

Job Title: Coil Power Supply Section Leader IO0712

Requisition ID **6100** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems - Extended Posting**

The ITER Organization brings together people from all over the world to be part of a thrilling human adventure in southern France—building the ITER Tokamak. We require the best people in every domain.

We offer challenging full-time assignments in a wide range of areas and encourage applications from candidates with all levels of experience, from recent graduates to experienced professionals. Applications from under-represented ITER Members and from female candidates are strongly encouraged as the ITER Organization supports diversity and gender equality in the workplace.

Our working environment is truly multi-cultural, with 29 different nationalities represented among staff. The ITER Organization Code of Conduct gives guidance in matters of professional ethics to all staff and serves as a reference for the public with regards to the standards of conduct that third parties are entitled to expect when dealing with the ITER Organization.

The south of France is blessed with a very privileged living environment and a mild and sunny climate. The ITER Project is based in Saint Paul-lez-Durance, located between the southern Alps and the Mediterranean Sea—an area offering every conceivable sporting, leisure, and cultural opportunity.

To see why ITER is a great place to work, please look at this video

Application deadline: 24/07/2022

Domain: Construction Domain

Department: Plant Construction Department

Division: Electrical Implementation Division

Section: Coil Power Supply Section

Job Family: Line Management and Group Leaders

Job Role: Section Leader

Job Grade: P5

Language requirements: Fluent in English (written & spoken)

Contract duration: Up to 5 years

Purpose

As the Coil Power Supply (CPS) Section Leader, you will be lead activities related to the design, procurement, installation and commissioning of components and systems, and transversal engineering support that are under the responsibility of the ITER CPS Section., You will lead the members of the CPS Section, complete the Procurement Arrangements and manage the execution of procurement contracts placed by the ITER Organization (IO).

Background

The CPS Section is responsible for procurement installation and commissioning of the ITER CPS system, which consists of the following main subsystems:

- 2 GVA, total installed power, Line Commutated power converters to supply the main superconductive magnets;
- 200 MVA, total installed power, Voltage Source power converters to supply the normal conductive In Vessel Coils;
- 750 Mvar total installed power, Reactive Power Compensators and Harmonic Filters;
- Switching Networks, Fast Discharge Units, DC busbars and Instrumentation.

Key Duties, Scope, and Level of Accountability

- Completes the installation and commissioning of the CPS required for the First Plasma configuration, and procures the power supply systems required to be installed and commissioned after the First Plasma;
- Manages the CPS staff, providing effective leadership for the Section, ensuring team members are motivated and constantly developing their skills and experience;
- Manages the budget of the section;
- Manages the on-site integration of the CPS components;
- Manages all interfaces within the components of the CPS and with the other ITER systems, particularly magnets, plasma control, interlocks, protection systems, buildings and site layout;
- Is responsible for the consistency of the Coil Power Supplies construction and commissioning planning;
- Coordinates the contributions from the ITER Domestic Agencies (DAs), including design activities, manufacturing, testing and installation of the components delivered by the DAs;
- Supports the licensing activities and safety assessment related functions in close collaboration with the Environmental Protection & Nuclear Safety Division;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

Measure of Effectiveness

- Completes the construction and commissioning of the Coil Power Supply System, including the prompt identification of solution required to address technical issues and establishing priority level and means of their implementation, in accordance with the applicable schedule;
- Establishes a suitable and effective mechanism for CPS design integration and interface with other ITER systems;
- Assures that IO's goals are achieved in a timely and effective manner, which meets safety, quality, cost and schedule targets;
- Receives positive feed-back from Technical Responsible Officers (TROs) and DAs and ensures good collaboration with all stakeholders;
- Demonstrates efficient leadership in supervising staff of the section and developing their competencies and ensuring commitment of the team to achieve the IO goals Responsible for Section deliverables that meet safety standards, quality schedule and cost requirements;
- Responsible for implementation of safety nuclear regulation and other safety standards of the section's work.

Experience & Profile

- **Professional Experience:**
 - Minimum 10 years' experience in managing the design, construction, commissioning and operation of pulsed power distribution systems, thyristor-based AC/DC conversion plants above 100 MVA, voltage source power converters above 10 MVA, and Reactive Power Compensation systems above 60 Mvar, within complex international environments or projects.
- **Education:**
 - Master's degree or equivalent in Electrical Engineering or other relevant discipline;
 - The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- **Language requirements:**
 - Fluent in English (written and spoken).
- **Technical competencies and demonstrated experience in:**

- Electrical Engineering Project Management: preparing technical specifications for procurement contracts, and monitoring/following up contracts for design, construction, installation, commissioning and operation of large electrical components/subsystems;
- Electrical Standards: Good knowledge of French and/or international electrical standards and design criteria for Nuclear Safety Relevant components;
- Team Building and Management: providing leadership, work direction and ensuring development of competencies for a multicultural team, including coaching team members and developing their competencies;
- Interface Management (identifying, resolving and maintaining technical and functional interfaces);
- Problem Solving: assesses problems, identifies root causes and reaches practical solutions in a consistent way to reach project objectives.
- Ability to write and revise technical reports, documentation and project plans;
- Good knowledge of software tools for transient and steady-state analyses of large electrical systems, based on power electronics devices.
- **Behavioral competencies:**
 - Collaborate: Ability to facilitate dialogue with a wide variety of contributors and stakeholders;
 - Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;
 - Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;
 - Manage Complexity: Ability to analyze multiple and diverse sources of information to understand problems accurately before moving to proposals;
 - Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.

The following important information shall apply to all jobs at ITER Organization:

- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, ITER Values (Trust; Loyalty; Integrity; Excellence; Team mind set; Diversity and Inclusiveness) and Code of Conduct;
- ITER Core technical competencies of 1) Nuclear Safety, environment, radioprotection and pressured equipment 2) Occupational Health, safety & security 3) Quality assurance processes. Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members;
- Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;
- May be requested to work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization;
- May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
- Informs the IO Director-General, Domain Head, or Department/Office Head of any important and urgent issues that cannot be handled by line management and that may jeopardize the achievement of the Project's objectives.