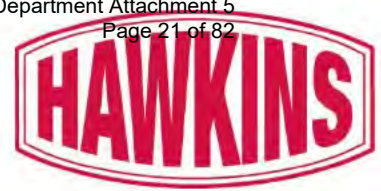


Effective August 1, 2003

Department of Energy web site – <http://tonto.eia.doe.gov/oog/info/wohpd/diesel.asp>

**TRADE SECRET DATA ENDS]**





July 1, 2022

Minnesota Power  
To: Rachel Kritzeck  
CC: Rick Fannin, Lisa Fox, Earl Ortman  
30 W Superior St  
Duluth, MN 55802

Dear Rachel:

Here is your pricing for July bulk orders. Thank you for your business and your continued support. Let me know if there are any questions.

[TRADE SECRET DATA BEGINS]

Product #	Product Name	Description	Location	Price	Future Date
814250	Sodium Hydroxide 50% Membrane (LS)	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	48,000 #	Cohasset, MN		
815407	Sodium Hypochlorite 12.5%	4,000 gal	Cohasset, MN		
814250	Sodium Hydroxide 50% Membrane (LS)	48,000 #	Cohasset, MN		
36141	Aqua Ammonia 19%	48,000 #	Cohasset, MN		
34053	Urea 42%	48,000 #	Cohasset, MN		

Aqua Ammonia: The price for the natural Gas for purposes of this is [REDACTED]

Sulfuric Acid, Caustic and Bleach pricing is adjusted quarterly. Pricing is FOB delivered, plus fuel surcharge.

TRADE SECRET DATA ENDS]

Thank you,

A handwritten signature in black ink that reads "Jared Brenny". The signature is written in a cursive, flowing style.

Jared Brenny | **Hawkins, Inc.**  
Account Manager, Industrial Sales Group  
2381 Rosegate | Roseville, MN 55113  
D: 612.225.6672 | M: 612.987.9632



July 29, 2022

Minnesota Power  
To: Rachel Kritzeck  
CC: Rick Fannin, Lisa Fox, Earl Ortman  
30 W Superior St  
Duluth, MN 55802

Dear Rachel:

Here is your pricing for August bulk orders. Thank you for your business and your continued support. Let me know if there are any questions.

[TRADE SECRET DATA BEGINS]

Product #	Product Name	Description	Location	Price	Future Date
814250	Sodium Hydroxide 50% Membrane (LS)	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	48,000 #	Cohasset, MN		
815407	Sodium Hypochlorite 12.5%	4,000 gal	Cohasset, MN		
814250	Sodium Hydroxide 50% Membrane (LS)	48,000 #	Cohasset, MN		
36141	Aqua Ammonia 19%	48,000 #	Cohasset, MN		
34053	Urea 42%	48,000 #	Cohasset, MN		

Aqua Ammonia: The price for the natural Gas for purposes of this is [REDACTED]

Sulfuric Acid, Caustic and Bleach pricing is adjusted quarterly. Pricing is FOB delivered, plus fuel surcharge.

TRADE SECRET DATA ENDS]

Thank you,

A handwritten signature in black ink that reads "Jared Brenny". The signature is written in a cursive, flowing style.

Jared Brenny | **Hawkins, Inc.**  
Account Manager, Industrial Sales Group  
2381 Rosegate | Roseville, MN 55113  
D: 612.225.6672 | M: 612.987.9632





September 1, 2022

Minnesota Power  
To: Rachel Kritzeck  
CC: Rick Fannin, Lisa Fox, Earl Ortman  
30 W Superior St  
Duluth, MN 55802

Dear Rachel:

Here is your pricing for August bulk orders. Thank you for your business and your continued support. Let me know if there are any questions.

[TRADE SECRET DATA BEGINS]

Product #	Product Name	Description	Location	Price	Future Date
814250	Sodium Hydroxide 50% Membrane (LS)	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	48,000 #	Cohasset, MN		
815407	Sodium Hypochlorite 12.5%	4,000 gal	Cohasset, MN		
814250	Sodium Hydroxide 50% Membrane (LS)	48,000 #	Cohasset, MN		
36141	Aqua Ammonia 19%	48,000 #	Cohasset, MN		
34053	Urea 42%	48,000 #	Cohasset, MN		

Aqua Ammonia: The price for the natural Gas for purposes of this is [REDACTED]

Sulfuric Acid, Caustic and Bleach pricing is adjusted quarterly. Pricing is FOB delivered, plus fuel surcharge.

TRADE SECRET DATA ENDS]

Thank you,

A handwritten signature in black ink that reads "Jared Brenny". The signature is written in a cursive, flowing style.

Jared Brenny | **Hawkins, Inc.**  
Account Manager, Industrial Sales Group  
2381 Rosegate | Roseville, MN 55113  
D: 612.225.6672 | M: 612.987.9632



September 30, 2022

Minnesota Power  
To: Rachel Kritzeck  
CC: Rick Fannin, Lisa Fox, Earl Ortman  
30 W Superior St  
Duluth, MN 55802

Dear Rachel:

Here is your pricing for October bulk orders. Thank you for your business and your continued support.  
Let me know if there are any questions.

[TRADE SECRET DATA BEGINS]

Product #	Product Name	Description	Location	Price	Future Date
814250	Sodium Hydroxide 50% Membrane (LS)	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	48,000 #	Cohasset, MN		
815407	Sodium Hypochlorite 12.5%	4,000 gal	Cohasset, MN		
814250	Sodium Hydroxide 50% Membrane (LS)	48,000 #	Cohasset, MN		
36141	Aqua Ammonia 19%	48,000 #	Cohasset, MN		
34053	Urea 42%	48,000 #	Cohasset, MN		

Aqua Ammonia: The price for the natural Gas for purposes of this is [REDACTED]

Sulfuric Acid, Caustic and Bleach pricing is adjusted quarterly. Pricing is FOB delivered, plus fuel surcharge.

TRADE SECRET DATA ENDS]

Thank you,

A handwritten signature in black ink that reads "Jared Brenny". The signature is written in a cursive, flowing style.

Jared Brenny | **Hawkins, Inc.**  
Account Manager, Industrial Sales Group  
2381 Rosegate | Roseville, MN 55113  
D: 612.225.6672 | M: 612.987.9632





October 31, 2022

Minnesota Power  
To: Rachel Kritzeck  
CC: Rick Fannin, Lisa Fox, Earl Ortman  
30 W Superior St  
Duluth, MN 55802

Dear Rachel:

Here is your pricing for November bulk orders. Thank you for your business and your continued support.  
Let me know if there are any questions.

[TRADE SECRET DATA BEGINS]

Product #	Product Name	Description	Location	Price	Future Date
814250	Sodium Hydroxide 50% Membrane (LS)	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	LTL # Bulk	Grand Rapids, MN		
801775	Sulfuric Acid 93%	48,000 #	Cohasset, MN		
815407	Sodium Hypochlorite 12.5%	4,000 gal	Cohasset, MN		
814250	Sodium Hydroxide 50% Membrane (LS)	48,000 #	Cohasset, MN		
36141	Aqua Ammonia 19%	48,000 #	Cohasset, MN		
34053	Urea 42%	48,000 #	Cohasset, MN		

Aqua Ammonia: The price for the natural Gas for purposes of this is [REDACTED]

Sulfuric Acid, Caustic and Bleach pricing is adjusted quarterly. Pricing is FOB delivered, plus fuel surcharge.

TRADE SECRET DATA ENDS]

Thank you,

A handwritten signature in black ink that reads "Jared Brenny". The signature is written in a cursive, flowing style.

Jared Brenny | **Hawkins, Inc.**  
Account Manager, Industrial Sales Group  
2381 Rosegate | Roseville, MN 55113  
D: 612.225.6672 | M: 612.987.9632

**AMENDMENT NO. 5 TO  
Chemical Supply Agreement**

This Amendment No. 5 ("Amendment") is entered into by and between Graymont (WI) LLC and ALLETE, Inc. ("ALLETE") to be effective as of March 1, 2022 ("Amendment Effective Date").

WHEREAS, ALLETE and Graymont (WI) LLC are parties to that certain Chemical Supply Agreement dated March 1, 2018 ("Agreement"); and

WHEREAS, the parties desire to amend the Agreement as contained in this Amendment.

NOW THEREFORE, In consideration of the mutual promises and covenants contained in this Amendment, the sufficiency of such consideration which is acknowledged by the parties, ALLETE and Graymont (WI) LLC agree as follows:

1. Exhibit A-3 is hereby deleted in its entirety and replaced with Exhibit A-4.
2. The capitalized terms used herein that are not defined in this Amendment shall have the meaning given to them in the Agreement.
3. All of the terms of the Agreement remain in full force and effect except as expressly amended by this Amendment.

IN WITNESS WHEREOF, ALLETE and Graymont (WI) LLC have caused this Amendment to be executed by their duly authorized representatives.

ALLETE, Inc.

By: Rachel Kritzeck

Name: Rachel Kritzeck

Title: Procurement Analyst

Graymont (WI) LLC

By: [Signature]

Name: Amy Sommer

Title: Sales/Acc't Mgr.

EXHIBIT A-4  
PRODUCTS AND PRICING

Products & Pricing – eff. 3/1/2022

[TRADE SECRET DATA BEGINS



TRADE SECRET DATA ENDS]

**AMENDMENT NO. 4 TO  
Chemical Supply Agreement**

PUBLIC DOCUMENT  
Docket No. E015/M-22-547  
Department Attachment 5  
Page 28 of 82

This Amendment No. 4 ("Amendment") is entered into by and between Graymont (WI) LLC and ALLETE, Inc. ("ALLETE") to be effective as of March 1, 2021 ("Amendment Effective Date").

WHEREAS, ALLETE and Graymont (WI) LLC are parties to that certain Chemical Supply Agreement dated March 1, 2018 ("Agreement"); and

WHEREAS, the parties desire to amend the Agreement as contained in this Amendment.

NOW THEREFORE, In consideration of the mutual promises and covenants contained in this Amendment, the sufficiency of such consideration which is acknowledged by the parties, ALLETE and Graymont (WI) LLC agree as follows:

1. Exhibit A-2 hereby deleted in its entirety and replaced with Exhibit A-3.
2. The capitalized terms used herein that are not defined in this Amendment shall have the meaning given to them in the Agreement.
3. All of the terms of the Agreement remain in full force and effect except as expressly amended by this Amendment.

IN WITNESS WHEREOF, ALLETE and Graymont (WI) LLC have caused this Amendment to be executed by their duly authorized representatives.

ALLETE, Inc.

By: Rachel Kritzeck

Name: Rachel Kritzeck

Title: Procurement Analyst

Graymont (WI) LLC

By: [Signature]

Name: Leah Spawer

Title: Sales Mgr.

**EXHIBIT A-3 PRODUCTS AND  
PRICING**

PUBLIC DOCUMENT  
Docket No. E015/M-22-547  
Department Attachment 5  
Page 29 of 82

Products & Pricing - eff. 3/1/21

[TRADE SECRET DATA BEGINS]



TRADE SECRET DATA ENDS]

**AMENDMENT NO. 3 TO  
Chemical Supply Agreement**

This Amendment No. 3 ("Amendment") is entered into by and between Graymont (WI) LLC and ALLETE, Inc. ("ALLETE") to be effective as of March 1, 2020 ("Amendment Effective Date").

WHEREAS, ALLETE and Graymont (WI) LLC are parties to that certain Chemical Supply Agreement dated March 1, 2018 ("Agreement"); and

WHEREAS, the parties desire to amend the Agreement as contained in this Amendment.

NOW THEREFORE, In consideration of the mutual promises and covenants contained in this Amendment, the sufficiency of such consideration which is acknowledged by the parties, ALLETE and Graymont (WI) LLC agree as follows:

1. Exhibit A is hereby deleted in its entirety and replaced with the attached Exhibit A-2.
2. The capitalized terms used herein that are not defined in this Amendment shall have the meaning given to them in the Agreement.
3. All of the terms of the Agreement remain in full force and effect except as expressly amended by this Amendment.

IN WITNESS WHEREOF, ALLETE and Graymont (WI) LLC have caused this Amendment to be executed by their duly authorized representatives.

ALLETE, Inc.

By: Tracey A. Mattfield

Name: Tracey A. Mattfield

Title: Contract Administrator

Graymont (WI) LLC

By: Terry Springer

Name: Terry Springer

Title: Acct. Mgr.

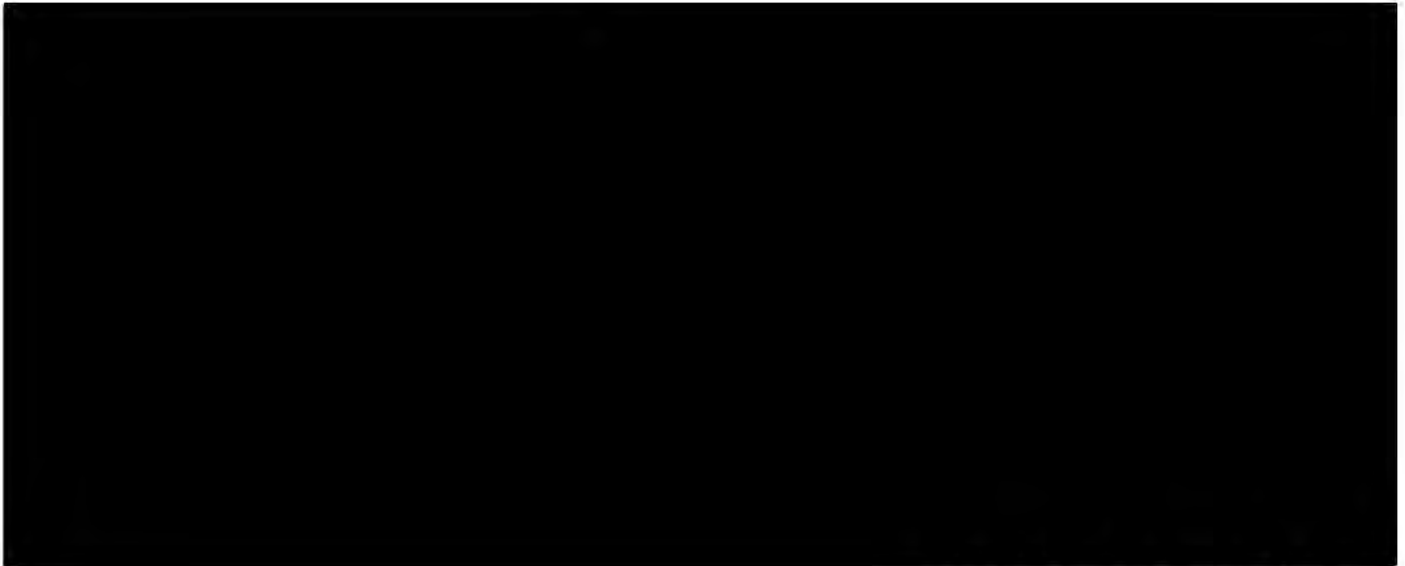


**EXHIBIT A-2**

**PRODUCTS AND PRICING**

Products & Pricing - eff. 3/1/20

[TRADE SECRET DATA BEGINS



TRADE SECRET DATA ENDS]

**AMENDMENT NO. 2 TO  
Chemical Supply Agreement**

This Amendment No. 2 ("Amendment") is entered into by and between Graymont (WI) LLC and ALLETE, Inc. ("ALLETE") to be effective as of March 1, 2019 ("Amendment Effective Date").

