

# IO1303 Electrical Engineer CEP-063

## General information

Job category	Standard
Confidential	No
Status	Published
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Electrical Engineering Division
Section	CEP / EED / Coil Power Supply and Distribution Section

## Job description

Main job	Engineering - Electricity
Title of the position	Electrical Engineer CEP-063
Job family	System Engineer - 1
Grade	P3
Direct employment	Not required
Supervised by:	Section Leader
Purpose	<p>To manage the system engineering activities for design, procurement, installation and commissioning of the ITER Reactive Power Compensation and Harmonic Filtering System (RPC&amp;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	<ul style="list-style-type: none"><li>- Is the Technical Responsible Officer in charge of the components of the ITER Reactive Power Compensation and Harmonic Filtering (RPC&amp;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);</li><li>- Follows up the procurement installation and commissioning liaising with the Section Leader;</li><li>- Supports the development, optimization and supervision of the Reactive Power Compensation System schedule, including fabrication, installation, commissioning and operation;</li><li>- Supports the resolution of the design and fabrication issues, proposing and implementing actions required to resolve design, construction and installation issues;</li><li>- Develops the procedures for acceptance test and integrated commissioning for the component/system under the responsibility;</li><li>- Enhances ITER reactive power compensator system integration and maturity of the interface with other ITER systems;</li><li>- Supports the system integration among the ITER Reactive Power Compensation and Harmonic Filtering components, the Pulsed Power Electrical Network, and ITER Pulsed Power Load;</li><li>- Carries out analyses of the system performance for the reactive power compensator system.</li><li>- Coordinates the Reactive Power Compensator and Harmonics Filter system installation and pre-operation;</li><li>- Supports the application of Quality Assurance (QA) &amp; Quality Control requirements and standards for components and systems, in close relation with the QA Division;</li><li>- Performs other duties in support of the project schedule as described in the Detailed Work Schedule and Strategic Management Plan;</li><li>- Performs other duties linked to the above purpose upon management request, as necessary;</li><li>- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.</li><li>- Reports to the Coil Power Supply Section Leader;</li><li>- Acts as an interface between all technical divisions, to support excellent integration of the electrical installation, the DAs and contractors;</li><li>- In response to requests from the Director-General and/or Director of Central Engineering &amp; 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.</li></ul>

Measures of effectiveness	<ul style="list-style-type: none"> <li>- Coordinates and supervises efforts of the ITER Organization and the DAs in respect to design, fabrication, installation and commissioning of the ITER RPC&amp;HF System;</li> <li>- 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;</li> <li>- Maintains effective communication with all the interfacing teams of the ITER and the DAs.</li> </ul> <p>Project Construction Phase. SAP Id : 50000241.</p>
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## Applicant criteria

Level of study	Master or higher degree
Diploma	Electrical Eng. field or other relevant discipline
Level of experience	At least 5 years
Technical experience	<ul style="list-style-type: none"> <li>- Experience in managing design, construction, installation and testing of SVCs system and/or other relevant complex electrical systems;</li> <li>- Basic experience in drafting/revising technical report/documentation and project plans;</li> <li>- Experience in monitoring/following up contracts for design, construction, installation and testing of large electrical components/subsystems would be an advantage;</li> <li>- Experience in the design and installation of complex electrical system for Tokamaks and/or large superconductive magnets would be an advantage.</li> </ul>
Social skills	<ul style="list-style-type: none"> <li>- Good knowledge of international electrical standards;</li> <li>- Good knowledge of the design details, technical requirements of SVCs;</li> <li>- Good knowledge of Power Electronics and the Electrical Circuit analysis.</li> </ul> <p>Note: Training may be provided to complement technical mix-skills required.</p>
General skills	<p>Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit</p> <p>Project experience :</p> <ul style="list-style-type: none"> <li>- Basic experience in monitoring/following up contracts for design, construction, installation and testing of large SVCs or other relevant large electrical components/subsystems;</li> <li>- Basic Project Management experience is required.</li> </ul>
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<p>Computer and IT skills :</p> <ul style="list-style-type: none"> <li>- Good knowledge of running computer codes for transient and steady-state analysis of electrical system, including power converters, SVCs and power systems;</li> <li>- Good knowledge of software applications for development of 3D model and 2D schematics.</li> </ul>

## Origin of the job

Entity	ITER ORGANIZATION
Recruitment reason	Replacement

## HR Follow-up

Email alerts	Every 10 applications
Main recruiter in charge	Mélanie Picarel
Followed by	CHOE Hyunejune
Alert recipient(s)	Mélanie Picarel CHOE Hyunejune
Publication default start date	2/20/2013
Publication default end date	3/22/2013
Automatic update	No