WHAT'S INSIDE

RED LION TO CEDAR CREEK

FOX LAKE TO LAKEFIELD JCT

STRAITS SUBSTATION

PANDA LIBERTY POWER PLANT AND PANDA PATRIOT POWER PLANT

LEADING INFRASTRUCTURE PROJECT AWARD
As I write this we have just completed work for 2015 and celebrated the New Year. I am pleased to say we completed the year with a record safety performance for the fifth year in a row. The improved safety numbers are a result of positive changes in attitude, safety behavior, hazard awareness, and our striving for continuous improvement. We have taken on many safety initiatives this year which I believe will improve not only our performance but impact our industry for the better. Some items to note are:

1. Extensive Grounding Program rolled out to 900+ employees
2. Drilled Hole Best Practices developed and rolled out
3. Down Hole Rescue Procedures developed for all drilling crews
4. Over 60,000 man-hours of safety training provided to employees

We have initiated an “On Boarding Program” for which we have hired talented individuals who, for the next 18 months, will cycle through various departments to gain in depth exposure to the inner workings of MJE on a broad scale. It is critical that we continue to invest in our people and develop the necessary skills to meet our customer needs.

Our backlog of work going into 2016 is strong and there are significant opportunities, in all sectors of our business, for continued growth. As part of this growth I am pleased to announce beginning January 1, 2016, Intermountain Electric (IME), a Quanta sister company, based out of Denver (CO) with a branch office in Reno (NV), will report under M. J. Electric. IME serves the heavy commercial and industrial markets, including new construction and long term maintenance contracts, and will be a good complement to our Industrial and Power Division. We welcome all of the IME folks into the MJE family and expect a seamless transition throughout this year and beyond.

I expect 2016 to be a year of growth and refinement as we seek to capitalize on the investments we are making in our people, processes, and equipment.

I sincerely thank you for your hard work and commitment to MJE as we focus on exceeding our customer’s expectations for today and help build our Nation’s infrastructure for generations to come.
Construction is nearly complete on a 34.5 kV rebuild in Iowa for ITC Midwest. The rebuild began at an existing deadend point in Linn County and runs approximately 6 miles to Benton County. The rebuild includes installation of T2-Penguin conductor and 3/8” EHS shield wire. The structures include 80 round wood poles, 27 laminate structures, and 2 steel structures on concrete foundations.

MJE Drilling has completed the foundation work at ITC’s Elm Creek Substation located in Cloud County, Kansas. Now that the substation’s foundation is complete, an M. J. Electric substation crew will begin construction on the actual 345/230 kV yard.

Project construction includes drilling and pouring foundations, final grading, setting gravel, installing conduit, and installing grounding. Above grade work will include erecting steel structures including stands, poles, bus and welding, installation, wiring, control wiring and grounding, gas circuit breakers, disconnect switches, instrument transformers, traps, and tuners. Construction began in September and is scheduled to be complete July 2016.
In early December, MJE completed work on PPL’s Auburn Tap Rebuild project in Schuylkill County (PA). Crews from IBEW 1319 began work in July reconstructing and modernizing the 69 kV line. The rebuild included adding a new fiber optic line, replacing 117 wood poles and various steel poles. Construction required a helicopter to pull in ropes and install aerial marking balls and fiber optic spacers.

HOLMES TO OLD MEAD ROAD

The 69 kV Pine Crest reroute and the 24.5-mile 138/69kV double-circuit section of line from the Chalk Hills Substation (WI) to Powers (MI) is complete. Energization of the 69 kV circuit occurred on October 30, 2015. MJE continues construction on the line from Powers towards Escanaba (MI) down an abandoned railroad corridor. The project has a scheduled in-service date of August 2016.

FOX LAKE TO LAKEFIELD JUNCTION

MJE was awarded ITC’s Fox Lake to Lakefield Junction 345/161 kV transmission line and foundations project. The scope of work includes excavation for and installation of concrete foundations, along with installation of wire, poles, and hardware. MJE Drilling will perform the foundation portion of the work.

