

# IO1349 Electrical Technician CEP-140 / CEP-148

## General information

Job category	Standard
Status	Confirmed
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Electrical Engineering Division
Section	CEP/ EED/ Electrical Power Distribution Section

## Job description

Main job	Engineering - Electricity
Title of the position	Electrical Technician CEP-140 / CEP-148
Job family	Technician - 3
Grade	G4
Direct employment	Required  Two vacancies to be filled in.  To support the engineering activities for design, procurement and installation of electrical power distribution and I&C cabling (gauges and electrical and pneumatic actuator signals) of the ITER plant systems, including follow up of the modifications that will occur at various stages of the ITER project.  To produce and regularly update the interface & control documents (ICD), the interface sheets (IS) between the ITER plant systems, the Steady State Electrical Network (SSEN) system and the cable engineering activities.  The SSEN distributes electrical power to all ITER plans systems. The key facts and figures of SSEN system are: - Main power distribution network at 22 kV; - Electrical consumers fed at 6.6 kV and 400 V; - More than 100 MVA total installed power; - Several hundreds of connection points.  The key facts and figures of the major ITER plant systems are: - Cooling Water System rated for 1300 MW-peak cooling power flow and about 65 MW total electric power demand; - Cryoplant and cryodistribution system rated for 65 kW-average at 4.5 K and about 40 MW total electric power demand; - Large Tritium Plant systems processing gaseous and liquid hydrogen isotopes and tritiated water at unprecedented throughputs and employing new technologies; - The largest and most complex vacuum system yet to be built; large system volumes of almost 10,000 m3 need to be evacuated and kept under high vacuum conditions; - Buildings services (lights, sockets, ventilation, heating and air conditioning, etc.) with a total power demand of about 30 MW.  - Provides electrical and cable engineering support, in accordance with ITER priorities and business needs, for low and medium voltage components of the ITER plants systems; the cable engineering support includes both power and I&C cables, including special signal cabling e.g. high frequency or very low (pA) current and pneumatics; - Follows up the CAD activities for the production of 2 D drawings and diagrams, and 3D layout models for the components and systems under her/his scope of work; - Proposes and implements actions required to resolve design integration issues; - Follows up design, manufacturing, testing , installation and commissioning activities for components and systems under her/his responsibility and those performed by the Domestic Agencies (DAs) and their contractors; - Ensures the implementation of Quality Assurance procedures for design , manufacturing,
Main duties / Responsibilities	

	<p>testing and commissioning;</p> <ul style="list-style-type: none"> <li>- Ensures Quality Control implementation during the whole process of the supply completion , from the design up to the commissioning moving through procurement and fabrication / assembly;</li> <li>- Updates when required the Project Schedule associated with the fabrication, installation, testing and commissioning related to I&amp;C and electrical engineering;</li> <li>- Performs other duties in support of the project schedule as described in the Detailed Work Schedule or 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> </ul> <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 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.</p>
Measures of effectiveness	<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>SAP Id: 50000240</p> <p>Project Construction Phase</p>

## Applicant criteria

Level of study	Bachelor or higher degree
Diploma	Electrical or Instrumentation Engineering
Level of experience	At least 5 years
Technical experience	<ul style="list-style-type: none"> <li>- At least 5 years experience in 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);</li> <li>- Eexperience preferably in multidisciplinary systems;</li> <li>- Experience in large science or industrial facility is required; preferably in an international environment;</li> <li>- Good knowledge of electrical standards for low voltage distribution;</li> <li>- Additional experience in industrial disciplines or general engineering physics (cooling, cryogenics, gas, vapor and liquid processing, vacuum).</li> </ul>
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)