

IO1225 Tritium Plant System Engineer CEP-130

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Engineering & Plant
Division	CEP / Fuel Cycle Engineering Division
Section	CEP / FCE / Tritium Plant Section

Job description

Main job	Engineering - Chemical engineering
Title of the position	Tritium Plant System Engineer CEP-130
Job family	System Engineer - 1
Grade	P3
Direct employment	Not required
Purpose	<p>To be responsible for elements of Tritium Plant integrated system design, procurement, installation and commissioning which includes the Isotope Separation System, Tokamak Exhaust Processing System, Storage and Delivery System, Detritiation System, Water Detritiation System, Analytical System, Automatic Control System and other support system.</p> <p>The key facts and figures of the Tritium Plant are:</p> <ul style="list-style-type: none">Processes deuterium-tritium exhaust from the ITER tokamak including impurity removal, hydrogen isotope separation, tritium storage, water detritiation and effluent gas detritiation;Daily hydrogen isotope throughput of 40 m3 during experimental campaigns;Tritium inventory less than 4 kg;Tritium stack releases less than 0.6 g/year;Full complement of systems for safe tritium handling.
Main duties / Responsibilities	<p>Is responsible for performance and management of the design, R&D, integration and qualification of the multiple systems associated with the Tritium Plant;</p> <ul style="list-style-type: none">Develops and maintains the integrated Tritium Plant design;Communicates and manages integration requirements to Fuel Cycle and Tokamak systems;Develops and uses computer modeling tools to analyze and understand Tritium Plant operations;Develops, communicates and maintains Tritium Plant description and plan documents such as Tritium Plant integrated design description, operational state definition, operational plan, system function coordination and Tritium Plant system requirements document;Performs Tritium Plant information standardization and harmonization;Provides information necessary for advancement of the Tritium Plant safety basis;Performs other duties in support of the project schedule as described in the Detailed Work Schedule and Strategic Management Plan, as, for example, responsible officer for a system;Performs other duties linked to the above purpose upon management request, as necessary;Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.
Measures of effectiveness	<p>Report to the Tritium Plant Section Leader;</p> <p>Interfaces with others Division or section on the ITER project including especially the Vacuum, and Fueling and Wall Conditioning sections and the Domestic Agency (DAs);</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> <p>Work Products: Completes assignments as specified, on time and within budget. Particular attention will be given to progress on Tritium Plant level design which includes definition and harmonization of functions and requirements, system descriptions, interface descriptions and operational plans. Progress will include collection of written and verbal information, coordination, analysis, synthesis, clash resolution, value engineering and communication of results;</p> <p>Team Contributions: Provides and receives contributions from fellow team members, and contributes to an overall productive work environment;</p>

Safety and Security: Performs work, generates designs and oversees the work of others with proper attention to safety and security.

Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	In chemical engineering
Level of experience	At least 8 years
Technical experience	Engineering experience with at least 5 years in successfully performing and/or managing the design, construction, installation, commissioning and operation of tritium processing systems or similar systems. Knowledge of formal chemical processing plant design procedures and disciplines; Knowledge multiple technical areas including tritium processing, tritium safety, gaseous chemical processing, nuclear licensing, vacuum systems and fusion technology is desirable.
Project experience	4 to 5 years
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)