TITLE: Plant Design & Mechanical Design Coordinators			CEP-056
REPORTS TO LINE MANAGER: Plant Design Section Leader			
GRADE RANGE: G4-G5			
DATE WRITTEN: MARCH 6 <sup>TH</sup> , 2007	DATE REVISED: JULY 25 <sup>TH</sup> , 2007	DATE REVISED: NOVEMBER 26 <sup>TI</sup>	<sup>H</sup> , 2007

## **Purposes:**

- Responsible for the design of building, structures, process and equipment
- Responsible for supervising the design activities performed by other Designers on at least one particular component / system

## Major Duties/Responsibilities:

- Performing, under the instruction of the relevant ITER Plant & Services Responsible Officers:
  - Design & solid modeling of equipment, such as (depending on the ITER needs and experience of the Design Coordinator):
    - Buildings & structures
    - Assembly jigs / tools
    - Mechanical components
    - 3D design of supports, hangers, penetrations and embedded plates
  - Design & solid modeling of circuits:
    - P&ID driven 3D design layout & detailed routing of systems circuits & equipment, use of catalogues, and/or:
    - Schematics driven 3D design layout & detailed routing of electrical circuits & equipment (including cable-trays, cubicles...)
  - General arrangement studies
  - Definition of interfaces
  - > Preparation of drawings, isometrics, Bill-of-Materials
  - Preparation of assembly drawings
  - Design integration tasks (interface management, digital mock-ups, fitting simulation, clash detection report ...)
  - Exchange of CAD data with ITER Partners (export import checking)
  - Integration studies
- Performing coordination & development tasks as Plant Design Coordinator:
  - Following up of at least one plant / service / system design (interactions with possibly several Designers, data structure in the data base, data & meta-data checking, interface analysis, Product Break Down Structure...)
  - Active contribution to: Design Work Orders and Design Work Checks (model and drawing checking), the preparation of the Design Integration – Design Office meetings, remote design collaboration schemes (interactions with the ITER Partners, Suppliers, supporting engineering companies / sub-contractors...), QA implementation, Design Office processes and improvements, DO library and auxiliary DO related activities.

- He/She is helped in his tasks by a high level of understanding and practice of CATIA V5 mechanical and equipment & systems modules, and ENOVIA LCA EV5.
- Work in a multinational interdisciplinary project team and responsibility for maintaining the high quality standards of the design processes conducted by the ITER Team.

### **Qualifications and Experience**:

- Higher diploma or certificates in Computer Aided Design or equivalent (such as mechanical and/or process engineering).
- A successful experience of responsibility in a Plant Design Office for a large multi-disciplinary project performed in an international environment and preferably in a remote design collaboration manner.
- 5 years experience of design work involving an advanced CAD system, including 3 years with CATIA 5 would be highly appreciated. Experience with CATIA V5 Equipment & Systems as well as with ENOVIA LCA VPM5 is not essential, though experience with previous versions of VPM, or with other integrated database systems would be advantageous.
- Demonstrated ability to produce high quality results which have stood the test of being manufactured successfully would be a distinct advantage.
- Skills: Excellent ability to organize and monitor design activities, good communication skills and capability to work towards predefined goals with a high level of autonomy.
- Previous experience in the design of electromechanical or nuclear components, in particular in the fusion field, would be advantageous, as would experience with complex mechanical and process systems, engineering projects.
- Language knowledge: Good active and passive knowledge of written and spoken English.

#### Work Direction and Interfaces:

- Reports to the Plant Design Section Leader of the ITER Design Office
- Interacts on a daily basis with the relevant ITER Component Responsible Officers (in charge of the technical solutions), Integration Responsible Officers (in charge of the configuration control), associated Design Coordinators & Designers and DO-Support Coordinators aiming at the required level of quality and at an efficient development of the design.

### Authority/Approval Levels:

• Has authority and approval levels generally defined by the Design Office Director for his/her scope of work.

# **Measures of Effectiveness:**

- Provides an efficient and high quality service to the ITER Design Office
- Contributes to an effective development of the plant design in a coordinated manner
- Develops further: technical capabilities, flexibility, CAD tool control and team spirit.
- Supports the objectives & interests of the ITER Project
- Establish a good collaboration attitude with all involved internal & external organizations.