

**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. 1-3  
Response Due: March 24, 2026

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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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