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March 31, 2014

DFD Selection Committee
State of Wisconsin, Division of Facilities Development
101 East Wilson Street, 7th Floor
P.O. Box 7866
Madison, WI 53707-7866

Ref: Letter of Interest
Engineering Services – DFD Project #14A2M UWMSN Arc Flash Hazard Analysis
University of Wisconsin – Madison

Dear Selection Committee:

KJWW Engineering is pleased to submit this letter of interest to provide engineering services for the State of Wisconsin – Division of Facilities Development for the above referenced project at the University of Wisconsin–Madison facilities and approximately 305 buildings off the main campus.

KJWW is a local full-service mechanical, electrical, structural, and technology professional design firm. Our A/E Data Record is up to date on WisBuild and contains our current Consultants Fee Schedule. KJWW is familiar with the Division of Facilities Development's policies and procedures and requirements. We have an excellent understanding of the services required for this type of project and can meet the proposed schedule. We are prepared to begin the project upon receiving official authorization to proceed.

The Project Manager and Lead Electrical Engineer for this project will be **Rick Leverenz, PE**. Rick has spent his entire 18-year career with KJWW and is a licensed Professional Engineer in Wisconsin. He is experienced in a variety of electrical systems, including arc flash analysis. He has served as electrical design engineer on numerous Division of Facilities Development (DFD) projects for the State of Wisconsin. **Tim Paap, PE**, will serve as Electrical Engineer on the project, working directly with Rick. Tim has spent his entire seven year career with KJWW and is experienced in design of power distribution systems and arc flash analysis. He also has extensive knowledge of the Power Tools for Windows calculation software that is used for short circuit calculations, coordination studies and arc flash analysis.

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Approach

Our approach to the project is described below:

- Prior to each site visit:
  - Review the existing one line diagrams and electrical floor plans to familiarize ourselves with each building. If this information is not available we will create in the field.
  - Create a spreadsheet template for each building detailing the pertinent information of each component that requires analysis.
  - An electronic tablet will be used in the field to help expedite information transfer.
- During each site visit:
  - Validate existing drawings. If discrepancies exist, note required changes.
  - Survey each component requiring analysis and enter all pertinent data into the spreadsheet template.
  - Take a picture of the outside and inside of every component for documentation.
  - Survey and record the lengths of each feeder.
  - If existing drawings do not exist, we will create the one-line diagram during our site visit.
- At the completion of each site visit:
  - Download the spreadsheet and one line markups for updating the Power Tools for Windows model of each building.
- Due to the size of the project, it is likely we will utilize the services of additional electrical staff from our firm.
- We will utilize an electrical contractor to assist with the field surveys and the removal of equipment covers.
- We will utilize one of DFD's preferred testing companies to assist with the examination and testing of the circuit breaker and relay units.

Schedule

We understand the project is to begin in June 2014 with substantial completion in September 2015 and project close out by December 2015. A review of building access will take place with Campus Facilities to determine any specific schedule requirements for buildings. The schedule below assumes a Notice to Proceed in June 2014.

- Field surveys, data gathering, one line development and calculations – June 2014
- Final Review of calculations and deliverable documents – July 2015
- Final Deliverable issued to DFD - August 2015

Due to the duration of the project, we are open to adjusting the dates listed above and approaching the project in phases by giving final deliverables of a group of buildings at various agreed upon milestones.

Relevant Project Experience

KJWW's electrical engineering staff has the expertise and experience to meet all goals of the project and deliver a quality product. Relevant project experience includes:

University of Iowa
Arc Flash, Iowa City, Iowa

- KJWW has provided engineering services for multiple arc flash projects at the University of Iowa. The largest of which was for the 70MW campus medium voltage distribution system. This project included an arc flash analysis for approximately 1000 points and covered three different campus maximum voltage distribution and generation systems. This analysis included distribution for approximately 250 buildings. In addition to the medium voltage arc flash project mentioned above, KJWW has also provided arc flash analysis for approximately 350,000 square feet of buildings that have been constructed and an additional 275,000 square feet of new buildings that are currently in design.

Iowa Army National Guard
Camp Dodge Arc Flash Analysis, Johnston, Iowa

- KJWW provided engineering services for a large campus wide arc flash analysis for the Iowa Army National Guard at Camp Dodge in Johnston Iowa. This project included approximately 1000 points that required analyzing. The scope of the project included approximately 160 buildings. These buildings consisted of office buildings ranging from 1500 square feet to 200,000 square feet, repair shops for vehicles and equipment, data center, firing ranges, barracks, mess halls/kitchens, storage buildings, the state command center, museum, lift stations, fuel storage/fuel filling station and general housing for officers.

