

Bill Van Camp



From: Chris Graff <chris.graff@siouxvalleyenergy.com>
Sent: Thursday, January 16, 2025 10:11 AM
To: Haas, Andy
Cc: Jonathan T. Aus
Subject: RE: Sioux Valley/Corson Follow Up Meeting

Follow Up Flag: Follow up
Flag Status: Flagged

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Good morning Andy,

Thanks for the call yesterday and as you requested below are what I have from notes on the call from Monday. If you are looking for additional information please let me know and I would be happy to send it over or track it down.

Attendance:

Knife River – Andy Haas, Pete Richardson, Clark Meyer
Sioux Valley Energy – Chris Graff, Jason Sage
East River Electric Cooperative – Jon Aus, John Knofczynski

Discussion:

- East River discussed preliminary results from transmission level study. Best option moving forward would be to construct a new transmission line and distribution substation on site to serve the load.
 - Distribution Substation site would require 5-7 acres of land
- Feeding out of the existing Corson substation at full projected phase 2 load would be difficult without significant improvements and the space available at the Corson substation for those improvements would be constricting and possibly not feasible.
- East River is evaluating options for line routes and possible site locations based on their existing transmission network and will provide those recommendations with the cost estimates.
- Timeline for a distribution substation and transmission line would likely push beyond the 2026 startup date for Knife River so we discussed potential options.
 - Sioux Valley feels that the Phase I load estimate can be served with utilizing some existing facilities at the Sand Plant as well as one new feeder from the Corson substation. This is not a permanent solution as it will push facilities at the Corson substation beyond normal base ratings and will affect capacity and reliability of the Sioux Valley distribution system, but to meet the project timelines this would be a potential solution for a period of time until the new substation can be put into service.
 - This would also provide a backup feed to the Knife River facilities long term that would have the capacity available to back up a large portion of the load in the event the new substation is out of service.
- East River will work to provide recommendations on transmission line route and potential substation site.
 - This will include preliminary CIAC numbers (Contribution In Aid to Construction)

- Sioux Valley will also include all necessary distribution costs once East River can provide a location for the substation facility, so we are able to determine distribution feeder distances.
- We will provide those numbers sometime the Week of January 20th to Knife River.

Bill Van Camp

From: Chris Graff <chris.graff@siouxvalleyenergy.com>
Sent: Thursday, January 30, 2025 8:28 AM
To: Haas, Andy
Cc: Jonathan T. Aus; Ted Smith
Subject: RE: Sioux Valley/Corson Follow Up Meeting
Attachments: Knife River Load Addition Slides.pptx

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Good morning Andy,

Attached is some information on the proposed solution to serve the expansion for Knife River up at the Corson facility. The first non-title slide is a proposed sub location and transmission route. I believe that is the site location we discuss in the last meeting or relatively close. The last slide is a table breakdown of the costs and what would be Knife River's responsibility under the last column marked as "load". For the Sioux Valley costs it is broken down between the initial load addition and the future expansion. We would look to receive payment on the costs under the initial load addition when we proceed forward with this project, but the future load addition costs could be incurred closer to when you request those facilities for the expansion in the next couple of years. Please review and don't hesitate to give me a call with any questions and we can discuss it.

Thanks,
Chris Graff, P.E.
Director of Operations



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From: Haas, Andy <andy.haas@kniferiver.com>
Sent: Tuesday, January 28, 2025 8:07 AM
To: Chris Graff <chris.graff@siouxvalleyenergy.com>
Subject: RE: Sioux Valley/Corson Follow Up Meeting

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Chris,

Do you have an update on the power supply for Corson?

Andy Haas

Aggregate & Asphalt General Manager

Knife River

1500 North Sweetman Place

Sioux Falls, SD 57118

office 605-336-5784

mobile 605-660-8452



From: Chris Graff <chris.graff@siouxvalleyenergy.com>

Sent: Thursday, January 16, 2025 10:11 AM

To: Haas, Andy <andy.haas@kniferiver.com>

Cc: Jonathan T. Aus <jaus@eastriver.coop>

Subject: RE: Sioux Valley/Corson Follow Up Meeting

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Sioux Valley Energy – Chris Graff, Jason Sage

