

Appendix 9.5.TDI-NE

NECPL - TDI-NE and VELCO Personnel Experience re O&M Services

- TDI-NE Personnel
- VELCO Personnel

NECPL Team - Representative O&M Experience Profile

Gene Martin

New York City Department of Corrections – Rikers Island Detention Facility Rikers Island, New York City	
Project Value	10-year O& M support agreement at \$8MM per annum for an \$85MM EPC program
Related Project Scope	<p>Development and implementation of long term O&M services in association with the engineering, procurement and construction of a Combined Heat and Power (CHP) Plant for the Island.</p> <p>Developed and secured 10-year post installation service agreement to ensure continued reliability and performance of CHP systems and components based on contractual uptime requirements. On site O&M support services coupled with high level remote monitoring of key system performance criteria</p>
Description	<p>Long term O&M services for entire facility system including the following key components:</p> <ul style="list-style-type: none"> • Eight 70,000 lbs per hour converted fuel oil to natural gas high-pressure boilers • 3 modular 7.5MW Solar gas turbine generators providing the prime source of electrical and thermal energy to the island • 15 low emissions burners • Natural gas supply train • Overall plant control and remote monitoring system

Morongo Casino, Resorts & Spa Cabazon, California	
Project Value	20-year, \$1.8MM per year O&M support for a \$16MM EPC project
Related Project Scope	<p>Designed and implemented follow on long-term O&M program for a 14MW combined heat and power central utility facility for remote casino development. Program performance and reliability guarantees offered in relations to keeping the 658,000-square foot casino facility 24 by 7 operations going.</p>
Description	<p>Developed and implemented long term strategic O&M program for providing round the clock power, natural gas, heating, cooling, and water heating needs for the casino complex including all related infrastructure:</p> <ul style="list-style-type: none"> • Islanded gas powered 14MW combined heat and CHP/ CUP power plant • Waste heat recovery driving cooling (absorber) and domestic water heating / heating

Public Services Electric & Gas (PSE&G) Northeast Grid Reliability Project Northeastern New Jersey	
Project Value	Startup services including development of utility accepted O&M plans for the energization of a \$1.8B Reliability Upgrade Program
Related Project Scope	Commissioning and establishment of PSEG staff led O&M program to energize and assimilate newly installed reliability infrastructure into routine operation. Key responsibility over the design and implementation process was the coordination of all OEM prescribed O&M protocols into a cohesive plan as part of the transmission system upgrades.
Description	<p>Scope of services included the coordination of commissioning and the establishment of applicable O&M protocols for the following new PSEG system components:</p> <ul style="list-style-type: none"> • Newly installed 200 circuit miles 230kV system • 16 newly installed 230kV substations and associated tie-ins • Owner's Representative in supervisory & technical oversight of health, safety • QC planning • Project controls • Maintenance scheduling

Thomas A Watson Generating Station Braintree Electric Light District Braintree, MA	
Project Value	Commissioning and O&M Planning associated with a \$110MM EPC project
Related Project Scope	Following startup services, the implementation of a follow-on O&M plan in concert with BELD staff's ongoing operations for the continued reliable deployment of generating assets to meet municipal power supply obligations.
Description	<p>Developed detailed post commissioning O&M plan for newly constructed 116 MW dual-fired combustion turbine project adjacent to Norton P. Potter II generation system. Components covered within the O&M plan included:</p> <ul style="list-style-type: none"> • Two 58MW Rolls Royce Trent 60 Model WLE combustion turbines operating in simple cycle configuration capable of operating on either natural gas or ultra-low sulfur diesel fuel oil • A 115kV switchyard • All newly installed plant ancillary equipment

Robert Harrison

O&M Services – University of New Hampshire, Durham Campus, New Hampshire, Combined Heat and Power Plant	
Project Value	10 – year, \$5MM per year turnkey O&M responsibility for University’s new \$28MM Combined Heating, Cooling and Power Generation Facility
Related Project Scope	Long term O&M responsibility for upgraded central utility facility including university based load electric generation. Overall responsibility for facility operations and staffing to meet continued thermal and electrical demands. Plant’s long-term equipment maintenance coordinated via subcontract with OEM supplier to maintain optimum loads supply and availability. Two additional 5-year renewal options exercised by the University
Description	<p>Managed staffing and programs to provide routine and preventive maintenance services for the following key components of the newly upgraded 17,000 square foot facility:</p> <ul style="list-style-type: none"> • Single 7.5 MW dual fueled Solar combustion turbine generator coupled to a heat recovery steam boiler with a natural gas fired duct burner • Electrical switchgear operating in parallel with utility grid • Fuel management systems including a single 50,000-gallon above ground, double walled fuel storage tank with applicable alarms and marking • Automated continuous emissions monitoring system for NOx, CO & O₂ • Upgraded chilled water plant • An existing steam generating plant