WHEREAS, ALLETE and Graymont (WI) LLC are parties to that certain Chemical Supply Agreement dated March 1, 2018 ("Agreement"); and

WHEREAS, the parties desire to amend the Agreement as contained in this Amendment.

NOW THEREFORE, In consideration of the mutual promises and covenants contained in this Amendment, the sufficiency of such consideration which is acknowledged by the parties, ALLETE and Graymont (WI) LLC agree as follows:

1. Exhibit A is hereby deleted in its entirety and replaced with the attached Exhibit A-1.
2. The capitalized terms used herein that are not defined in this Amendment shall have the meaning given to them in the Agreement.
3. All of the terms of the Agreement remain in full force and effect except as expressly amended by this Amendment.

IN WITNESS WHEREOF, ALLETE and Graymont (WI) LLC have caused this Amendment to be executed by their duly authorized representatives.

ALLETE, Inc.

By: Tracey A. Mattfield  
Name: Tracey A. Mattfield  
Title: Contract Administrator Sr.

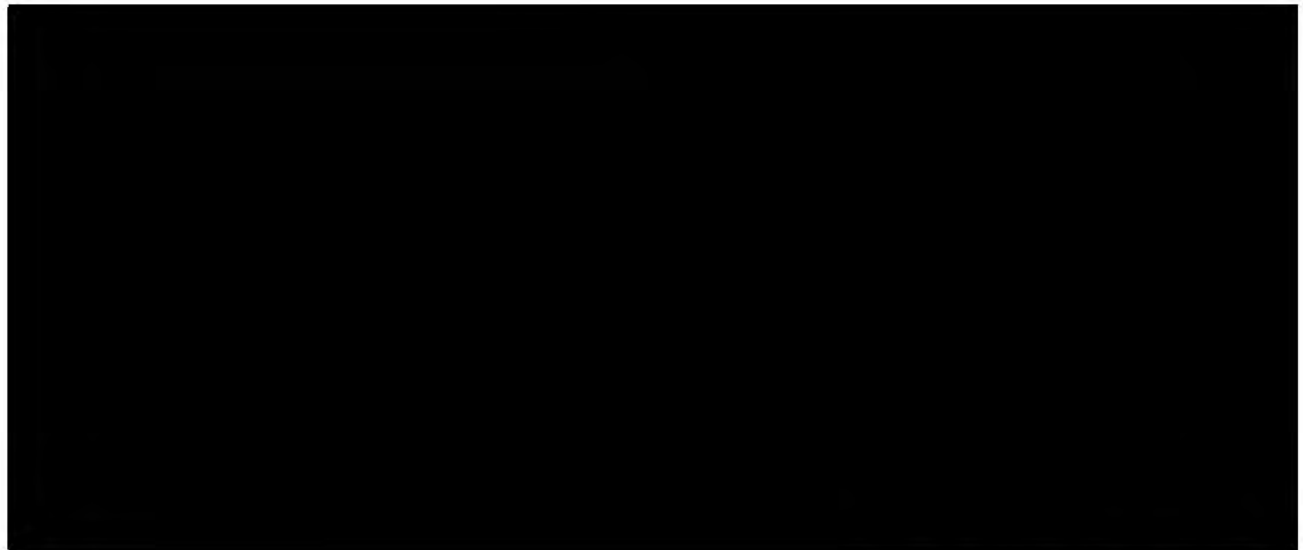
Graymont (WI) LLC

By: Terry Sanner  
Name: Terry Sanner  
Title: Account Mgr.

**EXHIBIT A-1**  
**PRODUCTS AND PRICING**

Products & Pricing - eff. 3/1/19

[TRADE SECRET DATA BEGINS]



TRADE SECRET DATA ENDS]



**AMENDMENT NO. 1 TO  
Chemical Supply Agreement**

This Amendment No. 1 ("Amendment") is entered into by and between Graymont (WI) LLC and ALLETE, Inc. ("ALLETE") to be effective as of May 30, 2018 ("Amendment Effective Date").

WHEREAS, ALLETE and Graymont (WI) LLC are parties to that certain Chemical Supply Agreement dated March 1, 2018 ("Agreement"); and

WHEREAS, the parties desire to amend the Agreement as contained in this Amendment.

NOW THEREFORE, In consideration of the mutual promises and covenants contained in this Amendment, the sufficiency of such consideration which is acknowledged by the parties, ALLETE and Graymont (WI) LLC agree as follows:

1. TERM. Section 2 is hereby deleted in its entirety and replaced with the following:

The "Term" of this Agreement shall begin on the Effective Date and shall continue thereafter to and including February 28, 2023 with the option to extend this Agreement, by mutual consent, for up to two additional years in one-year increments unless extended or earlier terminated in accordance with this Agreement.

2. INVOICING AND PAYMENT. Section 7 is hereby deleted in its entirety and replaced with the following:

Seller shall invoice Buyer for each shipment of goods hereunder, and, unless otherwise specified, payment shall be net 45 (ACH) days after receipt of invoice. Buyer shall timely pay all undisputed portions of each disputed invoice. All amounts due hereunder shall be subject to setoff and recoupment. Payment shall not constitute acceptance for goods and services or waiver of any claims related thereto.

3. The capitalized terms used herein that are not defined in this Amendment shall have the meaning given to them in the Agreement.

4. All of the terms of the Agreement remain in full force and effect except as expressly amended by this Amendment.

IN WITNESS WHEREOF, ALLETE and Graymont (WI) LLC have caused this Amendment to be executed by their duly authorized representatives.

ALLETE, Inc.

By: Tracey A. Mattfield

Name: Tracey A. Mattfield

Title: Contract Administrator Sr.

Graymont (WI) LLC

By: Terry Garner

Name: Terry Garner

Title: Account Manager

**CHEMICAL SUPPLY AGREEMENT  
For ALLETE, Inc. and Graymont, LLC**

This CHEMICAL SUPPLY AGREEMENT (this “Agreement”) is made and entered into as of the First day of March, 2018 (the “Effective Date”), by and between Graymont (WI) LLC, a Wisconsin Corporation (“Seller”), and ALLETE, Inc., a Minnesota corporation (“Buyer”). Together, Seller and Buyer are “Parties” to this Agreement and either Seller or Buyer individually is a “Party” to this Agreement.

NOW THEREFORE, in consideration of the mutual covenants and obligations stated in this Agreement, the receipt and sufficiency of which the Parties acknowledge, Seller and Buyer hereby agree as follows:

**SECTION 1. SALE AND PURCHASE OF PRODUCT**

Subject to the terms and condition of this Agreement, Seller shall sell to Buyer, and Buyer shall purchase from Seller from time to time, each of the product(s) set forth below in the amounts and at the price set forth below:

<b>Product(s)</b>	Those Products listed in Exhibit A
<b>Price of Product(s)</b>	The price shall be fixed as set forth below during the entire term of this Agreement for each Product as set forth in Exhibit A.
<b>Quantity of Product(s)</b>	Estimated volumes of Products to be purchased by Buyer are set forth in Exhibit A. Nothing in this Agreement shall require Buyer to purchase certain amounts of any Product from Seller, unless otherwise set forth in Exhibit A.
<b>Origin</b>	Superior, WI
<b>Destination</b>	Buyer location-specific requirements are attached herein as Exhibit C.
<b>Other</b>	The Product’s Specification is attached herein as Exhibit B. No changes to this specification will be allowed without prior written consent by Seller and Buyer. Delivery requirements, including but not limited to timing, shall be included in Exhibit B.

**SECTION 2 TERM**



The "Term" of this Agreement shall begin on the Effective Date and shall continue thereafter to and including February 28, 2021 with the option to extend this Agreement, by mutual consent, for up to two additional years in one-year increments unless extended or earlier terminated in accordance with this Agreement.

### SECTION 3. CHEMICAL ORDERS

Buyer may submit to Seller, via e-mail or fax, a written order for an estimated amount of Lime or Limestone to be purchased by Buyer and delivered by Seller ("Order").

Orders shall be phoned to: Customer Service, 888-638-1714 or 715-394-1707.

Confirmation of shipment shall be given to the caller at the time the order is placed.

Seller may change its contact information for Orders, and Buyer may change its contact information for acknowledgements and notices of shipment, in each case by written Notice to the other Party.

As more fully set forth in Section 21 (Complete Agreement), the terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgements or any such form or document even if signed by both Parties hereto.

### SECTION 4. WARRANTY

**4.1 Warranty.** Seller represents warrants that the goods and services furnished will be free from defects in materials and workmanship, merchantable and in full conformity with the applicable specifications set forth in Exhibit B, and Seller's description, promises or samples, and that such goods will be fit for the Buyer's intended use provided Seller has reason to know of such use, and that Seller will convey the good title to the goods, free and clear from all liens, claims and encumbrances. No implied warranties of Seller are excluded or disclaimed. Seller shall give prior notice to Buyer of any significant change(s) in materials, manufacturing processes, or test methods for mutual assessment of the probable effect on Buyer's processes or product performance. Seller warrants that the manufacture of the goods and any component part hereunder, and the use or resale of such goods do not infringe the claims of any U.S. or foreign patent, copyright, trademark or trade secret. Seller represents and warrants that the production and furnishing of the goods hereunder comply with all applicable laws, permits, rules and regulations, and further, that the delivery of such goods complies with all applicable laws, permits, rules and regulations regarding packaging, marking and shipping of the goods. Seller also represents and warrants that the goods are listed on the TSCA Inventory maintained by the U.S. Environmental Protection Agency under the Toxic Substances Control Act, and that Seller shall provide Buyer with documentation confirming such listing upon request.



**4.2 Compliance.** Seller represents and warrants that, if Seller is legally required to comply with the provisions of the following, all goods and services furnished under this Agreement shall be produced in compliance with and Seller shall abide by provisions of the following which are incorporated herein by reference to the extent that such provisions are applicable to Seller and this Agreement: Employee Non-Discriminatory and Equal Opportunity requirements contained in Executive Orders No. 11246, 11758 and any subsequent related orders; Certification of Nonsegregated Facilities, as required by Order of the U.S. Secretary of Labor cited at 32 Federal Register 7437 and any subsequent related orders; Employer Information Report (EEO-1, Standard Form 100) under Section 60-1.7 of Title 41 of the Code of Federal Regulations and any subsequent related regulations; Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era as mentioned in 38 United States Code Section 1787 and the Vietnam Era Veterans Readjustment Act and subsequent related law; laws relating to Utilization of Minority Business Enterprises and Minority Business Enterprises Subcontractor Program as provided in Section 800 of Title 10 of the Code of Federal Regulations and any subsequent related regulations and orders; and laws relating to Employment of the Handicapped under Section 503 of the Rehabilitation Act of 1973 and subsequent related law.

**4.3 Environmental Laws.** Seller shall observe and comply with all federal, state or local laws, statutes, codes enactments, ordinances, rules, regulations, permits, consents, approvals, authorizations, licenses, judgments, orders, writs, decrees, injunctions, common laws (including without limitation the common law respecting nuisance and tortious liability), or other requirements having the force and effect of law or regulation, relating to the protection of human health and safety, occupational health and safety, the environment, or natural resources and wildlife, including, without limitation (i) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), (ii) the Solid Waste Disposal Act, (iii) the Resource Conservation and Recovery Act (RCRA), (iv) the Toxic Substances Control Act (TSCA), (v) the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), (vi) the Clean Water Act, (vii) the Clean Air Act, (viii) the Occupational Safety and Health Act (OSHA), (ix) the Safe Drinking Water Act, (x) the Minnesota Environmental Response and Liability Act (MERLA), and (xi) the Department of Transportation rules on hazardous materials, all as amended and in effect from time to time ("Environmental Laws").

Seller shall consult with the Buyer in all cases where there is a question, or additional clarification is needed regarding compliance with Environmental Laws or permits.

**4.4 Safety and Health.** Seller specifically represents and warrants that all goods and services provided herein meet current safety standards established and promulgated under the Federal Occupational Safety and Health Act (OSHA) of 1970, or under any applicable law of a state in lieu thereof, for the protection of employees who will be affected by the use or performance of said articles and services. In Minnesota the rules governing safety include, but are not limited to, the Minnesota Occupational Safety and Health Codes and the Minnesota Manual on Uniform Traffic Control Devices, Appendix B. Additionally, the Contractor shall abide by and be signatory to Minnesota Power's *Contractor Safety Orientation Manual*. A copy of Minnesota Power's *Safety Manual* is available upon request.

**4.5 Buyer's Property.** Buyer has a strong regard for environmental stewardship and human health and safety. Consistent with this policy, Seller is responsible for conducting its activities



on Buyer's property in such a manner as to protect human health and safety and the physical environment which may be associated with the Agreement. Seller represents and warrants that all operations, products, services and reports are conducted or completed in compliance with all applicable Environmental Laws.

Seller has a duty to understand when its actions or contemplated actions may have an effect on any environmental requirements stated or implied herein, and shall demonstrate competency in environmental compliance.

**4.6 Remedy.** In the event Seller (i) offers or supplies any defective goods or services or any goods or services not in accordance with Buyer's location-specific requirements, specifications, or Seller's express or implied warranties hereunder, (ii) breaches any warranties or covenants, or (iii) fails to timely supply conforming goods or services hereunder, Buyer may, at its option: (a) reject such goods or services; (b) terminate this Agreement or any part hereof, including but not limited to a product-specific termination or a location-specific termination; (c) return such goods and charge Seller all costs, expenses and damages related to the return; (d) cover and charge Seller for any loss, costs and damages incurred; (e) require Seller to replace or otherwise correct, without expense to Buyer, any such goods or services; or (f) retain such goods and charge Seller for any damages. All rights and remedies stated herein shall be in addition to any rights and remedies provided by law, and shall survive any inspection, test, acceptance and payment. In addition to the rights set forth in this Section 4, Buyer may upon written notice to Seller, terminate this Agreement in whole or part, including but not limited to a product-specific termination or a location-specific termination (a) if reasonable grounds for insecurity arise as to Seller's expected performance (including timely performance) within ten (10) days after Buyer's written demand for adequate assurance.

## **SECTION 5. SHIPPING AND DELIVERY; ACCEPTANCE**

**5.1 Information to be Provided by Seller.** Upon execution of the Agreement, Seller shall provide to Buyer the following information:

- (i) Seller's safety training program
- (ii) Seller's certifications applicable to the goods and services provided hereunder
- (iii) Transportation Provider's transportation and delivery spill response plans
- (iv) Transportation Provider's driver training program applicable to the goods and services to be provided hereunder
- (v) A list of personal protective equipment for the transportation vehicles to be used for delivery of the goods to be furnished hereunder

**5.2 Packaging, Packing Lists and Bills of Lading.** Seller shall be responsible for proper packaging, loading and tie-down, as applicable, to prevent damage during transportation. Seller must bill all returnable containers on a separate memo invoice; return transportation charges will be collect and for Seller's account. Buyer's weight and/or count will be accepted as final and conclusive on all shipments not accompanied by such packing list.

