

IO1445 Structural Design Engineer TCWS - 012+013

General information

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

Job description

Main job	Engineering - Design
Title of the position	Structural Design Engineer TCWS - 012+013
Job family	Engineer - EC
Grade	P1
Direct employment	Not required [Job offer for 3 year contract]
Purpose	<p>To be responsible for the Design and Analysis of the structural supports for the Tokamak Cooling Water System (TCWS) piping and equipment; To contribute to the procurement and the successful construction of the TCWS piping system; To participate in the preassembly and pretesting of the TCWS piping system.</p>
Main duties / Responsibilities	<p>Produces static and dynamic stress analysis calculations and reports of the TCWS piping and equipment supports and structures according to ASME Code Section NF and ANSI / AISC using GTSTRUDL, Staad Pro, ANSYS or similar software; Maintains a fluent dialog with 3D designers and support designers to agree on the optimal required support configuration;</p> <p>Produces loads reports in coordination with other Sections and clients (Buildings, etc.); Monitors the structural analysis produced by industry or Domestic Agencies for the assigned systems;</p> <p>Participates in the design and conformity assessment of the TCWS equipment according to the French regulations (ESP/ESPN) and following required design codes and standards as per Licensing Design Basis;</p> <p>Maintains full and fruitful involvement in the systems design, fabrication and modularization of TCWS equipment according to the prescriptions of the French Nuclear Regulator - Autorité de Sûreté Nucléaire (ASN) and also follows the indications of the concerned Agreed Notified Body (ANB);</p> <p>Participates in the manufacturing of TCWS piping and equipment; Supports the Cooling Water System (CWS) Section for the design, procurement, assembly and/or installation and operation of the TCWS equipment in close collaboration with Domestic Agencies and other ITER Directorates;</p> <p>Supports a fruitful and continuous integration in Cooling Water System commissioning and supporting issues concerning commissioning technical specifications and procedures; Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan; 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.</p> <p>Reports to the Cooling Water System Section Leader. Acts as an interface with other internal and external resources for the design of the Cooling Water System components; 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 and urgent issues that cannot be handled by the concerned line management and may jeopardize the achievement of the Project's objectives.</p>

Measures of effectiveness	<p>Performs the stress reports of the TCWS equipment supporting structure in a timely manner; Produces reports on time and with a high quality standard; Contributes to ensuring satisfaction of safety and functional requirements flowdown.</p> <p>Project Construction Phase</p>
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Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear or Mechanical Engineering.
Level of experience	At least 2 years
Technical experience	<p>At least 2 years' experience in the seismic design of steel structures for Nuclear facilities; Good knowledge of large piping system support design; Good knowledge of structural design codes AISC, Eurocode, etc. Basic experience in the System Engineering of complex Nuclear projects; Basic experience in the Cold Sinks Engineering of complex systems and projects; Knowledge of ASME III related chapters will also be considered advantageous; Knowledge of the French ESP/ESPN regulations and practical application will be considered advantageous.</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	Basic Project Management experience/knowledge is appreciated.
Languages	English (Working)
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
	Good Knowledge of Caesar II structural analysis software, like GT Strudl, Staad Pro or similar software;
Others	<p>Knowledge of General Purpose FEM analysis software (ANSYS); Knowledge of 2D-3D CAD software (AVEVA PDMS, Intergraph Smartplant or Catia) will be considered advantageous.</p>