

**JACOBS - -**

**EXHIBIT 1**



## **WESLEY J. JACOBS**

## **Project Engineer Lead Electrical Engineer**

### ***EXPERIENCE SUMMARY***

Mr. Jacobs has 16 years of experience in the power industry. Currently, he is assigned as the Project Engineer and Lead Electrical and Controls Engineer for the modification work at the Prairie Island Nuclear Generating Plant Project for Northern States Power Company (NSP). His duties include direction of engineering and design activities, project estimating, equipment specification, and client and vendor interface.

In addition, he is assigned as the Lead Electrical and Controls Engineer for the Private Fuel Storage Facility Project. His duties include engineering and design activities to support the site selection, engineering/design, and licensing activities.

He has participated in the licensing effort for the first offsite "away-from-reactor" spent fuel storage facility for NSP. He was responsible for the electrical and controls design for the onsite Independent Spent Fuel Storage Installation (ISFSI) at Prairie Island. He was responsible for the electrical and control modifications to the auxiliary building crane trolley for single-failure-proof operation to support spent fuel storage cask movement inside the plant.

In addition to these modifications, he is Lead Engineer for other projects which include main control board modifications for human factors concerns, a river water temperature monitoring project, various security system modifications, a cathodic protection system upgrade, a software-based annunciator modification, plant design basis documentation (DBD) reconstruction, and numerous other modifications.

### ***RELEVANT PROJECT EXPERIENCE***

Mr. Jacobs is responsible for the day-to-day engineering of all Stone & Webster modification projects at Prairie Island Nuclear Generating Plant and for interfacing with the utility project engineering team concerning these projects. Duties include scope definition, engineering and design of modifications, equipment specification and selection, and construction support.

He is responsible for the engineering and design activities to support the conceptual design and licensing for the Private Fuel Storage Facility which includes:

- Generation of Design Criteria documents
- Preliminary load and lighting calculations
- Preliminary voltage drop and cable size calculations
- Site layout drawings
- Security systems design
- Support for security training, qualifications, and contingency plans

He participated in the site characterization study and licensing effort for the NSP Goodhue County ISFSI which included:

- Development of conceptual design for the offsite spent fuel storage facility
- Support of the site characterization study for site selection
- Support of the State Application for Site Certificate
- Support of the Safety Analysis documents



- Generation of the Security Plan
- Development of lighting, security, duct banks, one-line and grounding plans and calculations

He was responsible for the electrical and controls engineering/design for the NSP Prairie Island ISFSI which included:

- Storage cask instrumentation and monitoring system
- Security camera and intrusion detection systems with interface to the existing plant security system
- Electrical and controls section of the procurement specification for the cask transporter used to move the 125-ton casks from the plant to the storage facility
- Electrical power distribution
- Outside lighting system to meet security camera design requirements
- Building electrical distribution and lighting
- UPS for the security system
- Active radiation monitoring system using telephone lines for data transmission from the storage facility
- Equipment and installation specification preparation
- Construction specification preparation
- Construction support

He was also responsible for the electrical and controls engineering/design to upgrade the auxiliary building crane trolley to single-failure-proof to be used for cask movement within the plant. Engineering and design activities included:

- Electrical and controls review for the new trolley
- Installation drawings development which interfaced between the existing crane equipment and the new trolley electrical and controls equipment
- Client and vendor interface
- Construction support

### **EDUCATION**

B.S., Electrical Engineering - University of Colorado

### **LICENSES AND REGISTRATIONS**

Professional Engineer - Colorado, Minnesota

### **PROFESSIONAL AFFILIATIONS**

Institute of Electrical & Electronics Engineers - Member

Instrument Society of America - Member