The majority of the line follows the existing 161 kV wood H-frame line from Fox Lake Substation to Lakefield Substation. The existing 161 kV route will be replaced with double-circuit 345/161 kV and the existing 69 kV route will be replaced with a double circuit 345/69 kV line. The new route will install a single-circuit 345 kV line. The conductor for the 69 kV will be T2 4/0 Penguin, the 161 kV will be T2 795 mcm (Drake) and the 345 kV will be bundled T2 795 mcm (Drake). The structures will be monopole Cor-Ten steel mounted on concrete foundations. The project is scheduled for completion in August 2016.
MJE is rebuilding ITC's 138 kV Marshall - Blackstone transmission line that spans Calhoun and Jackson Counties in Michigan. The line begins in Marshall Township and extends east approximately 35 miles, ending in Blackman Township. The rebuild includes excavation and installation of concrete foundations by MJE Drilling. MJE transmission crews will remove the existing structures, conductor, and wire to install new direct embed steel monopoles, 954 ACSR conductor, 7/16" EHS shield wire, and a combination of single and double-circuit 138 kV structures. The right-of-way for this line traverses a variety of landscape types including farm fields, residential areas, and wetlands. The project is scheduled to be complete mid-summer 2016 under the direction of Project Manager Meredeth Bellmore.

RED LION TO CEDAR CREEK

In August 2015, MJE began the rebuild of the Red Lion to Cedar Creek 230 kV transmission line between the two substations located in New Castle County (DE). The rebuild includes foundations, caissons, poles and assemblies, existing line removal, phase conductors, and static wire/OPGW. The existing circuit runs approximately 21 miles; the 230 kV rebuild covers 15 miles with an additional 6 miles of new OPGW installation. This project includes the replacement of the existing shield wire on the first 75 line structures and includes removal and replacement of the existing wood H-frames. The project is broken into two phases. The first phase was completed in December 2015 with the second phase scheduled to be complete at the end of May 2016.
MOROCCO 345 / 138 kV SUBSTATION AND TIE-INS

The construction of International Transmission Company’s (ITC) Morocco 345/138 kV Substation is complete in Lenawee County (MI). The 345 kV yard consists of two rows of breaker-and-a-half configuration with gas circuit breakers, eight disconnect switches, and a control house. The 138 kV yard consists of three rows of breaker-and-a-half configuration, including eight gas circuit breakers, sixteen disconnect switches, and a control house.

MJE has also completed the line cut-ins for the new Morocco Substation. Crews installed three towers on the 345 kV side and twenty monopoles on the 138 kV side. The project also required twenty-one foundations which were installed by MJE Drilling.

OREGON CLEAN ENERGY SWITCHYARD

Construction is well underway at Oregon Clean Energy Switchyard near Toledo, Ohio. The switchyard consists 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 serves as an interconnection point to transfer energy from the Oregon Clean Energy Center 800 MW combined cycle natural gas power plant. The interconnection to the power plant will be an overhead bus. The completion date is set for Spring 2016.
MJE provided labor, construction equipment, and materials to assist in the repair of self-contained fluid filled (SCFF) cables which join the upper and lower peninsula power grids under the Straits of Mackinac. This basic cable design was developed in the 1920’s and uses dielectric fluid under pressure to maintain insulation integrity. It is a fairly common installation in submarine environments. American Transmission Company (ATC) now owns the two 138 kV circuits which lay on the floor of Lake Michigan near the Straits.

Four of these 138 kV cables had been installed in the early 1970’s, and due to unsecured movement and contact with below grade rock formations at both ends of the cables (McGulpin [Mackinaw City] and Point LeBarbe [St. Ignace] Riser Stations), the cables had experienced problems with fluid leaks near the cable pothead risers where the below grade system transitions to overhead transmission lines.

The core of the Straits project involved excavating the ends of the cables along the shorelines, removing and replacing the leaking land section of the cables, and splicing the new cable end section along with a new termination structure on the end of the existing submarine cables. The high voltage splicing work was completed by WA Chester.

Extensive project planning began in the spring of 2014. Existing data concerning cable anchor blocks was incomplete, so MJE did exploratory excavation that Fall. Since the circuits are critical to the Upper Peninsula’s grid, the timeframe for the repairs was compressed. The adjacent circuits shared the same existing deadend structure so maintaining one energized circuit while the other was being repaired was very challenging.

Further complicating the construction was the presence of several endangered plant species and known contaminated soils at Point LeBarbe Station. The plant species were marked and crews carefully worked around them. MJE also hired dewatering and water treatment specialists to ensure that water present in the excavations was properly maintained, contained, treated, and disposed in a safe manner.