**5.2 Timing of Delivery.** Time of the essence. Seller shall furnish sufficient labor and management forces, plant and equipment and shall work such hours (including night shift,



overtime, weekend and holiday work) as may be required to assure timely delivery as set forth in Exhibit B.

**5.3 Title and Risk of Loss.** Title and risk of loss and damage to all goods shall remain in Seller until receipt of the goods at Buyer's location. Title shall pass to Buyer upon Buyer's acceptance of goods at Buyer's location.

**5.4 Inspection and Acceptance.** All goods furnished to Buyer hereunder shall be subject to Buyer's inspection and acceptance or rejection within a reasonable time after delivery irrespective of payment date. The making or failure to make any inspection of, payment for, or acceptance of the goods shall in no way impair Buyer's right to reject or revoke its acceptance of non-conforming goods or to avail itself of any other remedies to which Buyer may be entitled, notwithstanding knowledge of the nonconformity, its substantiality or ease of discovery. Buyer shall have a reasonable time to submit claims of count, weight, quantity, loss or damage to delivered goods.

**5.5 Testing and Lab Analyses.** Buyer reserves the right to sample all goods furnished hereunder to ensure the goods are compliant with specifications set forth in Exhibit B. Seller shall provide Buyer Seller's quarterly quality assurances and quality control lab analyses.

## **SECTION 6. TAXES, FEES AND ROYALTIES**

All taxes, fees and royalties are included in the price of the goods and services as set forth in Exhibit A, other than any applicable state sales tax, which shall be to Buyer's account.

## **SECTION 7. INVOICING AND PAYMENT**

Seller shall invoice Buyer for each shipment of goods hereunder, and, unless otherwise specified, payment shall be net 30 days after receipt of invoice. Buyer shall timely pay all undisputed portions of each disputed invoice. All amounts due hereunder shall be subject to setoff and recoupment. Payment shall not constitute acceptance for goods and services or waiver of any claims related thereto.

## **SECTION 8. INSURANCE**

Without limiting any of the other obligations or liabilities of Seller, Seller shall provide and maintain such insurance as shall protect Seller from claims which may in any way arise out of or be in any manner connected with the performance of the Agreement, whether such claims arise out of the act of failure to act of Seller or of the direct or indirect delegee, appointee or employee. Such insurance shall be as specified below and all general liability insurance policies shall name Buyer and its Indemnitees under Section 11.2 as additional insureds with insurance companies rated A- or better by A.M. Best rating service in amounts not less than:

Type of Coverage	Limits
(i) Workers' Compensation Coverage	Statutory

(ii)	Employers' Liability Coverage	\$1,000,000
(iii)	Commercial General Liability, occurrence form, providing bodily injury, personal injury, and property damage liability coverage, including but not limited to Broad Form Property, contractual liability coverage for the indemnity promise contained herein.	
	General Aggregate	\$4,000,000
	Products - Completed Operations Aggregate	\$2,000,000
	Personal & Advertising Injury	\$2,000,000
	Each Occurrence	\$2,000,000
	Contractual	\$2,000,000
	Fire Damage (any one fire)	\$50,000
	Medical Expense (any one person)	\$5,000

All dollar amounts of coverage set forth above shall be per occurrence and in the aggregate and include a cross liability and severability of interest clause. The policies described herein shall (a) be endorsed to show that the insurers waive subrogation against Buyer, its affiliates, directors, officers and employees, and (b) the insurance is primary and non-contributory.

- (iv) Comprehensive Automobile Liability, covering all vehicles whether owned, hired, or leased or used by the Seller.

Bodily Injury/Property Damage	\$1,000,000
Combined Single Limit	

- (v) Sudden & Accidental Pollution Liability arising out of operations at Seller's site. If coverage is provided on a "claims made" policy form, the policy shall remain in effect, or provide for an extended reporting period during which claims can be made, for a period not less than two (2) years after completion of the work performed under this Agreement. \$5,000,000

All policies described above will not be terminated except upon not less than thirty (30) days prior written notice to Buyer. Seller shall, before commencing work under this Agreement, deliver to Purchasing and Contracts, ALLETE, Inc., 30 West Superior Street, Duluth, Minnesota 55802, certification of insurance coverage completed by its insurance carrier(s) or agent(s) certifying that minimum insurance coverages as required herein are in effect.



## SECTION 9. TERMINATION

**9.1 Termination for Convenience.** Buyer shall have the right to terminate the Agreement or any part thereof, including but not limited to a product-specific termination or a location-specific termination, upon sixty (60) days written Notice to Seller; provided, however, that such termination shall not be effective as to any Orders placed prior to such termination.

**9.2 Termination by Buyer for Default.** Buyer shall have the right to terminate or suspend this Agreement, by written Notice to Seller, in whole or in part, including but not limited to a product-specific termination or a location-specific termination, in the case of a breach of this Agreement by Seller, if such breach is not cured by the later of (i) seven (7) days after written Notice from Buyer and (ii) the expiration of a time period established in a plan provided by Seller to Buyer within three (3) days of Seller's receipt of such Notice, and acceptable to Buyer in its sole discretion, to commence a cure within seven (7) days after receipt of such Notice and diligently and continuously pursue a cure thereafter (a "Seller Event of Default"). Seller shall have the right to terminate or suspend this Agreement, by written Notice to Buyer, in whole or in part, in the case of (a) a failure by Buyer to make any payment due hereunder (other than the disputed portion of any amount due hereunder that is being disputed in good faith) if such failure is not cured within ten (10) days after written Notice from Seller. For the purpose of this Section 9.2, Seller shall be conclusively deemed to have breached this Agreement in the event Seller becomes insolvent or makes an assignment for the benefit of a creditor or commits an act of bankruptcy or files or has filed against it a petition in bankruptcy or reorganization proceedings.

## SECTION 10. FORCE MAJEURE

**10.1 Definition of Force Majeure.** "Force Majeure" means an event or condition that prevents or delays the performance by a Party of its obligations under this Agreement to the extent beyond the reasonable control, and without the fault or negligence, of the Party claiming relief, and which by the reasonable exercise of due diligence such claiming Party is unable to prevent or overcome. Force Majeure is defined as Acts of God, war, riot, labor dispute, fire, explosion, accident, flood, sabotage, governmental laws, regulations, orders or actions; breakage or failure of machinery or apparatus, national defense requirements or any other event beyond the reasonable control of such Parties. Force Majeure shall not include delays caused by unfavorable weather that is not abnormal for the season and geographic area, unsuitable ground conditions, inadequate construction force, market conditions or the failure of either Party to place orders for equipment or materials sufficiently in advance to ensure delivery when needed. Should the situation of Force Majeure exceed sixty (60) consecutive days, the Party not affected by the Force Majeure event may, at its option, terminate the Agreement in whole or in part and neither Party shall have any further obligation to the other Party; however, each Party shall be obligated to make payments which had become due and payable prior to such termination.

**10.2 Effect of Force Majeure.** If Force Majeure prevents either Party from performing any of its obligations under this Agreement, and if such Party gives to the other Party Notice of the Force Majeure (which Notice (i) shall identify the event of Force Majeure and, to the extent known, the expected length of time during which the event of Force Majeure will be in effect and the plan of the Party experiencing the Force Majeure to correct or remove it and (ii) be delivered



promptly after the start of the Force Majeure event), then the obligations of the Party giving such Notice are excused to the extent made necessary by the Force Majeure and during its continuance, which time period shall be called the "Force Majeure Period." An event of Force Majeure shall excuse the obligations of the notifying Party only to the extent that the Party takes all commercially reasonable actions necessary to overcome the Force Majeure with all reasonable dispatch. Only the Party suffering a Force Majeure may claim Force Majeure relief; provided, however, that the other Party shall be excused from its obligations that depend upon the performance of the obligations excused by the Force Majeure event. An attempt by the Party suffering an event of Force Majeure to perform its obligations notwithstanding the Force Majeure shall not constitute a waiver of the right to claim Force Majeure if such attempt proves unsuccessful. Notwithstanding the foregoing, the Party affected by Force Majeure, in its sole discretion, shall not be required to submit to unreasonable conditions or restrictions imposed by any governmental authority or contract counterparty, or to make significant capital expenditures, to overcome the Force Majeure. In the event, and to the extent, a Force Majeure prevents Buyer from accepting goods and services, Seller's sole remedy shall be an extension of the Term of this Agreement for the time period lost by reason of the Force Majeure.

## SECTION 11. INDEMNIFICATION

**11.1 Intellectual Property.** Seller shall, at its own expense, hold harmless, protect and defend Buyer against any claim, suit or proceeding brought against Buyer which is based on a claim, whether rightful or otherwise, that the goods or any part thereof, furnished under this Agreement, constitute(s) an infringement of any U.S. intellectual property rights, and Seller shall pay all damages, costs, and expenses arising from such claim.

**11.2 General Indemnification by Seller.** Seller shall completely indemnify, defend, and hold Buyer, its officers, agents and representatives ("Buyer Indemnitees") harmless from and against all claims for personal injury, property damage, wrongful death or other damages, losses and expenses, including attorneys' fees ("Claims"), arising out of, or resulting from, Seller's negligence or willful misconduct. It is expressly understood and agreed that this obligation to completely indemnify, defend and hold harmless shall apply and be enforceable for all Claims except to the extent caused by the negligence or willful misconduct of the Buyer Indemnitees. If a Claim is made by an employee of Seller against a Buyer Indemnitee, Seller shall and hereby agrees to indemnify the Buyer Indemnitee to the same extent as if the Claim was made by a non-employee of the Seller without regard to any limitation on Seller's liability for injuries to its employees, whether established by judicial decision, statute or otherwise. This provision shall also be enforceable in addition to and beyond any insurance coverages required for the protection of Buyer as permitted by law.

## SECTION 12. CHOICE OF LAW; VENUE

This Agreement and the rights of all parties hereunder shall be construed under and governed by the laws of the State of Minnesota. The Parties agree to submit to the exclusive jurisdiction of the State and Federal courts sitting in St. Louis County, Minnesota, and waive any objections to such location based on jurisdiction, venue or inconvenient forum.



### **SECTION 13. ASSIGNMENTS**

Buyer reserves the right to assign this Agreement to successors, assigns, affiliates or subsidiaries without further notice to or consent of Seller. No part of this Agreement may be assigned or subcontracted by Seller without Buyer's written consent.

### **SECTION 14. CONFIDENTIALITY**

Except as permitted or directed in writing by Buyer, Seller shall not during the term of this Agreement or thereafter divulge, furnish or make accessible to anyone or use in any way any confidential, trade secret, or proprietary information (including but not limited to personnel, financial or other matters) of Buyer that Seller has acquired or become acquainted with in the performance of any of its obligations under this Agreement, whether such information is developed by the Seller or others. Seller shall promptly notify Buyer of any request by any entity for information covered by this Agreement. Unless otherwise agreed to by the Parties in writing, all information of Buyer that Seller acquires or becomes acquainted with in the performance of any duty under this Agreement shall be considered confidential, trade secret or proprietary information belonging to Buyer.

### **15. GOVERNMENT CAUSED COSTS**

In addition to the price adjustments pursuant to Exhibit A, the purchase price for Product will be further adjusted for any increase or decrease in the direct cost to Seller of performing under this Agreement attributable to any federal, state or local statute, regulation, order, standard or directive whether or not currently in force. Such increase or decrease in cost will be assessed by Seller and promptly reported to Purchaser. The adjustment of the purchase price will become effective under this Agreement as of the date Seller first incurs such cost increase or decrease. While it is not the intent of this paragraph to pass on changes in such things as income tax rates, it is intended to pass on such items as sales taxes, value added taxes, business transfer taxes, goods and services taxes, costs to comply with new environmental standards not existing at the time of execution of this Agreement, royalties, severance taxes, and any other items resulting from acts of government (all levels) that impose a direct pre-income tax burden on Seller. If the price adjustment results in a price increase of more than fifteen percent (15%) to Purchaser, then Purchaser shall have the right upon sixty (60) days notice to Seller to terminate the Agreement in whole or in part.

### **SECTION 16. NOTICES**

Except as otherwise specifically provided by this Agreement, any notice provided for pursuant to this Agreement or given or made in connection with this Agreement ("Notice") shall be in writing and shall be deemed properly and sufficiently given or made if delivered in person

with receipt acknowledged in writing by the recipient, or sent by registered or certified mail return receipt requested, to the respective Parties at the addresses specified below:

If to Seller, addressed to:

**Graymont WI LLC**  
**C/O Graymont Central Region Office**  
215 N. Main, Suite 200  
West Bend, WI 53095  
ATTN: Vice President Sales

With Copies to:

**Graymont WI LLC**  
800 Hill Avenue  
Superior, WI 54880  
ATTN: Sales

If to Buyer, addressed to:

ALLETE, Inc.  
30 West Superior Street  
Duluth, Minnesota 55802  
Attn: Manager of Purchasing and Contracts

## **SECTION 17. SELLER AS AN INDEPENDENT CONTRACTOR**

It is agreed and understood that during the performance of this Agreement, Seller shall be considered an independent contractor, and not an agent of Buyer.

## **SECTION 18. WAIVERS**

The failure of either Party to require strict performance of any provision of this Agreement by the other Party, or the forbearance to exercise any right or remedy under this Agreement shall not be construed as a waiver by such Party of the right to require strict performance of any such provision or the relinquishment by such Party of any such right or remedy it might have with respect to any subsequent breach of such provisions. All waivers shall be signed in writing, designated a waiver, and signed by the waiving Party, and shall recite the rights waived.

## **SECTION 19. HEADINGS AND SECTION NUMBERS; CONSTRUCTION**

**19.1 Headings Not to Affect Construction.** The headings of the sections of this Agreement are inserted for convenience only and shall have no effect on the construction, interpretation or meaning of this Agreement.



**19.2 References to Section Numbers.** All references in this Agreement to a section of this Agreement will be interpreted to refer to the entire section, including subsections.

## **SECTION 20. AMENDMENTS**

Any and all amendments, supplements and modifications to this Agreement shall be effective only if in writing and signed by the Parties.

## **SECTION 21. COMPLETE AGREEMENT**

This Agreement is the complete and total expression of all agreements, contracts, covenants and other promises between Seller and Buyer related to the sale of goods and services set forth herein to Buyer. The terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgement or any other such form or document even if signed by both Parties. No preprinted terms and conditions or other preprinted provisions contained in or attached to or referred to in any purchase order submitted by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller shall operate to amend, modify, supplement or supersede the provisions contained in this Agreement, and any provision or statement in any purchase order issued by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller that purports to make the terms of such document exclusive or binding shall be void as it relates to this Agreement.

