Diverse Supplier Advocacy Award

Commonwealth Edison (ComEd) honored M. J. Electric (MJE) with the Diverse Supplier Advocacy Award this year at their 2nd Annual Supplier Diversity Awards event on April 27, 2017. The annual awards event is an opportunity for ComEd to honor and celebrate successful minority, veteran, and women-owned suppliers that are helping to drive community and economic development across northern Illinois. Although MJE is not a minority-owned company, it's a longtime ComEd supplier and advocate for diversity in the workplace.

Ed Farrington, MJE President, said, "A diverse workforce gives employees the opportunity to overcome barriers to rise through the ranks of corporate America. Our commitment to this initiative is illustrated through being a charter member of CONSTRUCT." CONSTRUCT is a training program designed to prepare minority students to compete for entry-level jobs in construction and energy-related fields in neighborhoods throughout Chicago and northern Illinois. The program has graduated more than 300 students with an 80 percent success rate at job placement.

Unmanned Aerial Vehicle Services

M. J. Electric, LLC’s Central Region Office is now operating Unmanned Aerial Vehicles (UAVs) to carry out complex aerial inspections in areas that are difficult or dangerous to access using traditional methods. UAV inspections provide accurate, real-time data about the condition of our customers’ assets and reduce downtime during the inspection process. The use of UAVs result in increased overall efficiency and a substantial improvement in jobsite safety for the project inspectors and technicians.

Inspection of infrastructure is necessary for detecting and identifying asset condition and potential hazards before they become an operational or safety concern. UAVs compile a combination of high-resolution imagery and video to provide comprehensive data about our customers’ infrastructure.
Invest in the Future Scholarship

M. J. Electric is proud to present the 2017 “Invest in the Future” Scholarship to help the development of the electrical construction industry. Each scholarship awards up to a maximum of $4,000 ($1,000 per year for a 4-year program). Two scholarships are awarded annually, one for a student attending Iron Mountain High School and one for a student attending Kingsford High School. This year MJE is proud to present the scholarships to Parker Swartout of Iron Mountain High School and Marcus Maraccini of Kingsford High School.

Future Leaders Program

In March, MJE held the Kickoff Event for the inaugural Future Leaders Program. The program is designed to develop and prepare staff for promotional opportunities, strengthen the company’s talent pipeline, improve bench strength, and address succession needs. After completing a comprehensive nomination and vetting process, Julie Neuens (Financial Analyst), Nathan Raiche (Project Manager), Joe Mahoney (Superintendent Utility Division), Jim Maness (Senior Project Manager), and Travis Moore (Senior Project Manager) were selected to participate.

MJE partnered with the Impact Group to lead the Future Leaders Program. Elements of the program include each participant completing a competency assessment, personal development plan, Capstone Project, and on-going personal coaching. Senior management and the participant’s manager are engaged in this 7-month program and work closely with all of the participants and the Impact Group to ensure success.

Internship

For the past two years the Eastern Region Office (PA) has hosted a high school intern during the school year. This year Jacob Barr, a senior at Hamburg Area High School, has invested 90 minutes per school day learning about engineering, estimating, and construction in the electric utility industry from some of MJE’s finest. MJE’s employees believe in what they do and feel that hosting an intern gives back to the community by training future generations for electrical construction careers.
Distribution Conversion

MJE is currently rebuilding approximately 12 miles of 4 kV distribution line into 12 kV for NIPSCO in Lake County, Indiana. The 4 kV lines will be re-conducted from the existing 2/0 CU wire to new 336.4 ACSR and 2AA conductor. During the conversion, crews will replace associated hardware, transformers, fuses, and switches. MJE will reuse about 170 poles but almost 400 poles will need to be replaced. The project began earlier this year with a completion date set for December 2017.