The existing wood structures at both riser stations were deteriorating and ATC decided to replace these structures with new steel structures and added a new high security fence. MJE’s drilling, substation, and transmission crews all completed portions of the work. Critical coordination between crews was performed flawlessly, a tribute to the expertise and professionalism of our field crews. If you are heading north across the Mackinac Bridge, look along the shoreline to the west. You can see the shiny new galvanized deadend structure the crews erected at Point LeBarbe Riser Station as part of the work for this project.
CLIFFS NORTHSHORE MINING PROJECT COMPLETE

MJE’s Minnesota crews recently completed a 115 /13.8 kV substation which will provide needed electrical service to the mining operations at Cliffs North Shore Mining (CNSM) in Babbitt (MN). The installation included a 115 kV transmission interconnect that fed the 13.8 kV metal-clad switch gear and allowed CNSM to expand operations into a new area of the mine.

SUBSTATION MODIFICATIONS

In April 2015, American Electric Power awarded MJE five 138 kV substation modification projects all located in, and around, the Fort Wayne (IN) area. Construction began in September at Guardian Substation. Guardian Substation is a located in Noble County and required removal of relay, SCADA, RTU panels, battery charger, CCVT junction boxes, and corresponding control cables. After crews successfully made adjustments at Guardian, they mobilized at Garrett North Station where modifications included installation of 2 CCVTs and control cable work. After those stations were complete, MJE crews moved to the County Line substation located in Dekalb County. Expected work will continue there until March 2016. Lastly in August 2016, crews will mobilize to Kendallville and Albion Substations both located in Noble County. Albion’s scope includes installation of wave traps, tuners, CCVTs, breakers & corresponding relay panels along with some removals. Kendallville’s scope includes installation of relay panels, relays in existing panels, control switches, relay output modules, and rebuilding a bay on the current configuration. All modifications are on schedule to be complete in December 2016.
Exelon Generation’s 78 MW Sendero Wind Farm project, located near Hebbronville (TX), is complete and was energized November 20, 2015. MJE crews installed 155,000 feet of 34.5 kV underground collection system. In addition, MJE oversaw the construction of the 34.5/138 kV collector substation and the 6.2 mile 138 kV transmission line. The wind farm features 39 GE 2.0 MW wind turbines in addition to its extensive underground collection system, collector substation, and transmission line.

M. J. Electric (MJE) and Process Controls & Instrumentation (PCI, a division of MJE) have successfully completed their work at the Panda Liberty Power Plant in Bradford County (PA). In January, work will be complete on the Panda Patriot Power Plant in Lycoming County (PA). As of mid-December 2015, crews have worked over 130,000 man hours between these two sites.

Both facilities are 829-megawatt natural gas-fired combined-cycle generating stations consisting of two 400 MW single-shaft power trains. These plants use Siemens SGT6-8000H gas turbines, Siemens SST-5000 steam turbines, Siemens SGEN6-2000H hydrogen-cooled generators, Vogt “Smart-Box” Heat Recovery Steam Generators, and Air Cooled Condensers. Gemma is constructing ancillary systems and buildings as well as the electrical interconnection facilities and tie-ins for natural gas, water, and wastewater. Once built, the plants are expected to supply the power needs of up to one million homes each and make a significant contribution to the area’s economy.
ASSET MANAGEMENT WEBSITE

M. J. Electric has grown so fast in such a short amount of time that new policies and procedures had to be developed to help maintain production and efficiency. MJE works on projects nationwide so getting the correct tools in the hands of our crews in a timely manner is key to the efficiency of our work. Because of that, one of the many additions MJE is proud to implement is an online tool catalog website. The website and Tool Order Requisition Program were developed by MJE’s I.T. Department and Tool Control personnel, with Jared Keller, Jim Gardiner and Josiah Bradbury leading the project.

This website serves as a tool e-catalog for Field and Operations personnel to place requisition requests for tools, safety, and expendable items. The e-catalog features organized photos and descriptions for each tool allowing for efficiency and accuracy when choosing tools for jobs. In addition, it includes owner’s manuals, part lists, specific information on tooling and contact information for all Tool Control locations nationwide. Once the order request is placed online, Tool Control is able to gather, pack, and ship tools to the appropriate work sites. The website has significantly reduced cost, allowed for a more efficient and effective process, and created a platform to sustain future growth.

RETIREE PARTY

M. J. Electric is proud to congratulate the 2015 retirees.

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<thead>
<tr>
<th>Name</th>
<th>Years</th>
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<tr>
<td>Terry Alwine</td>
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<tr>
<td>Kelly Applin</td>
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<td>Scott Klein</td>
<td>19</td>
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<td>Dave Oleksy</td>
<td>32</td>
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A combined total of 147 years of dedicated service. Thank you and congratulations!