## **SECTION 22. COUNTERPARTS**

Buyer and Seller may execute this Agreement in two or more counterparts, each of which shall constitute an original document and all of which taken together shall constitute a single Agreement.

## **SECTION 23. SURVIVAL**

The provisions of Sections 4 (Warranty), 5, (Shipping and Delivery; Acceptance), 6 (Taxes, Fees and Royalties), 7 (Invoicing and Payment), 8 (Insurance), 11 (Indemnification), 12 (Choice of Law; Venue), 13 (Assignments), 14 (Confidentiality), 16 (Notices), 17 (Seller as Independent Contractor), 18 (Waivers), 19 (Headings and Section Numbers; Construction), 20 (Amendments), 21 (Complete Agreement), 23 (Survival), and 24 (Severability) shall survive the expiration of this Agreement.

## **SECTION 24. SEVERABILITY**

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or

any other jurisdiction, but this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

**SECTION 25. EQUAL EMPLOYMENT OPPORTUNITY**

When this Agreement is used for procurement in support of utility business, Supplier and its Subcontractors shall abide by the requirements of §§ 41 CFR 60-1.4(a) (as amended by E.O. 13665 regarding pay transparency), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. These regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.

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IN WITNESS WHEREOF, the Parties have duly executed this Agreement in their respective corporate names as of the 1<sup>st</sup> day of March, 2018.

Graymont WI LLC, as Seller

By: [Signature]

Name: Henry Spomer

Title: Account Manager

ALLETE, Inc., as Buyer

By: [Signature]

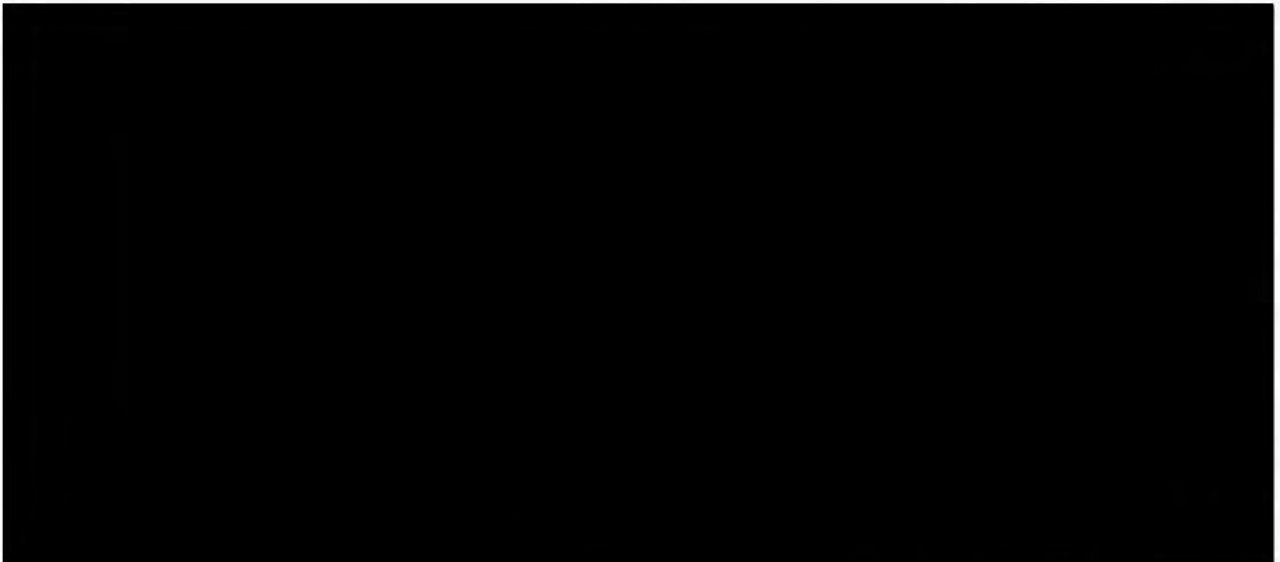
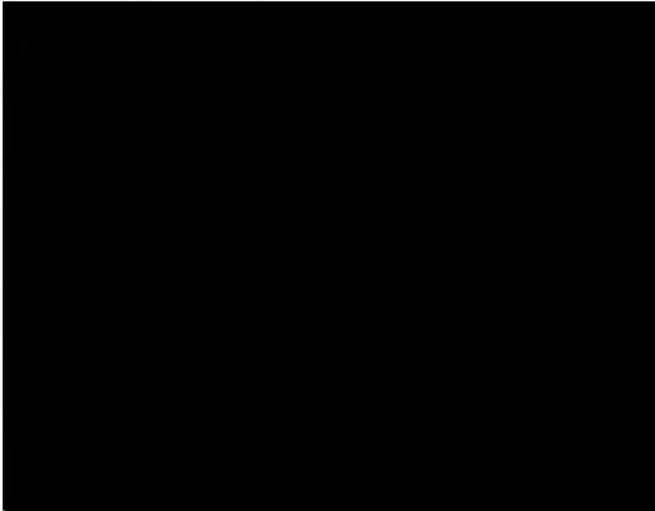
Name: Tracey A. Mattfield

Title: Contract Administrator

**EXHIBIT A**  
**PRODUCTS AND PRICING**

Products & Pricing - eff. 3/1/18

**[TRADE SECRET DATA BEGINS]**



**TRADE SECRET DATA ENDS]**

## EXHIBIT B

### PRODUCT SPECIFICATIONS

#### Limestone

Calcium Carbonate (CaCO <sub>3</sub> )	97
Magnesium Carbonate (MgCO <sub>3</sub> )	1.7
Silica (SiO <sub>2</sub> )	0.26
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.10
Alumina (Al <sub>2</sub> O <sub>3</sub> )	0.04
Moisture	0.00
% Passing 325 Mesh	95%

- Limestone shall be ground off-site.
- Limestone shall pass Minnesota Power's (MP) reactivity test.
- Limestone supplier shall deliver limestone that minimally meets the size criteria of 95% passing a 325 mesh screen. Clumps of limestone will not be permitted.
- Limestone shall contain a minimum of 97.0% CaCO<sub>3</sub> by weight.
- Limestone should contain 0% (minimal) moisture by weight.
- Limestone should have a bulk density between 68lb/cu.ft. and 150 lb/cu.ft.

#### Hydrate Lime

Avail. Lime Index as Calcium Hydroxide (Ca(OH) <sub>2</sub> ), %	92.7
Total Calcium as Calcium Oxide (CaO), %	71.9
Available Lime Index as Calcium Oxide (CaO), %	70.2
Magnesium Oxide (MgO), %	1.6
Silica (SiO <sub>2</sub> ), %	1.1
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ), %	0.2
Alumina (Al <sub>2</sub> O <sub>3</sub> ), %	0.4
Total Sulfur (S), %	0.01
Loss on Ignition, %	24.6
Carbonates (CaCO <sub>3</sub> ), %	2.6
Moisture (H <sub>2</sub> O), %	1.0
Neutralizing Value (CaCO <sub>3</sub> =100), %	130
Bulk Density (ASTM C 110), kg/m <sup>3</sup>	340-570
Bulk Density (ASTM C 110), lbs/ft <sup>3</sup>	21-36
Specific Gravity	2.24
Solubility in Water (0°C), g/l	1.85
pH (saturated solution) (25°C)	12.454

Composition and Typical Chemical Properties (ASTM C 25, C 1271, C 1301)

## Quicklime

Total Calcium as Calcium Oxide (CaO), %	95.8
Available Lime Index as Calcium Oxide (CaO), %	93.7
Magnesium Oxide (MgO), %	1.7
Silica (SiO <sub>2</sub> ), %	0.7
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ), %	0.2
Alumina (Al <sub>2</sub> O <sub>3</sub> ), %	0.2
Total Sulfur (S), %	0.1
Loss on Ignition, %	1.3
Carbonates (CaCO <sub>3</sub> ), %	1.1
Bulk Density (ASTM C 110), kg/m <sup>3</sup>	840-1040
Bulk Density (ASTM C 110), lbs/ft <sup>3</sup>	52-65
Specific Gravity	3.25-3.38
Solubility in Water (0°C), g/l	1.31
pH (saturated solution) (25°C)	12.454

Test data shown in Typical Analysis is based upon average results of production samples. Product shipments are subject to normal variation. Accordingly, test data cannot be taken as establishing minimum or maximum specifications.

## EXHIBIT C

### BUYER LOCATION-SPECIFIC REQUIREMENTS

#### Boswell Energy Center

Follow "Limestone Truck Unloading Procedure" attached herein.

#### Contact List for an ESO Chemical Unloading Escort

Minnesota Power Site	Onsite Contact Position	Contact #	Unloading Hours
Boswell Energy Center	Unit 3 Control Room Operator	218-313-4660	24/7, Drivers must monitor for dust

**NOTE:** If there are any environmental concerns or questions please contact the following:

#### Contact List for any Environmental Questions or Concerns

Name	Extension	Phone #	Email
Unit 3 Control Room	4660	218-313-4660	NA



### Boswell Unit 3 Limestone Truck Unloading Procedure

#### **Delivery & Load**

The powdered limestone would be delivered to the site by trucks. Truck-mounted blowers would be used to convey the limestone from the trucks to the limestone storage silo

All Limestone would be unloaded in to the south tower near unit #4 by the Dry Chem Building

The delivery location address is:

Minnesota Power  
1210 NW 3<sup>rd</sup> Street  
Cohasset MN 55721

The MP ESO (Environmental System Operator) will call or will notify Bill Cromwell the supplier when the silo levels get low. The dispatcher from Dave's Transport will help to keep our silo filled.

Delivery of limestone should avoid day shift changes ( 6–6.30 am and 5-7.00 pm) if possible.

Deliveries should normally be during daylight hours, 8 am to 6 pm for safety.

Drivers will be escorted to the unloading area by the ESO (Environmental System Operator).

PPD equipment, vests, safety glasses with side shields, steel toed shoes, and hard hats should be worn when on site.

The Info Center (if open) or the Control Room (660 or 661 back Up) should be notified to send an escort to direct the driver to the unloading area.

- There will be sufficient staging space for 5 or "more" trucks if needed. If there is a mechanical breakdown and trucks back up, we can send them back to the Rajala property.

The bill of lading shall be checked by the ESO prior to unloading.

The driver shall be responsible for unloading the limestone.

### Unloading Instructions

1. A valid bill of lading shall be presented to an MP employee before unloading any delivery.
2. An MP ESO shall check and sign the bill of lading prior to unloading.
3. Remove camloc cap from one 1 of 3, 4" pipes between the Lime stone building and the API trailer.
4. Hook up the hose to 1 of the 3 riser pipes for limestone conveying to the truck.
5. MP's ESO shall open the 4" valve on the riser pipe for the line to be used
6. MP's ESO shall switch on the dust collector at the control panel on the outside of the building
  - The red pilot light should come on indicating the dust collector contact relay is on.
  - If the red flashing beacon light comes on operator assistance is needed. This light indicates that there could be a problem such as the silo is already filled. If this occurs
    - MP's ESO should go inside and look at the display panel to see what the alarm is
7. Pressurize the limestone delivery line with air through the truck air path into the silo
8. Verify that there are no air leaks in the hose from the truck to the silo
9. Open up the truck limestone dump valves and empty the load into the silo
10. MP's ESO shall look towards the top of the silo and if fugitive dust (limestone) can be seen shut down the loading and get a hold of MP Control Room (660 or 661 back Up) to assist with the problem.
  - MP's ESO operator shall log that a visual opacity check was performed on the log sheet which should be hanging next to the Silo System HMI.
11. Complete loading
12. Switch off the dust collector
13. Close off the valve for the riser pipe being used
14. Remove the hose
15. Replace the 4" Camloc cap
16. Drop the bill of lading off in the mailbox by the unloading area.
  - Each load should have a bill of lading
  - The load weight shall be included on the bill of lading
  - The change in the MP silo level should be documented by the ESO on the bill of lading. (This is available at the control panel in the building).



The estimated yearly usage could be up to 41,610 tons per year for unit #3.

Boswell site staging capacities are:

**Slurry tank Limestone Capacity on Site**

- The lime slurry tank holds 50,000 gallons and is designed for 30% density slurry.
  - 50,000 gallons x 8 lbs/gal x 30% limestone = 120,000 pounds
  - About 2.5 trucks at 50,000 pounds per truck
- We need 100,000 gallons of slurry to fill the FGD tank for initial fill. Added to 300,000 gallons of water.
  - 100,000 gallons x 8 lbs/gal x 30% limestone = 240,000 pounds
  - About 5 trucks at 50,000 pounds per truck
- The controls can fill at 100 GPM from the lime system. Yes, that takes 1,500 minutes, or 25 hours

**Silo Capacity on Site**

- $22,000 \text{ ft}^3 \times 70 \text{ lbs/ft}^3 = 1,540,000 \text{ pounds}$
- About 31 trucks at 50,000 pounds per truck

The first load filled the silo to 19% Capacity. (Note that this is at the bottom of the cone and the fill measurement is based on height of fill only)

**Truck Loading Operating Parameters with truck air pump**

Optimal loading occurs at about 14 PSI on the truck gauge with about 640 SCFM @ 1050 RPM with a 50 HP motor (2000 RPM max). With these conditions it took about 55 minutes to unload a truck The maximum flow for truck loading is 800 scfm


**TWO TRUCK UNLOADING**

The filtering system on top is good to 3800 scfm so we should be able to unload two trucks at the same time (800 max scfm required to unload each truck) with truck supplied compressed air.

**Truck Loading Operating Parameters with MP Roots Blower**

The Roots Blower is rated at 1000 CFM @ 13 PSI and is a 125 HP. When using the Roots Blower one of the two Kunkel relief valves relieved system pressure at 10 PSI making it difficult to balance the limestone fill from the truck. The low trip point for the Kunkel relief valve is being addressed and replacement parts are being sent to reset the trip point 14 PSI. .



 AN ALLETE COMPANY	OPERATIONAL Excellence	Boswell Energy Center Procedure	Revision:	2
		BEC-4-PROC-0037	Rev Date:	10/25/2015
		Prepared By: Karen Becicka	Approved By: Ken Snell	
		BEC-4 QUICKLIME TRUCK UNLOADING		
CONTINUOUS USE PROCEDURE				

## 1. Purpose

- 1.1. This procedure provides the steps to be taken when unloading Quicklime to the U4 Lime Silo.

## 2. Applicability

- 2.1. This procedure is intended to be used whenever a truck comes into Boswell with a load of Quicklime, 1/8 X 0 High Calcium Quicklime, to be delivered to the U4 Lime Silo.

## 3. Assumptions

- 3.1. The following assumptions are to be considered:
  - 3.1.1. Lime Silo Bin Vent Filter is operational and starts at time of unloading. The Bin Vent Filter allows air to be vented from the lime silo during unloading.
  - 3.1.2. Lime Silo has enough capacity for full truckload of quicklime.
    - 3.1.2.1. High-High Level indicator is working properly and contact can be made from the Control Room Operator to the ESO.
  - 3.1.3. Backup Bulk Lime Unloading Blower is operational.
  - 3.1.4. Lime Unloading Safety Shower is operational.
  - 3.1.5. Vinegar stations are stocked.

