# SCI

## Mr. Richard A. Realmuto, P.E. President

#### Summary

Mr. Realmuto has over 25 years' experience in operations, management, analysis, design, construction, commissioning and start-up of electrical power generation facilities, with wideranging knowledge in electrical power generation, distribution, control and instrumentation systems. He has direct experience with combustion turbine, combined cycle, central heating and cooling, waste water treatment, mission critical, recycling, waste to energy, solar and wind turbine facilities.

Mr. Realmuto is principal investigator for Solar PV due diligence projects and/or provides specialty support for electrical systems, specialties include technical reviews of solar PV and electrical design review, interconnection applications, power purchase agreements, and O&M agreements. Additionally, he is intimately familiar with all of the commercially available PV solar technologies and has evaluated the application of these technologies for investors in solar PV projects.

#### Education

Master of Science in Electrical Engineering, Polytechnic University Master of Science in Environmental Technology, New York Institute of Technology Bachelor of Science in Electrical Engineering, Polytechnic University

#### **Professional Registration**

Professional Engineer, New York

#### Experience

### Sigma Energy Solutions Inc. Senior Consultant

Mr. Realmuto provided a wide variety of consulting services for transactions including construction financing, leases, project development and planning, mergers & acquisitions, tax equity participation and other privatization initiatives related to power generation and renewable energy, facilities. Key examples of recent relevant assignments are provided below.

#### Long Island Solar Farm

The project, developed by BP Solar, is a utility scale solar PV power plant rated at 31.5 Megawatts MW located at Brookhaven National Laboratory in Upton, Long Island, NY. Mr. Realmuto led the team responsible for the technical due diligence of the project, including technology assessment; O&M cost preparation and validation; modeling and independent resource assessment; pro forma review; interconnection requirements review; contract review and the overall plant design review.

#### **Greater Sandhill Project**

The project, developed by SunPower, a utility scale solar PV power plant rated at 19 Megawatts (MW) peak located in Alamosa, Colorado. Mr. Realmuto led the team responsible for the technical due diligence of the project, including technology assessment; O&M cost preparation and validation; modeling and independent resource assessment; pro forma review; interconnection requirements review; contract review and the overall plant design review. Mr. Realmuto also performed the monthly on-site construction project inspections.

#### Brooklyn Navy Yard Cogeneration Facility

Provide owner's engineering consulting services for post event investigations, troubleshooting, engineering evaluations, and project management of electrical projects of a 315 MW cogeneration facility providing electrical power and steam to the Brooklyn Navy Yard Development Corporation (Host) and Con Edison. Recent work includes leading the repair team for the total renovation and modernization of 4kV switchgear that was submerged due flooding associated with super-storm Sandy, project manager for the internal inspection and tap-changer maintenance of a 175 MVA 3 winding 13.8kV to 138 kV GSU, technical adviser for the upgrade of SOE, 125VDC and 125VAC UPS systems.

#### Caithness Long Island Energy Center

Provide owner's engineering consulting services for the construction and commissioning of the 138kV Switchyard for a 350 MW combined cycle generation facility providing electrical power Long Island Power Authority (LIPA). Mr. Realmuto was the primary interface with LIPA and coordinated the design, installation and commissioning requirements among the separate EPC contractors for the 138 kV substation and power plant, as well as LIPA to ensure all applicable interconnection requirements were maintained. Mr. Realmuto continues in an advisory role in supporting the plant with the installation of a MV network power feed to the facility and FERC disturbance monitoring compliance.

#### Shady Hills Power Company

Performed a site visit to evaluate the equipment that was being affected by the lightning strike, reviewed the equipment affected, identified potential problems, recommended possible modifications for a 516-MW simple-cycle electric generating plant, consisting of three (3) combustion turbines, located in Spring Hill, Florida, which is one the highest areas susceptibility to lightning strikes in the US. As a result of Mr. Realmuto's recommendations, equipment affected by lightning was greatly reduced over the previous storm season.

#### Goal Line Combined Cycle Cogeneration Facility

As part of project acquisition due diligence, provide overall facility major equipment condition assessment; projected O&M costs including major maintenance, as well as facility performance evaluation. The project has a nameplate rating of 49.9 MW. The project is a natural gas fired General Electric (GE) LM6000 combustion gas turbine combined cycle plant.

#### EIF – Generation and Transmission Assets – ArcLight Capital Partners

As part of project acquisition and debt syndication due diligence, provided facility major electrical equipment condition assessment; projected O&M costs including major maintenance. Also provided contract review including power purchase agreements and operating agreements. The facilities covered by this acquisition five generating facilities with a total capacity of 774MW. The generation technology included GE7FA, Westinghouse W501DA, GE LM2500 equipment operating in a combined cycle mode. Two of the facilities were co-generation facilities classified as QF facilities. The portfolio also included the 660 MW Neptune Regional Transmission System, for which Mr. Realmuto was the lead investigator.

#### **Black Hills Generation – Energy Investors Funds**

As part of project acquisition due diligence, provide facility electrical major equipment condition assessment; projected O&M costs including major maintenance. Also performed selected contract review and assisted client in proforma development. The portfolio consisted of several LM6000 peaking and combined cycle plants; 7EA combined cycle plant as well as GE 7FA peaking plant.