

IO1430 Tritium Plant System Engineer PSE-158

General information

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| 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

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| Main job | Engineering - Chemical engineering |
| Title of the position | Tritium Plant System Engineer PSE-158 |
| Job family | Engineer - 2 |
| Grade | P3 |
| Direct employment | Not required |
| Purpose | <p>To advance systems designs to completion, and to follow-up fabrication and installation.</p> <p>To manage Tritium Plant loop functions and requirements, and interfaces within the loop and to external systems using a disciplined (systems engineering) approach.</p> <p>To integrate elements of the Tritium Plant loops through value engineering and trade off studies; identifying & managing risks and supporting decision making processes over their life cycle.</p> <p>Background information:</p> <p>The ITER Tritium Plant processing loop consists of different processing systems to store and to supply gases for machine operation, to purify hydrogen isotopes and to remove tritium from tritiated species, and to separate hydrogen isotopologues. The systems operate in an exceedingly integrated fashion and are highly interdependent.</p> |
| Main duties / Responsibilities | <p>Responsible for Functional Analysis and optimization of Tritium Plant loop requirements and design solutions considering safety, risks, costs, and other constraints;</p> <p>Responsible for compiling and maintaining design basis documentation and supporting documents using formal review procedures for the Tritium Plant loop;</p> <p>Manages Tritium Plant loop functional and physical interfaces insuring systems consistency and that the design results in harmonized, practical operation;</p> <p>Develops operational strategies and design configurations over the HH/He, DD and DT phases of ITER, including operations and maintenance plans for the Tritium Plant loop;</p> <p>Develops and establishes installation, testing, and commissioning plans considering the ITER Research Plan;</p> <p>Provides support for safety basis development and documentation;</p> <p>Contributes to Fuel Cycle modelling;</p> <p>Works effectively with system responsible officers and other team members;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule and 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 and perpetuation of the ITER Safety Program, values and ethics.</p> <p>Reports to the Tritium Plant Section Leader;</p> <p>Interfaces through the Fuel Cycle Engineering Division Head with other Fuel Cycle groups;</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 and urgent issues that cannot be handled by the concerned line management and 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> |

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| Measures of effectiveness | <p>Ability to find practical, cost-effective, manageable and efficient solutions to issues; Quality of communication with personnel associated with interfacing systems and management; Ability to work effectively in teams and contribute to the overall success of the Fuel Cycle design/build project; Performing work safely and with regard for safety in designs.</p> <p>Project Construction Phase ID SAP: 50000272</p> |
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Applicant criteria

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| Level of study | Master or equivalent degree |
| Diploma | Nuclear, Chemical Engineering or other relevant |
| Level of experience | At least 8 years |
| Technical experience | <p>At least 8 years' experience in system engineering, integration, commissioning and operation of gas handling facilities; At least 5 years' proven success in complicated chemical processing system design and fabrication; Experience in systems comprising high integrity networks and components; Experience in gas handling, vacuum and pumping technologies; Experience in hydrogen and tritium processing systems and with nuclear facilities is desirable.</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>Very good understanding of gas processing technologies, vacuum technology, hazardous and radioactive material handling; Systems engineering training is desirable; Basic Project Management experience is required.</p> |
| Languages | English (Working) |
| Specific skills | MS Office standard (Word, Excel, PowerPoint, Outlook) |
| Others | <p>Proven ability to write effective technical documents in English; Desirable knowledge on software for project management, CAD, document control and chemical process modeling.</p> |