

IO1983 Power Supply Engineer PED-150

General information

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

Job description

Main job	Engineering - Electronics
Title of the position	Power Supply Engineer PED-150
Job family	Engineer - 1
Grade	P2
Direct employment	No
Purpose	<p>To design, plan and execute the commissioning and integrated tests of the Coil Power Supply System (CPSS) including the associated Instrumentation & Control (I&C) systems and the parts of the auxiliary plant systems, such as Cooling Water System, Heating, Ventilation and Air Conditioning (HVAC) and Control, Data Access and Communication (CODAC), that are required to operate the CPSS.</p> <p>To perform engineering support analyses and produce the engineering and planning documentation for the operation of the CPSS, including the analysis of the plasma operation and control scenarios and the power system stability studies that are required to assess the impact of the ITER pulsed load on the French 400 kV grid</p>
Main duties / Responsibilities	<p>Performs the electrical and I&C engineering analyses and develops the procedures for the on-site acceptance tests and integrated commissioning for the CPSS;</p> <p>Performs the engineering support analyses of the plasma operation and control scenarios and the power system stability studies that are required to assess the perturbations produced by the ITER pulsed load on the French 400 kV grid;</p> <p>Develops and maintains the procedure for commissioning, testing and operation of software and hardware of the Coil Power Supply System (CPSS), including the associated I&C;</p> <p>Produces the technical documentation required by the French Transmission System Operator to permit the operation of the CPSS and deliver the pulsed power required for the plasma operation;</p> <p>Performs the field surveillance during installation, commissioning, testing and operation of the CPSS, following the applicable rules for segregation, separation and Quality Assurance/Quality Control;</p> <p>Participates to execution of the integrated commissioning, testing and operation of the CPSS, including the required trouble shooting;</p> <p>Follows-up the production of Electrical Diagrams, Process Flow Diagrams (PFD), Control Loop Diagrams, Wiring Diagrams and produces the as-built drawings;</p> <p>Develops the plan for the preventive and routine maintenance as well as unplanned maintenance for the CPSS system;</p> <p>Contributes to operation & maintenance activities, including on call duty operation team;</p> <p>May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays;</p> <p>May be requested to be part of any of the project/construction teams and to perform other duties in support of the project schedule;</p> <p>Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to the Coil Power Supply Section Leader;</p> <p>Acts as an interface between all members of the Coil Power Supply Section, ITER CODAC section, Science and Operation Division, the French Transmission System Operator, other plant systems and the ITER Domestic Agencies.</p> <p>In response to requests from the Director-General and/or Plant Engineering Department Head, or proactively, informs the DG/ Plant Engineering Department Head of any important and urgent issues that cannot be handled by the concerned line management and may jeopardize the</p>

Measures of effectiveness	<p>achievement of the Project's objectives.</p> <p>Performs effectively the construction and commissioning activities of the Coil Power Supply Section for the scope of activities;</p> <p>Ensures proper execution of electrical engineering analyses required to support the installation and commissioning of coil power supply system;</p> <p>Contributes effectively the activities related to resolution of interfaces issues between electrical components, plant systems, CODAC and operation team.</p>
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Applicant criteria

Level of study	Master or equivalent degree
Diploma	Electrical Engin., power convertor/syst./control
Level of experience	At least 5 years
Technical experience/knowledge	<p>At least 5 years in the design, construction and/or operation, test for large power conversion plants, components and power systems of large electrical systems;</p> <p>Good knowledge of the electrical steady state and transient analysis;</p> <p>Good knowledge in design and integration of electrical instrumentation and control systems;</p> <p>Good knowledge of the International Electro-technical Commission standards for the test of the large electrical installation;</p> <p>Experience in the design, construction for the high power;</p> <p>Good knowledge of codes and guidelines for 400 kV grid access and experience in execution; of transient stability analyses for power system and 400 kV grid is considered as an advantage;</p> <p>Good Project Management experience is required.</p> <p>Extensive experience in similar jobs (involving similar work responsibilities) and/or additional training certificates may be considered as substitute for the required educational degree.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to communicate effectively
General skills	<p>Ability to facilitate dialogue with a wide variety of contributors and stakeholders;</p> <p>Ability to adjust communication content and style to negotiate and deliver messages;</p> <p>Ability to work autonomously and meet deadlines with high standards;</p> <p>Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity.</p> <p>Fluent in English (written and spoken);</p> <p>Working level in French (written and spoken) is an advantage.</p>
Languages	English (Fluent) French (Working)
Specific skills	MS Office professional (Access, Project, Publisher, Visio), MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<p>Good knowledge of Microsoft Office package tool;</p> <p>Good knowledge of software applications for development of 3D models and 2D schematics;</p> <p>Good knowledge of running software tools for transient and steady-state analysis of electrical systems, including power converters, Static Var Compensators and the associated I&C.</p>