Job Title: Power System Maintenance Engineer IO1109

Requisition ID **6002** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation** - **New 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: 08/05/2022
Domain: Science & Operation
Department: Science,Controls & Operation
Division: Operations
Job Family: Commissioning & Operations
Job Role: Operations Coordinator – 2
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As a Power System Maintenance Engineer, you will ensure that the ITER Coil Power Supply System's components are correctly preserved and maintained (including spare management aspects) in order to enable the safe, efficient and reliable operation of these facilities.
You will also monitor Maintenance contracts deliverables and performance within the Site Operation.

Background information:
The Operations Division is responsible for developing plans and procedures for implementation of commissioning, operation and maintenance work processes of the ITER Tokamak and plant systems. The Coil Power Supply (CPS) systems provide high current DC power supply and protections to superconducting coils of the ITER facility via several different circuits.
This system has strong interface with Plasma Control and Coils protections and is assigned to the Maintenance Group.

Key Duties, Scope, and Level of Accountability

- Implements safe, reliable and efficient Maintenance Work Management process of the CPS systems including the assistance for the commissioning of CPS subsystems and of multiple interfaces as they are turned over to clients;

- Manages technical aspects for CPS systems maintenance contracts;
- Prepares and revises technical specifications and associated documents required for maintenance components , spare parts and technical services of CPS systems in link with the CPS Operation Responsible officer;
- Plans, authorizes and supervises maintenance activities, then reviews maintenance and inspection reports and implementing corrective actions when necessary;
- Ensures necessary spares are planned and procured;
- Monitors tendering processes and manages maintenance and technical support contracts with specific focus on those involving specialized services and Original Engineering Manufacturers;
- Assesses contractors' performance and sets up and analyses Key Performance Indicators;
- Reviews system maintenance and inspection plans established according to project requirements and manufacturers recommendations;
- Acts as maintenance management system key user (SAP PM) key user in order to ensure the good deployment of associated practices and processes;
- Writes and updates internal procedures pertaining to the activities of the Division;
- Proposes upgrades or improvements in order to improve the overall system reliability and equipment performance
- Evaluates arising maintenance issues and provides reports to the Maintenance Group Leader;
- Maintains up to date, in close relation with Safety, Quality and Security Department, knowledge of specific French Regulations pertaining to the operation and maintenance of industrial and nuclear facilities;
- 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

- Ensures reliable and efficient implementation of Maintenance Work Management process of the CPS system in order to achieve required system reliability and availability of the service for the clients at optimized costs,
- Ensures compliance with all regulations in order to prevent health and safety risks;
- Completes procurement activities in a timely manner within defined costs and ensures that Key Performance Indicators of contractors show a positive trend.
- Contributes to a safe working environment by ensuring all activities are properly authorised and tracked and performing some internal inspections.

Experience & Profile

- ***Professional Experience:***
  - Minimum 8 years' experience in managing design, installation, maintenance and operation of high current power electronics systems in large-scale facilities or complex international environments or projects.
- ***Education:***
  - Master's degree or equivalent in Electrical Engineering field;
  - 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:***
  - Specialised Domains of Expertise (Maintenance of Power Systems): The operating processes and technology of components for high current converters systems including HV oil insulated transformers, water cooled thyristors bridges, direct current switches (high power), Direct

Current components; water cooled electrical components and the associated control systems including fast controllers;
    - High Voltage environment, in particular personal safety rules in relation with French regulations fully applicable on ITER project
    - Project and Contract Management: planning, measuring progress of work, managing risks and costs, executing within human and financial resources and reporting on progress (preferably in SAP PM);
    - Implementation of Maintenance work processes in order to drive efficiency and overall planning, scheduling and execution performance;
    - **Problem Solving:** Analysing and determining root cause of problems, interacting with stakeholders to find and implement solutions based on technical expertise in high current AC/DC conversion systems;
- ***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.