

<b>TITLE:</b> Electrical Engineer		CEP-080
<b>REPORTS TO LINE MANAGER:</b> Leader of Steady State Electrical Power Network Section, Electrical Engineering Division, Department for Central Engineering and Plant Support		
<b>DIRECT EMPLOYMENT:</b> NOT REQUIRED		<b>GRADE RANGE:</b> P3-P4
<b>Date Written:</b> July 2008	<b>Date Revised:</b>	<b>Date Revised:</b>

**Purpose:**

To supervise the design, procurement, construction, factory testing, installation, commissioning, final acceptance of components for the ITER Steady State Electrical Power Network (SSEPN), and routing of cables for power distribution, command and control.

**Major Duties/Responsibilities:**

- Be responsible for preparation and revision of technical specification and associated documents required for the design, procurement, construction, installation and commissioning of components and systems under her/his responsibility;
- Be responsible for design integration and layout of the SSEPN components;
- Be responsible for the routing and installation of cables for power distribution, control and commands required for the ITER SSEPN, as well as all other ITER systems, including cables for nuclear safety relevant systems;
- Supervises the contributions from the ITER Domestic Agencies, including design activities, manufacturing, testing and installation of the components delivered by the Domestic Agencies;
- Evaluates design issues and provides reports to the Section Leader;
- Supports the licensing activities and assessment of safety-related functions in close contact with the safety group;
- Revises regularly the Project Schedule associated with the fabrication, installation, testing and commissioning of the components and systems;
- Implements guidelines and rules established by the line management;
- Maintains a strong commitment to the implementation and perpetuation of the ITER safety program, values and ethics.

**Qualifications and Experience:**

- **Education:** University Degree in Electrical Engineering or equivalent.
- **Experience:** At least 5 years' work experience in managing design, installation and testing of large AC power distribution systems, comparable to those of the ITER SSEPN (i.e. AC rated voltage in the range from Low to High Voltage, about 150 MVA connected loads, 120 MW to be distributed), or projects of similar complexity;
- Experience in routing and installation of cables for power distribution, control and commands, including cables for nuclear safety relevant systems;
- Good knowledge of the design details, technical requirements and installation of power transformers, switchgears, distribution transformers, distribution boards, emergency diesel generators and uninterruptable power supply systems comparable to those required for ITER;

- Good experience in the preparation of technical specifications for procurement contracts of AC power distribution components/subsystems, including specifications for cable routing and installation;
- Ability to work effectively in a multi-cultural environment;
- **Language requirements:** Good communication skills in written and spoken English.

**The following optional qualifications will be considered an advantage:**

- Good knowledge of ETAP software application ([www.etap.com](http://www.etap.com)) or equivalent applications for analysis of electrical circuits;
- Experience in using software applications for management of layout space allocation, routing and scheduling of complex cabling systems for power distribution, control and commands;
- Knowledge of the design details and technical requirements of earthing systems;
- Good knowledge of standards and design criteria applicable to the design of nuclear safety relevant components and systems.

**Work Direction and Interfaces:**

- Reports to the Leader of Steady State Electrical Power Network Section. Interfaces with the relevant technical divisions to support excellent integration;
- Interfaces with the construction design team on building and site requirements;
- Interacts with members of the ITER Team and Domestic Agency Personnel as required.

**Authority/Approval Levels:**

This position has authority and approval levels generally defined by the Leader of Steady State Electrical Power Network Section for her/his scope of work.

**Measures of Effectiveness:**

- Successfully implements guidelines and rules established by the Leader of the Steady State Electrical Power Network Section and the Head of the Electrical Engineering Division;
- Successfully provides engineering support to the Steady State Electrical Power Network Section and the Electrical Engineering Division;
- Successfully manages interface between ITER divisions and Domestic Agencies and maintains effective communications with all parties delivering subsystems;
- Successfully develops, in agreement with the ITER general Project Schedule, cost effective installation and testing plans.