

<b>TITLE:</b> Technical Engineer for Low Voltage Power Distribution		CEP-093
<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> REQUIRED		<b>GRADE RANGE:</b> G5-G6
<b>Date Written:</b> July 2008	<b>Date Revised:</b>	<b>Date Revised:</b>

**Purpose:**

To support the engineering design activities of the Steady State Electrical Power Network (SSEPN) Section in all matters related to the Low Voltage electrical systems and equipment of the ITER plant systems, including buildings, cable routing and penetrations for power and control cables.

**Major Duties/Responsibilities:**

- Prepares Computed-Aided Design (CAD) work orders, sketches and input data for CAD designers and follows up the CAD activities dedicated to the production of 3D layout models and 2D drawings for the components and systems under their responsibility;
- Proposes and implements actions required to resolve design integration issues.
- Prepares block diagrams for technical reports and presentations;
- Prepares input data required for engineering analyses performed by computer tools;
- Assists the members of the SSEPN Section to supervise 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;
- 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:** Engineering apprenticeship or technical diploma in electrical installations or equivalent;
- **Experience:** At least 5 years' experience in design, monitoring and follow up Low Voltage electrical installations of rated power above 10 MVA;
- Good knowledge of the design details, and technical requirements of Low Voltage electrical distribution systems comparable to those of the ITER SSEPN;
- Experience in design and management of cable routing and scheduling for power and control cables;

- Knowledge of international electrical standards and general design criteria;
- Good ability to draft / revise technical reports, spreadsheets and electrical diagrams, using Microsoft Office tools;
- Experience in monitoring / following up contracts for design, construction, installation and testing of large electrical components / subsystems;
- Ability to work effectively in a multi-cultural environment;
- Collaborative and positive personality;
- **Language requirements:** Good communication skills in written and spoken English.

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

- Experience in design, monitoring and follow up of Medium and High Voltage electrical installations;
- Good knowledge of database applications for the management of cable routing and scheduling.
- Experience in installation of large quantities of cables and penetrations for power and control cables.
- Good knowledge of 2D and 3D software applications for electrical schematic and layout purposes, including cable routing tools;
- Knowledge of the ETAP software application ([www.etap.com](http://www.etap.com)) or equivalent applications for analysis of electrical circuits.

**Work Direction and Interfaces:**

- Reports to the Leader of the Steady State Electrical Power Network Section.
- 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 the SSEPN Section for their scope of work.

**Measures of Effectiveness:**

- Successfully implements guidelines and rules established by the Leader of the SSEPN Section and the Head of Electrical Engineering Division;
- Successfully supports the design of the SSEPN, including the system integration and interfaces with other ITER systems;
- Successfully supports the SSEPN Section in the following up of the work performed by the Domestic Agencies and Engineering Support companies;
- Successfully maintains effective communications with all parties delivering subsystems.