

ITER 국제기구 공모 직위 직무기술서 (제206차)

○ 2개 직위

구분	분야	소속	직위	Job No.	등급
①	플랜트 엔지니어링 (PED)	Electrical Engineering Division Coil Power Supply Section	Coil Power Supply Section Leader	PED-101	P5
②	중앙통합 (CIO)	Central Integration Office Analysis Section/Division	Electromagnetic & Compatibility Engineer	CIO-063	P3

IO1865 Coil Power Supply Section Leader - PED-101

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Division	PED / Electrical Engineering Division
Section	PED / EED / Coil Power Supply Section

Job description

Main job	Engineering - Electricity
Title of the position	Coil Power Supply Section Leader - PED-101
Job family	Section Leader
Grade	P5
Direct employment	Required
Purpose	<p>To be responsible for installation, commissioning and operation of components and systems, and transversal engineering support that are under the responsibility of the ITER Coil Power Supply Section, by leading the members of the Coil Power Supply Section, completing the Procurement Arrangements and managing the execution of procurement contract placed by the ITER Organization (IO).</p>
Main duties / Responsibilities	<ul style="list-style-type: none">-To complete the installation and commissioning of the Coil Power Supplies in the Detailed Work Breakdown Structure Schedule (DWBS);-To operate and maintain the components of the Coil Power Supply System;-To design and start the procurement of the components that are planned be installed after the first plasma.-Provides effective leadership for the Section ensuring team members are motivated and constantly developing their skills and experience;-Responsible for the budget management of the section;-Is responsible for on-site integration of the Coil Power Supply components;-Manages all interfaces within the components of the Coil Power Supplies and with the other ITER systems, particularly magnets, plasma control, interlocks, protection systems, buildings and site layout;-Responsible for the consistency of the Coil Power Supplies construction and commissioning planning;-Supervises 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;-Executes and delivers the Detailed Work Schedule (DWS) in support of the Strategic Management Plan for scope budget and schedule of the systems in the Section and contributes to the staffing of the Section;-Assures that IO's goals are achieved in a timely and effective manner, which meets safety, quality, cost and schedule targets;-Maximizes human capital and people's commitment to achieving the IO goals;-Provides leadership in safety;-Builds and maintains relationship with internal and external stakeholders;-May be requested to be part of any of the project/construction teams and perform other duties;-Manage coil power supply operations & maintenance team, including participation to all call duty;-May be required to work outside normal working hours, including nights, weekends and public holidays;-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.-Reports to Electrical Engineering Division Head-In response to requests from the Director-General and/or the Head of the Plant Engineering Department (PED) or proactively, informs the DG/PED Head of any important and urgent issues

Measures of effectiveness	that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.
	<ul style="list-style-type: none"> -Completes the construction and commissioning, 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 mechanism for Coil Power Supplies design integration and interface with other ITER systems; -Ensures a good communication with other Sections and Departments/Offices within the ITER Organization on Coil Power Supplies related issues; -Positive feed-back from Technical Responsible Officers (TROs) and DAs; -Manages effectively of the Coil Power Supply Section staff members; -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; -Responsible for adherence to technical standards. <p>Project Construction Phase SAP ID : 50000677</p>

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Electrical Engineering
Level of experience	At least 10 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 10 years' experience and competent expertise in the design, construction, commissioning and operation; -Experience in pulsed power distribution systems, AC/DC conversion plant above 200 MVA and Reactive Power Compensation systems above 200 Mvar; -Experience in the preparation of technical specifications for procurement contracts of large electrical components and subsystems; -Good experience in the preparation of technical specifications for procurement contracts of large electrical components/subsystems, including procurement contracts for operation and maintenance, and contracts for purchase of electricity; -Good experience in monitoring/following up contracts for design, construction, installation, commissioning and operation of large electrical components/subsystems; -Ability to draft and revise technical reports, documentation and project plans;
Social skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Good negotiation skills</p> <ul style="list-style-type: none"> -Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree; -Good knowledge of the design details and technical requirements of Power Supply systems comparable to those required for ITER; -Good knowledge of electrical standards and design criteria for Nuclear Safety Relevant components.
General skills	<ul style="list-style-type: none"> -Basic Project Management experience is required. -Experience working with Tokamak fusion devices, or large international scientific facilities would be considered an advantage.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -At least 5 years' experience in supervising a team would be an advantage; -Ability to provide effective leadership; -Ability to motivate and develop the team members' skills and experience. -Ability to negotiate with influence and convince internal and external stakeholders. -Good knowledge of Microsoft Office tools adopted by the ITER Organization; -Good knowledge of software tools for transient and steady-state analyses, and real time digital simulation of large electrical systems.