## 4. Precautions and Limitations

- 4.1. Lime Silo storage capacity of approximately 33,000 cubic feet.
- 4.2. Rotary Valve rate of 24,000 pounds per hour.
- 4.3. Maximum Transfer Blower rate is 1.037 discharge cfm.
- 4.4. The Backup Bulk Lime Unloading Blower is sized to unload one truck at a time.
  - 4.4.1. A High Pressure alarm activates if pressure exceeds 11 psig.
  - 4.4.2. If the DP across the Blower Air Intake Filter is > 15 INWC, the Blower Motor is de-energized and an alarm activated in DCS.



- 4.5. Filling should stop if High-High Silo Level indication alarms.
- 4.6. Low Level alarm indicates lime needs to be delivered soon.
- 4.7. High Differential Pressure (> 12 INWC) on the Bin Vent requires the unloading process to stop in order to prevent possible damage to roof mounted equipment.

## **5. Resources Required**

- 5.1. One (1) ESO Operator
- 5.2. One (1) Control Room Operator
- 5.3. Chock blocks for truck, unloading flex hose.

## **6. Reference Documents**

- 6.1. BEC-4 Quicklime SDS #6246

## **7. Procedure:**

### **Safety Checks**

- 7.1. ESO and Truck Driver to verify Bill of Lading for correct product:
  - 7.1.1. BEC-4 Quicklime (1/8" under)
  - 7.1.2. SDS #6246
- 7.2. ESO to verify Truck Driver has proper PPE and is familiar with unloading, emergency, and spill procedures.
  - 7.2.1. Truck driver PPE requirements:
    - 7.2.1.1. During truck spotting, off load line connections, and during off load:
      - 7.2.1.1.1. Hardhat
      - 7.2.1.1.2. Safety glasses and side shields
      - 7.2.1.1.3. Steel toed shoes
      - 7.2.1.1.4. Hi Vis Vest
    - 7.2.1.2. Post off load (empty truck) PPE
      - 7.2.1.2.1. When disconnecting off load lines (pressurized line hazard with potential Quicklime exposure)
        - 7.2.1.2.1.1. Gloves
        - 7.2.1.2.1.2. Full suit (Tyvek suit, rain suit, goretex, etc)
        - 7.2.1.2.1.3. Full Face Respirator
- 7.3. ESO to verify Unloading Station Safety Shower is functional:
  - 7.3.1. Weekly PM sign off
  - 7.3.2. Test Shower (one time per day), notify U4 CRO as DCS will alarm when shower is activated
- 7.4. ESO to verify Vinegar station is stocked

### **Unloading Procedure**

7.5. ESO to verify through Ash Handling HMI or CRO:

7.5.1. Silo level is adequate for capacity of truck.

7.5.1.1. Enter beginning Silo level (%) on Bill of Lading (BOL).

<b>Note:</b>	If the High-High Silo Level alarm is received during unload by CRO from DCS, CRO to contact ESO to STOP the unloading process immediately.
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7.5.2. Lime Silo Bin Vent Filter is operating and DP is acceptable

<b>Note:</b>	Three (3) to six (6) inches of water column is normal DP range. 10 INWC triggers pulsing of bags, 12 INWC activates a High alarm. If High DP alarm is received during unloading of truck, by CRO from DCS, CRO to contact ESO to STOP the unloading process immediately to prevent possible damage to roof mounted equipment.
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7.6. ESO to verify Unloading Line Knife Gate Valve is functional.

<b>Note:</b>	Valve is normally left in the open position. If a plugged line is suspected, close the valve.
--------------	---

7.6.1. Truck driver hooks up the unload connections (cam locks – secure/cotter pin)

7.6.1.1. ESO and truck driver verify connections, unload hoses, and silo unload connections are in good condition.

7.6.2. ESO to verify Quicklime truck tires are chocked.

7.6.3. After unloading is complete, ESO to verify no leaks are present from the unload lines to the top of the silo.

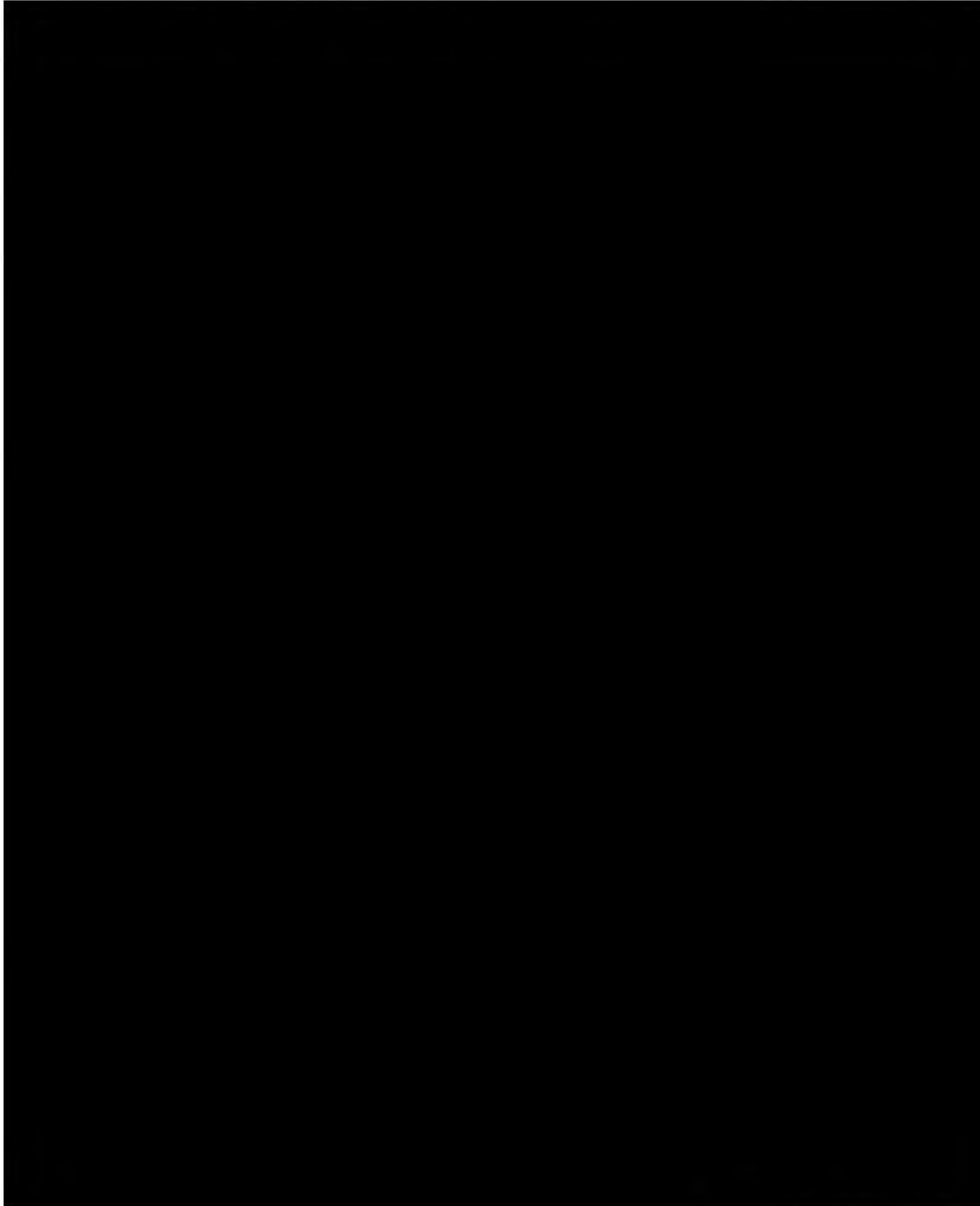
7.6.4. ESO to sweep and properly dispose of residual Quicklime immediately after unload.



**EXHIBIT D**

**FUEL SURCHARGE**

**[TRADE SECRET DATA BEGINS]**



**TRADE SECRET DATA ENDS]**

## CHEMICAL SUPPLY AGREEMENT

This CHEMICAL SUPPLY AGREEMENT (this "Agreement") is made and entered into as of January 1, 2016 (the "Effective Date"), by and between ADA Carbon Solutions (Red River), LLC, a Delaware limited liability company ("Seller"), and ALLETE, Inc., a Minnesota corporation ("Buyer"). Together, Seller and Buyer are "Parties" to this Agreement and either Seller or Buyer individually is a "Party" to this Agreement.

WHEREAS, Seller owns a powdered activated carbon manufacturing facility near Coushatta, Louisiana ("Seller's Plant"), and Buyer desires to purchase powdered activated carbon from Seller.

NOW THEREFORE, in consideration of the mutual covenants and obligations stated in this Agreement, the receipt and sufficiency of which the Parties acknowledge, Seller and Buyer hereby agree as follows:

### SECTION 1. SALE AND PURCHASE OF PRODUCT

Subject to the terms and conditions of this Agreement, Seller shall sell to Buyer, and Buyer shall purchase from Seller from time to time, each of the product(s) set forth below (the "Products") in the amounts and at the price set forth below:

Product(s)	Those Products listed in Exhibit A
Price(s):	The price for each Product shall be as set forth in Exhibit A or as mutually agreed in writing by the Parties from time to time as provided for in Exhibit A. The applicable volume rebate schedule is also included in Exhibit A.
Quantity:	Estimated volumes of Products to be purchased by Buyer are set forth in Exhibit A. Nothing in this Agreement shall (1) require Buyer to purchase certain amounts of any Product from Seller, unless otherwise set forth in Exhibit A, or (2) require Seller to sell any amount of Product to Buyer greater than the Annual Maximum (as set forth on Exhibit A) in any calendar year, unless by mutual agreement of the Parties.
Origin:	Seller's Plant or as may otherwise be agreed by the Parties from time to time in writing.
Destination	Buyer location-specific requirements are attached herein as Exhibit C.
Other	The Quality Specifications and Typical Properties for the Product are attached herein as Exhibit B. No changes to this specification will be allowed without prior written consent by Seller and Buyer. Delivery requirements, including but not limited to timing, shall be included in

Exhibit C.
------------

As used in this Agreement, (i) the term "Affiliate" means, with respect to any Person, any Person with control over or subject to control by, or under direct or indirect common control with, such Person; *provided*, that in no event shall either Party be deemed an Affiliate of the other Party for purposes of this Agreement, (ii) the term "control" as used in the definition of "Affiliate" means the power to direct the management and policies of a Person, directly or indirectly, whether through the ownership of fifty percent (50%) or more of the voting securities, by contract, or otherwise, and (iii) the term "Person" means any individual, limited liability company, partnership, corporation, association, business trust or other entity.

## **SECTION 2. TERM**

The "Term" of this Agreement shall begin on the Effective Date and shall continue thereafter to and including December 31, 2018, unless earlier terminated in accordance with this Agreement. Buyer and Seller may extend this Agreement for up to two additional one-year terms (or one additional two-year term) by mutual written agreement. Buyer can terminate this Agreement with regard to purchases for Buyer's Taconite Harbor Energy Center upon thirty (30) days written notice.

## **SECTION 3. CHEMICAL ORDERS**

Buyer shall submit to Seller, via electronic mail, written orders for a specific amount of Product to be purchased by Buyer and delivered by Seller no fewer than 7 business days prior to the requested delivery date ("Order"). Seller shall indicate its acceptance of the Order either by sending, via electronic mail, a written acknowledgement to Buyer within 24 hours of the date of the Order, or by shipment of Carbon pursuant to the Order, with written notice via electronic mail upon shipment.

Orders shall be sent to:

ADA Carbon Solutions (Red River), LLC  
c/o ADA Carbon Solutions, LLC  
1460 W. Canal Court  
Littleton, CO 80120  
Attention: Customer Service  
Facsimile: (303) 962-1970  
Email: [customer.relations@ada-cs.com](mailto:customer.relations@ada-cs.com)

Acknowledgments/Notices of shipment shall be sent to individual placing the order via email.

Seller may change its contact information for Orders, and Buyer may change its contact information for acknowledgments and notices of shipment, in each case by written Notice to the other Party.



As more fully set forth in Section 20 (Complete Agreement), the terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgements or any such form or document even if signed by both Parties hereto.

#### **SECTION 4. WARRANTY**

**4.1 Warranty.** Seller warrants that the Product furnished will be free from defects in materials and workmanship and in full conformity with the applicable Quality Specifications set forth in Exhibit B, and that Seller will convey good title to the Product, free and clear from all liens, claims and encumbrances. Seller warrants that the manufacture of the Product provided hereunder do not infringe the claims of any U.S. or foreign patent, copyright, trademark or trade secret. Seller represents and warrants that the production and furnishing of the Product provided hereunder comply with all applicable laws, permits, rules and regulations, and further, that the delivery of such goods complies with all applicable laws, permits, rules and regulations regarding packaging, marking and shipping of the goods. Seller also represents and warrants that the goods are listed on the TSCA Inventory maintained by the U.S. Environmental Protection Agency under the Toxic Substances Control Act, and that Seller shall provide Buyer with documentation confirming such listing upon request. **THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS SECTION 4 ARE IN LIEU OF ALL OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, IN FACT OR BY LAW, WITH RESPECT TO PRODUCT FURNISHED HEREUNDER, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**4.2 Compliance.** Seller represents and warrants that, if Seller is legally required to comply with the provisions of the following, all Product furnished under this Agreement shall be produced in compliance with and Seller shall abide by provisions of the following which are incorporated herein by reference to the extent that such provisions are applicable to Seller and this Agreement: Employee Non-Discriminatory and Equal Opportunity requirements contained in Executive Orders No. 11246, 11758 and any subsequent related orders; Certification of Nonsegregated Facilities, as required by Order of the U.S. Secretary of Labor cited at 32 Federal Register 7437 and any subsequent related orders; Employer Information Report (EEO-1, Standard Form 100) under Section 60-1.7 of Title 41 of the Code of Federal Regulations and any subsequent related regulations; Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era as mentioned in 38 United States Code Section 1787 and the Vietnam Era Veterans Readjustment Act and subsequent related law; laws relating to Utilization of Minority Business Enterprises and Minority Business Enterprises Subcontractor Program as provided in Section 800 of Title 10 of the Code of Federal Regulations and any subsequent related regulations and orders; and laws relating to Employment of the Handicapped under Section 503 of the Rehabilitation Act of 1973 and subsequent related law.

**4.3 Environmental Laws.** With respect to any activities to be conducted on Buyer's property, Seller shall observe and comply with all federal, state or local laws, statutes, codes enactments, ordinances, rules, regulations, permits, consents, approvals, authorizations, licenses, judgments, orders, writs, decrees, injunctions, common laws (including without limitation the common law respecting nuisance and tortious liability), or other requirements having the force and effect of

law or regulation, relating to the protection of human health and safety, occupational health and safety, the environment, or natural resources and wildlife, including, without limitation (i) the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), (ii) the Solid Waste Disposal Act, (iii) the Resource Conservation and Recovery Act (RCRA), (iv) the Toxic Substances Control Act (TSCA), (v) the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), (vi) the Clean Water Act, (vii) the Clean Air Act, (viii) the Occupational Safety and Health Act (OSHA), (ix) the Safe Drinking Water Act, (x) the Minnesota Environmental Response and Liability Act (MERLA), and (xi) the Department of Transportation rules on hazardous materials, all as amended and in effect from time to time ("Environmental Laws").

