

IO1224 Electrical Engineer CEP-063

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Electrical Engineering Division
Section	CEP/ EED/ Coil Power Supply Section

Job description

Main job	Engineering - Electricity
Title of the position	Electrical Engineer CEP-063
Job family	System Engineer - 2
Grade	P4
Direct employment	Not required
Purpose	<p>To lead and manage the system engineering activities for design, procurement, installation and commissioning of the ITER Reactive Power Compensation and Harmonic Filtering System (RPC&HF), which includes three large Static Var Compensators (SVC), based on Thyristor Controlled Reactors (TCR) and tuned filters with a total rated power of 750 Mvar, directly connected to a 66 kV ac distribution system, without step down transformers.</p>
Main duties / Responsibilities	<p>Is the Technical Responsible Officer (TROs) for the procurement, installation and commissioning of the ITER Reactive Power Compensation and Harmonic Filtering (RPC&HF) System to ensure that components and subsystems will be designed, fabricated, shipped and installed in accordance with the requirements specified in the Procurement Arrangement with the Chinese Domestic Agency (DAs), including the system and layout integration aspects;</p> <p>Develops and supervises the Reactive Power Compensation System schedule, including construction, installation, commissioning and operation;</p> <p>Evaluates the design issues, proposing and implementing actions required to resolve design, construction and installation issues;</p> <p>Develops the procedures for acceptance test and integrated commissioning for the component/system under the responsibility;</p> <p>Enhances ITER reactive power compensator system integration and maturity of the interface with other ITER systems;</p> <p>Performs analyses of the overall performance for the reactive power compensator system.</p> <p>Coordinates the Reactive Power Compensator and Harmonics Filter system installation and pre-operation;</p> <p>Is responsible of the Quality Assurance/Quality Control of components or systems;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and Strategic Management Plan;</p> <p>Performs other duties linked to the above purpose upon management request, as necessary;</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 technical divisions, to support excellent integration of the electrical installation, the DAs and contractors;</p> <p>In response to requests from the Director-General and/or Director of Central Engineering & Plant (CEP) Directorate, or proactively, informs the DG/Director of CEP Directorate 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>
Measures of effectiveness	<p>Coordinates and directs efforts of the ITER Organization and the DAs in respect to design, fabrication, installation and commissioning of the ITER RPC&HF System;</p> <p>Continuously updates integrated system analysis to verify the overall performance for the reactive power compensation, taking into account the design evaluation of the ITER coil power supply system;</p> <p>Maintains effective communication with all the interfacing teams of the ITER and the DAs.</p>

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	in the Electrical Engineering field or other
Level of experience	At least 10 years
Technical experience	<p>Experience in managing design, construction, installation and testing of SVCs system, comparable with those of the ITER RPC&HF systems;</p> <p>Good experience in monitoring/following up contracts for design, construction, installation and testing of large electrical components/subsystems;</p> <p>Good ability to draft/revise technical report/documentation and project plans;</p> <p>Experience in the design and installation of complex electrical system for Tokamaks and/or large superconductive magnets would be an advantage.</p> <p>Good experience in monitoring/following up contracts for design, construction, installation and testing of large SVCs, comparable with those of the ITER RPC&HF system;</p>
Project experience	At least 5 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	<p>Good knowledge of the design details, technical requirements of SVCs;</p> <p>Good knowledge of Power Systems and Power Electronics;</p> <p>Good knowledge of international electrical standards.</p>
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Free criteria	<p>Good knowledge of running computer codes for transient and steady-state analysis of electrical system, including power converters, SVCs and power systems;</p> <p>Good knowledge of software applications for development of 3D model and 2D schematics.</p>