



CITY COUNCIL/ELECTRICAL ADVISORY COMMITTEE

September 20, 2017 – 4:00 p.m.
Regular Meeting

CITY COUNCIL

Marc Tall, Mayor
Ronald Beauchamp, Mayor Pro-Tem
Patricia Baribeau, Council Member
Michael Sattem, Council Member
Ralph Blasier, Council Member

ADMINISTRATION

Patrick Jordan, City Manager
Robert S. Richards, CMC, City Clerk
Ralph B.K. Peterson, City Attorney
Mike Furmanski, Electrical Superintendent
Melissa Becotte, City Controller

ELECTRICAL ADVISORY COMMITTEE

John Anthony, Chairperson
Ann Bissell, Vice Chairperson
John Mellinger, Committee Member
Glendon Brown, Committee Member
Tim Wilson, Committee Member

[Escanaba City Council Chambers: 410 Ludington Street - Escanaba, MI 49829](#)

[Meeting Agenda](#)

Wednesday, September 20, 2017

CALL TO ORDER

ROLL CALL

APPROVAL/ADJUSTMENTS TO THE AGENDA

CONFLICT OF INTEREST DECLARATION

NEW BUSINESS

- 1. Update – Electric Department –General Operations.**
Explanation: An update on departmental operations will be given by Electrical Superintendent Mike Furmanski.
- 2. Update – Breezy Point Distribution line upgrade.**
Explanation: Administration will provide an update on the Breezy Point distribution line upgrade.
- 3. Approval – Northshore Substation Relay Panels.**
Explanation: Administration will seek Council approval to purchase relay panels from Energis High Voltage Resources, Inc of Green Bay, WI for \$58,095.08. These panels are included in the current budget.
- 4. Approval – Northshore Substation Structural Steel.**
Explanation: Administration will seek Council approval to purchase the structural steel from B&B Steel of Knapp, WI for \$59,886.00. This purchase is included in the current budget.
- 5. Approval – Northshore Substation Control Building.**
Explanation: Administration will seek Council approval to purchase a control building from Trachte, LLC of Oregon, WI for \$126,334.00. This purchase is included in the current budget.
- 6. Approval – Northshore Substation Reclosers.**
Explanation: Administration will seek Council approval to purchase 4 reclosers from Resco of Middleton, WI for \$78,100. This purchase is included in the current budget.

Agenda - September 20, 2017

7. Update – Solar Generation Project

Explanation: Administration will provide an update on the potential solar project for the City.

8. Approval – Geotechnical Assessment

Explanation: Administration will seek Council approval to retain Westwood Multi-Disciplined Surveying & Engineering of Eden Prairie, MN to complete a Geotechnical Assessment, Pile Load Testing, FAA Solar Glare Review & Application, and Shade Analysis with Energy Production Modeling on the proposed site. This work is not budgeted.

GENERAL PUBLIC COMMENT

COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS

ADJOURNMENT

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audiotapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling City Hall at (906) 786-9402.

Respectfully Submitted,

James V. O'Toole
City Manager

NB #3

MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski MF

Date: 15SEP17

Re: Northshore Sub Relay Panel bid of August 29, 2017

The Electric Department requested bids for the Northshore Substation relay panels. Specifications were requested by 2 vendors, but only 1 bid was received. The bid was from Energis High Voltage Resources, Inc of Green Bay, WI in the amount of \$58,095.08. Energis built the panels in the North Substation and they were very well done. Energis has also done a fair amount of work for the City that was all very well done. Therefore, I am recommending that we accept the bid from Energis High Voltage Resources, Inc for \$58,095.08.

September 4, 2017

Mr. Mike Furmanski
City of Escanaba
P.O. Box 948
Escanaba, MI 49829

SUBJECT: Recommendation for Northshore Substation Relay Panels
Project # ESC-17-05.1

Dear Mr. Furmanski:

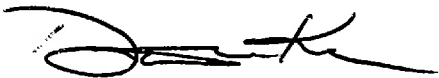
I have reviewed and evaluated the responses received for your Northshore Substation relay panel bids as part of your substation reconstruction project. These bids were received during the bid opening held at City of Escanaba – City Electric Department at 2:00 p.m. EST on August 29, 2017. There were two (2) vendors who requested copies of the Specifications and Bidding Documents. Not all vendors elected to bid this project. Please see the attached Bidder's Tabulation Form for bidding details.

At the bid opening, the stated price was \$58,095.08. Upon evaluation of the vendor's bid, I recommend that Energis High Voltage Resources, Inc. of Green Bay, Wisconsin, be awarded the relay panels contract. Previous experience with Energis High Voltage Resources, Inc. has shown that they are able and qualified to provide the bid item as submitted.

After you approve a vendor, we will assemble and send contract documents to the successful bidder for this purchase. Once the vendor reviews, bonds and signs the contract documents we will review their submittals and forward the contracts to you for final signatures.

