

IO1326 Nuclear Analyst CIE-231

General information

Job category	Standard
Status	Published
Department	DIP/Directorate for Central Integration & Engineering
Division	CIE / Project Engineering & Integration Division
Section	CIE / PEI / Systems Engineering, Analysis and Standards Section

Job description

Main job	Engineering - Nuclear Power
Title of the position	Nuclear Analyst CIE-231
Job family	Engineer - 1
Grade	G6
Direct employment	Required
Purpose	<p>To perform radiation (neutron and gamma) transport analyses and activation calculations for ITER as directed by his/her supervisor.</p> <p>The activity will include the creation of geometric models derived from Computer Aided Design (CAD) models and drawings, the definition of radiation sources, and the specification of tallies using the Monte-Carlo N-Particle transport (MCNP) code.</p> <p>To present the results and be prepared to demonstrate their accuracy and write reports of the analyses to a high standard.</p>
Main duties / Responsibilities	<p>Performs radiation transport calculations;</p> <p>Performs activation calculations;</p> <p>Maintains the database of neutronics models;</p> <p>Reviews and follows-up nuclear calculations performed or provided by the ITER Team or provided by the ITER Parties;</p> <p>Defines tasks in agreement with ITER Parties to complete nuclear analyses;</p> <p>Manages nuclear analysis contracts;</p> <p>Estimates the effects of the design change and/or evolution on nuclear loads on ITER components and verifies that the important and basic nuclear responses are kept within the design limits, not degrading ITER machine performance;</p> <p>Supports the timely execution of the nuclear calculations and the verification of the design inputs;</p> <p>Performs these 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>
Measures of effectiveness	<p>Under the supervision of the Nuclear Shielding and Analysis Coordinator, reports to the Systems Engineering, Analysis & Standards Section Leader;</p> <p>Interfaces with all other ITER Departments and Divisions;</p> <p>In response to requests from the Director-General and/or Director of Central Integration & Engineering (CIE) Directorate, or proactively, informs the DG/Director of CIE 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.</p>
	<p>Completing tasks in a timely manner meeting agreed deadlines;</p> <p>Provision of accurate calculations in respect with the defined schedule;</p> <p>Performance of effective follow-up of contracts related to his/her scope of work;</p> <p>Provision of comprehensive reports and summaries of the performed and revised analyses;</p> <p>Generation and maintenance of trustworthy, up to date information related to the machine technical scope.</p>
	Project Construction Phase

Applicant criteria

Level of study	At least Master's Degree or equivalent
Diploma	Nuclear Physics, Nuclear Engineering or equivalent
Level of experience	At least 5 years
Technical experience	At least 5 years of experience in nuclear calculations and related activities; Good knowledge of specific aspects of fusion devices and the basic functions of ITER machine and its components.
Project experience	3 to 4 years
Social skills	Ability to work effectively in a multi-cultural environment , Ability to work in a team and to promote team spirit
General skills	Computer and IT skills: Knowledge of the computer usage (super computer, cluster machines, stand-alone work station); Experience with Microsoft Office suite of programs.
Languages	English (Working)