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JOB DETAIL

My space	Ref. IO1450 - 11/14/2014	
RSS See jobs	Coil Power Supply	System Engineer PSE-161
My job alert		
	Main job	Control system
	Department	DIP/Directorate for Plant System Engineering
	Job Family	Engineer - 1
	Application Deadline	12/14/2014
	Grade	P1
	Direct employment	Required
	Purpose	To perform functional analyses of the Coil Power Supply component and their interfaces systems, during manufacturing, factory tests, installation and on-site acceptance tests, for preparing commissioning and operation. To draft, review and/or monitor all the technical documents (e.g. Interphase Control Documents, Interphase Sheets) and drawings (e.g. One Line Diagrams, Control Logic Diagrams and P&ID) of the Coil Power Supplies and its interfaced systems. To perform and implement global and local control logic system properly supported by the instrumentation and control of the Coil Power Supplies and its interfaced systems. To develop and to implement the Coil Power Supply system simulator(s) considering the interfaces systems.
	Responsibilities	Develops and support the electrical functional analysis and the process control logic design studies for the Coil Power Supply system, including its interfaced systems, for establishing nominal performances and to assess the off- normal safety scenarios (for both incidental and accidental analyses); Performs steady state and transient analyses of the Coil Power Supply components, for both normal and off- normal conditions, including the interfaces with the following interconnected systems: – the main components of the Coil Power supplies, – the magnets (superconductive and normal conductive), – the Heating and Current Drive power supplies, – the 400 kV supply grid, – and the plasma shape and control system. Ensures the integration among the Coil Power Supply Systems and its interfaces systems also issuing technical specifications and procedure for the relevant integrated testing and commissioning; 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; 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. Under the coordination of Cryogenic System Section Responsible Officers, reports to the Director of Plant System Engineering Directorate; Acts as an interface between the Coil Power Supply
	Measures of	System and Its Interfaced systems. In response to requests from the Director-General and/or Director of Plant System Engineering (PSE) 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. Provides analyses to support effectively the systems
	effectiveness	integration among the Coil Power Supply components and their interfaces systems, in a timely manner; Ensures satisfaction of safety and functional requirements flow down; Supports the interface parameters among the Coil Power Supplies and their interfaced systems, extensively

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	implementing functional analysis; Assesses the flexibility of Coil Power Supply System performance to be adapted to possible further enlargement of the operating space and scenarios.
	Project Construction Phase
Level of study	Master or equivalent degree
Diploma	Electrical Engineering field or equivalent.
Level of experience	At least 2 years
Technical experience	At least 2 years' experience in analysis of electrical circuits and power conversion systems including their control systems; Experience in design, testing, commissioning and operation of large complex electrical systems would be an advantage; Experience in the design and installation of power supply systems for Tokamak and/or large superconducting magnets would be an advantage.
Social skills	Ability to work effectively in a multi-cultural environment Ability to work in a team and to promote team spirit
Specific skills	MS Office standard (Word, Excel, PowerPoint, Outlook)
General skills	Other main education shall include at least one the following specializations: - Power Systems, - Power Transmission, - Power Conversion, - Theory and Practice of Control Systems, - Transient Analysis of Electrical Circuits, including computer simulations; Knowledge of international electrical QA/QC standards would be an advantage; Knowledge of the design details, technical requirements of power conversion system would be an advantage.
Others	Basic knowledge of French for electrical engineering is required to interact with the French Transmission System
	Operator; Basic knowledge of running computer codes for transient and steady-state analysis of electrical system, including power converters, SVCs and power systems is required; Experience using 2D-3D CAD software would be considered as an advantage.
Languages	English (Working)
	French (Basic)

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