If you have any questions regarding these recommendations, I can be contacted by telephone at 715-577-1369 or by email at dkrause@krausepowerengineering.com.

Sincerely,



Dave Krause, P.E.

Enclosure

BIDDER'S TABULATION FORM – 00 43 99

Client's Name: City of Escanaba – City Electric Department
Project Number: ESC-17-05.1
Project Name: Northshore Substation Relay Panels
Bid Opening Date/Time: August 29, 2017, at 2:00 p.m. EDT

Bidder's Name	Bid Bond (Y/N)	Base Bid
Energis High Voltage Resources, Inc.	Y	\$58,095.08
Keystone Electrical Manufacturing Co.		No Bid

NB #4

MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski MF

Date: 15SEP17

Re: Northshore Sub Structural Steel bid of September 6, 2017

The Electric Department requested bids for the Northshore Substation structural steel. Specifications were requested by 1 vendor, who did submit a bid. That bid was from B&B Steel of Knapp, WI in the amount of \$59,886.00. B&B Steel supplied the steel for the North Substation and that was very well done. Therefore, I am recommending that we accept the bid from B&B Steel for \$59,886.00.



Krause Power Engineering, LLC
2029 County Highway I, Suite 1
Chippewa Falls, WI 54729
TEL 715 577 1369 FAX 715 861 3916
WEB www.krausepowerengineering.com

September 12, 2017

Mr. Mike Furmanski
City of Escanaba
P.O. Box 948
410 Ludington Street
Escanaba, MI 49829

SUBJECT: Recommendation for Northshore Substation Steel
Project # ESC-17-03.1

Dear Mr. Furmanski:

I have reviewed and evaluated the responses received for your steel bids as part of your reconstruction of Northshore Substation. These bids were received during the bid opening held at the City of Escanaba – City Electric Department at 2:00 p.m. on September 6, 2017. There was one (1) vendor who requested copies of the Specifications and Bidding Documents. Please see the attached Bidder's Tabulation Form for bidding details.

At the bid opening, the stated price was \$59,886.00. Upon evaluation of this vendor's bid, I recommend that B&B Steel of Knapp, Wisconsin, be awarded the Northshore Substation Steel contract. Previous experience with B&B Steel has shown that they are able and qualified to provide the bid item as submitted.

After you approve a vendor, we will assemble and send contract documents to the successful bidder for this purchase. Once the vendor reviews, bonds and signs the contract documents we will review their submittals and forward the contracts to you for final signatures.

If you have any questions regarding these recommendations, I can be contacted by telephone at 715-577-1369 or by email at dkrause@krausepowerengineering.com.

Sincerely,

A handwritten signature in black ink that reads "Dave Krause". The signature is written in a cursive style with a large, looping initial "D".

Dave Krause, P.E.

Enclosure

BIDDER'S TABULATION FORM – 00 43 99

Client's Name:	City of Escanaba – City Electric Department
Project Number:	ESC-17-03.1
Project Name:	Northshore Substation Steel
Bid Opening Date/Time:	September 6, 2017, at 2:00 EDT

Bidder's Name	Bid Bond (Y/N)	Base Bid
B&B Steel	Y	\$59,886.00

NB #5

MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski *MF*

Date: 15SEP17

Re: Northshore Sub Control Building bid of September 6, 2017

The Electric Department requested bids for the Northshore Substation control building. Specifications were requested by 1 vendor, who did submit a bid. That bid was from Trachte, LLC of Oregon, WI in the amount of \$126,334.00. Trachte supplied the control building for the North Substation and that was very well done. Therefore, I am recommending that we accept the bid from Trachte, LLC for \$126,334.00.

September 12, 2017

Mr. Mike Furmanski
City of Escanaba
P.O. Box 948
410 Ludington Street
Escanaba, MI 49829

SUBJECT: Recommendation for Northshore Substation Control Building
Project # ESC-17-02.1

Dear Mr. Furmanski:

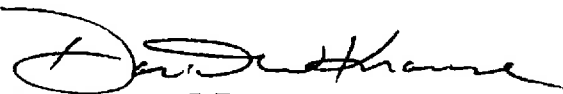
I have reviewed and evaluated the responses received for your control building bids as part of your reconstruction of Northshore Substation. These bids were received during the bid opening held at the City of Escanaba – City Electric Department at 2:00 p.m. on September 6, 2017. There were four (4) companies who requested copies of the Specifications and Bidding Documents. Not all companies elected to bid this project. Please see the attached Bidder's Tabulation Form for bidding details.

At the bid opening, the stated price was \$126,334.00. Upon evaluation of this vendor's bid, I recommend that Trachte, LLC of Oregon, Wisconsin, be awarded the Northshore Substation Control Building contract. Previous experience with Trachte, LLC has shown that they are able and qualified to provide the bid item as submitted.