Seller shall consult with the Buyer in all cases where there is a question, or additional clarification is needed regarding compliance with Environmental Laws or permits.

**4.4 Safety and Health.** Seller specifically represents and warrants that all Product provided hereunder meets any applicable current safety standards established and promulgated under the Federal Occupational Safety and Health Act (OSHA) of 1970, or under any applicable law of a state in lieu thereof, for the protection of employees who will be affected by the use or performance of said Product. In Minnesota the rules governing safety include, but are not limited to, the Minnesota Occupational Safety and Health Codes and the Minnesota Manual on Uniform Traffic Control Devices, Appendix B. Additionally, the Contractor shall comply with Minnesota Power's *Contractor Safety and Company Policies Orientation Manual*. A copy of such manual is available upon request.

**4.5 Buyer's Property.** Buyer has a strong regard for environmental stewardship and human health and safety. Consistent with this policy, Seller is responsible for conducting its activities on Buyer's property in compliance with all applicable Environmental Laws. All activities conducted by Seller on Buyer's property shall be conducted or completed in compliance with all applicable Environmental Laws.

**4.6 Remedy.** If any shipment is out-of-specification, Buyer shall have the right, at its sole discretion, to (i) request a new shipment of Product as replacement for the out-of-specification Product and return to Seller the out-of-specification Product at no cost to Buyer; or (ii) purchase on the open market the amount of Product equal to the out-of-specification tonnage and return to Seller the out-of-specification Product at no cost to Buyer; or (iii) to use the out-of-specification Product. To the extent Buyer opts to purchase replacement carbon on the open market, Seller shall reimburse Buyer an amount for each pound of Product that is out-of-specification equal to (i) the price paid by Buyer for replacement Product, including costs reasonably incurred by Buyer in purchasing such substitute powdered activated carbon and transportation charges, if any, reasonably incurred by Buyer (the "Replacement Price") less (ii) the sum of the contract price applicable to the Product that Seller failed to deliver plus the cost that would have been incurred to transport the out-of-specification Product to Buyer's facility, except that if such difference is zero or negative, then neither Party shall have any obligation to make any deficiency payment to the other; *provided*, that in no event shall the Replacement Price include any penalties or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability.



Seller shall also reimburse Buyer for the reasonable and documented out-of-pocket costs, if any, incurred by Buyer to transport the out-of-specification Product back to Seller.

## **SECTION 5. SHIPPING AND DELIVERY; ACCEPTANCE**

**5.1 Information to be Provided by Seller.** Upon request by Buyer, Seller shall provide to Buyer the following information to the extent reasonably available:

- (i) Seller's transportation contractor's safety training program
- (ii) Seller's certifications applicable to the Products provided hereunder, if any
- (iii) Seller's transportation contractor's transportation and delivery spill response plans
- (iv) Seller's transportation contractor's driver training program, including DOT Hazardous Materials training, applicable to the Products to be provided hereunder
- (v) A list of personal protective equipment (example: hard hat, safety glasses, safety boots all required and hi-visibility vest recommended) for the transportation vehicles to be used for delivery of the goods to be furnished hereunder as well as documentation that drivers' delivery of said goods have met all associated OSHA requirements for the use of the same.

**5.2 Packaging, Packing Lists and Bills of Lading.** Seller shall be responsible for proper packaging, loading and tie-down, as applicable, to prevent damage during transportation. Seller must bill all returnable containers on a separate memo invoice; return transportation charges will be collect and for Seller's account. Buyer's weight and/or count will be accepted as final and conclusive on all shipments not accompanied by a bill of lading.

**5.2 Timing of Delivery.** Seller shall furnish sufficient labor and management forces, plant and equipment and shall work such hours (including night shift, overtime, weekend and holiday work) as may be required to assure timely delivery.

**5.3 Title and Risk of Loss.** Title and risk of loss and damage to all goods shall remain in Seller until receipt of the goods at Buyer's location. Title and risk of loss and damage shall pass to Buyer upon the unloading of goods into Buyer's Product silo.

**5.4 Inspection and Acceptance.** All goods furnished to Buyer hereunder shall be subject to Buyer's inspection and acceptance or rejection within a reasonable time after delivery irrespective of payment date. The making or failure to make any inspection of, payment for, or acceptance of the goods shall in no way impair Buyer's right to reject or revoke its acceptance of non-conforming goods or to avail itself of any other remedies to which Buyer may be entitled, notwithstanding knowledge of the nonconformity, its substantiality or ease of discovery. Buyer shall have a reasonable time to submit claims of count, weight, quantity, loss or damage to delivered goods.

**5.5 Testing and Lab Analyses.** Buyer reserves the right to sample all goods furnished hereunder to ensure the goods are compliant with specifications set forth in Exhibit B. Seller shall provide Buyer copies of Seller's certificates of analysis for delivered Product.

## SECTION 6. TAXES, FEES AND ROYALTIES

All taxes, fees and royalties are included in the price of the goods and services as set forth in Exhibit A, other than any applicable state sales tax, which shall be to Buyer's account. In addition, the prices set forth in Exhibit A do not include, and Buyer shall be responsible for, the cost of shipping Product from Seller's facility to Buyer's facility. To the extent shipping costs are incurred by Seller, the actual costs of shipping shall be invoiced by Seller and paid by Buyer; provided, that for shipments that utilize a transload, Seller shall also invoice, and Buyer shall pay, a monthly transload charge that is calculated by Seller on a three-month rolling period basis and reflects a reasonable allocation to Buyer of Seller's costs for rail and transload expenses. Such invoices will be accompanied by the invoice for truck delivery to Buyer's facility (whether from Seller's facility or a transload facility). Seller shall manage shipping costs by delivering Product through the lower cost option of (i) routing through one of Seller's transload facilities or (ii) direct truck shipment from Seller's facility, taking into consideration the shipping time necessary to meet required delivery dates.

## SECTION 7. INVOICING AND PAYMENT

Seller shall invoice Buyer for each shipment of goods hereunder, and, unless otherwise specified, payment shall be net 30 days after receipt of invoice. Buyer shall timely pay all undisputed portions of each disputed invoice. All amounts due hereunder shall be subject to setoff and recoupment. Payment shall not constitute acceptance for goods and services or waiver of any claims related thereto. If Seller does not receive timely payment, interest shall be charged at the U.S. prime rate in effect on the due date (as published in *The Wall Street Journal* as of the date payment is due) plus 1% per annum, but in no event in excess of the highest rate allowed by applicable law.

## SECTION 8. INSURANCE

Without limiting any of the other obligations or liabilities of Seller, Seller shall provide and maintain such insurance as set forth in the table below. Except for worker's compensation, all insurance policies shall name Buyer and its Indemnitees under Section 11.2 as additional insureds with insurance companies rated A-or better by A.M. Best rating service in amounts not less than:

Type of Coverage		Limits
(i)	Workers' Compensation Coverage, including coverage under the United States Longshoremen's and Harbor Workers' Compensation Act, the Jones Act and the Federal Employers' Liability Act, where applicable.	Statutory
(ii)	Employers' Liability Coverage	\$1,000,000
(iii)	Commercial General Liability, occurrence	

<p>form, providing bodily injury, personal injury, and property damage liability coverage, including but not limited to Broad Form Property Damage with no explosion, collapse and underground (XCU) exclusions, contractual liability coverage for the indemnity promise contained herein.</p> <p>General Aggregate Products – Completed Operations Aggregate Personal &amp; Advertising Injury Each Occurrence Contractual Fire Damage (any one fire) Medical Expense (any one person)</p>	<p>\$4,000,000 \$2,000,000 \$2,000,000 \$2,000,000 \$2,000,000 \$50,000 \$5,000</p>
<p>(iv) Comprehensive Automobile Liability, covering all automobiles, trucks, tractors, trailers, motorcycles, mobile equipment or other automotive equipment whether owned, hired, or leased or used by the Seller, and including MCS-90.</p> <p>Bodily Injury/Property Damage Combined Single Limit</p>	<p>\$1,000,000</p>
<p>(v) Pollution Liability. If coverage is provided on a “claims made” policy form, the policy shall remain in effect, or provide for an extended reporting period during which claims can be made, for a period not less than two (2) years after completion of the work performed under this Agreement.</p>	<p>\$5,000,000</p>

Umbrella or excess liability coverage may be utilized to satisfy the dollar amounts of coverage set forth above. All dollar amounts of coverage set forth above shall be per occurrence and in the aggregate and include a cross liability and severability of interest clause. The policies described herein shall (a) be endorsed to show that the insurers waive subrogation against Buyer, its affiliates, directors, officers and employees, (b) the insurance is primary and noncontributory, and (c) not expire, terminate or otherwise discontinue coverage except upon not less than thirty (30) days prior written notice to Buyer. Seller shall, before commencing work under this Agreement, deliver to Purchasing and Contracts, ALLETE, Inc., 30 West Superior Street, Duluth, Minnesota 55802, certification of insurance coverage completed by its insurance carrier(s) or agent(s) certifying that minimum insurance coverages as required herein are in effect.

## **SECTION 9. TERMINATION; EVENTS OF DEFAULT**

**9.1 Termination for Convenience.** Buyer shall have the right to terminate the Agreement or any part thereof, including but not limited to a product specific termination or a location specific termination, upon ninety (90) days written Notice to Seller; provided, however, that such termination shall not be effective as to any Orders placed prior to such termination. Seller shall have the right to terminate this Agreement or any part thereof, including, without limitation, a product specific termination or a location specific termination, (i) upon ninety (90) days written Notice to Buyer; provided, however, that such termination shall not be effective as to any Orders placed prior to such termination, or (ii) upon thirty (30) days written notice to Buyer in the event Buyer has not placed an Order for Product for sixty (60) or more consecutive days excluding outages prior to Seller's termination Notice. Notwithstanding the foregoing Seller shall not have the right to terminate this Agreement pursuant to this Section 9.1 with respect to the supply of Product to the Taconite Harbor Energy Center prior to January 1, 2017. For purpose of this Section 9.1, in the event Buyer delivers a blanket purchase order to Seller that contemplates future deliveries based on further releases or other instructions from Buyer, the term "Order" shall mean such releases or other instructions that have actually been delivered at the time the termination Notice is delivered or are delivered subsequent to such Notice for delivery of Product prior to the termination date set forth in such Notice, and shall not refer to the blanket purchase order.

**9.2 Termination by Buyer or Seller for Default.** Buyer shall have the right to terminate or suspend this Agreement, by written Notice to Seller, in whole or in part, including but not limited to a product-specific termination or a location-specific termination, in the case of a material breach of this Agreement by Seller, if such breach is not cured by the later of (i) thirty (30) days after written Notice from Buyer and (ii) the expiration of a time period established in a plan provided by Seller to Buyer within ten (10) days of Seller's receipt of such Notice, and acceptable to Buyer in its sole discretion, to commence a cure within thirty (30) days after receipt of such Notice and diligently and continuously pursue a cure thereafter (a "Seller Event of Default"). Seller shall have the right to terminate or suspend this Agreement, by written Notice to Buyer, in whole or in part, in the case of (a) a failure by Buyer to make any payment due hereunder (other than the disputed portion of any amount due hereunder that is being disputed in good faith) if such failure is not cured within ten (10) days after written Notice from Seller, or (b) a material breach of any other provision of this Agreement by Buyer, if such breach is not cured by the later of (i) thirty (30) days after written Notice from Seller and (ii) the expiration of a time period established in a plan provided by Buyer to Seller within ten (10) days of Buyer's receipt of such Notice, and acceptable to Seller in its sole discretion, to commence a cure within thirty (30) days after receipt of such Notice and diligently and continuously pursue a cure thereafter (a "Buyer Event of Default") and, together with a Seller Event of Default, an "Event of Default"). For the purpose of this Section 9.1, a Party shall be conclusively deemed to have materially breached this Agreement in the event (a) such Party makes an assignment for the benefit of its creditors generally or files a petition in bankruptcy, insolvency or reorganization proceedings or (b) such Party has filed against it a petition in bankruptcy, insolvency or reorganization proceedings if within sixty days after the filing thereof either the petition is not dismissed or the order for relief is not stayed or dismissed.

**9.3 Other Remedies for Events of Default.** Upon the occurrence and during the

continuation of an Event of Default hereunder, in addition to the termination rights provided for in Section 9.1, the Party not in default shall have the right, at its option, to pursue any other remedies provided under this Agreement or now or hereafter existing at law or in equity or otherwise. Without limiting the foregoing:

- (a) Unless excused by Force Majeure or Buyer's failure to perform, if Seller fails to deliver the quantity of Product required in accordance with this Agreement and each Order, Seller shall pay to Buyer, within fifteen (15) business days of receipt of an invoice therefor, an amount for each pound of Product of such deficiency equal to (i) the price paid by Buyer for replacement Product, including costs reasonably incurred by Buyer in purchasing such substitute powdered activated carbon and transportation charges, if any, reasonably incurred by Buyer (the "Replacement Price") less (ii) the sum of the contract price applicable to the Product that Seller failed to deliver plus the cost that would have been incurred to transport such Product from Seller's facility to the point of delivery, except that if such difference is zero or negative, then neither Party shall have any obligation to make any deficiency payment to the other; *provided, further* that in no event shall the Replacement Price include any penalties or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.
- (b) Unless excused by Force Majeure or Seller's failure to perform, if Buyer fails to accept delivery of the quantity of Product covered by any Order in accordance with this Agreement, Buyer shall pay to Seller, within fifteen (15) business days of receipt of an invoice therefor, an amount for each pound of Product of such deficiency equal to (i) the contract price applicable to the Product that Buyer failed to accept *plus* the actual amount of any transportation charges incurred by Seller to deliver Product to the point of delivery *less* (ii) the highest reasonable market price (FOB the point of delivery for the Product that Buyer failed to accept) at which Seller sells or otherwise disposes of the Product at the time of Buyer's breach (the "Sales Price"); *provided, however*, that only quantities of Product resold by Seller solely for purposes of effecting cover pursuant to this Section shall be included in the calculation of the Sales Price and any quantities of Product otherwise sold, or to be sold, by Seller to third parties notwithstanding Seller's attempt to cover shall not be included in such calculation. If such difference is zero or negative, then neither Party shall have any obligation to make any deficiency payment to the other; *provided, further*, in no event shall the Sales Price include any penalties or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Buyer's liability. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.
- (c) Both Parties shall be subject to a commercially reasonable good faith obligation to mitigate any damages hereunder.
- (d) All determinations shall be made in a commercially reasonable manner.



