

**Northern States Power Company, doing business as Xcel Energy
Information Request**

Docket No.: EL25-032
 South Dakota Knife River
 Requestor: Xcel Energy
 Requested From: Sioux Valley Energy
 Analyst: Steve Kolbeck
 Date of Request: March 10, 2026 Data Request No. 1-1
 Response Due: March 24, 2026

Question:

Ted Smith states in his rebuttal testimony that Knife River will need “to install approximately 9,400 feet (1.8 miles) of medium voltage distribution line.” Provide all facts that support, were relied upon, or assumed for this testimony.

Response:

During the service process with Sioux Valley Energy, Knife River provided a proposed site CAD file depicting conveyor and motor locations along with a table of data listing seven different service points. Sioux Valley determined the length of 9,400 feet based on examination of aerial imagery assuming Knife River would be taking service in the southeast corner of their property from Xcel, which is close to one of Xcel’s existing transmission lines. The route identified by Sioux Valley involves installing distribution facilities along the same path as the conveyor and motor facilities outlined by Knife River. A screenshot depicting the assumed route and length of the route are shown in an attached image.

KNIFE RIVER

24033 CORSON AGGREGATE PLANT PROJECT
Preliminary Load Values

Nameplate	HP	FLA	Calc KVA	Load Factor	Adjusted KVA	Service Description	Service To:	Notes
EH101 480V	1175	1769	1,468.98	70.00%	1,028.28	Service Point-1, 480/277, 3PH, 4W	Service to 2500A/2500A MSB	PAD-MOUNT XFMR
EH101 4160V	1000	133	957.17	70.00%	670.02	Service Point-1, 4160V, 3PH, 4W	Service to CR101 Soft Start	PAD-MOUNT XFMR
EH102 480V	500	710	589.58	70.00%	412.71	Service Point-2, 480/277, 3PH, 4W	Service to 1200A/1200A MSB	PAD-MOUNT XFMR
EH201 480V	810	1086	901.81	70.00%	631.27	Service Point-3, 480/277, 3PH, 4W	Service to 2000A/2000A MSB	PAD-MOUNT XFMR
EH202 480V	1192	1668	1,385.11	70.00%	969.58	Service Point-4, 480/277, 3PH, 4W	Service to 2500A/2500A MSB	PAD-MOUNT XFMR
EH203 480V	656	1329	1,103.60	70.00%	772.52	Service Point-5, 480/277, 3PH, 4W	Service to 2000A/2000A MSB	PAD-MOUNT XFMR
EH203 4160V	2040	271.5	1,953.93	70.00%	1,367.75	Service Point-5, 4160V, 3PH, 4W	Service to 4160V 1000A Switch	PAD-MOUNT XFMR
EH204 480V	2774	3671	3,048.40	70.00%	2,133.88	Service Point-6, 480/277, 3PH, 4W	Service to 4000A/4000A MSB	PAD-MOUNT XFMR
EHPOND	400	600	498.24	70.00%	348.77	Service Point-7, 480/277, 3PH, 4W	Service to 1500A/1500A MSB	PAD-MOUNT XFMR
SUB-TOTAL	10547	11237.5	11,906.83		8,334.78			
Totals:	10,547.00	11,237.50	11,906.83		8,334.78			
TOTAL SITE, Amended KVA					8,334.78			
MVA					8.33			

Preparer: Ted Smith
Title: V.P Engineering/Operations
Department: Engineering/Operations
Telephone: (605)534-3535
Date: March 24, 2026

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Requestor: Xcel Energy
Requested From: Sioux Valley Energy
Analyst: Steve Kolbeck
Date of Request: March 10, 2026 Data Request No. 1-2
Response Due: March 24, 2026

Question:

Ted Smith states in his rebuttal testimony that Knife River will need to install “approximately nine on-site three phase pad mount distribution transformers.” Provide all facts that support, were relied upon, or assumed for this testimony.

Response:

Knife River provided Sioux Valley Energy with a table listing desired service locations and expected load at each service. The full table is shown in Response 1-1, but a zoomed in version of the table is shown below for ease in reading service sizes and location information. Knife River identified seven different service points in that table with two of the service points requiring two different service voltages at those points which would require a total of nine distribution transformers to step down to the service voltages of either 277/480V or 4,160V. The service point locations were determined based on the site layout CAD file provided to Sioux Valley Energy by Knife River at the time the load information in the table was supplied.

Nameplate	HP	FLA	Calc KVA	Load Factor	Adjusted KVA	Service Description
EH101 480V	1175	1769	1,468.98	70.00%	1,028.28	Service Point-1, 480/277, 3PH, 4W
EH101 4160V	1000	133	957.17	70.00%	670.02	Service Point-1, 4160V, 3PH, 4W
EH102 480V	500	710	589.58	70.00%	412.71	Service Point-2, 480/277, 3PH, 4W
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SUB-TOTAL	10547	11237.5	11,906.83		8,334.78	
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Requested From: Sioux Valley Energy
Analyst: Steve Kolbeck
Date of Request: March 10, 2026 Data Request No. 1-3
Response Due: March 24, 2026

Question:

Ted Smith states in his rebuttal testimony that “a rough cost estimate of the construction of an on-site distribution system necessary for Knife River to receive electric service from Xcel Energy as currently proposed would range from approximately \$1.2 to \$1.5 Million dollars.” Provide all facts that support, were relied upon, or assumed for this testimony.

