

IO1429 Tritium Confinement System Engineer PSE-143

General information

Job category	Standard
Status	Published
Department	DIP/Department for ITER Project
Division	PSE/Fuel Cycle Engineering Division
Section	PSE/ FCED/ Tritium Plant Section

Job description

Main job	Engineering - Chemical engineering
Title of the position	Tritium Confinement System Engineer PSE-143
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To integrate elements of the tritium confinement and detritiation systems for the ITER Tokamak Complex and Hot Cell facilities over their life cycle.</p> <p>To ensure proper design, manufacturing, testing, installation and commissioning activities of confinement system components and systems through systems engineering processes.</p> <p>To manage interfaces so that the integrated network functions as an efficient and effective system.</p> <p>Background information:</p> <p>Tritium confinement and detritiation consists of an extensive network extending to each tritium operation. Tritium leaks from primary confinement (e.g. pipes and components) are handled by secondary systems including confinement barriers and detritiation systems. Elements of this network include the Second Barrier (for example glove boxes), and the Glove Box Detritiation System. These elements are distributed throughout multiple buildings among many and varied plant systems.</p>
Main duties / Responsibilities	<p>Responsible to progress the Second Barrier, Glove Box Detritiation System and related system designs, meeting safety requirements in a practical, optimized, cost-effective and timely manner;</p> <p>Responsible for communicating to all ITER systems requiring Second Barrier and Glove Box Detritiation System, the design standards and requirements of these elements;</p> <p>Responsible for establishing and maintaining requirements and interfaces between systems;</p> <p>Responsible for Functional Analysis of Second Barrier and Glove Box Detritiation System;</p> <p>Responsible for preparing, maintaining & communicating design documents;</p> <p>Follows up design, manufacturing, testing, installation & commissioning activities of confinement system components and systems, including those performed by the Domestic Agencies (DAs) & their contractors;</p> <p>Ensures the implementation of Quality Assurance procedures for design, manufacturing, testing & 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 & fabrication / assembly;</p> <p>Updates when required the confinement systems project schedule;</p> <p>Provides support for licensing activities & in Fuel Cycle hazard analysis;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule & the 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 & perpetuation of the ITER Safety Program,</p>

Measures of effectiveness	values & ethics.
	<p>Reports to the Tritium Plant Section Leader;</p> <p>Manages Second Barrier & Glove Box Detritiation System interfaces together with responsible officers for interfacing systems & contributes to overall Fuel Cycle interface management;</p> <p>In response to requests from the Director-General (DG) and/or Director of Plant System Engineering (PSE) Directorate, or proactively, informs the DG/Director of any important & urgent issues that cannot be handled by the concerned line management & may jeopardize the achievement of the Project's objectives.</p> <p>Clarity and thoroughness of documents;</p> <p>Quality and timeliness of work products;</p> <p>Ability to find practical, cost-effective, manageable and efficient solutions to issues;</p> <p>Quality of communication with personnel associated with interfacing systems and management;</p> <p>Ability to work effectively in teams and contribute to the overall success of the Fuel Cycle design/build project;</p> <p>Performing work safely and with regard for safety in designs.</p>
	<p>Project Construction Phase</p> <p>ID SAP: 50001091</p>

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear or Chemical Eng. or other discipline
Level of experience	At least 8 years
Technical experience	<p>At least 8 years' experience relevant to engineering design, integration and commissioning of gas handling facilities;</p> <p>At least 5 years' experience in nuclear industry or relevant nuclear projects;</p> <p>Experience in large design/build projects through all phases, i.e. conceptual, preliminary and final design, followed by manufacturing, installation and commissioning;</p> <p>Experience in systems comprising high integrity pipes and components is required and experience with tritium handling equipment and practices is advantageous;</p> <p>Demonstrated ability to write clear, well-organized technical documents in English.</p>
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 understanding of gas processing technologies, vacuum technology, hazardous and radioactive material handling;</p> <p>Knowledge and practical experience in chemical engineering technologies.</p>
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
Others	<p>Basic project experience is advantageous, in particular in managing contract.</p> <p>MS Office professional (Visio)</p>