- (e) If a Party obligated to make a payment under this Section 9.2 timely makes such payment to the other Party, or if the calculations provided in Section 9.2(a) or 9.2(b), as applicable, result in no deficiency payment being due, then any failure to deliver or accept Product as described in this Section 9.2 shall constitute an Event of Default that has been cured.
- (f) Either Party may waive a breach by the other Party in accordance with Section 17, provided that no waiver by or on behalf of either Party of any breach of any of the covenants, provisions, conditions, restrictions or stipulations contained in this Agreement shall take effect or be binding on a Party unless the waiver is reduced to writing and executed by such Party, and any such waiver shall be deemed to extend only to the particular breach waived and shall not limit or otherwise affect any rights that a Party may have with respect to any other or future breach.

## **SECTION 10. FORCE MAJEURE**

**10.1 Definition of Force Majeure.** "Force Majeure" means an event or condition that prevents or delays the performance by a Party of its obligations under this Agreement to the extent beyond the reasonable control, and without the fault or negligence, of the Party claiming relief, and which by the reasonable exercise of due diligence such claiming Party is unable to prevent or overcome. Force Majeure includes, but is not limited to, fire, floods, earthquake, hurricane, tornado, explosion, accident, war or war-like operations (whether or not a state of war is declared), riot, Acts of God, acts of terrorism, insurrection, nationwide or regional strikes, nationwide or regional lockouts, and nationwide or regional labor disputes, enactment of new applicable law or order, or changes in applicable law that prevent performance, and breakdowns of or damage to Buyer's plants, equipment, facilities, or power systems interconnected with generating stations (including shutdowns for unplanned maintenance as may be necessary to mitigate or eliminate the imminent threat of such breakdowns or damage). Force Majeure shall not include delays caused by unfavorable weather that is not abnormal for the season and geographic area (subject to the weather events explicitly listed as Force Majeure events above), unsuitable ground conditions, inadequate construction force, strikes or labor disturbances involving the personnel of Seller or any of its subcontractors (except to the extent as part of a nationwide or regional strike, lockout or labor disturbance that does not solely affect Seller or any of its subcontractors), market conditions or the failure of either Party to place orders for equipment or materials sufficiently in advance to ensure delivery when needed.

**10.2 Effect of Force Majeure.** If Force Majeure prevents either Party from performing any of its obligations under this Agreement, and if such Party gives to the other Party Notice of the Force Majeure (which Notice (i) shall identify the event of Force Majeure and, to the extent known, the expected length of time during which the event of Force Majeure will be in effect and the plan of the Party experiencing the Force Majeure to correct or remove it and (ii) be delivered promptly after the start of the Force Majeure event), then the obligations of the Party giving such Notice are excused to the extent made necessary by the Force Majeure and during its continuance, which time period shall be called the "Force Majeure Period." An event of Force Majeure shall excuse the obligations of the notifying Party only to the extent that the Party takes all commercially reasonable actions necessary to overcome the Force Majeure with all reasonable dispatch. Only the Party suffering a Force Majeure may claim Force Majeure relief;

provided, however, that the other Party shall be excused from its obligations that depend upon the performance of the obligations excused by the Force Majeure event. An attempt by the Party suffering an event of Force Majeure to perform its obligations notwithstanding the Force Majeure shall not constitute a waiver of the right to claim Force Majeure if such attempt proves unsuccessful. Notwithstanding the foregoing, the Party affected by Force Majeure, in its sole discretion, shall not be required to submit to unreasonable conditions or restrictions imposed by any governmental authority or contract counterparty, or to make significant capital expenditures, to overcome the Force Majeure. In the event, and to the extent, a Force Majeure prevents Buyer from accepting goods and services, Seller's sole remedy shall be an extension of the Term of this Agreement for the time period lost by reason of the Force Majeure.

## **SECTION 11. INDEMNIFICATION; LIMITATION OF LIABILITY**

**11.1 Intellectual Property.** Seller shall, at its own expense, hold harmless, protect and defend Buyer against any claim, suit or proceeding brought against Buyer which is based on a claim, whether rightful or otherwise, that the manufacture and sale of the Products to Buyer constitute(s) an infringement of any U.S. intellectual property rights, and Seller shall pay all damages, costs, and expenses arising from such claim.

**11.2 General Indemnification by Seller.** Seller shall completely indemnify, defend, and hold Buyer, its officers, agents and representatives ("Buyer Indemnitees") harmless from and against all claims for personal injury, property damage, wrongful death or other damages, losses and expenses, including reasonable attorneys' fees ("Claims"), arising out of, or resulting from, Seller's negligence or willful misconduct. It is expressly understood and agreed that this obligation to completely indemnify, defend and hold harmless shall apply and be enforceable for all Claims except to the extent caused by the negligence or willful misconduct of the Buyer Indemnitees. If a Claim is made by an employee of Seller against a Buyer Indemnitee, Seller shall and hereby agrees to indemnify the Buyer Indemnitee to the same extent as if the Claim was made by a nonemployee of the Seller without regard to any limitation on Seller's liability for injuries to its employees, whether established by judicial decision, statute or otherwise. This provision shall also be enforceable in addition to and beyond any insurance coverages required for the protection of Buyer as permitted by law.

**11.3 General Indemnification by Buyer.** Buyer shall completely indemnify, defend and hold Seller, its officers, agents and representatives ("Seller Indemnitees") harmless from and against all Claims arising out of, or resulting from, Buyer's negligence or willful misconduct. It is expressly understood that this obligation to completely indemnify, defend and hold harmless shall apply and be enforceable for all Claims except to the extent caused by the negligence or willful misconduct of the Seller Indemnitees. If a Claim is made by an employee of Buyer against a Seller Indemnitee, Buyer shall and hereby agrees to indemnify the Seller Indemnitee to the same extent as if the Claim was made by a nonemployee of the Buyer without regard to any limitation on Buyer's liability for injuries to its employees, whether established by judicial decision, statute or otherwise.

### **11.4 Limitation of Liability.**

- (a) Except for indemnification obligations under this Section 11 with respect to claims by a

third party that is not an Affiliate of the indemnified party or as otherwise expressly provided in this Agreement, neither Party shall be liable to the other Party for any punitive, special, incidental or consequential damages based upon breach of any warranty or of contract, negligence or any other theory of legal liability, including, but not limited to, loss of profits or revenue, loss of use of the goods or any associated equipment, cost of capital, and downtime costs.

To the maximum extent permitted by law, each party's annual aggregate liability under or in connection with this Agreement, whether in an action in contract or in tort or otherwise, shall in no event exceed \$1,000,000 (the "Cap"); provided that (i) the Cap shall not limit a party's ability to recover proceeds of insurance required to be maintained pursuant to this Agreement that are actually paid by the carrier(s) with respect to claims arising out of the performance of this Agreement, (ii) claims by Seller for undisputed invoices for Product, which conforms to the requirements of this Agreement, that was delivered to Buyer shall not be subject to such Cap, and (iii) the Cap shall not apply to Seller's indemnification obligations (A) under Section 11.1 or (B) under Section 11.2 with respect to Claims brought by third parties not affiliated with Buyer for personal injury or property damage, and (iv) the Cap shall not apply to Buyer's indemnification obligations under Section 11.3 with respect to Claims brought by third parties not affiliated with Seller for personal injury or property damage.

(b) The limitations of liability provided in Sections 11.4(a) and (b) shall not apply with regard to claims arising out of a Party's gross negligence, willful misconduct or breach of confidentiality obligations contained in Section 14.

## **SECTION 12. CHOICE OF LAW; VENUE**

This Agreement and the rights of all Parties hereunder shall be construed under and governed by the laws of the State of Minnesota. The Parties agree to submit to the exclusive jurisdiction of the State and Federal courts sitting in St. Louis County, Minnesota, and waive any objections to such location based on jurisdiction, venue or inconvenient forum.

## **SECTION 13. ASSIGNMENTS**

Buyer reserves the right to assign this Agreement to successors, assigns, Affiliates or subsidiaries without further notice to or consent of Seller; provided that Buyer shall not be relieved of its obligation hereunder in the case of any such assignment. Subject to the last sentence of this Section 13, no part of this Agreement may be assigned or subcontracted by Seller without Buyer's written consent; *provided, however*, that Seller shall be permitted to assign this Agreement (1) as collateral in connection with a financing but shall not be relieved of its obligations hereunder in the case of any such assignment or (2) to a party who acquires all or substantially all the assets of Seller pursuant to a written agreement and has a net worth at least equal to that of Seller; *provided, further*, that in each of (1) and (2) Seller provide to Buyer prior written notice of such assignment. Notwithstanding the foregoing, Buyer expressly acknowledges and agrees that Seller may sub-contract transportation-related services hereunder to a third-party carrier; provided that Seller shall not be relieved of its obligation hereunder in the case of any such assignment.

## **SECTION 14. CONFIDENTIALITY**

Each Party (a “Receiving Party”) shall maintain as confidential all the terms and provisions of this Agreement and all confidential and proprietary information, data, knowledge and know-how relating, directly or indirectly, to the other Party or its Affiliates, or their respective businesses, products, condition (financial or other), operations, assets, liabilities or intellectual property, which is delivered, disclosed or furnished to the Receiving Party by or on behalf of the other Party (a “Disclosing Party”) before, on or after the Effective Date (collectively, “Confidential Information”). Notwithstanding the foregoing, each Receiving Party may disclose Confidential Information of the Disclosing Party to its board of directors or other internal governing body, Affiliates, independent auditors, bankers, brokers, providers of financing, investors, consultants and advisors (“Representatives”); *provided*, that before disclosing any Confidential Information to its Representative, the Receiving Party shall inform such Representative of the confidential nature thereof and of the Receiving Party’s obligations under this Agreement. The Receiving Party shall be liable to the Disclosing Party for any use or disclosure of Confidential Information by any such person that would violate this Section 14 if such person was a party hereto. Receiving Party shall not use any Confidential Information of the Disclosing Party for any purpose other than the performance, administration or enforcement of this Agreement. Nothing in this Section 14 shall prohibit either Buyer or Seller from making public the existence of this Agreement, or the term of this Agreement. Buyer and Seller acknowledge specifically that this provision shall not prohibit the disclosure of Confidential Information:

- (a) To the Minnesota Public Utilities Commission or other Minnesota State agencies, and other parties/intervenors, in any ratemaking cost recovery or resource planning proceeding that is related to this Agreement; *provided*, that with respect to such proceeding Buyer shall pursue the same protections to maintain the confidentiality of the Confidential Information that it would typically pursue to protect its own confidential information.
- (b) To a court in connection with the enforcement of this Agreement or any dispute under this Agreement.
- (c) In response to an order, directive or request for information from a governmental authority, court or litigant, where the disclosure of such Confidential Information is required by law.
- (d) As required to comply with any law, rule, regulation or other directive or requirement of or in connection with any report or information filed with the Securities and Exchange Commission or other appropriate governmental authority or agency.
- (e) To consultants and contractors performing work related to this Agreement who agree in writing to protect the confidentiality of such information as and to the extent provided in this Agreement.

In the foregoing situations (b) through (e), the Party disclosing information shall comply with any specific confidentiality requirement(s) imposed by this Agreement, shall notify the other Party as soon as practicable prior to disclosure, and shall otherwise take reasonable measures to limit the disclosure of Confidential Information in a manner consistent with applicable law.

Such measures shall include, as appropriate and permitted by applicable law, filing documents under seal, redacting specific pricing information from disclosed documents, and disclosing documents subject to court-approved protective orders.

“Confidential Information” shall not include any information that (i) is or becomes generally available to the public other than as a result of a disclosure by the Receiving Party, (ii) except for the terms and conditions of this Agreement, was within the Receiving Party’s rightful possession prior to it being furnished to the Receiving Party by or on behalf of the Disclosing Party pursuant hereto, or (iii) becomes available to the Receiving Party on a non-confidential basis from a source other than the Disclosing Party; *provided*, that the Receiving Party does not know or have reason to believe that the source is bound by a confidentiality agreement with, or other contractual, legal or fiduciary obligation of confidentiality to, the Disclosing Party or any other party with respect to such information.

## **SECTION 15. NOTICES**

Except as otherwise specifically provided by this Agreement, any notice provided for pursuant to this Agreement or given or made in connection with this Agreement ("Notice") shall be in writing and shall be deemed properly and sufficiently given or made if delivered in person with receipt acknowledged in writing by the recipient, or sent by registered or certified mail return receipt requested, to the respective Parties at the addresses specified below:

If to Seller, addressed to:

ADA Carbon Solutions (Red River), LLC  
c/o ADA Carbon Solutions, LLC  
1460 W. Canal Court  
Littleton, Colorado 80120  
Attention: Vice President of Sales

*With a copy to:*

ADA Carbon Solutions (Red River), LLC  
c/o ADA Carbon Solutions, LLC  
1460 W. Canal Court  
Littleton, Colorado 80120  
Attention: General Counsel

If to Buyer, addressed to:

ALLETE, Inc.  
30 West Superior Street  
Duluth, Minnesota 55802  
Attention: Manager of Purchasing and Contracts

## **SECTION 16. SELLER AS AN INDEPENDENT CONTRACTOR**



It is agreed and understood that during the performance of this Agreement, Seller shall be considered an independent contractor, and not an agent of Buyer.

## **SECTION 17. WAIVERS**

The failure of either Party to require strict performance of any provision of this Agreement by the other Party, or the forbearance to exercise any right or remedy under this Agreement shall not be construed as a waiver by such Party of the right to require strict performance of any such provision or the relinquishment by such Party of any such right or remedy it might have with respect to any subsequent breach of such provisions. All waivers shall be signed in writing, designated a waiver, and signed by the waiving Party, and shall recite the rights waived.

## **SECTION 18. HEADINGS AND SECTION NUMBERS; CONSTRUCTION**

**18.1 Headings Not to Affect Construction.** The headings of the sections of this Agreement are inserted for convenience only and shall have no effect on the construction, interpretation or meaning of this Agreement.

**18.2 References to Section Numbers.** All references in this Agreement to a section of this Agreement will be interpreted to refer to the entire section, including subsections.

## **SECTION 19. AMENDMENTS**

Any and all amendments, supplements and modifications to this Agreement shall be effective only if in writing and signed by the Parties.

## **SECTION 20. COMPLETE AGREEMENT**

This Agreement is the complete and total expression of all agreements, contracts, covenants and other promises between Seller and Buyer related to the sale of Product set forth herein to Buyer. The terms and conditions of this Agreement will prevail notwithstanding any different, conflicting, or additional terms and conditions that may appear on any purchase order, invoice, acknowledgement or any other such form or document even if signed by both Parties. No preprinted terms and conditions or other preprinted provisions contained in or attached to or referred to in any purchase order submitted by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller shall operate to amend, modify, supplement or supersede the provisions contained in this Agreement, and any provision or statement in any purchase order issued by Buyer or in any order acknowledgment, acceptance, or invoice issued by Seller that purports to make the terms of such document exclusive or binding shall be void as it relates to this Agreement.

## **SECTION 21. COUNTERPARTS**

Buyer and Seller may execute this Agreement in two or more counterparts, each of which shall constitute an original document and all of which taken together shall constitute a single Agreement.

