

IO1425 Nuclear Pressure Equipment System Eng.TCWS-005+006

General information

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| Job category | Standard |
| Status | Published |
| Department | DIP/Department for ITER Project |
| Division | PSE/Plant Engineering Division |
| Section | PSE/ PED/ Cooling Water System Section |

Job description

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| Main job | Engineering - Nuclear Power |
| Title of the position | Nuclear Pressure Equipment System Eng.TCWS-005+006 |
| Job family | Engineer - 1 |
| Grade | P2 |
| Direct employment | Not required |
| Purpose | <p>This post includes a total of 2 vacancies : TCWS-005 & TCWS-006.</p> <p>To be responsible for the design of Nuclear Pressure Equipment within his/her scope of responsibility for the ITER Tokamak Cooling Water Systems (TCWS) according to the French regulations (ESP/ESPN).</p> <p>To support the Cooling Water System (CWS) Section in the role of manufacturer of TCWS piping and components' design and fabrication, in accordance with the French regulations (ESP/ESPN).</p> <p>Background information:</p> <p>The Tokamak Cooling Water System (TCWS) has several separate water cooled primary heat transfer systems designed to remove approximately 1,000 MW of heat from the Vacuum Vessel and the In-Vessel components. The other associated functions of the TCWS are the water volume and chemical control of the corrosion products as well as the draining and baking of the majority of clients. All these systems have to confine radioactive materials (e.g. Activated Corrosion Products) and therefore need to comply with the French regulation for the Nuclear Pressure Equipment (ESP/ESPN). These systems have nuclear-grade piping, which is a comparable size to a commercial fission reactor water system, and several pressure vessels (e.g. Pressurizers, Heat Exchangers, Electrical Heaters etc).</p> <p>Supports the CWS Section for the design, procurement, assembly and/or installation & operation of the TCWS system in close collaboration with other ITER Organization (IO) Directorates & with the Safety, Quality & Security Department;</p> <p>Is responsible for the TCWS design & conformity assessment of the Nuclear Pressure Equipment in accordance with the French regulations (ESP/ESPN) and following ASME design codes and standards;</p> <p>Is responsible for the application of the prescriptions of the French Nuclear Regulator (Autorité de Sécurité Nucléaire (ASN) to the TCWS design & fabrication;</p> <p>Is responsible for managing contracts & with Agreed Notified Body (ANB) for the design & the manufacturing of TCWS Nuclear Pressure Equipment;</p> <p>Supports the CWS Section to coordinate the manufacturing activities made by the involved Domestic Agency following the baseline time schedule & the assembly sequence;</p> <p>Supports the licensing & safety requirements for the TCWS by managing & reviewing the safety analysis & the compliance with the RPrS (Rapport Preliminaire de Sécurité);</p> <p>Prepares & maintains the required documentation for licensing, commissioning & operation;</p> |
| Main duties / Responsibilities | <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, values & ethics.</p> <p>Reports to the Cooling Water System Section leader;</p> <p>Acts as an interface with internal & external resources to coordinate the design & construction of the TCWS Nuclear Pressure Equipment;</p> |

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| Measures of effectiveness | In response to requests from the Director-General and/or Plant System Engineering (PSE) Directorate Director, or proactively, informs the DG/ PSE Directorate Director of any important & urgent issues that cannot be handled by the concerned line management & may jeopardize the achievement of the Project's objectives. |
| | Manages the design of the TCWS Nuclear Pressure Equipment in a timely manner and within the defined costs; |
| | Manages contracts with ANB in a timely manner and within the defined costs; |
| | Supports IO in the role of Manufacturer for design and fabrication of the TCWS. |
| Project Construction Phase | |

Applicant criteria

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| Level of study | At least Master's Degree or equivalent |
| Diploma | Nuclear Engineering |
| Level of experience | At least 5 years |
| Technical experience | At least 5 years' experience in the System Engineering of complex nuclear projects; |
| | At least 2 years' experience in the design of Nuclear Pressure Equipment for Nuclear projects according to the French regulations (ESP/ESPN) and ASME design codes and standards; |
| | Basic experience in the management of prescriptions from the French Nuclear regulator the Autorité de Sûreté Nucléaire (ASN) is required; |
| | Experience in coordinating and supervising technical activities with French Agreed Notified Body (ANB) is preferable. |
| Social skills | Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit |
| General skills | Basic Project and Contract Management experience is required; |
| | Working knowledge of French (written and spoken) would be considered an advantage. |
| Languages | English (Working) |
| Specific skills | MS Office standard (Word, Excel, PowerPoint, Outlook) |
| Others | Knowledge of 2D-3D CAD software is preferable; |
| | Knowledge of FEM code (ANSYS) is preferable. |