Beacon Landfill Gas Waste to Energy Renewable Project West Pennsylvania	
Project Value	\$36MM
Related Project Scope	<p>Start-up services and commissioning and establishment of O&M protocol and support program in association with engineering, procurement and construction services for project delivery.</p> <p>Related O&M scope developed in concert with the EPC contract delivery to establish an viable plan for the continued delivery of associated LFG at rated capacity and quality.</p>
Description	<p>O& M project support of LFG project investment funded by John Hancock Life Insurance Co. Established long term post installation O&M procedures for all LFG systems and components.</p> <ul style="list-style-type: none"> • LFG collection systems, 2 LFG gas processing plants, 15 miles of pipelines and 2-compressor and blending stations. • Coordinated OEM post installation support for gas separation system – separation of methane from landfill gas to provide pipeline quality "natural gas" via an Air Liquide/DOW membrane separation technology

Suresh Dave

New York Power Authority's (NYPA) Generation and Transmission Asset Upgrades Program	
Project Value	\$750MM aggregate program costs
Related Project Scope	Worked as dedicated NYPA in-house project engineer and project manager to oversee the deployment, operation and maintenance of related capital improvement programs to enhance NYPA's continued ability to deliver power to its client base.
Description	<p>Key activities overseen by Mr. Dave in support of NYPA's reliability upgrades across its energy generation and transmission portfolio include the following:</p> <ul style="list-style-type: none"> • Marcy 345kv Substation - Convertible Static Compensator Project Installation. Latest generation of voltage source inverters installed to provide steady state and dynamic voltage and power flow capability for the New York State Transmission system • Plattsburgh Substation - Inter Phase Converter equipment installation for PV-20 line • Marcy South 345kv Transmission Line Project - Hudson River Submarine/Underground Cable Crossing with High Pressure Oil Filled (HPOF) pipe type 345kv cable; 10 miles of 345kv overhead transmission line from Fishkill, N.Y. to Roseton, N.Y.; 55 miles of 345kv overhead transmission line from Monticello, N.Y. to Rock Tavern, N.Y.; Maintenance & Storage Building Facility; and co-coordinating substation construction work by Con Edison and Central Hudson Gas & Electric Co.; • Niagara Ontario 345kv Transmission Project - 345kv HPOF pipe type cable system between Ontario Hydro's and the Authority's substations near Niagara Falls, N.Y. Coordinated the substation and overhead transmission line work by Ontario Hydro. Managed engineering and procurement work contracted to A/E firms and contractors • Plattsburgh Substation Modification - Major substation modifications to connect two 115kv-transmission lines constructed by Plattsburgh Municipal Lighting Company.

Operation & Maintenance, Key Personnel



Name	Michael Erwin Fiske
Title	Director of Transmission Assets (2012-Present) Construction Manager of Substation Construction (2004-2012) Supervisor of Substation Maintenance & Construction (1998-2004)
Duration of Experience	28 Years
Description of Experience	<ul style="list-style-type: none">▪ Oversight of all maintenance activities, associated with VELCO substations, Transmission lines and system protections. Responsibilities include management and oversight, contract review and negotiations, financial reporting, forecasting, monitoring, budget development, and project and process development▪ Manage VELCO Facilities department and assist in budget development.▪ Manage VELCO's inventory process and ensure inventory levels are appropriate for system reliability.▪ Develop and lead field crews to ensure safety and reliability for the VELCO system.▪ Ensure all required NERC/FERC maintenance is completed annually.▪ Manage and assist in development of all O&M budgets along with Asset maintenance construction budgets.▪ Oversight of Construction Managers and Field Coordinators to ensure projects are completed safely, on schedule, and on budget.▪ Assist in all security system operations and responsible for maintenance of this equipment.▪ Collaborate with all Directors to ensure a cohesive environment exists.
Education/Certifications	<ul style="list-style-type: none">▪ NERC Certified training▪ Master Electrician▪ Vermont State Apprentice Program▪ Proctor High School▪ OSHA 40-hour hazardous waste certification▪ Certified High Voltage Electrical worker▪ First Aid and AED certified▪ Certified Switchman▪ Various Project Management Courses▪ CDL

