J.F. White Electrical Division On Track with Variable Frequency Drive and Motor Replacement Project at MWRA’s Deer Island

BOSTON HARBOR, MA – J.F. White Contracting’s Electrical Division, based in Framingham, MA, is on schedule with the Deer Island North Main Pump Station Variable Frequency Drive and Motor Replacement project. The NECA contractor is serving as both general contractor and prime electrical contractor in the elaborate five-year project, which is valued at just over $24 million.

The project, which commenced in November 2011, entails the replacement of ten 3,500HP/4,160V Pump Motors and corresponding “Smart” Variable Frequency Drives (VFDs), that will pump raw wastewater from incoming sewer lines located 140’ beneath the building, through the plant for treatment and purification. J.F. White is currently working on the seventh of ten new VFD/Motor replacement combinations.

Prior to commencing work on any VFD/Motor combination, approval of a comprehensive, detailed, equipment lifting/rigging plan was required. The scope includes the installation and integration of the most advanced Smart VFD Technology with the facility’s existing 20-year old control systems and wiring. The new motor and drive hardware and software components provide technology that will result in more reliable and energy-efficient pump station operation.

Reliability testing procedures prior to commissioning:

- All aspects of the project require J.F. White’s close coordination with motor and drive manufacturers, testing companies, and the Deer Island Electrical Group, Deer Island Primary Operations and Deer Island Plant Interface Control System Group.
- Extensive start-up and commissioning procedures are integral to the project. Prior to acceptance by Deer Island and commissioning, each VFD/Motor combination must complete a 48-hour Integrated System Field Test (ISFT) to assure 100% reliability. The equipment must then pass a 10-day Operational Availability Demonstration (OAD), involving both the systems’ hardware and software. During the OAD, the equipment must exhibit 99.7% availability for pumping operations, and have no system failures.
- To ensure continuous wastewater pumping operations at the Deer Island facility, only one motor and VFD combination can be worked on at a time. Existing VFD/Motor combinations are kept operational until commissioning of a complete new set. After installation of each set, J.F. White is providing decommissioning and removal of each old VFD and motor set.
- The J.F. White project team has been headed by the latest Project Manager Gerry Case, Project Manager Kevin Gaulin, Site Supervisor Kevin Crompton, Foreman Dan Comolotti, and Field Engineer Steve Bowers. The team is managing a field crew of IBEW Local 103 journeyman electricians in the multi-year project.

Fellow NECA Boston Chapter firms, Chapman Construction Group and Richard W. Reid Electrical, are working as sub-contractors to J.F. White in the project; each contractor will replace one motor/drive set.

Malcolm Pirnie provided the project’s electrical engineering services and Fay, Spofford & Thorndike of Boston is serving as the resident engineering firm.

The project on schedule for completion in March 2016.

In another aspect of the project, NECA member J.M. Electrical Company is handling the Automatic Temperature Control installation of the plant chillers, which are being replaced by J.F. White’s Mechanical Division.

Massachusetts solar industry stakeholders, legislators meet at State House to discuss lifting the state’s solar net metering caps

NECA and IBEW spearhead effort to ensure solar industry remains vibrant

BOSTON, MA – Solar energy advocates representing the National Electrical Contractors Association (NECA) Boston Chapter, the International Brotherhood of Electrical Workers (IBEW) Local 103, and solar energy developer, Next Step Living, Next Step Living and Southern Light Strategies, and Liberty Square Construction, met with Massachusetts legislators at the State House in Boston on Thursday, May 21 to discuss the importance of immediately lifting the state’s net metering caps.

It is an issue that, according to solar industry leaders, puts the vibrant Massachusetts solar industry at risk. Their message was clear: raise the caps as soon as possible, as a legislative action before the state in 2014.