After you approve a vendor, we will assemble and send contract documents to the successful bidder for this purchase. Once the vendor reviews, bonds and signs the contract documents we will review their submittals and forward the contracts to you for final signatures.

If you have any questions regarding these recommendations, I can be contacted by telephone at 715-577-1369 or by email at dkrause@krausepowerengineering.com.

Sincerely,


Dave Krause, P.E.

Enclosure

BIDDER'S TABULATION FORM – 00 43 99

Client's Name: City of Escanaba – City Electric Department
Project Number: ESC-17-02.1
Project Name: Northshore Substation Control Building
Bid Opening Date/Time: September 6, 2017, at 2:00 p.m. EDT

Bidder's Name	Bid Bond (Y/N)	Base Bid
Builders Exchange of Northwest Michigan		No Bid
Construction Market Data Group LLC		No Bid
Systems Control		No Bid
Trachte	Y	\$126,334.00

NB #6

MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski *MAF*

Date: 15SEP17

Re: Northshore Sub Reclosers

The Electric Department recently requested a quote from RESCO of Middleton, WI for 4 new G&W Viper Reclosers with external current transformers and substation stands. We did not bid this as all of our reclosers are G&W Vipers and we would like to keep them all the same for familiarity for the crew. Their quote is attached.

There are 4 reclosers that are currently in use in the temporary Northshore Sub. 2 of them are Vipers, which will be used on the distribution system as line reclosers. 2 of them are Cooper reclosers, which we will sell.

I am recommending that we purchase 4 new G&W Viper reclosers from RESCO for a total cost of \$78,100.00.

Customer:	RESCO
Date:	August 28, 2017
Validity:	30 Days
Quotation Number:	SQ 33520C
Customer Reference:	Escanaba

Item 1: G&W Electric Viper-S Solid Dielectric Recloser, Catalog No. VIP378ER-12S

Standard Features:

- Three (3) epoxy insulated vacuum interrupter modules
- One (1) three phase magnetic actuator operator, providing three phase operation
- Manual trip and lockout handle with mechanical block, capable of physically blocking electronic and manual operation
- Contact position indicator
- Three (3) 1000/500:1 current transformers, encapsulated within the solid dielectric insulation, exclusively for use with the recloser control
- Operation counter
- Lifting provisions

Additional Features:

- "L" style vacuum interrupter modules
- Six (6) 15kV 800 Amp interfaces with screw-on silicone insulators.
- Six (6) #250-750MCM Clamp style aerial lug, compatible with AL or CU cable
- 10 foot DC cable, with 6 Connector on Recloser end and hardwired into the junction box on the other end.
- Recloser heaters will be powered by customer supplied 120VAC
- 10 foot control cable, with 14 pin Connector on Recloser end and hardwired into the junction box on the other end.
- Three (3) External CT's mounted over the Horizontal Bushings CT Ratio 1200:5 / C400 rating. CT's to be hardwired into the External Junction box shorting blocks.
- One (1) External Junction box mounted to the substation frame. All wires will be terminated in the Junction box. Customer will be responsible for making entrances into the junction box and bring wires to the control house.
- Galvanized steel substation adaptor frame, with recloser mounting positions of 45 degree mounting.
- Interrupter requires 125 VDC, to be supplied by user
- Customer to Supply the Relay to operate the recloser.

Ratings:

Maximum design voltage	15kV
Impulse level (BIL)	110kV
Continuous and load break current	800 Amp
Interrupting Rating RMS (kA)	12.5kA
Making Current, RMS, asym, KA	20kA
Peak, asym (kA)	32kA
Short Circuit Current, kA sym, 3 second	12.25kA

Operating Temperature Range: Temperature range, -40°C to +65°C (-40°F to 150°F)

Standards:

Ratings per IEEE C37.60-2003 and IEC 62271-111

Price Each: \$ 19,525.00/each

Exceptions/Clarifications:

- Recloser will be factory tested using a G&W house control.
- Customer will be using G&W's internal CT's for overcurrent protection.
- Customer will be using external CT's with a customer supplied relay.
- Recloser will not include voltage sensing or deadline operation.
- Quotation and BOM based on G&W order 57776, drawing D3670 SSIL AN0, except for the lug size and no control provided

Commercial Terms and Conditions

Submittal drawings (if required):

If required, submittal drawings will be issued for approval 4 weeks after receipt of order.

Lead time for shipment:

18 weeks after receipt of order and release to production.

Shipping Terms: FOB-Factory, Bolingbrook, IL USA

Freight: Prepaid and Allowed on a standard closed top trailer.

Payment: Net 30 days; Payment terms are subject to G&W Finance Department approval.

Warranty and all other terms and conditions are as per SM-F-1 Rev 5