Operation & Maintenance, Key Personnel



Name	John M. Harvey
Title	Substation Maintenance Supervisor
Duration of Experience	30 Years
Description of Experience	<ul style="list-style-type: none"> Overall Operation and Maintenance of 54 VELCO Substations and Administrative Buildings Plumbing, HVAC, electrical and general building repair and maintenance Management and oversight of Budgetary and Inventory systems Involvement with various substation design and construction projects Decades of experience with fiber optic splicing and installation, ROW clearing, steel erection, assembly of power transformers, installation of circuit breakers/switches/DC systems/control house wiring Substation maintenance experience includes DC system testing, transformer testing and repair, circuit breaker testing/repair/rebuilds, cooling system repair and maintenance, as well as Highgate HVDC converter, Essex FACTS, and Granite RPD
Education/Certifications	<ul style="list-style-type: none"> Vermont State Electricians Apprenticeship Vermont State Line Maintainer Apprenticeship Doble Power factor test training Rheinhausen Ltc Seminar S&C Circuit Switcher Repair Seminar

Name	Casey B. LeGrand
Title	Senior Substation Maintenance Technician
Duration of Experience	20 Years
Description of Experience	<ul style="list-style-type: none"> Obtain switching clearance and permission to work on high voltage equipment Maintain all equipment found in High Voltage Electrical Substation's Transformers, Breakers, Circuit Switchers, Switches, VT's, CT's Perform all capital projects and maintenance of Highgate Converter Perform all testing on Substation Equipment: Power Factor, DC winding resistance, Breaker timing, Turns Ratio, DLRO, SFRA, Megohmmeter, Hi-pot Assembly and installation of new equipment Troubleshooting various electrical systems Lead crew on maintenance and capital projects Establish maintenance work procedures
Education/Certifications	<ul style="list-style-type: none"> 1996-1998, Associates of Electrical and Electronic Engineering Technologies Degree, VERMONT TECHNICAL COLLEGE, Randolph, VT 1995-1996, Electrical Engineering, SAINT MICHAELS COLLEGE, Colchester, VT CPR and First Aid Confined Space Entry Fire Prevention Equipment Training Forklift Training Grounding Safety Substation Maintenance Level 1 Certification ABB HPL Breaker Training Transformer Maintenance, DOBLE Power Factor and Breaker TDR900 Training Analytically Troubleshooting Electrical Systems, Power Electronics in Transmission Systems HVDC, FACTS and wind power, Allen Bradley PLC 1, Modicon PLC 1,

Operation & Maintenance, Key Personnel



Name	Matthew Smyrski
Title	Jr System Protection Technician
Duration of Experience	13 years
Description of Experience	<ul style="list-style-type: none"> Support Asset Maintenance Department management team with various projects throughout several VELCO substations Operation and maintenance of anemometer towers deployed throughout VELCO's transmission system
Education/Certifications	<ul style="list-style-type: none"> Vermont Technical College; (2005-2008) Major: Associates in Electrical Engineering; (2008-2012) Journeyman Electrician School

Name	Thomas Veysey
Title	System Protection Technician IV
Duration of Experience	23 Years
Description of Experience	<ul style="list-style-type: none"> Lead technician on various major VELCO projects – responsibilities include: reviewing drawings, creating commissioning documentation, and oversight of contractors Projects included Ascutney Project, Georgia Transformer Project, and Coolidge Reactor Project Support for various supervisors – responsibilities include creating weekly schedules, dispatching technicians, submitting job applications to Operations Department Work closely with engineering department during design of upgrades for various substations Perform all maintenance, review switching, write functional procedures, assign tasks to other technician, and close out all maintenance orders for various substations Backup SME for NERC requirement PRC-005, which involves attending audits and requires familiarity with regulations
Education/Certifications	<ul style="list-style-type: none"> 1990, Associates Degree in Electronics Technology, Vermont Technical College ECNE Meter School ECNE Relay School Various SEL Seminars Project Management Course NERC Seminar focusing on PRC-005