

IO1525 Cryogenic System Engineer PSE-158

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Plant System Engineering

Job description

Main job	Engineering - Cryogenics
Title of the position	Cryogenic System Engineer PSE-158
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	<p>To be responsible specifically for the integrated Magnets Feeders system in terms of instrumentation and control logic;</p> <p>To perform functional analysis for Magnets Feeders clients and support the integrated functional analysis of the cryogenic system;</p> <p>To manage the layout, integration, Quality Control (QC) of Magnets Feeders systems and associated cryodistribution systems;</p> <p>To perform safety analysis to support the Magnets Feeders systems design in normal and accidental conditions in single and integrated configurations;</p> <p>To implement global and local control logic system properly supported by local instrumentation and control room high level vision;</p> <p>To implement man machine interface in the design as single and/or integrated systems also using simulators;</p> <p>To perform risk analysis for Magnets Feeders systems functional design investigating risks in the Interfaces matrix, risk in the safety Issues, risks in the performances during operational and accidental scenarios;</p> <p>To identify and execute technical studies, establish and review baseline documentation, design, procurement, implementation, commissioning, operation and maintenance of all functions required for the correct and safe running of the ITER Magnets Feeders and associated cryodistribution system.</p> <p>Develops & supports the process, functional analysis & control logic design studies for the Magnets Feeders clients served by of the Cryodistribution establishing nominal performances & safety issues;</p> <p>Performs safety analysis for the Magnets Feeders clients served by Cryodistribution for normal & accidental scenarios;</p> <p>Performs dynamic simulation of the integrated systems & Magnets clients functional behavior in normal and accidental scenarios;</p> <p>Supports the design, procurement, assembly and/or installation and operation of the Magnets Feeders and associated Cryodistribution systems in close collaboration with Domestic Agencies and other ITER IO Directorates;</p> <p>Performs risk analyses on safety performances as well as functional performances for the Magnets Feeders and associated Cryodistribution system;</p> <p>Plans and executes the required testing, commissioning and operation program for the Magnets Feeders and associated cryodistribution systems;</p> <p>Trains the operators of the cryogenic system;</p>
Main duties / Responsibilities	<p>May be required to work shifts during the ITER assembly and commissioning phase;</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>Under supervision of in Cryogenic System Section Responsible Officers, reports to the Plant System Engineering Directorate Director;</p> <p>Acts as an interface between the Cryogenic System Section and Domestic Agencies and Subcontractors;</p>

Measures of effectiveness	In response to requests from the Director-General (DG) and/or Director of Plant System Engineering Directorate, or proactively, informs the DG/ Director of PSE Directorate 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.
	Oversees the design, manufacturing, installation and commissioning of the Magnets Feeders and associated cryodistribution system; Implements the Magnets Feeders cryodistribution system control logic and testing; Tests performance to prepare commissioning of the Magnets Feeders and associated Cryodistribution system;
	Maintains effective and cooperative communications with all parties involved in the Magnets Feeders and Cryodistribution system.
	Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Cryogenics, mechanical, nuclear or others
Level of experience	At least 5 years
Technical experience	At least 5 years' experience in the manufacturing, installation and testing of large plant systems; Experience in cryogenics instrumentation and components;
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Good knowledge of cryogenics and nuclear design code and standards; Good knowledge of factory acceptance tests and commissioning of large plant system.
Languages	English (Working)
Specific skills	Computer Aided Design
Others	Experience with 2D-3D CAD software is considered as an advantage.