ITER 국제기구 공모 직위 직무기술서 (제136차)

❍ 1개 직위

구분	분야	소속	직위	Job No.	등급
①	플랜트 엔지니어링 (PED)	Plant Engineering Department Tokamak Cooling Water System Section	Process and System Engineer	TCWS-028	P2

IO1598 Process and System Engineer - TCWS-028

General information

Job category	Standard
Status	Published
Department	PED / Plant Engineering Department
Section	PED / Tokamak Cooling Water System

Job description

Main job	Engineering - Mechanics
Title of the position	Process and System Engineer - TCWS-028
Job family	Engineer - 1
Grade	P2
Direct employment	Not required
Purpose	To develop the process engineering and the control logic of the Primary Heat Transfer Systems (PHTS's) of ITER Tokamak Cooling Water Systems (TCWS) and ancillary systems; To develop Process Flow Diagrams and Process &Instrumentation Diagrams for the TCWS; To select preliminary size and prepare data sheets for TCWS equipment; To contribute to the preparation of the Technical Specification for the procurement, and the fabrication and testing of the TCWS equipment; To produce the valid documentation for the commissioning of TCWS (Commissioning Technical specifications and Commissioning Procedures); To work close to with the Cooling Water System (CWS) Section in the preparation of the Safety Report for the TCWS.
Main duties / Responsibilities	Develops and finalizes the process engineering of TCWS namely for the PHTSs, the Chemical and Volume Control Systems, the Draining and Refilling System and Drying System; Develops and finalize Process Flow & Instrumentation Diagrams for the whole TCWS; Develops and finalizes the functional analysis, control logic design studies and operational guidelines for all the TCWS; Performs specific sizing calculations for TCWS equipment (e.g. pumps, heat exchangers, filters, demineralizers, etc.), selects equipment and produces data sheet; Develops and finalizes commissioning procedures, implementing the necessary features in the design; Collaborates with the Instrumentation & Control Engineers in the CWS Section to develop the control logic design studies and their integration in the TCWS system; Supports the CWS Section for the design, procurement, assembly and/or installation and operation of the TCWS piping and components in close collaboration with Domestic Agencies and other ITER IO Directorates; May be required to work shifts during the ITER assembly and commissioning phase; Performs other duties in support of the project schedule as described in the Detailed Work Schedule and the Strategic Management Plan; May be requested to belong to any project team dealing with above activities and performs other duties upon management request; Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics. Under the coordination of the Tokamak Cooling Water System Design Supervisor, reports to the Plant Engineering Department Head; Acts as an interface with other internal and external resources for the TCWS system; In response to requests from the Director-General or proactively, informs the DG 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. Ensures the satisfaction of safety and functional thermal hydraulic requirements flow down; Develops & finalizes P&IDs and equipment selection / sizing in a timely manner within the defined costs; Develops effectively accurate operating guidelines in a timely manner; Produces datasheets for the procurement of the TCWS equipment in a timely manner;

Measures of effectiveness	Contributes to the preparation of the Technical Specifications for the TCWS equipment procurement in a timely manner. SAP Id: 50003085 Project Construction Phase

Applicant criteria

Level of study	Master or equivalent degree
Diploma	Nuclear Engineering
Level of experience	At least 5 years
Technical experience/knowledge	At least 5 years' experience in the System Engineering of complex nuclear projects, with particular reference to process design (e. g. sizing of cooling systems), P&IDs development (Instrumentation and Control Logic), equipment selection and sizing; Basic experience in the Thermal-Hydraulic and Thermal-Mechanics Engineering of complex systems; Basic experience in the Control Processes of Cooling Systems for Nuclear Power Plants or nuclear facilities; Basic Project Management experience is required.
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
Languages	English (Fluent)
Others	Knowledge of MS Office standard (Word, Excel, PowerPoint, Outlook) is required; Knowledge of 2D-3D CAD software is required; Knowledge of specific software for sizing equipment (e.g. HTRI, ASPEN, HONEYWELL etc.) is an advantage; Knowledge of specific software for Thermal-Hydraulic circuits calculations (e.g. Fathom) is an advantage; Knowledge of specific software for Thermal-Hydraulic and Thermal-Mechanics calculations (e.g. ANSYS) is an advantage.