Job Title: Integration Engineer IO1008

Requisition ID **4000** - Posted **19/05/2021** - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems** - **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: 23/06/2021
Domain: Engineering
Department: Engineering Design
Division: Heating & Current Drive
Section: Ion Cyclotron
Job Family: Project Engineering
Job Role: Engineer - 1
Job Grade: P2
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As integration Engineer, you will manage the Ion Cyclotron Heating & Current Drive system (IC H&CD) integration during the construction, installation and commissioning phases.
You will be responsible of the design review organization in the IC H&CD section to ensure that the review process is standardized in the section and in compliance with ITER Organization (IO) rules and regulations.

Background

The IC system will be used at ITER for Heating and Current Drive (H&CD) in a number of plasma operating scenarios, providing power to the plasma. That power aims to increase the energy content in the plasma to assist fusion operation and control internal plasma parameters.

The ICH&CD system is a powerful radiofrequency system composed of power supplies, RF transmitters, transmission line system and a set of antennas facing the plasma.

Major Duties/Roles & Responsibilities

- Coordinates the IC H&CD system integration activities;
- Identifies the system interfaces;
- Defines the interface documentation, which includes interface sheets, drawings, diagrams and 3D models;
- Performs regular updates and maintains records of the corresponding documentation;
- Interacts for this purpose with IO Responsible Officer of other systems, IO and Domestic Agencies Technical Responsible Officers of ICH&CD subsystems;
- Prepares the installation of IC H&CD subsystems to insure the installation procedure are compliant with internal rules;
- Prepares the installation contract documentation and takes in charge the corresponding reviews in IO;
- Contributes to the operation and maintenance plans for the system;
- Implements and follows up the design review processes for IC H&CD system, in compliance with the existing procedures and quality & safety requirements;
- Ensures the compliance of the design presented at these reviews with IC H&CD technical, integration and construction requirements;
- 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

- Describes accurately and exhaustively the interfaces of IC H&CD system up to their validation by both interfacing systems;
- Organizes, reports and follows up on technical issues with other ITER subsystems in the frame of this interface definition within the defined timeline;
- Delivers to quality and on time the Construction Hand Over Packages and Engineering Work Packages;
- Performs accurate monitoring and approval of the design review processes in support of DAs and IO Responsible Officers;
- Maintains effective communication with the interfacing teams within ITER and Domestic Agencies.

Experience & Profile

- ***Professional Experience:***
  - At least 5 years' experience in interfaces management, design reviews, and integration of heating systems for research facility.
- ***Education:***
  - Master's degree or equivalent in Science or Engineering;
  - 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:***

  - **Interface Management** (identifying, resolving and maintaining technical and functional interfaces):
    - In the technical integration of H&CD systems;
    - Ensuring design compliance of H&CD systems with other interfacing systems.
  - **Design** (create or review technical designs based on project requirements);
  - **Systems Engineering and Design Control** (planning, input and change control, verification and validation).
- ***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.