

Senior Electrical Engineer

Background	Mr. Patel has over 20 years of engineering experience in variety of power plants and transmission- distribution substations. Engineering and design responsibilities include developing design, performing calculations, equipment specifications, procurement recommendations, and technical support for electrical projects involving high, medium, and low voltage systems. Proficient in SKM Power Tools, and ETAP Power Station calculation software.
Education	BS, Electrical Engineering Drexel University
Professional Licenses & Certifications	Professional Engineer: PA, NJ, NY, MD, OH, GA, CT, FL

Select Project Experience

## Amtrak Frequency Converter Upgrade Project – 11kV Substation and M-G Set Control, Metuchen, NJ

Project involves replacement of 11kV AIS with enclosed 11kV substation serving power to Motor-Generator (M-G) set which converts frequency to 25Hz for Amtrak traction power. Also involves upgrading the M-G set control to ABB control system. 11kV Substation and M-G set is located in PSE&G Metuchen Switching Station. As Project Manager and Lead Electrical Engineer responsible for all deliverables from design drawings to the installation contract packages. Manage all project meetings, engineering/construction schedules, coordinate work with PSE&G Utility. Provide construction support during the construction, commission, and startup.

## Hackensack University Medical Center, Central Utilities Plant, Hackensack, NJ

Responsible for peer review all electrical deliverables for Hackensack University Med. Center (HUMC), Central Utilities Plant (CUP) project. Project consists of an electrical design for the HUMC CUP building including extending dual 26kV Utility services to a 15kV distribution system to serve the multiple buildings on campus. The CUP building includes a 5kV, 6MW emergency generating distribution system to serve the CUP essential electrical system and new Pavilion building emergency loads. The CUP building also includes boiler and chiller equipment to serve the existing HUMC hospital buildings.

## PSEG Power -Owner's Engineering Service - Combined Cycle Power Plant Projects

Services include engineering functions for various combined cycle power projects. Leading the electrical project engineering efforts to successful completion in terms of safety, reliability, functional performance and adherence to scope and schedule. Provides oversight of the engineering, design, procurement, supply of equipment/materials, and construction. Responsible to attend all project meetings as PSEG's representative. Provide guidelines and resolve technical issues, requests, questions and technical matters brought by the Engineers on Record, contractor and equipment suppliers. Manage to keep track of deliverables such as drawing packages, calculations, purchase requisitions/orders, etc. Review document/drawing packages and assure that the scope, PSEG guidelines and procedures are met. Interface with interconnecting utility and power grid operators i.e. PJM, ISO-NE.

## Holtec Technology Center, 69kV Substation Project, Camden, NJ

As Lead Electrical Engineer, responsible for the design of a 69 kV, four (4) breaker ring bus, air insulated substation (AIS) and coordination of interconnection requirements, including two (2) 69kV incoming underground lines, protective relay and metering interface of substation, with Public Service Electric and Gas (PSE&G). Project also includes installation of two 69kV-15kV transformers feeding to 15kV distribution switchgear which feeds facility building distribution loads. This includes designing the Substation to PSE&G Guidelines, Standards and Procedures.