TITLE: Electrical Integration Engineer			CEP-071
REPORTS TO LINE MANAGER: Leader of the Steady State Electrical Power Network (SSEPN) Section, Department for Central Engineering and Plant Support			
Direct employment: not required GRADE RAD		GRADE RANGE: G	4-G5
Date Written: Jan 2008	Date Revised:		Date Revised:

Purpose:

Responsible for the low and medium voltage electrical installations inside the Tokamak complex, including: layout integration, cabling and penetrations, electromagnetic compatibility and earthing of power supply components and conductive parts inside the buildings of the Tokamak complex.

Major Duties/Responsibilities:

- Preparation and updating of interface control documents and technical specifications for electrical installations, layout integration, cabling and penetrations, electromagnetic compatibility and earthing of power supply components and conductive parts inside the buildings of the Tokamak complex.
- Preparation of CAD work orders and follow up the CAD activities for the production of 3D layout models and 2D drawings for the components and systems under her/his responsibility.
- Propose and implement actions required to resolve design integration issues.
- Monitor and follow up design and construction activities for components and systems under her/his responsibility and those carried out by the ITER Domestic Agencies.
- Revise regularly the Project Schedule associated with the fabrication, installation, testing and commissioning of the components and systems under her/his responsibility.

Qualifications Required:

- Engineering apprenticeship, or high school diploma in electrical installations, or equivalent.
- Training in electrical installations, or equivalent.
- At least 5 years experience in design, monitoring and follow-up of electrical installations during the construction of large technical or scientific facilities.

- Good knowledge of the design details, technical requirements and safety functions of electrical distribution systems comparable to those of the ITER SSEPN.
- Knowledge of the design rules and techniques related to the electromagnetic compatibility of electrical components in large electrical installations.
- Good knowledge of international electrical standards and general design criteria for Nuclear Safety Relevant components.
- Good ability to draft/revise technical reports, documentation, technical specifications and project plans.
- Ability to work effectively in a multi-cultural environment.
- Collaborative and positive personality.
- Very good command of English, both spoken and written.

The following optional qualifications will be considered an advantage:

- Good knowledge of 2D and 3D software applications for electrical diagrams and layout purposes, including cable routing tools.
- Good experience in running computer codes relevant to the analysis of electromagnetic compatibility, earthing and lightning protection systems.
- Experience in design and construction of grounding systems for large scientific experimental facilities.

Work Management structure and Interfaces:

- Reports to the Leader of the Section of Steady State Electrical Power Network.
- Interfaces with all technical Divisions to support the efficient integration of the electrical installations.

Authority/Approval Levels:

• Has authority and approval levels generally defined by the Electrical Power Supply Division Head for his/her scope of work.

Measures of Effectiveness:

- Successfully supports the design and construction activities of the Steady State Electrical Power Network Section.
- Successfully supports the design activities related to layout integration, cabling and penetrations, electromagnetic compatibility and earthing of power supply components and conductive parts inside the buildings of the Tokamak complex.
- Successfully communicates with other Sections and Departments of the ITER Organization on SSEPN related issues.

• Successfully coordinates and directs the efforts of the ITER Organization and the Domestic Agencies concerning the design, fabrication, installation and commissioning of the ITER SSEPN.