Response:

Based on the information presented earlier in the request, the cost estimate was based on Knife River needing to install roughly 9,400 of three-phase medium voltage distribution line and install nine on-site distribution transformers along with all the necessary labor and miscellaneous equipment. The additional equipment needed would include, but not be limited to, sectionalizing enclosures, grounding equipment, cable terminations, lightning protection, subgrade equipment bases, switches, etc. Typically for a facility of that size with that amount of services there would also be switches to allow for portions of the facility to be taken offline without affecting other areas or in the event of a fault on the facilities the effect of the outage could be limited. An estimate for those switches is also included in the estimate. A breakdown of the estimated costs are as follows:

Approximately 9,400 ft of three-phase medium voltage underground distribution line

28,200 ft of cable @ \$4/ft = \$112,800

Trenching/Boring cable of 9,400 ft @ \$10/ft = \$94,000

Miscellaneous Equipment = \$35,000

Total for medium voltage cable facilities = \$241,800

Switchgear to provide overcurrent protection and switching capabilities

Total of three pad mounted switches @ \$150,000/ea = **\$450,000**

Transformers

1 – 1,500 kVA 480/277 V secondary for Service Point 1 @ **\$75,000**

1 – 1,000 kVA 4,160/2,400 V secondary for Service Point 1 @ **\$75,000**

1 – 500 kVA 480/277 V secondary for Service Point 2 @ **\$31,000**

1 – 1,000 kVA 480/277 V secondary for Service Point 3 @ **\$52,000**

1 – 1,500 kVA 480/277 V secondary for Service Point 4 @ **\$75,000**

1 – 1,000 kVA 480/277 V secondary for Service Point 5 @ **\$52,000**

1 – 2,500 kVA 4,160/2,400 V secondary for Service Point 5 @ **\$77,000**

1 – 2,500 kVA 480/277V secondary for Service Point 6 @ **\$97,000**

1 – 500 kVA 480/277 V secondary for Service Point 7 @ **\$31,000**

Total Distribution Transformer Cost = \$565,000

Total estimated cost of distribution facilities to service the plant

\$1,256,800

20% additional estimate value to cover unknown design variances and material fluctuations based on timing = \$251,360

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Date of Request: March 10, 2026 Data Request No. 1-4
Response Due: March 24, 2026

Question:

Please indicate whether it would be necessary to construct on-site electrical distribution system to enable Knife River to receive service from Sioux Valley.

Response:

Sioux Valley Energy would provide all on-site medium voltage distribution facilities. Knife River would be responsible for service wires from the secondary terminals of the service transformers as the specified voltages in the table provided earlier in this request.

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Requested From: Sioux Valley Energy
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Date of Request: March 10, 2026 Data Request No. 1-5
Response Due: March 24, 2026

Question:

If it is necessary to construct on-site electrical distribution to enable Knife River to receive service from Sioux Valley, please indicate whether Sioux Valley or Knife River is to bear the cost for such construction.

Response:

The cost of the proposed on-site distribution facilities was included in the initial estimate provided to Knife River. Knife River would be responsible for the distribution system costs as either an upfront contribution in aid to construction or over time through the monthly facility charge in the rate.

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Requested From: Sioux Valley Energy
Analyst: Steve Kolbeck
Date of Request: March 10, 2026 Data Request No. 1-6
Response Due: March 24, 2026

Question:

If it is necessary to construct on-site electrical distribution to enable Knife River to receive service from Sioux Valley, please indicate the estimated cost for such construction.

Response:

Sioux Valley Energy provided estimated on-site distribution costs for Knife River on 1/30/2025 in an email correspondence with a total of \$1,730,000 to serve a total of 10,967 HP of motor load with all necessary distribution circuits, equipment, transformers, and switches.

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Response Due: March 24, 2026

Question:

If it is necessary to construct on-site electrical distribution system to enable Knife River to receive service, please indicate whether Sioux Valley or Knife River would be responsible for the maintenance of such on-site electrical distribution system.

Response:

Sioux Valley Energy would be responsible for the maintenance of the medium voltage distribution facilities on site.

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Response Due: March 24, 2026

Question:

Please identify what equipment and/or infrastructure Knife River will be required to install at Knife River's cost to complete the on-site electrical distribution system, including the technical details and any engineering documentation of the capability of these new facilities.

Response:

Knife River would be responsible for installing all necessary secondary service wire from the distribution transformers to the desired service panels or equipment. Sioux Valley Energy would provide service at Knife River's desired locations at service voltage of 277/480V or 4,160V as identified in the table provided earlier in this request.

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Question:

Please identify the rates, charges, terms of service, and other requirements that Sioux Valley would require of Knife River to serve its Rock Crushing Plant. Please provide any relevant tariff pages, schedules or other documents should they exist. If they do not exist, please explain how Sioux Valley will undertake the creation of such documents and what approvals will be required. Also identify whether any of the rates, terms of service, charges or the creation of such rates and charges subject to the jurisdiction of the PUC.

Response:

Sioux Valley Energy does not have a current rate for Knife River, although Sioux Valley Energy did provide Knife River with an estimated rate which was a product of information provided by Knife River and conversations among the necessary parties. Such estimate is included in Exhibit SS-2 and discussed in comparison to the rate provided by Xcel Energy in the Pre-Filed Intervenor Testimony of Scott Shewey. A cooperative member that is comparable in size to that of Knife River has its own confidential rate and terms of service which are part of an Electric Service Agreement. The corresponding rate and associated fees for a member of comparable size are created based upon the actual costs to ensure two very important objectives of our cooperative model. The first objective is to ensure that a large load is not subsidizing our traditional membership. The second and equally important objective is to ensure that a large load is not being subsidized by our traditional membership. Such a rate would be approved by the democratically-elected Sioux Valley Energy Board of Directors and is not subject to further approval by the PUC.

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