

# IO1431 Electrical Technician PSE-093

## General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Plant System Engineering
Division	PSE / Electrical Engineering Division
Section	PSE/ EED/ Electrical Power Distribution Section

## Job description

Main job	Engineering - Electricity
Title of the position	Electrical Technician PSE-093
Job family	Technician - 3
Grade	G4
Direct employment	Required
Purpose	<p>To support the engineering activities for design, procurement &amp; installation of electrical power distribution and Instrumentation &amp; Control (I&amp;C) cabling (gauges and electrical &amp; pneumatic actuator signals) of the ITER plant systems, including follow up of the modifications that will occur at various stages of the ITER project.</p> <p>To produce and regularly update the interface &amp; control documents (ICD), the interface sheets (IS) between the ITER plant systems, the Steady State Electrical Network (SSEN), the Pulsed Power Electrical Network (PPEN) system &amp; the cable engineering activities.</p> <p>To support the final design, installation &amp; commissioning of I&amp;C electrical systems based on IEC61850 communication standard.</p> <p>Background information:</p> <p>The SSEN distributes electrical power to all ITER plans systems. The key facts and figures of SSEN system are:</p> <ul style="list-style-type: none"><li>. Main power distribution network at 22 kV;</li><li>. Electrical consumers fed at 6.6 kV and 400 V;</li><li>. More than 100 MVA total installed power;</li><li>. Several hundreds of connection points.</li></ul> <p>The PPEN distributes electrical power to magnet converters &amp; Heating systems. The key facts and figures of PPEN system are:</p> <ul style="list-style-type: none"><li>. Main power distribution network at 66kV &amp; 22 kV;</li><li>. More than 900 MVA total installed power;</li><li>. Several tens of connection points in High &amp; medium voltage.</li></ul> <p>Provides electrical &amp; cable engineering support, in accordance with ITER priorities &amp; business needs, for low &amp; medium voltage components of the ITER plants systems;</p> <p>Follows up the CAD activities for the production of 2 D drawings &amp; diagrams, and 3D layout models for the components &amp; systems under her/his scope of work;</p> <p>Proposes &amp; implements actions required to resolve design integration issues;</p> <p>Follows up design, manufacturing, testing, installation &amp; commissioning activities for components &amp; systems under her/his responsibility &amp; those performed by the Domestic Agencies (DAs) and their contractors;</p> <p>Ensures the implementation of Quality Assurance procedures for design , manufacturing, testing &amp; commissioning;</p> <p>Ensures Quality Control implementation during the whole process of the supply completion , from the design up to the commissioning moving through procurement &amp; fabrication / assembly;</p> <p>Updates when required the Project Schedule associated with the fabrication, installation, testing &amp; commissioning related to I&amp;C and electrical engineering;</p>
Main duties / Responsibilities	<p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule or 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 &amp; perpetuation of the ITER Safety Program, values &amp; ethics.</p>

Measures of effectiveness	<p>Reports to the Electrical Power Distribution (EPD) Section Leader;</p> <p>Acts as an interface between all technical divisions, to support excellent integration of the plant system electrical installation, the DAs and contractors;</p> <p>In response to requests from the Director-General and/or Director of Plant System Engineering (PSE) Directorate, or proactively, informs the DG/ Director of PSE Directorate of any important &amp; urgent issues that cannot be handled by the concerned line management &amp; may jeopardize the achievement of the Project's objectives.</p>
	<p>Completes requested design, follow-up procurement and installation activities of plant systems and interfaces in accordance with the defined schedule and cost;</p> <p>Communicates efficiently with other sections and Directorates of the ITER Organization on plant systems electrical power distribution and I&amp;C and EPD related issues;</p> <p>Coordinates and directs efforts of the ITER Organization and the Domestic Agencies in respect to design, manufacturing, installation and commissioning of the ITER plant systems electrical power distribution and I&amp;C and EPD.</p>
	<p>Project Construction Phase</p> <p>ID SAP: 50000240</p>

## Applicant criteria

Level of study	Bachelor or higher degree
Diploma	Electrical or Instrumentation Engineering or other
Level of experience	At least 5 years
Technical experience	<p>At least 5 years' experience in design, testing, installation and commissioning of low and medium voltage distribution, components and systems, comparable with those of at least one of the major ITER plants systems (see above the main key facts and figures);</p> <p>Experience in large science or industrial facility is required;</p> <p>Appropriate experience of commissioning activities using IEC 61850 compliant communication standard will be considered as an advantage;</p> <p>Preferably experience in multidisciplinary systems with appropriate knowledge of electrical standards for low voltage distribution.</p>
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	Good knowledge of CAD tools for production of 2D diagrams (electrical, and/or P&ID).