East River Electric Cooperative – Jon Aus, John Knofczynski

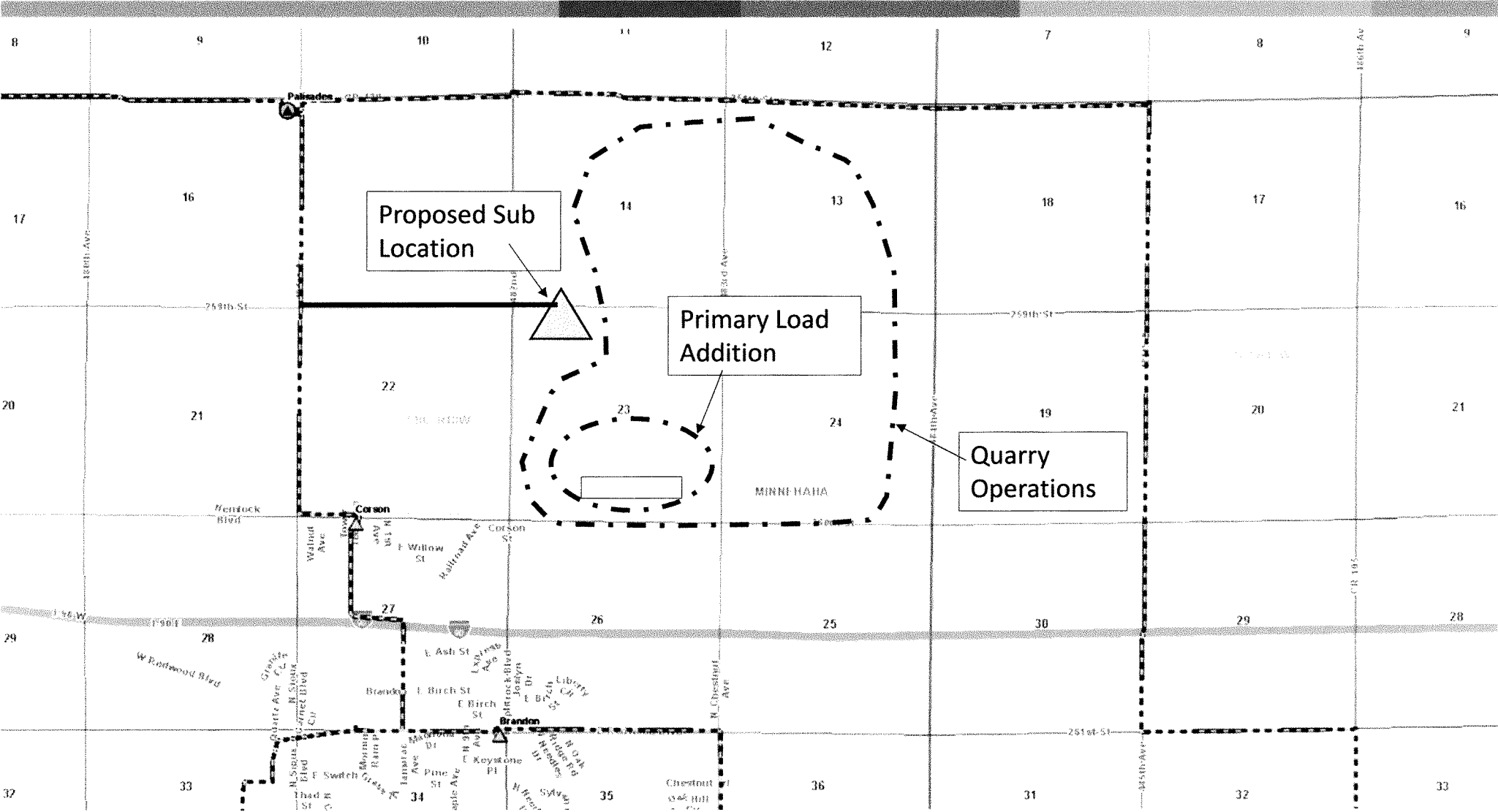
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New Corson Area Substation - Knife River Gravel and Quartz Quarry Load Addition



East River COST/CIAC ESTIMATES

Project	Description	Estimate	SPP	System	Load
Knife River New Substation Option					
115 kV Transmission Line	1.25 miles of 115 kV Transmission Line	\$500,000	\$0	\$0	\$500,000
115/12.47 kV Substation	New Distribution Sub, 115 kV Ring Bus, 10 MVA Base Transformer	\$6,500,000	\$3,250,000	\$0	\$3,250,000
	Total	\$7,000,000	\$3,250,000	\$0	\$3,750,000

SVE COSTS NOT INCLUDED IN THIS TABLE

Sioux Valley COST/CIAC ESTIMATES

Project	Description	Estimate	SPP	System	Load
Knife River New Substation Option					
Initial Load Addition	2 Distribution circuits, cable, equipment, transformers, and switches to feed 8,105.5 HP	\$1,230,000	\$0	\$0	\$1,230,000
Future Load Addition	1 Distribution circuit, cable, equipment, transformers, and switches to feed 2,861.5 HP	\$500,000	\$0	\$0	\$500,000
	Total	\$1,730,000	\$0	\$0	\$1,730,000

Bill Van Camp

From: Chris Graff <chris.graff@siouxvalleyenergy.com>
Sent: Thursday, May 29, 2025 8:18 AM
To: Haas, Andy
Subject: RE: Corson Plant Expansion Billing Estimate

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Andy,

The other thing I forgot to mention is the demand charge in your estimate is the demand coincident with East River's peak, so if your demand is lower at that time your demand charge would be less. The standard large power rate the sand plant is on, the demand charge is based on your plant peak. So for example if your highest demand at the new plant is 11MW but during the coincident peak time with East River you are only running at 8MW, you would only pay the \$24/kW demand charge on the 8MW. Where as if this were on our large power rate you would pay the \$17.50 on the full 11 MW. Does that make sense?