Representatives from NECA/IBEW, solar companies, Mass Electric Construction and All-Pro Electric, were joined by NECA/IBEW Business Development Director Lisa Podgurski and NECA Boston Assistant Manager Kristen Gowan, meeting with Massachusetts State Senator Ryan Fattman, Representative Tackey Chan, Representative Dan Donahue, Representative Paul Brodeur, Representative Leonard Mirra, and Representative Claire Cronin in an effort to spur immediate action by the state to raise the net metering caps.

The group was joined by solar companies, Next Step Living and Southern Light Solar as well as NECA and IBEW legislative consultants, Beacon Strategies and Liberty Square Group, in the solar lobbying effort. Ma. Podgurski serves on the state’s Net Metering/Solar Task Force, appointed by Governor Charlie Baker to research alternatives to the current net metering cap system.

The current state cap on net metering, set at 4 percent of a utility provider’s peak demand for private projects and 5 percent for public projects, puts the Massachusetts solar industry at risk, as the state currently has solar instalations totaling 776 megawatts of renewable electric capacity, according to the Massachusetts Department of Energy Resources. Nearly 270 megawatts of solar capacity was installed in the state in 2014.

For a complete directory of NECA Greater Boston Chapter member firms, call 1-877-NECA-IBEW or visit us at www.bostonneca.org.
State-of-the-Art
JATC Training Facility in Spotlight at NECA Boston Chapter Meeting

DORCHESTER, MA – At the NECA Boston Chapter meeting on June 10th, more than 70 NECA members joined with Wentworth Student Chapter members in a walk-through of the new JATC Electrical Training facility at 170 Freeport Street on the IBEW Local 103 campus. JATC Director of Training Jim O’Connell and Assistant Director of Training Chris Sherlock presented an overview of the comprehensive, highly regarded training program to attendees. There are presently 650 electrical and telecom apprentices enrolled in the Boston JATC program which is co-sponsored and run by IBEW Local 103 and NECA Boston.

Fischbach & Moore Electric Nears Completion of 1.9MW of Solar Installations for Mass DOT

BOSTON, MA – Fischbach & Moore Electric Group, LLC, of Boston, is nearing completion of the installation of four solar arrays totaling 1.9MW for the Massachusetts Department of Transportation. The solar fields are located on MassDOT land adjacent to the Massachusetts Turnpike at the Framingham 13 South and North Interchanges, and in Natick on I-90 Westbound. The NECA contractor has managed a field crew of 18 IBEW electricians throughout the project, which commenced in February and is scheduled for completion in June. During the winter of 2015, the crew worked through nearly nine feet of snow in order to keep the project on schedule. The Fischbach and Moore project team is headed by Project Manager Jim Bradley, Foremen Ross Hagen, Peter Connell and Ethan McMahon, Site Superintendent Charlie Leigh, and Estimator Steve Hopkins.

SOLAR LEGISLATIVE NEWS

Attorney General Healey Backs Lifting Net Metering Cap

BOSTON, MA – On June 1st, a day prior to a legislative hearing on the solar net metering cap, Attorney General Maura Healey came out strongly in favor of lifting the net metering cap immediately. In written testimony to the chairmen of the Legislature’s energy committee ahead of a hearing on Tuesday, June 2nd, Healey said public and private net metering caps have been reached in National Grid’s territory, putting solar projects in 171 communities at risk as development slows. “Increased market constraints can drive up costs, and reduce investment in the clean energy sector, to the detriment of customers, the clean tech economy, and the Commonwealth’s energy and environmental policy goals.” Healey wrote in her testimony. “A limited cap increase will help avert this market boom-bust that would adversely impact 1,400 Massachusetts solar companies and place jobs at risk.”

The June 2nd legislative hearing was held in the Gardner Auditorium at the State House. The NECA/IBEW legislative panel, comprised of Larry Aller, Lisa Podgurski, Felix Senkovsky of Mass Electric Construction and John Gill of All Pro-Electric provided testimony before the State’s Joint Committee on Telecom, Utilities and Energy. The message presented – net metering has a major negative impact on the solar industry and on jobs in Massachusetts.

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