WHAT'S INSIDE

HOLLAND ENERGY PARK

PINNEBOG WIND PARK

OREGON CLEAN ENERGY SWITCHYARD

GRAND PRAIRIE GATEWAY

HOLMES TO OLD MEAD ROAD
Beginning January 1, 2016, Intermountain Electric (IME), a sister company through Quanta Services, began reporting to M. J. Electric. IME is a 70 year old company based in Denver, CO with branch offices in Reno, NV and North Dakota. IME strengthens our comprehensive electrical construction services in the industrial and commercial markets through their advanced bidding, CAD, BIM technologies, Revit coordination, scheduling, and management solutions. By utilizing both cutting edge BIM and fabrication capabilities, IME is able to streamline construction through accurately counting and sorting project components resulting in timely purchasing and efficient fabrication. BIM is integral to the design, fabrication, and construction process. BIM brings all of the groups together visually, coordinating scope of work with all involved with the project, reducing rework, and driving the schedule. Through integrating IME’s services, we are poised to provide even more innovative project solutions to our customers. We are excited about this opportunity and welcome IME to our MJE family.

\[ \text{“Through integrating IME’s services, we are poised to provide even more innovative project solutions to our customers.”} \]

Joe Mahoney, MJE General Superintendent, participated in the Chicago Polar Plunge Fundraiser to raise money for the Special Olympics. This year 6,000 participants plunged into Lake Michigan to raise money for this cause. Joe joined the ComEd team representing M. J. Electric. He raised $8,175 coming in fourth place out of the 550 ComEd participants. Overall ComEd raised $171,000 and took first place in fundraising.

In January company leaders, from President to Foreman, gathered in Milwaukee for a two day Leadership and Safety Conference to discuss safety expectations, the art of communicating between generations, workplace integrity, and industry opportunities.

Chicago’s Polar Plunge Fundraiser

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Radio Road Substation

MJE completed construction of ITC’s Radio Road Substation, located in Linn County, Iowa. This project, overseen by Project Managers Scott Klocke and Clay Devill, included site grading and site development, seeding, drainage installations, drilled pier foundations, below grade grounding and raceway, erection of steel structures, installation of above grade grounding and raceway, installation of six circuit breakers, one capacitor bank, one transformer and associated bus and jumpers, setting of the ITC furnished control building, installation and termination of control cabling, final grading, final rocking, and commissioning support.

Oregon Clean Energy Switchyard is Complete

The Oregon Clean Energy Switchyard is complete. MJE was awarded the Engineering, Procurement, and Construction (EPC) contract at the end of 2014, and provided complete engineering and design, supply, inspection, delivery, installation, and testing and commissioning. MJE Drilling was also awarded the foundation portion of the switchyard.

Construction under the direction of Project Manager, Andy Hoffman, included installation of a new 345 kV five-breaker ring bus substation including breakers, bus, steel structures, disconnect switches, control enclosure, relays, meters, RTU, SCADA, and other miscellaneous supporting equipment. It is an interconnection point to transfer energy from the Oregon Clean Energy Center, an 800 MW combined-cycle natural gas generation facility under construction with a scheduled completion in 2017. The interconnection to the power plant will be an overhead bus.

Elm Creek Substation

Substation expansion project which includes a 230 kV gas circuit breaker, 230 kV disconnect switch, seven control panels, and construction of a new 345 kV substation. The new substation utilizes a 345/230/13.8 kV, 660 MVA transformer, one 55 MVAR bus reactor, two 345 kV gas circuit breakers, six 345 kV disconnect switches, and a control building with seven control panels. Crews will construct foundations, steel structures, above and below grade raceway and grounding, bus, control cable terminations, and final rocking and grading. Scheduled completion is set for July 2016.

MJE is working on ITC’s existing Elm Creek 230 kV
Grand Prairie Gateway

MJE was awarded the western portion of ComEd’s Grand Prairie Gateway Project. This portion includes 43 miles of 345 kV electric transmission line being constructed between Byron and Wayne Substations. The new line will connect these substations and travel across the counties of Ogle, DeKalb, Kane, and DuPage. MJE will be providing electric transmission construction, matting, SWPP, and foundation services.

The total transmission line will include approximately 400 single-pole steel structures and is located along 60 miles of right-of-way. This transmission line will allow for more efficient flow of electricity across the grid, alleviating congestion and reducing costs. The line will also allow customers to access lower-cost, cleaner energy. It is expected to save customers approximately $250 million within the first 15 years. The project is anticipated to be completed and begin service by June 2017.

Information from ComEd.com/GrandPrairieGateway

Emmaus Transmission Line

Construction of PPL’s Emmaus Transmission Line is underway with installation of 80 wood poles, and 11 steel poles ranging in height from 85 to 115 feet. The new line serves as a safety net to prevent power outages for approximately 7,000 area homes and businesses. In addition to the line, PPL added more smart grid switches to isolate outages and reroute power around trouble areas within a few minutes. PPL is confident these improvements will prevent long stretches of lost power if storms ravage their region. This project is part of PPL’s broader campaign to strengthen infrastructure throughout its 29-county territory. Construction, which began in August 2015, is expected to be complete in April 2016.

“Without your help and support, this project certainly wouldn’t be nearing completion. Thanks for your focus on safety and making sure that we are doing the right thing each day throughout this challenging project.”

