Design review Support for Tritium Plant Section

Technical Specifications
# Table of Contents

1 Abstract..............................................................................................................................................3  
2 Scope and description of the work ...............................................................................................3  
3 Deliverables and Timetable ...........................................................................................................4  
4 Specific requirements and conditions ..........................................................................................5  
5 Work Monitoring / Meeting Schedule .........................................................................................5  
6 Quality Assurance (QA) Requirement ..........................................................................................5  
7 Terminology and Acronyms ..........................................................................................................7  
List of technical Abbreviations ........................................................................................................7
1 Abstract

The purpose of this contract is to provide support for Tritium Plant section for preparation of design reviews foreseen in year 2014. This technical specification presents technical scope, boundaries and deliverables required to prepare Final Design Review (FDR) for Water Detritiation System (WDS) holding tanks, Preliminary Design Review (PDR) for Tokamak Complex Detritiation System (TC-DS) and for Preliminary Design Review (PDR) for Hot Cell Facility Detritiation System (HCF-DS).

2 Scope and description of the work

This task is required to process technical documentation packages for preparation of Design Reviews and to provide support for preparation and during Design Review meetings. Task consists of the following

1. Provide support for preparation of Preliminary Design Review (PDR) for Tokamak Complex Detritiation System
   - Create folder structure in ITER Document Management system (IDM) DS PDR and register in IDM all documents from design package. This work includes reformatting documents from the supplier package into format required by design review
   - Support for creation of Authorization to proceed for DR
   - Support for preparation of Design Review meeting. This work includes preparation of Summary for documentation
   - Provide administrative support for monitoring of readiness of documentation package. This work includes facilitation of review of the documents in IDM.
   - Provide support for review of Systems Requirement Document (SRD) in IDM. Collect all comments in tracking table and assist with categorization and closure of all actions related to the SRD update.
   - Attend the DR meeting: collect the Chits, assist the chairman during the DR meeting and the Closed session
   - Provide chits management support:
     o Make sure that all Chits have been reviewed and categorized by the Chairman
     o Make sure that Chits have been merged whenever possible by the Chairman
     o Make sure that the Chairman provides a final list of Chits
   - Provide minutes of the DR meeting

2. Provide support for preparation of Preliminary Design Review (PDR) for Hot Cell Facility Detritiation System
   - Create folder structure in ITER Document Management system (IDM) DS PDR and register in IDM all documents from design package. This work includes reformatting documents from the supplier package into format required by design review
   - Support for creation of Authorization to proceed for DR
   - Support for preparation of Design Review meeting. This work includes preparation of Summary for documentation
   - Provide administrative support for monitoring of readiness of documentation package. This work includes facilitation of review of the documents in IDM.
   - Provide support for review of Systems Requirement Document (SRD) in IDM. Collect all comments in tracking table and assist with categorization and closure of all actions related to the SRD update.
• Attend the DR meeting: collect the Chits, assist the chairman during the DR meeting and the Closed session
• Provide chits management support:
  o Make sure that all Chits have been reviewed and categorized by the Chairman
  o Make sure that Chits have been merged whenever possible by the Chairman
  o Make sure that the Chairman provides a final list of Chits
• Provide minutes of the DR meeting

3. Provide support for preparation of Final Design Review (FDR) for Water Detritiation System water holding tanks. This review will be combined with Manufacturing readiness Review (MRR)
• Create folder structure in ITER Document Management system (IDM) DS PDR and register in IDM all documents from design package. This work includes reformatting documents from the supplier package into format required by design review
• Support for creation of Authorization to proceed for DR
• Support for preparation of Design Review meeting. This work includes preparation of Summary for documentation
• Provide administrative support for monitoring of readiness of documentation package. This work includes facilitation of review of the documents in IDM.
• Provide support for review of Systems Requirement Document (SRD) in IDM. Collect all comments in tracking table and assist with categorization and closure of all actions related to the SRD update.
• Attend the DR meeting: collect the Chits, assist the chairman during the DR meeting and the Closed session
• Provide chits management support:
  o Make sure that all Chits have been reviewed and categorized by the Chairman
  o Make sure that Chits have been merged whenever possible by the Chairman
  o Make sure that the Chairman provides a final list of Chits
• Provide minutes of the DR meeting

3 Deliverables and Timetable

ITER Organization shall during the Contract period establish the Expert work plan on ad hoc basis and relative to the specific tasks defined in section 2 and deliverables defined on a quarterly basis.

The total duration of this contract will be 12 month. Contractor shall be available for at least about 50% of working time for work activities and shall be available for at least 30% of working time at ITER site for performance of all activities. Start date of the contract shall be in September 2013.

A monthly report shall be submitted to IO by the end of the fifth working day following the end of each month. The report shall cover the following:

1. A brief summary of the work and achievements during the month
2. Financial summary showing amount to be charged by contractor for previous month; the cumulative totals.
3. A time sheet for the previous month with short description on day by day basis
4 Specific requirements and conditions

Contractor shall propose candidate with qualification suitable for administrative support for technical documentation and systems design process.

The ITER Organization may organize an interview with the Contractor to complement the assessment of the submission.

The official language of the ITER project is English. Therefore all input and output documentation relevant for this contract shall be in English.

The work requires full time presence of the Contractor at the site of the ITER Organization, Route de Vinon sur Verdon, 13115 St. Paul-lez-Durance, France.

5 Work Monitoring / Meeting Schedule

A monthly report shall be submitted by the contractor. Contractor shall also propose a list of meetings with ITER for progress monitoring in agreement with schedule proposed. At least the following meetings listed below should be foreseen for the contract including meetings for the particular subtasks as required.

