



CITY OF LE SUEUR
REQUEST FOR COUNCIL ACTION

TO: Mayor and City Council
FROM: Richard Kucera, Public Services Director
SUBJECT: Electric System Study
DATE: For the City Council Meeting of Monday February 24, 2020

PURPOSE

Consider approval the task order project named Electric System Study from DGR Engineering.

SUMMARY

City staff has identified a need for an electric system study of the existing electric system facilities. This would include load growth projection of the electric system. An assessment of the ability to handle projected loads. Ability of the system to properly provide backup service should the loss of any major component. Developing alternatives to correct deficiencies identified. Prioritization of the recommended system improvements. Cost estimates for the recommended system improvements. Development of a 10-year Capital Improvement Plan with cost estimates for budgeting. And, presentation of the final report to City Council.

This study was identified in the 2020 Capital Improvement Plan/Capital Equipment Plan.

ACTION REQUESTED

Staff is recommending that City Council approve the execution of Electric System Study from DGR Engineering for a lump sum fee of \$26,900.00.

TASK ORDER

Task Order No. 3

Effective Date: _____

Task Order Amendment to the DGR ENGINEERING Master Agreement for Professional Services

DGR Engineering (Consultant) agrees to provide to: Le Sueur Municipal Utilities - Le Sueur, Minnesota (Client), the professional services described below for the Project identified below. The professional services shall be performed in accordance with and shall be subject to the terms and conditions of the Master Agreement for Professional Services executed by and between Consultant and Client on the 11th day of November, 2016.

TASK ORDER PROJECT NAME: Electric System Study

TASK ORDER PROJECT DESCRIPTION: Le Sueur Municipal Utilities (LMU) wishes to complete a study of their electric system. The study is being undertaken to review and analyze the existing electric system condition and performance in order to make recommendations for improvements going forward, including the development of a capital improvements plan.

DGR CONTACT PERSON: Chad Rasmussen, Asst Dept Head – Electric Power
Stuart Anderson, Project Manager – Electric Power

CLIENT CONTACT PERSON: Justin Anderson, Electric Superintendent

SCOPE OF WORK:

- Interview Utility staff regarding their opinions of the electric system performance, weaknesses, load growth areas, and development plans. System criteria for acceptable service levels will be discussed and decided upon.
- Review existing electric system facilities.
- Develop a detailed computer model of the primary electric system using the Milsoft “Windmil”® modeling software. This model will be used for voltage and thermal analysis of the system, using the latest customer and system load information, and will be constructed with circuitry based upon the latest electric system map.
- Develop a load growth projection for the electric system. Use available outside projections for this, if any, along with input from Utility staff about known and potential load additions that are expected to occur on the system.
- Based on the above computer models and the projected loads, assess the ability of the electric distribution system to handle expected loads. This will include an assessment of the ability of the system to properly provide backup service should the loss of any major

component (such as a substation transformer, substation bus, or mainline feeder) be out of service.

- Develop alternatives to correct any deficiencies identified in the analysis, both in terms of modeling results and the observed condition/age of equipment on the system.
- Prioritize the recommended system improvements.
- Develop cost estimates associated with the improvements identified.
- Review the alternatives and improvements identified with Utility staff to obtain their input, and perform follow-up analysis if required.
- Develop a report for use as a planning tool for Utility staff. A 10-year Capital Improvements Plan (CIP) will be developed which will include cost estimates for budgetary purposes that are tied to either specific dates or to load levels so that the Utility can use this information in budgetary planning. A review draft of the report will be made available to Utility staff prior to finalizing the report.
- Presentation of the final report will be made once the review draft has been approved by Utility staff and any revisions necessary have been made. DGR will furnish up to 15 copies of this report for distribution by Utility staff to decision makers.

FEE ARRANGEMENT: We propose to perform the above described work for a lump sum fee of \$26,900. The lump sum fee includes all expenses including software, mileage, subsistence and deliverables costs.

SPECIAL TERMS AND CONDITIONS: None

Le Sueur Municipal Utilities
Le Sueur, Minnesota

(Client)

By: _____

Title: _____
(Authorized signature and Title)

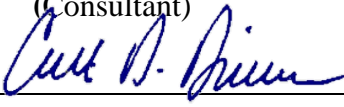
Address: _____

City: _____

Date: _____

DeWild Grant Reckert and Associates Company
d/b/a DGR Engineering

(Consultant)

By:  _____
Curt D. Dieren

Title: Vice President
(Authorized signature and Title)

Address: 1302 South Union Street

City: Rock Rapids, IA 51246

Date: 2-19-2020