Thanks,
Chris

From: Haas, Andy <andy.haas@kniferiver.com>
Sent: Thursday, May 29, 2025 8:00 AM
To: Chris Graff <chris.graff@siouxvalleyenergy.com>
Subject: RE: Corson Plant Expansion Billing Estimate

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Chris,

Thanks for the information, that helps clarify a few questions on our end.

Andy

From: Chris Graff <chris.graff@siouxvalleyenergy.com>
Sent: Thursday, May 29, 2025 7:45 AM

To: Haas, Andy <andy.haas@kniferiver.com>

Subject: RE: Corson Plant Expansion Billing Estimate

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Andy,

The \$24/kW at this point is an estimate as we would need to know what your intention is with the aid amount before we could finalize that rate with East River. If you wanted to put some of that aid into the rate versus paying it all up front we would need to account for that in the rate.

A couple things to note though vs the current rate you are on with the sand plant. The sand plant is currently on our standard Large Power Rate which is for loads smaller than 2 MW. These loads receive not only some of our power supply from Basin Electric but also some of our WAPA allocation. Loads larger than 2 MW go on an individual rate which do not qualify for the WAPA allocation which is a slightly cheaper power supply. So that is some of the increase in the demand charge. The other component of the large power rate is the energy charge which for the large power is \$0.0411. The estimate below uses a slightly lower \$0.04 energy charge so there is a reduction in the energy charge from this estimate. Also, these are just estimated values for energy and demand and if you want to get into further discussion about pinpointing a definite rate value let me know and we can discuss what this could look like differently.

Thanks,
Chris Graff, P.E.
Director of Operations



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From: Haas, Andy <andy.haas@kniferiver.com>
Sent: Thursday, May 29, 2025 7:25 AM
To: Chris Graff <chris.graff@siouxvalleyenergy.com>
Subject: RE: Corson Plant Expansion Billing Estimate

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Good morning, Chris

Still working on a cost analysis for the electric service for the new quarry and wanted to get clarification on the demand charge.

On the estimate below it shows the demand charge to be \$24.00 per kW and our current sand plant is only being billed at \$17.50 per kW, is there a reason for the increase in cost per kW?

Thanks

Andy

From: Chris Graff <chris.graff@siouxvalleyenergy.com>
Sent: Tuesday, March 18, 2025 9:22 AM
To: Haas, Andy <andy.haas@kniferiver.com>
Subject: Corson Plant Expansion Billing Estimate

** WARNING: EXTERNAL SENDER. NEVER click links or open attachments without positive sender verification of purpose. DO NOT provide your user ID or password on sites or forms linked from this email. **

Good morning Andy,

I have compiled an estimate for your monthly electric service as you have requested based on information from you. A couple of things to note:

- This is assuming Knife River would be paying 100% of the CIAC up front that was previously identified and sent over to you. (Approx. \$5,480,000)
- This is a rough estimate of what the rates would be. If you want more firm numbers on the rates, we would need to get a confirmation from you on what Knife Rivers plans for the CIAC and then work through those rates with East River to confirm.
- These numbers are based on your estimated 70% load factor and the plant running at 97% power factor during production months (10 months out of the year)
- The load in the 2 off months is estimated at 10% of the peak load. We discussed 5-10% will be expected so I assumed 10% to be on the upper end.

During Production Months (10 Months/Year)

Peak Load (kVA) - Estimate from Knife River	11,906.83
Peak Load (kW) - Assuming 97% Power Factor	11,549.63
Average kVA/Month based on 70% LF (70% LF estimated by Knife River)	8,334.78
Average kW/Month based on 70% LF (70% LF estimated by Knife River)	8,084.74
Estimated Energy Use (kWh) (30.5 days/month)	5,918,028
Basic Service Charge	\$ 12,000.00
Demand Charge (\$24/kW)	\$ 277,191.00
Energy Charge (\$0.04/kWh)	\$ 236,721.12
Estimated Average Bill in Production Months	\$ 525,912.12
Average All in Rate \$/kWh (Total \$/Total kWh)	\$ 0.089

During Maintenance Months (2 Months/Year)

Peak Load (kVA) - Estimate from Knife River	1,190.68
Peak Load (kW) - Assuming 97% Power Factor	1,154.96
Average kVA/Month based on 70% LF (70% LF estimated by Knife River)	833.48
Average kW/Month based on 70% LF (70% LF estimated by Knife River)	808.47
Estimated Energy Use (kWh) (30.5 days/month)	591,803
Basic Service Charge	\$ 12,000.00
Demand Charge (\$24/kW)	\$ 27,719.10
Energy Charge (\$0.04/kWh)	\$ 23,672.11
Estimated Average Bill in Maintenance Months	\$ 63,391.21
Average All in Rate \$/kWh (Total \$/Total kWh)	\$ 0.107

If you have any questions at all or want to discuss these numbers, please let me know.

Thanks,

Chris Graff, P.E.
Director of Operations



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