

System Engineer

Location:

Hours: 40 hours per week

Contract: 9 month PAYE Fixed Term Contract

Sonovision, an ORTEC Group company, are a multi award-winning company who provide engineering services, document engineering and marketing services to global OEMs across a wide variety of sectors including Defence, Aerospace, Energy and general Industry.

A key strategy for Sonovision is the expansion of our core engineering portfolio with our existing client base, in particular, the Energy sector according with ORTEC strategy.

The role:

As part of the expansion of our Engineering and Projects activities, we are recruiting a Systems Engineer to support us in our growth in the Nuclear Energy sector. Sonovision will provide a Training program based on ORTEC experiences in French Nuclear engineering if required.

Key Tasks and Responsibilities:

Reporting to the Business Unit Manager, fulfil the role identified below

Responsible for system design and system integration into overall HPC design:

- Produce, Review and update the system documentation for the mechanical and thermo-hydraulic design, electrical, operator instructions, human machine interface, safety and environmental, control logic design, as well as periodic testing in compliance with the engineering rules, methodologies, quality processes, and tools
- Instrumentation and Control, performing the analysis for defining the I&C Functional Requirements of the system and production of the I&C logic:
 - Writing of the Instrumentation and Control Functional Requirements
 - Writing of Detailed Functional Diagram
 - Writing of the Functional Test Procedure
 - Testing the I&C logic and feeding results back into specification
 - Definition and description of human machine interface (alarm sheets, operating images, operating procedures)
- Mechanical Design:
 - Sizing of components e.g. pumps, pipework, pressure relief valves, tanks etc.
 - Perform thermal-hydraulic calculation and modelling with in house or commercial tools
 - Ensuring the 3D model is consistent with the intended system design
 - Formulate equipment specification and provide the data in respective database or data sheet
 - Support to procurement team in formulation of technical specification for contract documentation
 - Support to procurement team in technical surveillance of supplier documentation
- Analysis and verification of input data, requirements, and lessons learnt from other stations

- Engage proactively with all stakeholders to ensure the delivery of a product meeting the requirements set by all disciplines (layout, civil, hazard, nuclear safety, environment, configuration management, procurement ...)
- Contribute to topics around good practises, innovation, improvement of processes and quality
- Participate in experience sharing activities within the discipline.

Management of configuration related to the system including:

- Managing requests for modifications to system(s) issued by various external parties by producing specifications and following engineering cycle
- Analysis and verification of the applicability of these modifications and challenging them as appropriate
- Developing technical solutions and presenting them to internal or external stakeholders / the client to help resolve technical issues
- Utilising the electronic databases supporting configuration management.

Support handovers to detailed designers or customers:

- Liaising with other stakeholders through participation at kick off meetings, gate reviews etc relevant to the system
- Producing and updating process diagrams with all relevant design changes for handovers with detailed designers.

The right candidate will have the following skills and background:

- Mechanical or Process Engineering degree or equivalent qualification
- Minimum of 4 years' relevant experience of process engineering
- Relevant experience in nuclear industry
- Working knowledge of fluid mechanics, heat transfer and thermodynamics
- Knowledge of instrumentation and control design
- Experience producing design documentation and test specifications

Desirable

- Knowledge of EPR system design principles, Instrumentation and Control architecture and Safety Classification
- Experience of working on an operating plant or on an industrial site
- Knowledge of UK licensing requirements and its application within the HPC project
- Ability to speak and write technical documents in French