## **SECTION 22. SURVIVAL**

The provisions of Sections 6 (Taxes, Fees and Royalties), 7 (Invoicing and Payment), 11 (Indemnification; Limitation of Liability)(with respect to indemnification obligations and limitations of liability), 12 (Choice of Law; Venue), 14 (Confidentiality), 15 (Notices), 16 (Seller as Independent Contractor), 18 (Headings and Section Numbers; Construction), 20 (Complete Agreement), 22 (Survival), 23 (Audit Rights), and 24 (Severability) shall survive the expiration or earlier termination of this Agreement; provided, however, that the provisions of Section 14 (Confidentiality) shall only survive for a period of five years following the expiration or earlier termination of this Agreement. In addition, the provisions of Section 8 (Insurance) that require pollution liability insurance provided on a "claims made" policy form to be maintained in effect, or provide for an extended reporting period, shall survive for a period of two years following the expiration or earlier termination of this Agreement.

## **SECTION 23. AUDIT RIGHTS**

Requests for payment by either Party which are based on payment under Section 4.6 or Section 9.2 shall be subject to an audit by the other Party. The Party receiving such payment shall maintain adequate supporting records for verification of the amount of such payment, in such form as the other Party may reasonably direct or, absent direction, in accordance with generally accepted accounting procedures. During the period of performance and the two-year period following payment, the Party receiving payment shall preserve such records and allow access to them by auditors appointed by the other Party.

## **SECTION 24. SEVERABILITY**

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision or any other jurisdiction, but this Agreement shall be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

## **SECTION 24. EQUAL EMPLOYMENT OPPORTUNITY**

When this Agreement is used for procurement in support of Purchaser's electric utility business, Supplier and its Subcontractors shall abide by the requirements of §§ 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. These regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex national origin, protected veteran status or disability.


**[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK ]**

IN WITNESS WHEREOF, the Parties have duly executed this Agreement in their respective corporate names as of the date first above written.

**ADA Carbon Solutions (Red River), LLC  
as Seller**

By:   
Name: THOMAS E. COYNE  
Title: VICE PRESIDENT OF SALES

**ALLETE, Inc., as Buyer**

By:   
Name: Tracey A. Mattfield  
Title: Contract Administrator

**EXHIBIT A**  
**PRODUCTS, VOLUMES AND PRICING**

**Products**

**Brominated Carbon (Halogenated):**

	2016 (lbs)	2017 (lbs)	2018 (lbs)	2019 (lbs)	2020 (lbs)
Minimum	TBD	TBD	TBD	TBD	TBD
Maximum	1, 689, 240	1, 613, 640	1,689,240	TBD	TBD
Average	TBD	TBD	TBD	TBD	TBD

**Non-Brominated Carbon (Non-Halogenated):**

	2016 (lbs)	2017 (lbs)	2018 (lbs)	2019 (lbs)	2020 (lbs)
Minimum	116,070	121,830	115,500	TBD	TBD
Maximum	1,882,690	1,816,690	1,892,290	TBD	TBD
Average	193,450	203050	203050	TBD	TBD

**Powder Activated Carbon:**

Tac Harbor only

	2016 (lbs)
Minimum	350,000
Maximum	725,000
Average	550,000

**Pricing**

[TRADE SECRET DATA BEGINS

	2016	2017	2018	2019	2020
PowerPAC Premium (Brominated)	\$0.60/lb .	\$0.61/lb.	\$0.63/lb.	\$0.66/lb.	\$0.69/lb.
PowerPAC (Non Brominated)	\$0.55/lb .	\$0.56/lb.	\$0.58/lb.	\$0.61/lb.	\$0.64/lb.
FastPAC Premium (Brominated)	\$0.81/lb .	NA*	NA*	NA*	NA*

\*If Buyer desires to purchase FastPAC Premium after 2016 pricing shall be by mutual written agreement.

Freight will be Pre-paid Add with Fuel Surcharge (actual cost). All freight including fuel surcharge shall be at Seller's actual costs pursuant to Section 6 of the Agreement.

TRADE SECRET DATA ENDS]



## **EXHIBIT B**

### **PRODUCT SPECIFICATIONS**

#### **PowerPAC Premium (Halogenated):**

- Moisture 12% maximum as packed
- Size 95% minimum minus 325 mesh
- Delivery can be made in pneumatic bulk trailers

#### **PowerPAC (Non-Halogenated):**

- Moisture 8% maximum as packed
- Size 95% minimum minus 325 mesh
- Delivery can be made in pneumatic bulk trailers

#### **FastPAC Premium (Halogenated)**

- Moisture 8% maximum as packed
- Size: 95% minimum minus 325 mesh
- Delivery can be made in pneumatic bulk trailers

## EXHIBIT C

### BUYER LOCATION-SPECIFIC REQUIREMENTS

#### Minnesota Power Chemical Delivery Information & Contact List

##### **Boswell Energy Center**

All truck drivers hauling chemicals to Boswell Energy Center are directed to pull into the Information Center and park prior to the site access gate. Either the truck driver or Information Center Personnel will contact an Environmental Systems Operator (ESO) for assistance and access to the site and unloading assistance. If a delivery arrives after the Information Center receiving hours, contact #'s are posted on signs at the Information Center. Drivers are prohibited from entering the site (passing thru the gate) without an ESO escort.

Chemical delivery drivers will be required to go through annual contractor site specific safety training.

##### **Contact List for an ESO Chemical Unloading Escort**

<b>Minnesota Power Location</b>	<b>Chemical</b>	<b>Onsite Contact Position</b>	<b>Contact #</b>	<b>Unloading Hours</b>
Boswell Energy Center	Carbon	Unit 3 Control Room Operator	218-313-4660	24/7, Driver must monitor for leaks & dust

**NOTE:** If there are any environmental concerns or questions please contact the following:

##### **Contact List for any Environmental Questions or Concerns**

<b>Name</b>	<b>Extension</b>	<b>Phone #</b>	<b>Email</b>
Unit 3 Control Room	4660	218-313-4660	NA

## **Taconite Harbor Energy Center**

### **Contact List for a Plant Attendant Chemical Unloading Escort**

<b>Minnesota Power Site</b>	<b>Chemical</b>	<b>Onsite Contact Position</b>	<b>Contact #</b>	<b>Unloading Hours</b>
Taconite Harbor Energy Center	Carbon	Control Room Operator	218-406-6800	24/7

**NOTE:** If there any environmental concerns or questions please contact one of the following individuals:

### **Contact List for any Environmental Questions or Concerns**

<b>Name</b>	<b>Extension</b>	<b>Phone #</b>	<b>Email</b>
Brian W Smith	6881	218-406-6881	bwsmith@mnpower.com
Rob Kelly	6858	218-406-6858	rkelly@mnpower.com
Chris Baumgartner	6864	218-406-6864	cbaumgartner@mnpower.com
Brian Sandmann	68809	218-406-6809	bsandmann@mnpower.com

When arriving at Taconite Harbor drivers are to contact the control room operator at extension 6800. The CRO will have an Auxiliary Operator meet the driver and direct him to the proper connection for unloading. All areas for transferring chemicals are either inside the building or are well lighted so deliveries can be made 24/7.

**AMENDMENT NO. 1 TO**  
**CHEMICAL SUPPLY AGREEMENT**

This AMENDMENT NO. 1 TO CHEMICAL SUPPLY AGREEMENT (the “Amendment”), by and between ADA Carbon Solutions (Red River), LLC, a Delaware limited liability company, (“Seller”) and Allete, Inc., a Minnesota corporation, (“Buyer”) (together, the “Parties” and individually a “Party”), is effective as of December 13, 2017 (the “Effective Date”). Capitalized terms used and not otherwise defined in this Amendment will have the meanings set forth in the Agreement (as defined below).

**RECITALS**

WHEREAS, the Parties entered into a Chemical Supply Agreement, entered into as of January 1, 2016 (the “Agreement”);

WHEREAS, the Parties now desire to extend the term of the Agreement;

WHEREAS, the Parties now desire to amend various provisions of the Agreement in connection with extending the Agreement;

NOW, THEREFORE, in consideration of the promises and the mutual agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

**AGREEMENT**

1. Term. Section 2 of the Agreement is hereby amended by deleting the date “December 31, 2018” and replacing it with “December 31, 2023”.
2. Pricing. Exhibit A of the Agreement is hereby amended by deleting the table entitled “Pricing” and restating it as follows:

[TRADE SECRET DATA BEGINS

Pricing

	2016	2017	2018	2019	2020	2021	2022	2023
PowerPAC Premium (Brominated)	\$0.60/lb	\$0.61/lb	\$0.61/lb	\$0.63/lb	\$0.65/lb	\$0.65/lb	\$0.67/lb	\$0.67/lb
PowerPAC (Non-Brominated)	\$0.55/lb	\$0.56/lb	\$0.56/lb	\$0.58/lb	\$0.60/lb	\$0.60/lb	\$0.62/lb	\$0.62/lb
FastPAC Premium (Brominated)	\$0.81/lb	NA*	NA*	NA*	NA*	NA*	NA*	NA*

\* If Buyer desires to purchase FastPAC Premium after 2016 pricing shall be by mutual written agreement

Freight will be Pre-paid Add with Fuel Surcharge (actual cost). All freight including fuel surcharge shall be at Seller’s actual costs pursuant to Section 6 of the Agreement

**TRADE SECRET DATA ENDS]**

3. MISCELLANEOUS.

- a. Except as specifically amended by this Amendment, the terms and conditions of the Agreement prior to the date hereof shall remain in full force and effect.
- b. This Amendment may be executed in any number of counterparts, any of which may be delivered via facsimile or PDF, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one instrument.
- c. No provision of this Amendment shall be deemed waived without express written notice of waiver. Failure to demand strict performance in one instance shall not be deemed to waive either Party's right to insist on strict performance in any other instance.
- d. If any provision of this Amendment is held to be invalid or unenforceable under any present or future law, in whole or in part, by any court of competent jurisdiction, such provision shall be ineffective to the extent of such invalidity or unenforceability without invalidating the remaining provisions of this Amendment or affecting the validity or enforceability of such provisions. Such invalid or unenforceable provisions shall be replaced by a provision that comes closest to the business objective intended by such invalid or unenforceable provision without being invalid or unenforceable itself.
- e. This Amendment shall be interpreted, governed and construed under the laws of the State of Minnesota, without regard for its conflict of laws provisions.

*Signatures commence on next page*

Signed and executed by authorized representatives of the Parties:

**Allete, Inc.**

By: Tracey Mattfield

Name: Tracey Mattfield

Title: Contract Administrator

Date: Dec. 13, 2017

**ADA Carbon Solutions (Red River), LLC**

By: Oscar Velasquez

Name: Oscar Velasquez

Title: National Sales Manager

Date: Dec. 13, 2017





Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

**Docket Number:** E015/M-22-547  
**Requested From:** Minnesota Power  
**Type of Inquiry:** Financial

☐ Nonpublic ☒ Public  
**Date of Request:** 10/27/2022  
**Response Due:** 11/7/2022

**SEND RESPONSE VIA EMAIL TO:** [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

**Assigned Analyst(s):** Andrew Golden and Holly Soderbeck

**Email Address(es):** [andrew.golden@state.mn.us](mailto:andrew.golden@state.mn.us) and [holly.soderbeck@state.mn.us](mailto:holly.soderbeck@state.mn.us)

**Phone Number(s):** 651-539-1819 and 651-539-1849

**ADDITIONAL INSTRUCTIONS:**

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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**Request Number:** 4  
**Topic:** Economic Dispatch  
**Reference(s):** Petition, pp. 5-6

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**Request:**

- A. Please explain how Minnesota Power considers reagent costs when determining if Boswell 3 or Boswell 4 meet factors for economic dispatch.
- B. Please explain the conditions or scenarios for Minnesota Power being able to determine market dispatch for Boswell 3 and 4 units and for Midcontinent Independent System Operator (MISO) to determine dispatch either unit.

**Responses:**

- A. Reagent costs are calculated based on reagent purchase prices, usage rates, and are calculated on a \$/MWH basis. These \$/MWH values are then used as an adder when developing Boswell 3 and 4's energy offer that is submitted to MISO. The reagents considered include Limestone, Aqueous Ammonia, Activated Carbon, Urea, and Lime.
- B. MISO determines market dispatch for generating units. Minnesota Power submits an offer for each of its generators to MISO for dispatch. The generation offer parameters include: Start Up Costs, Daily Run Times, No Load Costs, Start Up and Notification Times, Unit Limits (ie: minimums and maximums), Ramp Rates, Energy Offers, and Reserve Offers (Ancillary Services).

The unit parameters are evaluated by MISO to determine market dispatch levels. In the event the units are required by MISO to serve load or run for transmission reliability, MISO will dispatch the units accordingly. MISO indicates a market dispatch with varying generation levels one day prior to the actual dispatch. Due to the increased volatility in energy market prices and transmission reliability, and because of the short term nature of MISO dispatching units, it is difficult for

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To be completed by responder

**Response Date:** November 7, 2022  
**Response by:** Laurel Udenberg  
**Email Address:** [ludenberg@mnpower.com](mailto:ludenberg@mnpower.com)  
**Phone Number:** (218) 723-7537



Minnesota Department of Commerce  
85 7th Place East | Suite 280 | St. Paul, MN 55101  
Information Request

**Docket Number:** E015/M-22-547  
**Requested From:** Minnesota Power  
**Type of Inquiry:** Financial

☐ Nonpublic ☒ Public  
Date of Request: 10/27/2022  
Response Due: 11/7/2022

**SEND RESPONSE VIA EMAIL TO:** [Utility.Discovery@state.mn.us](mailto:Utility.Discovery@state.mn.us) as well as the assigned analyst(s).

Minnesota Power to determine when, how long, or how much the units will be dispatched. While the difficulty applies to both Units 3 and 4, Unit 3's market dispatch is increasingly difficult to determine because of its economic status, meaning the unit has the potential to come off and on based MISO's market dispatch with minimal notice. Conditions that impact the need to dispatch generation and energy market prices include load level, transmission and generation availability.

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To be completed by responder

Response Date: November 7, 2022  
Response by: Laurel Udenberg  
Email Address: ludenberg@mnpower.com  
Phone Number: (218) 723-7537

## **CERTIFICATE OF SERVICE**

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce  
Public Comments**

**Docket No. E015/M-22-547**

Dated this **10<sup>th</sup>** day of **November 2022**

**/s/Sharon Ferguson**

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Matthew	Brodin	mbrodin@allete.com	Minnesota Power Company	30 West Superior St  Duluth, MN 55802	Electronic Service	No	OFF_SL_22-547_M-22-547
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400  St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_22-547_M-22-547
Hillary	Creurer	hcreurer@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 55802	Electronic Service	No	OFF_SL_22-547_M-22-547
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_22-547_M-22-547
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022093	Electronic Service	Yes	OFF_SL_22-547_M-22-547
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_22-547_M-22-547
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350  Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_22-547_M-22-547