

PROJECT FACT SHEET

Customer: Lend Lease

Project: Telstra Data Centre

Project Profile:

The Telstra Clayton data centre will be constructed as a new build on a brown field site to be constructed at 1816 – 1832 Dandenong Road, Clayton, Victoria 3168, Australia. The facility is required to be operational continuously all year round and shall be designed as a Mission Critical Facility.

The system distribution arrangement must be designed to be concurrently maintainable without impacting the operation of the IT data centre equipment.

The new data centre will be located in an existing Telstra site that also accommodates engineering and operations facilities as well as an existing data centre.

The NEC will have its own dedicated 11kV standby generators that will only have the capacity to cater for a maximum load of 10MVA. The Carpark Data Centre will have its own dedicated Diesel Rotary Uninterrupted Power Supply (DRUPS) system, Static UPSs and separate standby generator plant (SGP).

The Data Centre will be supplied via six (6) dedicated 22kV feeders that emanate from the NEC. This specification includes for the installation, termination, and testing of this associated cabling including differential protection cabling between the two facilities.



Nilsen Scope of Works:

- 22kV cabling from NEC to the Data Centre including inter trip and differential protection cabling.
- Installation of new HV in-ground Cabling
- Installation of distribution transformers provided as free issue,
- Installation of static UPS and battery equipment Low voltage mains cabling, distribution transformers and main switchboards,
- Isobar Distribution boards,
- Submains cabling including to generator and fuel delivery auxiliary DBs,
- Lighting and lighting control system
- Emergency escape lighting and exit signs,
- Communications system,
- Structured cabling system,
- Security system (containment only),
- CCTV system (containment only),
- Access control system (containment only),
- (SCADA) system, and interface with HV switchgear, LV switchgear, DRUPS systems, standby generator system, fuel delivery system, static UPS system for a complete facility installation.
- Provisions and interface to existing site wide building management system (BMS) as supported by Honeywell, ,
- Lightning protection

Added value accrued to customer because of Nilsen involvement:

Nilsen played a major role in the preliminary and final design process assisting Lend Lease, Aecom and Telstra with integration of HV and LV power generation engineering adding our knowledge and experience to this critical facility.

Award or Award Nominations:

Winner – NECA Awards of Excellence (Vic) – Commercial Large (2014)