# JOB DETAIL

Ref. IO2152 - 8/7/2019

## Safety Control Syst. Integration Engineer SCSN-002

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| **Main job** | Control system |
| **Department** | SCOD / Science & Operations Department |
| **Division** | SCOD / Control Division |
| **Section** | SCOD / CD / Facility Control System Section |
| **Job Family** | Engineer - 2 |
| **Application Deadline (MM/DD/YYYY)** | 09/10/2019 |
| **Grade** | P3 |
| **Direct employment** | Required |
| **Purpose** | To be responsible for the integration of the Plant Safety Systems for Nuclear in the Central Safety System for nuclear.<br>To perform activities linked to the design of the Safety Control System, from licensing of this system to the procurement, installation, integration and commissioning, upon guidance and in close relations with the Central Safety System Responsible Officer.<br>To perform necessary actions to ensure that the Safety Control System meets the project requirements and is delivered on time.<br><br>Background information:<br><br>The Safety Control System for Nuclear (SCS-N), provided by the Control Division (CD), ensures the protection of people and environment against radiological risks by performing nuclear safety instrumentation and control (I&C). The SCS-N is composed of the Central Safety System for Nuclear (CSS-N) and many Plant Safety Systems for Nuclear (PSS-N). The SCS-N is subject to licensing by the safety French authority (ASN) and shall comply with the international nuclear standards (IEC61513 and associated standards). |
| **Main duties / Responsibilities** | Develops the nuclear safety I&C control system according to relevant nuclear standards;<br>Develops detailed specifications and designs of sub-systems which make up the nuclear Safety Control Systems;<br>Defines the integration plans for the Safety Control Systems, and assures that all SCS-N subsystems are correctly integrated as per requirement of nuclear safety I&C standards;<br>Reviews, writes and maintains the documentation needed for the full acceptance of the CSS-N as per nuclear safety I&C standards requirements and the Management & Quality Program;<br>Develops the functional qualification of the SCS-N hardwired and computerized I&C functions;<br>Plans, prepares and supervises factory acceptance tests, site acceptance tests and commissioning tests of the nuclear Safety Control Systems;<br>Issues deviation and non-conformity reports and manages efficiently corrective actions as necessary;<br>Contributes to the standalone and integrated commissioning phases for the safety systems;<br>Defines the interfaces between central safety control system and plant safety systems;<br>Participates in the preparation of Safety Control Systems design reviews;<br>Contributes to the management and technical follow-up of contracts related to nuclear safety I&C.<br>Collaborates with the ITER Safety Department in order to ensure that the safety requirements are correctly implemented within the CSS-N;<br>May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;<br>May be required to work outside ITER Organization reference working hours, including nights, weekends and public holidays. |
| **Measures of effectiveness** | Establishes the integration plans and procedures for the integration of the safety control systems in line with cost, quality and schedule .<br>Provides the required specifications according to quality and safety standards within the defined schedule;<br>Ensures the definition of the interfaces of components within the nuclear Safety Control Systems and with sensors/actuators delivered by the different plant systems; |

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| | Prepares and executes effectively the validation, installation and commissioning of the nuclear Safety Control Systems ensuring compliance with system requirements and applicable standards;<br>Produces and maintains up-to-date high quality technical documentation;<br>Manages efficiently interfaces and communicates and collaborates with interfacing teams of the ITER project;<br>Ensures that nuclear safety standards are met at all times. |
| **Level of study** | Master or equivalent degree |
| **Diploma** | Industrial Control, Nuclear Engineering or other |
| **Level of experience** | At least 8 years |
| **Technical experience/knowledge** | At least 8 years of experience in engineering and integration of scientific control systems or large scale industrial plant safety I&C systems;<br>The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.<br><br>The design of large scale heterogeneous safety I&C systems;<br>The integration of I&C safety systems in large facilities;<br>Using proficiently international safety I&C standards: IEC 61508, IEC 61513 and related standards for nuclear safety I&C systems;<br>Conducting acceptance and commissioning tests of safety I&C systems is considered as a strong advantage;<br>Mastering Siemens safety PLC and/or in HIMA Planar 4 platforms/architectures is considered as an advantage;<br>Using the following Microsoft Office Tools: Outlook, Word, Excel, Visio, SharePoint. |
| **General skills** | Collaborate: Ability to dialogue with a wide variety of contributors and stakeholders;<br>Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;<br>Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;<br>Manage Complexity: Ability to gather multiple and diverse sources of information to understand problems accurately before moving to proposals/solutions;<br>Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity. |
| **Languages** | English (Fluent) |