U.S. Department of Agriculture
Arc Flash Analysis, Ames, Iowa

- KJWW provided engineering services for an arc flash analysis for the USDA. This project included approximately 68 buildings. These buildings consisted of office buildings ranging from 2500 square feet to 400,000 square feet, repair shops for vehicles and equipment, livestock sheds, incinerators, laboratories, lift stations and animal treatment centers. There were approximately 600 points that required analyzing on this project.

Additional Arc Flash Experience:

University of Iowa | Iowa City, IA
Primary Voltage System ..... 1100 Components
Football Operations Center ..... 70 Components
Indoor Football Practice Facility ..... 30 Components

Iowa National Guard | Johnston, IA
230 Buildings ..... 861 Components

Bay Valley Foods | Dixon, Mendota, and Pecatonica, IL
Multiple Buildings ..... 704 Components

USDA Campus | Ames, IA
50 Buildings .....560 Components

Ipsen, Inc. | Cherry Valley, IL
Multiple Buildings .....365 Components

Pella | Pella, IA
Area 4 - Existing Building .....360 Components
Area 3
Medium Voltage Distribution Study ..... 30 Components

Pella | Shenandoah, IA
Existing Facility .....400 Components

Borg Warner | Dixon, IL
Equipment Study .....340 Components

Iowa Lakes Community College | Emmetsburg & Estherville, IA
6 Buildings .....331 Components

Wells Fargo Home Mortgage | West Des Moines, IA
Home Base Building .....290 Components

Meskwaki Bingo Casino Hotel | Tama, IA
Equipment Study .....270 Components

U.S. General Services Administration | Kansas City, MO
Whittaker Federal Court House.....257 Components

U.S. General Services Administration | Des Moines, IA
Neal Smith Federal Building.....200 Components

Homeland Energy | New Hampton, IA
Multiple Buildings .....180 Components

Johnson Controls | Red Oak, IA
Existing Building .....173 Components

Unilever | Chicago, IL
Global Tech Center .....170 Components

Swift Foods | Marshalltown, IA
Processing Facility .....150 Components

MidAmerican Energy | Des Moines, IA
Data Center .....150 Components

MidAmerican Energy | Sioux City, IA
Existing Building .....140 Components

Bay Valley Foods – Mendota | Mendota, IL
Multiple Buildings .....130 Components

Dixon Direct | Dixon, IL
Phase II .....114 Components
Phase I ..... 72 Components

Cobham | Davenport, IA
Existing Building .....92 components

Soy Energy | Mason City, IA
Existing Building ..... 74 Components

Proliant | Lytton, IA
Existing Building ..... 66 Components

Hydrite Chemical | Marshalltown, IA
Existing Building ..... 58 Components

John Morrell | Sioux Falls, IA
Multiple Buildings ..... 25 Components

Ball Plastics | Ames, IA
Line 20 - Existing Building ..... 13 Components
Containers Operations ..... 10 Components

John Deere Parts Distribution Center | Milan, IL
Multiple Buildings ..... Confidential

CUNA | Madison, WI
Existing Building ..... Confidential
Existing Building - Murphy Drive ..... Confidential

College of Lake County | Grayslake, IL
A Wing Switchgear Replacement
B Wing Switchgear Replacement

Data Center Electrical Improvements

BJC Christian Northwest | St. Louis, MO
Arc Flash, Short Circuit, & Coordination Study

CGH Medical Center | Sterling, IL
Arc Flash Study

Christian Hospital Northeast | St. Louis, MO
Short Circuit Analysis

Nationwide | Des Moines, IA
Existing Building Arc Flash Study
URB Data Center Arc Flash Study

Ames Lab | Ames, IA
Hazard Analysis Verification

JRS | Cedar Rapids, IA
Existing Facility Study

Simpson College | Indianola, IA
Carver Hall Analysis

Story County | Nevada, IA
Administration Building Study
Justice Center Building Study

Turtle Creek Casino and Hotel | Williamsburg, MI
New Facility - Arc Flash Study

KJWW Engineering Consultants appreciates the opportunity to submit this letter of interest. We will meet the specified schedule for all project deliverables and are prepared to begin work immediately upon receipt of a written Notice to Proceed. If there are any questions or a need for further explanation, please contact myself at (608) 221-6722.

Sincerely,

Rick Leverenz, PE
Senior Engineer

KJWW