Cross Winds II Energy Park EPC

White Construction awarded MJE Phase II of the 43 MW Cross Winds Energy Park near Tuscola County, Michigan. MJE is responsible for engineering, procurement, and construction of the 34.5 kV collection system and expansion of the existing 34.5/345 kV substation. MJE will also perform turbine wiring for the 19 GE 2.3 MW turbines. The project is scheduled to start in June and will be fully energized in October.
In 2016, M. J. Electric (MJE) performed a number of emergency energized transmission and substation repairs for Commonwealth Edison (ComEd) when equipment outages were not an option. Those emergency projects demonstrated the safety and creativity that energized work methods can provide. In early 2017, MJE and Quanta Services, Inc. (Quanta) hosted nine executives and key managers from ComEd to tour the Lazy Q Training Center in Texas to get a hands-on look at the commitment Quanta has made to the advanced tools and training for energized work. These positive experiences set the stage for discussions with ComEd on planned energized projects MJE could perform on their system. To meet ComEd’s needs, the Chicago MJE team sent four of their top transmission linemen to the Lazy Q Training Center to become certified energized lineman per the stringent Quanta standards.

In early May 2017, a team of the four newly trained Chicago MJE linemen, along with four experienced transmission linemen from the east coast led by MJE’s resident energized expert Pete McKay, installed four energized suspended dead-ends on a 345 kV line at ComEd. Joe Mahoney provided the planning and coordination with ComEd to ensure the work was performed to ComEd’s schedule and standards. Jon Freeman, who managed some of the ComEd emergency repairs in 2016, provided the local MJE support resources to supplement the energized linemen. This effort provided ComEd a solution to some Line Clearance issues that otherwise would have been difficult because of hard to get outages and switching. MJE will complete an additional 80 suspended dead-ends using energized methods during the summer of 2017.

ComEd now joins a growing number of MJE utility customers (American Electric Power, PPL Corporation, and Pepco) who have already used and leveraged MJE’s broad energized capabilities and skills. John Holtz, MJE Vice President of Central Operations said, “As a long time Contractor of Choice for ComEd for Transmission, Substation, and Distribution work, we are proud to provide yet another value-added service to ComEd with our energized services. We have made the commitment with local equipment and training so that ComEd can continue to utilize energized...
MonoSol Duneland Line 21

M. J. Electric, LLC began electrical construction for the casting, mixing, Silverson, winding, and building work on MonSol, LLC’s Duneland Line 21. MJE is supplying all material, labor, tools, and supervision in addition to furnishing all IMC and EMT raceways, supports, fittings, junction boxes, terminal strips, power wiring, and low voltage wiring for control circuits. Work is scheduled to be complete by November 2017.

Atlantic Sunrise Project

The Atlantic Sunrise Project will expand the existing Transco pipeline, operated by Williams, to supply enough natural gas to meet the energy needs of more than seven million American homes by connecting producing regions in northeastern Pennsylvania to markets in the Mid-Atlantic and Southeast.

Towantic Energy Center and IsoPhase

Located on a 26-acre site in Oxford, Connecticut, the state-of-the-art Towantic Energy Center is a 785 MW 2x1 state-of-the-art dual-fuel combined-cycle electric generating facility using two GE 7HA.01 combustion turbine generators, two heat recovery steam generators (HRSG), and one steam turbine generator.

MJE was awarded the construction installation and testing of all above ground electrical systems and instrumentation for the combustion turbine generators, one triple-pressure HRSG, an axial exhaust condensing steam turbine generator, air-cooled heat exchanger, associated balance-of-plant equipment, and IsoPhase.

The primary fuel will be clean natural gas, however, the plant will be capable of operation on ultra-low sulfur distillate fuel oil. The facility will employ dry-cooling and the most advanced natural gas turbine and environmental control technology. CPV Towantic Energy Center will use clean natural gas to create electricity to power over 750,000 Connecticut homes.

Phillips 66

As part of a joint venture with Yellowstone Electric Co., M. J. Electric continues work at the Phillips 66 Plant in Billings, Montana. MJE is providing electrical construction and process, control, and instrumentation to help keep the plant efficient and up to date. The Billings Refinery was awarded the 2016 ENERGY STAR certification in recognition of its efforts to reduce greenhouse gas emissions through energy efficiency. The refinery produces a high percentage of gasoline, diesel, and aviation fuels as well as fuel-grade petroleum coke.
MJE has completed construction on ITC Midwest’s Grand Junction to Jefferson Transmission Line in Greene County, Iowa. The project consisted of installation of OPGW on one mile of existing 69 kV double-circuit transmission line, installation of OPGW including re-insulation of three miles of existing 34.5 kV line, and rebuilding approximately five miles of existing 34.5 kV single-circuit transmission line.

