NV5

UNDERSEA CABLING

UNDERSEA CABLING

NV5 staff have provided engineering, design, project management, and construction support services for the Trans Bay Cable Project in California. The project involved construction of a 53-mile undersea, high-voltage direct current transmission link (HVDC Plus) between San Francisco's City Center electrical power grid and a PG&E substation near the city of Pittsburg.

TRANS BAY CABLE PROJECT

STEEL RIVER PARTNERS | PITTSBURG, CA

Project manager and engineer responsible for analysis and design of all steel sub-structure frame geometry for switchyard and heavy equipment foundations as set forth under IBC, CBC, IEEE, and NFPA design criteria. Project featured intricate design involving construction of a 53-mile undersea, high-voltage direct current (HVDC Plus) transmission link between San Francisco's City Center electrical power grid and a PG&E substation near the City of Pittsburg. Each converter station included three buildings and a large array of equipment, including converters, converter coolers, reactors, transformers, and high-voltage AC and DC electrical equipment. The HVDC Plus system transmits up to 400 megawatts at a direct current voltage of 200 kilovolts. This was a challenging project due to high seismicity and poor soil conditions at each location.

TRANS BAY CABLE PROJECT – RESIDENT ENGINEER SERVICES

STEEL RIVER PARTNERS | SAN FRANCISCO, CA

Project manager responsible for on-site residential engineering services related to the project disciplines of architecture, civil engineering, structural engineering, and landscape. Monitored construction progress to ensure compliance with permitted IFC construction document sets and ensured that construction of all facilities conformed in every material respect to approved plans and specifications. Prepared documents to initiate changes in the approved drawings and specifications when required, ensuring complete and up-to-date drawings, plans, specifications were readily available and promptly provided to project inspectors and testing agencies. Ensured that the Chief Building Official was notified of corrective action or the disposition of items noted on laboratory reports or other tests identified as not conforming to the approved plans and specifications.