– Mark Berner, P.E.
(Project Manager PPL)

Holmes - Old Mead Road Transmission Line

MJE recently completed a 20-mile segment of the new 138 kV Holmes to Old Mead Road transmission line in an abandoned rail road corridor between Powers and Escanaba (MI). Part of the abandoned railroad corridor will also be developed into a multi-purpose recreational trail in cooperation with Michigan agencies.

Additional construction continues in Segment 28 with installation of wire on the 138/69 kV double circuit portion of line heading toward the Old Mead Road Substation and also in Segment 7 with the structure setting. As of mid-March, 85% of the steel poles have been set, 94% of the foundations are complete, 90% of the existing line has been wrecked out, and 83% of new wire has been installed. The Holmes–Old Mead Road line stretches 58 miles from the Holmes Substation in Menominee County to the Old Mead Road Substation in Escanaba, Michigan. The line is part of ATC’s Bay Lake Project and has an anticipated in-service date of mid-2016.
M. J. Electric provides renewable energy services including:

- Early Development & Engineering Design
- Collector Substations & Interconnection
- Switchyards 34.5 kV - 765 kV
- Transmission Line 34.5 kV - 765 kV
- Collector Systems
- Battery Storage
- Solar
- Engineering Studies
- Mapping

- Procurement & Construction Services
- Overhead & Underground Transmission & Distribution Collector Systems
- 34.5 kV - 765 kV
- Collector Substation & Utility Interconnect
- Switchyards 34.5 kV - 765 kV
- High Voltage Transmission Line
- 34.5 kV - 765 kV
- Turbine Wiring
- Battery Storage
- Solar
- Emergency Repair & Storm Response

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DTE’s Pinnebog Wind Park EPC Project

Aristeo Construction awarded M. J. Electric the electrical scope of work for DTE’s Pinnebog Wind Park EPC project located in Huron County, Michigan. The 50 MW wind park includes 33 GE 1.7 MW turbines located on approximately 14,000 acres. Pinnebog Wind Park will power more than 22,000 homes. Construction includes complete electrical engineering, substation and tower wiring, collection system engineering, substation/SCADA expansion engineering and installation, and turbine erection.

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Fair Wind Project

Hard Rock Trenching in Maryland for Exelon
Holland Energy Park

Crews started above grade construction at the Holland Energy Park, a 125 MW 2x1 combined cycle plant owned and operated by the Holland Board of Public Works. The plant features two Siemens SGT-800 gas turbines, Vogt HRSGs, and one Siemens SST-400 steam turbine. This spring, a Process Controls & Instrumentation crew will install and calibrate the instrumentation. Excess heat from the plant will allow Holland to quintuple the size of the snow melt system in downtown Holland. Holland’s system represents the largest municipal snow melt system in the United States. MJE is contracted by Barton Malow, the EPC contractor for the project. Holland Energy Park is scheduled for mechanical completion at the end of August 2016 with the entire park being complete in February 2017. Roughly 30 electricians from IBEW Local 275 are working on the project.

Craig Station NOx Reduction Project

Black & Veatch contracted MJE for the NOx Reduction Project at Craig Station in Colorado. MJE’s scope of work includes the installation of above grade electrical for the Unit 2 SCR along with the removal and replacement of four new booster fans, cable tray and raceway construction for the SCR reactor, fly ash handling and associated equipment, cable tray and conduit installation, and completion of the battery and data highway systems. Additional scope involved MCC, switchgear, panels, transformers, lights, and fiber optic. Craig Station, operated by Tri-State Generation, is a key baseload power station providing 1303 MW of relatively low-cost, reliable generation. The Industrial, Power & Controls Division and Process Controls & Instrumentation crews are scheduled to complete this project by early 2017.
MJE has completed the replacement of 9.5 miles of 2156 ACSR conductor and 3/6 Alumoweld shield wire with 1033 ACSS TW double bundle and 7/8 Alumoweld shield wire for Commonwealth Edison. In addition, MJE installed one new steel pole and removed one existing lattice structure. Challenges during the project included installing wire over two major highways and two state routes with live traffic, contending with an extremely busy railroad running parallel to the transmission line, and replacing the wire while the line remained energized. MJE provided the energized services using the Quanta Services' LineMaster™ robotic arm. This unique, specialized technology enables MJE to safely reconductor, rebuild, replace, and add lines and equipment while keeping the system in service.

This reconductor project used the robotic arm to successfully maneuver around an energized 34.5 kV underbuild and an energized 345 kV parallel circuit.

ComEd Reconductor Project

Construction began in September 2015 and was complete in January 2016.
M J Electric invests in and fosters trusting relationships as we safely deliver electric transmission, substation, distribution, renewable energy, power, industrial, and concrete foundation construction services that increase the security, reliability, and capacity of our nation’s infrastructure. For additional information about our company, or to change your contact information, please visit at www.mjelectric.com or email us at info@mjelectric.com.

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Englishtown – Wyckoff Transmission Line Foundations

MJE Drilling constructed four drilled pier foundations adjacent to the New Jersey turnpike in East Windsor as a subcontractor to J. W. Didado Electric, a sister Quanta Company. The installation included two 8’ diameter piers, one 7’ diameter pier, and one 6’ diameter pier. Work was complete in early March.