

PROJECT PROFILE



BARRON WATER & LIGHT/XCEL ENERGY - BARRON, WISCONSIN

Project Information

Client: City of Barron
Contact: Dave Krause, Krause Power Engineering, LLC
Site Location: Barron, Wisconsin
Municipal Utility: Barron Water & Light
Parent Utility: XCEL Energy

General Description

Barron Water and Light is the municipal utility for Barron County, Wisconsin. Barron is home to more than 200 businesses and industries, and surrounded by nearly 45,000 local residents. Barron Water and Light is served by parent utility XCEL Energy. The utility recognized the need to replace the old unreliable switchgear without replacing the incoming cables and termination. A consulting engineer was hired to write specifications and perform the technical evaluations of the proposals, from which, Shallbetter was selected out of the group of qualified suppliers.

Project Challenges

The existing switchgear incorporated utility metering from the 1960's. The new switchgear had to meet XCEL Energy's approval and specification without increasing the physical size of the cubicle. Shallbetter's engineering department worked with Krause Construction and XCEL to achieve the design without delaying the project.

Shallbetter overcame the aggressive shipping schedule. The order was issued in early 2009 and had to be delivered to the job-site by mid 2009. This project's overall life cycle was less than 22 weeks. This included drawing approval and component purchasing. Shallbetter prepurchased all the long lead-time components within 2 weeks of order placement. This allowed Shallbetter to maintain the aggressive shipping schedule. The Shallbetter engineering staff expedited the drawings for approval and was approved quickly based on the three dimensional drawings showing conduit locations and termination heights.



Sheltered-Aisle / Switchgear Features:

The walk-in sheltered-aisle / switchgear have many features provided for the comfort of the operator and the overall performance.

These features include:

- NEMA 3R construction w/ 11 gauge galvanized steel.
- Heavy duty 6" channel base for added support.
- Base undercoating for added protection
- Interior / exterior paint finish meets or exceeds ANSI-C57.12.28 paint specifications.
- 120/240V CPT & panel board for aisle power.
- XCEL Energy utility metering.
- Cutler Hammer 15kV, 1200A vacuum circuit breakers.
- Schweitzer protective relaying for the main and feeders.

"I couldn't have wished for anything better, the Shallbetter service team was very experienced and well trained. All minor issues recognized during final installation and testing were addressed instantly. I would recommend Shallbetter, Inc. for projects like this one in the future."

--Dave Krause, Krause Power Engineering, LLC

Shallbetter Inc.

Shallbetter Inc. met and matched existing footprints, conduit locations, and existing cable heights without any past drawings to reference. They overcame installation challenges without disturbing the overhead power lines, met the decommission and installation of new gear time-frame of only one week, and their service team was also hired to help with installation of the new switchgear. Shallbetter's engineering and production capabilities added value through customization, quality, and service, successfully delivering the completion of this project as scheduled.