PEOPLE HELPING PEOPLE

Each year the corporate office, located in Iron Mountain (MI), participates in the “People Helping People Fund Drive” providing gifts and food for needy families in the local area. Employees are encouraged to donate items for needy children and families as well as toiletries and non-perishable food items. Cash donations are matched by the company and are used for fuel and utilities assistance. This year MJE is honored to donate $23,400 in cash and gifts. We are proud to take part in making a more joyous season for those less fortunate.
EMPLOYER SUPPORT OF THE GUARD AND RESERVE AWARD

In early December M. J. Electric was awarded the “Employer Support of the Guard and Reserve Award” at the George S. Sullivan Power Project in Anchorage (AK). COL Joseph Streff, CSM Peterson, and Shawn Rall presented the award to Project Manager Kevin Gunderson. Russell Throckmorton, First Sergeant and member of Local 1547 in Alaska, recommended Kevin and M. J. Electric for the award due to their support during his time off for training.

Kevin said, “We just did what every company should do. It was a very patriotic and proud moment to be given such an award. I was honored and humbled to say the least. We are very grateful for all of our service men and women, retired or active duty, and could not do what we do without them.”

LEADING INFRASTRUCTURE PROJECT AWARD

The New Jersey Alliance for Action’s “New Jersey’s Leading Infrastructure Projects” award program was created to honor the businesses and organizations that work together as partners to ensure the project’s success through innovative, pioneering, and landmark construction initiatives which greatly impact the state’s economy. The West Wharton Substation Enhancement Project is a great example of what can be accomplished when organizations work as a team to construct a successful project.

The New Jersey Alliance for Action honored M. J. Electric with the “New Jersey’s Leading Infrastructure Project Award” for Senior Project Manager Richard Maguire’s work at West Wharton Substation located in Morris County (NJ). Jersey Central Power & Light (JCP&L) officials told the New Jersey Alliance for Action about Rich’s leadership on the project resulting in M. J. Electric receiving the award. The award will be presented mid-February.

SOUTH SHORE TOY DRIVE

MJE’s Central Region Indiana office has once again participated in the South Shore Toy Drive sponsored by “Becoming We the People” and “Kempo Jujutsu Martial Arts Academy”. The South Shore Toy Drive collects both new and used toys locally and distributes them to struggling families throughout Lake and Porter counties in Northwest Indiana.

Mrs. Jordan Hestermann, Director of “Becoming We The People”, started the toy drive in 2009 and continues to coordinate with local businesses and not-for-profit community organizations collecting and distributing toys. Last year, toys were given to Rainbow Shelter, Ark Shelter, Haven House, Crisis Center, Gabriel’s Horn, Veterans Life Changing Services, The Caring Place, and Sojourner Truth House. A large distribution was given through St. Mary’s Church in East Chicago (IN). Each year the toy drive grows and is able to extend their outreach to several more.
M. J. Electric is proud to announce another recipient of Quanta’s Commitment Coin. Construction Manager Joe Regiani is currently working at the Holland Energy Park project in Holland, MI. Joe has demonstrated a consistent pattern of dedication to MJE’s safety program, observed in his team’s overall safety performance. This was recently detected when a delivery truck driver was having health issues while at the job site. Joe and his team recognized the symptoms and immediately responded with assistance and deployed the onsite AED. The crew and Joe’s response to this incident is a testament to him and his dedication to safety. The truck driver is doing well and our customer was very impressed with the response observed. MJE is fortunate to have Joe on the team.

Senior Project Manager Jim Washburn has been awarded a Quanta Commitment Coin for his dedication to safety. Jim and his team have gone seven years without an OSHA recordable at the PNM San Juan site in Waterflow, NM. He contributes this accomplishment to following policies and procedures, informing his team of lessons learned from all incidents that have occurred, and always striving to improve performance when new ideas are learned. The core group of supervisors ensures new employees are properly trained and have the means to follow the policies. The safety program is continuously monitored for adherence, better practices, procedures, equipment, and is used to create a successful jobsite environment.

Vice President Paul Randby was awarded a Quanta Commitment Coin for his leadership during a reassessment goal of Equipotential Zone (EPZ) grounding safety. Paul assembled a team from among a varied group of MJE employees to evaluate, reconstruct, and train crews on EPZ safety and practicality. In just over a year the group evaluated the EPZ grounding procedures, made revisions, and rolled it out to field crews. The reassessment group led by Paul, achieved practical and safety objectives successfully.

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