Landis to Minotola 138 kV Reterminations

The Landis Substation will have three existing 138 kV circuits reterminated at their new terminal positions on the newly constructed 138 kV ring bus. The Monroe-Dorothy line will be connected to the Monroe Terminal in the Landis Substation ring bus to establish a 1404 Monroe-Landis line. This fall the Monroe-Dorothy line will be connected to the Minotola Substation to create the Minotola-Dorothy 138 kV line on the north side of the double-circuit lattice towers along ROW 106. This project involves the coordination of multiple outages, multiple MJE subcontractors, and the owner to bring together multiple scopes of work by outage end dates. The project began in April and will be complete in September 2017.

Marquette County Storm

At approximately 3:30 a.m. on April 10, 2017, MJE responded to American Transmission Company’s (ATC) request for assistance after a storm event in Marquette County, Michigan. Weather experts estimate that 80 mph straight-line winds produced significant damage to the area, breaking four 138 kV wood H-frame structures and creating outages on three 138 kV lines. Two of the damaged H-frame structures supported a 138 kV line which spanned U.S. Highway 41 just west of Ishpeming. The line fell onto the highway and MJE quickly assembled crews and worked with local authorities to close the highway to keep the public safe. The crews’ primary focus was to raise the 138 kV conductor off the highway so traffic could resume. The MJE team worked through indomitable weather conditions and succeeded in energizing the initial 138 kV line by the end of the first shift. By 7:00 p.m. on April 12th, the remaining two 138 kV lines were restored.
Newton

Construction is complete on ITC Newton 138 kV Substation in Branch County, Michigan. MJE’s scope included all foundations, four breakers, 10 disconnects, a control house, six H-frames, 1285 feet of tube bus, and all corresponding control cable. The project involved a 138 kV switchyard which fed into the Jonesville Station. Construction for the Newton Substation began in January and was commissioned and energized on April 11, 2017 by ITC with the help of MJE crews.

Reynolds

Northern Indiana Public Service Company (NIPSCO) contracted MJE to construct below ground work including perimeter conduits, substation reactor, and foundations for the Reynolds 765 kV Substation located in Reynolds, Indiana. Construction also includes the below grade grounding including the line reactor area and foundations installation for the 765 kV line reactor expansion area. Installation includes foundations for HICO reactors, reactor breakers, drilled pier foundations, water separation system, reactor oil containment system, conduit, cable trench, ground grip connection for reactor expansion area, secondary oil containment and drainage, and oil capture tank system grounding. All connections to the previously installed ground grid for the 765 kV line reactor expansion will be made by MJE crews. The entire project is set for completion July 2017.

Cedar Creek to Milford

The rebuild of the Cedar Creek to Milford 230 kV transmission line and foundations was awarded to MJE by Delmarva Power. The 43-mile 230 kV rebuild is adjacent to the existing structures and is located between Cedar Creek and Milford Substations in New Castle County, Delaware. Construction consists of removal of wood H-frame and multi-pole structures, installation of 377 new steel monopoles, removal of old single-circuit line and static wire, and installation of new 1590 ACSR and 96-count fiber OPGW. The foundations will be installed by MJE Drilling using steel caissons and drilled pier foundations. The project requires MJE to develop a mitigation plan and take protective measures to avoid disturbance of a bald eagle nest within the construction corridor. The project began in April 2017 and will be complete by June 2018.

Birdsboro EPC

MJE was contracted by Power Plant Management Services (PPMS) to engineer, procure, construct, commission, test, and startup a 230 kV switchyard and transmission line in Birdsboro, Pennsylvania for Birdsboro Power, LLC.

The project includes construction of four miles of 230 kV transmission line with a 500 kV line crossing underneath. The transmission line corridor passes through the habitat of the endangered Bog Turtle and Eastern Redbelly Turtle. A mitigation plan was developed and construction in the environmentally sensitive areas will only be performed when the turtles are not active.