IO1864 Electromagnetic & Compatibility Engineer - CIO-063

General information

Job category	Standard
Status	Published
Department	CIO/ Central Integration Office
Division	CIO / Analysis Section/Division

Job description

Main job	Engineering - Nuclear Power
Title of the position	Electromagnetic & Compatibility Engineer - CIO-063
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To provide expertise to the Analysis Section/Division of the CIO in matters related to Electro-Magnetic (EM) analyses and compatibility;</p> <p>To ensure the equipment compatibility with the electromagnetic environment;</p> <p>To monitor that procedures and standards for EM analyses are applied across the project.</p> <p>-Performs and coordinates activities related to the transversal function EM Compatibility & Magnetic perturbation;</p> <p>-Performs and coordinates tasks in preparation of the commissioning phase on matter related to the tokamak machine operation (evaluation of EM loads, coil current voltages, etc.), EM environment definition (magnetic field, and magnetic field variations) and EM shielding requirement in machine commissioning and operational scenarios;</p> <p>-Supports Department for the qualification of equipment to the electromagnetic environment and the analysis of the required EM shielding;</p> <p>-Develops instructions, guidelines and procedures for EM analyses and EM compatibility;</p> <p>-Interacts with Safety Department to propagate, methodologies, procedures and requirements for EM analyses that are classified as Project Importance Activity (PIA);</p> <p>-Carries out training and organizes information meeting to propagate EM analysis requirements;</p> <p>-Coordinates the development of general models and tools for EM analysis and make them available to EM analysis performer to promote synergies between analysis performers and improve efficiency and quality;</p> <p>-Interacts and communicates with other departments for the propagation and consistencies of EM interface loads between equipment;</p> <p>-Performs EM analyses of ITER components in plasma transient events for the evaluation of electro-magnetic loads, for the definition of component design loads or to provide input boundary conditions for local detailed analyses;</p> <p>-Supports Responsible Officers (RO) to prepare contracts, task agreements and technical specifications for activities related to electromagnetic analyses and electromagnetic compatibility;</p> <p>-Reviews and verifies EM analyses;</p> <p>-Develops interfaces according to simulations of plasma transient events (disruptions, vertical displacement events, fast discharge events, etc.) with EM analysis programs to improve analysis quality and efficiency;</p>
Main duties / Responsibilities	<p>-Prepares and reviews detailed analysis reports;</p> <p>-Updates and keeps records of the Finite Element (FE) models developed inside the ITER Organization and by the supporting agencies;</p> <p>-Performs other duties in support of the project schedule or upon management request, as necessary;</p> <p>-May be requested to be part of any of the project/construction teams and to perform other duties;</p> <p>-Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>-Reports to Analysis Section/ Division Head;</p> <p>-Interfaces with all other ITER Departments and Divisions for matters of his/her competence;</p> <p>-In response to requests from the Director-General and/or Central Integration Office (CIO) Head</p>

Measures of effectiveness	<p>or proactively, informs the DG/ CIO Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p> <ul style="list-style-type: none"> -Pro-actively supports the Analysis Section/Division Head in identifying analysis needs and in improvement of the efficiency of the analysis work; -Provides comprehensive and accurate reports and summaries of the performed and revised analyses; -Provides FE models developed for the analyses within the defined schedule; -Provides work plan and schedule of analyses coordinated by Analysis Section/Division; -Maintains effective communication with all organizations interfacing with ITER; -Contributes to cost saving and improvement of work efficiency; -Generates and maintains trustworthy, up to date information related to the machine's technical scope.
	<p>Project Construction Phase SAP ID: 50000178</p>

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Mechanical or Nuclear/Fusion Engineering or other
Level of experience	At least 8 years
Technical experience/knowledge	<ul style="list-style-type: none"> -At least 8 years' experience in the use of Finite Element (FE) programs or electromagnetic analysis tools for tasks in EM domains relevant for nuclear fusion devices; -Good experience with super computers, cluster machines, and stand-alone work stations; -Experience in the qualification of equipment to the electromagnetic environment and the analysis of the required EM shielding; -Experience in electromagnetic compatibility design and qualification at DC and low frequency noise would be an advantage; -Basic knowledge of plasma physics would be an advantage; -Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates in relevant domains may be considered a reasonable substitute for the required educational degree; -Good knowledge of the basic functions of a tokamak machine and of the impact of EM transients (plasma disruption, magnet fast discharges) on its components;
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit, Ability to communicate effectively
General skills	<ul style="list-style-type: none"> -Good understanding of the basic principles of electromagnetism; -Good knowledge of Electromagnetic analysis tools.
Languages	English (Fluent)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<ul style="list-style-type: none"> -Experience with Microsoft Office suite of programs; -Good knowledge of the EM analysis tools and experience in finite element software (Ansys, Maxwell 2D-3D) would be an advantage; -Knowledge of the computer usage (super computer, cluster machines, stand-alone work station).