

IO1548 Nuclear Engineer, Test Blanket Modules TED-006

General information

Job category	Standard
Status	Published
Department	TED / Tokamak Engineering Department
Division	TED / Internal Components Division
Section	TED / INC / Tritium Breeding Blanket Systems Section

Job description

Main job	Engineering - Facilities engineering
Title of the position	Nuclear Engineer, Test Blanket Modules TED-006
Job family	Engineer - 2
Grade	P3
Direct employment	Not required
Purpose	<p>To be the technical responsible officer (TRO) for all maintenance activities under the responsibility of the IO associated with the Test Blanket Systems (TBS), including Remote Handling (RH), RH-assisted & hands-on maintenance & for the detailed definition, assessment & monitoring of all the associated R&D contracts;</p> <p>To supervise & manage contracts with nuclear industry & laboratories for the development of the design & for the manufacturing of the common TBS components in the Test Blanket Modules (TBM) Port Cells, including maintenance tools & equipment;</p> <p>To define, assess & monitor the R&D & industrial contracts addressing the TBM Port Plug Maintenance, taking into account the assessment of contamination, Occupational Radiation Exposure's implication & ALARA principle.</p>
Main duties / Responsibilities	<p>Manages all the maintenance activities under the responsibility of the IO associated with the TBS, in particular the detailed definition of the maintenance operations in the TBM Port Cells & TBM-associated areas of the Hot Cell;</p> <p>Defines the R&D required for the validation & demonstration of maintenance operations & for the assessment & monitoring of the associated external contracts, including the preparation of documentation required by control bodies (eg. French Nuclear Regulator);</p> <p>Assesses maintenance operations on the TBS components in the Tokamak Complex & in the Hot Cell as defined by the ITER Members TBM Teams; including the evaluation of all associated safety aspects (normal & abnormal events);</p> <p>Defines & develops maintenance operations associated with the TBM Port Plugs' replacement & refurbishment in the Hot Cell, supporting the TRO for the TBM Port Plug design;</p> <p>Manages service & procurement contracts with industry & laboratories on design work & analyses for Test Blanket Systems' common components in the TBM Port Cells (e.g., Ancillary Equipment Unit, Bio-shield plug, Pipe Forest) & the associated maintenance tools & equipment;</p> <p>Interacts with the ITER Safety Team & with ITER Members' TBM Teams in the area of maintenance of common components & equipment to assess acceptability & accessibility of the various Test Blanket Systems' components, with particular focus on the expected zoning of the various areas occupied by the TBSs;</p> <p>Performs other duties in support of the project schedule as described in the Detailed Work Schedule & the Strategic Management Plan & upon management request;</p> <p>May be requested to belong to any project team dealing with above activities & perform other duties upon management request;</p> <p>Maintains a strong commitment to the implementation & perpetuation of the ITER Safety Program, values & ethics.</p> <p>Reports to Tritium Breeding Blanket Systems Section Leader;</p> <p>Acts as an interface between all ITER Members involved in the TBM Program on the technical issues relating to TBM Systems / ITER Systems interfaces under the supervision of the Tokamak Engineering Department (TED);</p> <p>Interacts with Responsible Officers within ITER Departments dealing with TBM related activities;</p> <p>Liaises with technical experts involved in the Members' TBM Programs;</p>

Measures of effectiveness	In response to requests from the Director-General and/or TED Head, or proactively, informs the DG/ TED Head of any important & urgent issues that cannot be handled by the concerned line management & may jeopardize the achievement of the Project's objectives.
	Coordinates and contributes efficiently to the integration activities for the TBM Systems; Establishes and maintains the effective co-ordination & results of TBM-related activities with ITER Organization Departments; Establishes appropriate Quality Assurance and Quality Control procedures for TBM-related activities under the responsibility of the ITER Organization;
	Successfully keeps required milestones, costs and schedules concerning the design and procurement activities for which he/she is the Technical Responsible Officer.
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Mechanical or nuclear engineering
Level of experience	At least 10 years
Technical experience/knowledge	At least 10 years' experience in design and analyses of nuclear systems and components with a minimum of 4 years' experience in nuclear maintenance in contaminated/irradiating environment; Experience in Nuclear Safety and in procedures associated with preparing design analyses and documentation in a nuclear facility would be considered as an advantage; Expertise in technology aspects of fusion research, in particular in relation to the nuclear aspects of fusion technology; Demonstrated experience in international collaboration would be preferable; Basic Project Management experience is required.
Social skills	Knowledge on Nuclear maintenance procedure, including the aspects of associated contamination management and the implementation of the ALARA principle would be considered an advantage.
Languages	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Others	English (Fluent) Good command of MS Office standard (Word, Excel, PowerPoint, Outlook); Experience in working with CATIA V5 CAD software, ENOVIA, MS Office professional (Access, Project, Publisher, Visio), and SEE System Design (SSD) software for Schematics.