In addition to the transmission line, MJE will construct a three-breaker switchyard with disconnect switches and associated relaying, metering, RTU, SCADA, and other miscellaneous supporting equipment. This project will interconnect the FirstEnergy transmission system to the 485 MW natural gas-fired combined cycle combustion turbine electric generating facility. The Birdsboro Project began in 2017 and will take approximately one year to complete.
Toll Road Project

ITC awarded M. J. Electric the Toll Road Overhead Transmission Line and SVC Substation project with MJE Drilling completing the foundations installation. The below-grade scope involves drilling and pouring foundations and installing conduit and grounding. Above ground construction includes erecting steel structures, bus and welding, wiring, grounding gas circuit breakers, disconnect switches, instrument transformers, traps and tuners, and control house. MJE Drilling installed two foundations to raise the 345 kV line connected to the 1170 MW Enrico Fermi II Generating Station to provide clearance for the new Toll Road Substation. Thirty additional foundations will be installed to support rerouting three existing 120 kV lines from the Generating Station and cutting into Toll Road; 24 of the foundations will be constructed without an outage. This project, located in Monroe County, Michigan, began in early 2017. The substation is expected to be complete by the end of this year.

Lordstown Clean Energy EPC

The Lordstown Clean Energy Center projects are nearly complete. The projects involve engineering, procurement, and construction for two 345 kV switchyards (collector yard and interconnect yard) with an interconnecting transmission line between the two facilities and all foundation construction.

In late May, MJE crews completed the 345 kV transmission line connecting the switchyard to the generating plant and the 345 kV interconnecting switchyard. Crews will remobilize in the fall to complete the final jumpers for the switchyard. The collector yard was complete in mid-June with crews remobilizing in late summer to finish the remaining bus work along with attaching jumpers to the transformers for the generating facility. MJE’s new fiber optics services group completed the fiber splicing on all three jobs.

Multi-Value Project Phase IV

The Minnesota to Iowa 345 kV transmission project is part of a network of new 345 kV transmission lines planned by ITC Midwest and MidAmerican Energy. This line runs from Jackson County to Faribault County, Minnesota, then turns south into Kossuth County, Iowa. As electricity demand increases, Midwest utilities have increasingly turned to wind energy to meet this need and satisfy renewable energy requirements. Connecting those generating sources to customers requires a strong electric transmission system. The Minnesota to Iowa 345 kV transmission project, along with the other past and present MISO MVP Projects, strengthen the region’s high-voltage electric transmission system to accommodate this additional load. M. J. Electric was contracted to build this line as a part of the “Multi-Value Project” (MVP) Phase IV.
Minnesota Safety Training

The Minnesota region recently held their annual safety training focusing on backyard machine, bucket rescue, pole top rescue, bucket truck set up, barricading, grounding, hydraulic tool use, and safe work practices of rigging, hardware, and sling inspections. The training, conducted by Leigh Conducy, took place at the Dakota County Technical College.

Annual Spring Break Up Training

MJE recently completed the Annual Spring Training in both the Upper Peninsula and northern Wisconsin. Many new classroom and field training programs and initiatives were rolled out to the 130 attendees at 33 different training stations. The hands-on training consisted of various types of stringing equipment, DOT inspections, and pulp truck operations. Field employees led and trained on the majority of the stations. In addition to our existing required evaluations and proficiency training, employees received new evaluation forms to be implemented as part of this training. Apprentices, operators, and lineman offered positive feedback and their appreciation for the realistic training that gave them time on the equipment in order to understand safe operation and limitations. This Spring Training session was conducted by Dave Keller, Dan Wieting, Darrell Lauzon, and Shane Nault.

Quality Management System

As we move into 2017, there is a company-wide initiative to continue with our implementation of a QA/QC program that is compliant to the ISO 9001:2015 standards. This program is designed to improve customer satisfaction, standardize processes, and continually improve MJE as an organization. The adoption of a Quality Management System is a strategic decision for M. J. Electric that can help to improve our overall performance and provide a sound basis for sustainable development initiatives.

What is ISO 9001?
The ISO-International Standards Organization specifies the requirements for a quality management system. It is a standardized business quality model for MJE to follow through policy and procedures to improve on the work that we perform in all aspects of the company. The goal is to standardize the way we do business, allowing us to measure both our successes and failures. There are seven principles of the ISO standard:

1. Customer Focus
2. Senior Management Leadership
3. Engagement of People
4. Process Approach
5. Continuous Improvement
6. Evidence-Based Decision Making
7. Management of Relationships

Each area brings a unique set of challenges and obstacles to overcome that forces us to analyze our processes and procedures across every sector we perform in, driving us to become more competitive in the markets we serve. This will be a long process but not only will MJE benefit from this transition, but our customers will as well.