<table>
<thead>
<tr>
<th>Scope of meeting</th>
<th>Point of check</th>
<th>Deliverable</th>
<th>Place of meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick-off meeting</td>
<td>Initiation</td>
<td>Written report/meeting minutes</td>
<td>ITER site</td>
</tr>
<tr>
<td>Coordination or progress meeting as required</td>
<td>Questions and issues to address Progress review</td>
<td>Written meeting summary – resolution of questions, future actions</td>
<td>ITER site</td>
</tr>
<tr>
<td>Final draft report/deliverable review meeting</td>
<td>Deliverable completion, draft report</td>
<td>Draft written and oral reports</td>
<td>ITER site</td>
</tr>
<tr>
<td>Closing Task Order meeting</td>
<td>Deliverables acceptance</td>
<td>Final written report</td>
<td>ITER site</td>
</tr>
</tbody>
</table>

6 Quality Assurance (QA) Requirement

The general requirements are detailed in ITER document ITER Procurement Quality Requirements (22MFG4).

Prior to commencement of the task, a Quality Plan Quality Plan (22MFMW) must be submitted for IO approval giving evidence of the above and describing the organization for this task; the skill of workers involved in the study; any anticipated sub-contractors; and giving details of who will be the independent checker of the activities.

Prior to commencement of any manufacturing, a Manufacturing & Inspection Plan Manufacturing and Inspection Plan (22MDZD) must be approved by ITER who will mark up any planned interventions.

Deviations and Non-conformities will follow the procedure detailed in IO document MQP Deviations and Non Conformities (22F53X).

Prior to delivery of any manufactured items to the IO Site, a Release Note must be signed MQP Contractors Release Note (22F52F).
Documentation developed as the result of this task shall be retained by the performer of the task or the DA organization for a minimum of 5 years and then may be discarded at the direction of the IO. The use of computer software to perform a safety basis task activity such as analysis and/or fulfill, etc. shall be reviewed and approved by the IO prior to its use, it should fulfill IO document on Quality Assurance for ITER Safety Codes Quality Assurance for ITER Safety Codes (258LKL).

Work must be performed in accordance with the French Quality Order of 10 August 1984 (and subsequent revisions such as 7 February 2012) which describes quality requirements for design, construction and operation in Basic Nuclear Installation. These orders are the basis for the following safety requirements:

- ITER Preliminary Safety Report (RPrS), (ITER_D_3ZR2NC)
- Safety Important Functions and Components Classification Criteria and Methodology (ITER_D_347SF3)
- Overall supervision plan of the chain of suppliers for Safety Important Components, Structures and Systems and Safety Related Activities, (ITER_D_4EUQFL)

All work activities and products must comply with these requirements.
# Terminology and Acronyms

<table>
<thead>
<tr>
<th>Denomination</th>
<th>Definition</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITER Organization</td>
<td>For this Contract the ITER Organization</td>
<td>IO-</td>
</tr>
<tr>
<td>ITER Organization Responsible Officer</td>
<td>Person appointed by the ITER Organization with responsibility to manage all the technical aspects of this contract</td>
<td>IO-RO</td>
</tr>
<tr>
<td>Contractor</td>
<td>Firm or group of firms organized in a legal entity to provide the scope of supply.</td>
<td>C-</td>
</tr>
<tr>
<td>Contractor’s Team</td>
<td>The Contractor plus all the sub-contractors/consultants working under its responsibility and coordination for the performance of the contract</td>
<td>C-Team</td>
</tr>
<tr>
<td>Contractor Responsible</td>
<td>The person appointed (in writing) by the legally authorized representative of the Contractor, empowered to act on behalf of the Contractor for all technical, administrative legal and financial matters relative to the performance of this contract</td>
<td>C-R</td>
</tr>
<tr>
<td>ITER Organization Task Responsible Officer</td>
<td>Person delegated by the IO-RO for all technical matters, but limited to one specific task order</td>
<td>IO-TRO</td>
</tr>
<tr>
<td>Contractor Task Responsible Officer</td>
<td>Equivalent to the IO-TRO in the Contractors team.</td>
<td>C-TRO</td>
</tr>
</tbody>
</table>

**List of technical Abbreviations**

- **A&E**: Architect Engineering
- **BITF**: Buildings Integration Task Force
- **CMM**: Configuration Management Model
- **DICC**: Design Integration Configuration Control
- **DS**: Detritiation System
- **HCF-DS**: Hot Cell Facility Detritiation System
- **HVAC**: Heating Ventilation Air Conditioning
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD</td>
<td>Interface Control Document</td>
</tr>
<tr>
<td>IO</td>
<td>ITER International Organization</td>
</tr>
<tr>
<td>IS</td>
<td>Interface Sheet</td>
</tr>
<tr>
<td>PBS32</td>
<td>Plant Break Down 32: Tritium Plant</td>
</tr>
<tr>
<td>PFD</td>
<td>Process Flow Diagram</td>
</tr>
<tr>
<td>SRD</td>
<td>System Requirements Document</td>
</tr>
<tr>
<td>TBM</td>
<td>Test Blanket Module</td>
</tr>
<tr>
<td>TC</td>
<td>Tokamak Complex</td>
</tr>
<tr>
<td>TC-DS</td>
<td>Tokamak Complex Detritiation System</td>
</tr>
<tr>
<td>TCWS</td>
<td>Tokamak Cooling Water System</td>
</tr>
</tbody>
</table>