ATTACHMENT VI TO SCHEDULE Q

PROJECT SPECIFIC QUALITY REQUIREMENTS

1. PROCUREMENT PHASE PROJECT SPECIFIC QUALITY REQUIREMENTS

* 1. Minimum inspection levels for CONTRACTOR supplied equipment and materials are indicated in SAEP-1151. CONTRACTOR shall submit its supplier inspection and test plans according to these minimum inspection levels. When vendor performance does not meet the specified requirements in the purchase order, CONTRACTOR shall increase the inspection level to the next highest level for the purchase order without additional cost to COMPANY.
  2. For any equipment or material items that have no specified inspection levels identified in SAEP-1151, CONTRACTOR shall prepare a special form 175 for approval by the Company Representative.
  3. Inspection levels specified in Attachment VI shall not be any lower than the level of inspection specified in SAEP-1151.

2. CONSTRUCTION AND PRECOMMISSIONING PHASE PROJECT SPECIFIC QUALITY REQUIREMENTS

* 1. “CONSTRUCTION AND PRECOMMISSIONING PHASE” shall mean the time between issuance of a Notice to Proceed and Mechanical Completion of the WORK.
  2. As a minimum, CONTRACTOR shall assign, or require its subcontractor to assign COMPANY approved quality personnel to the WORK at site in accordance with EXHIBIT I. With COMPANY approval, inspectors may be qualified to inspect more than one discipline; in this case, however, he may not fulfill more than one full time position at any time during the execution of the contract. For example, an inspector qualified to inspect work both in electrical and instrumentation disciplines can only be allocated to fulfill either one of the inspection positions at a time.
  3. Prior to the start of construction activity, CONTRACTOR shall initiate a kick-off meeting with all concerned parties to ensure full understanding on the execution, requirements and control of the activity.
  4. CONTRACTOR shall establish a system of serialized log for all NDT uniquely identifying the individual welds to be tested and method applied. This log is to be an ongoing log of NDT requests and completions as the Project progresses. The log reference (serial number) for each weld or welds examined shall be included in NDT reports. NDT of any repair shall be sequentially identified in the log and include the log reference of the initial NDT that determined need for the repair.
  5. CONTRACTOR may, upon approval of the COMPANY, delegate establishment and continuation of the NDT Log to sub-CONTRACTOR directly responsible to provide construction activities on the Project. Wherein such approved delegation has occurred, CONTRACTOR shall be responsible for the assurance of upkeep and accuracy of the NDT Log.

3. CONTINUAL IMPROVEMENTS

*NONE*

4. PREVENTIVE ACTION

*NONE*

5. OTHER PROJECT SPECIFIC REQUIREMENTS

5.1 Paragraph 1.6 of this Schedule Q is deleted and replaced in its entirety with the following:

COMPANY shall complete its review of the CONTRACTOR’s quality documents (Quality Plan and ITP) no more than thirty (30) calendar days after submittal, and shall complete its review of personnel qualifications and requirements for each Work Authorization no more than seven (7) calendar days after submittal.

5.2 Paragraph 3.6 of this Schedule Q is deleted and replaced in its entirety with the following:

CONTRACTOR shall include a listing of applicable ITP or SATIPs when applicable for execution of the scope of the WORK in described in the Work Authorization.

5.3 Paragraph 5.9 of this Schedule Q is deleted and replaced in its entirety with the following:

CONTRACTOR may assign Quality personnel to multiple Work Authorizations under the same contract. For the primary contract, CONTRACTOR’s Quality personnel shall be dedicated to perform quality functions as described in this Schedule “Q” and shall perform no other function on this Contract.

5.4 Paragraph 5.14 of this Schedule Q is deleted and replaced in its entirety with the following:

CONTRACTOR shall make quality personnel changes required due to vacations, illness, temporary assignments, emergency leave, resignations or other reasons as necessary to maintain required Quality coverage. CONTRACTOR shall advise the Company Representative of such personnel and quality coverage at least seven (7) calendar days in advance of scheduled absences or changes. All other changes such as illness and emergency leaves shall be notified within 24 hours.

5.5 Paragraph 7.3.2 of this Schedule Q is deleted and replaced in its entirety with the following:

CONTRACTOR shall submit a quality audit schedule to the Company Representative for review and approval within thirty (30) calendar days from the effective date of this Contract. As a minimum, full quality system audits shall be carried out annually, within one month of the anniversary date of this CONTRACT. CONTRACTOR’s audits may be rescheduled only with the concurrence of the Company Representative.

5.6 Paragraph 1.1 of Attachment IV of this Schedule Q is deleted and replaced in its entirety with the following:

Seven (7) days prior to the start of the applicable WORK on each Work Authorization, CONTRACTOR shall submit for review and approval a listing of applicable section of its Inspection and Test Plan (ITP) for all construction processes to be executed by CONTRACTOR or subcontractors. When any part of the scope of WORK is not supported by an ITP, CONTRACTOR shall prepare Inspection and Test Plan(s) and supporting procedures and checklists and submit to COMPANY for approval a minimum of seven (7) days prior to the start the activity. CONTRACTOR shall review the quality requirements in all applicable COMPANY standards and procedures and include appropriate Quality requirements in each ITP. Each ITP shall detail all review, witness, and hold points for COMPANY, CONTRACTOR, and subcontractors as specified in this Contract. It shall also include the methods, extent and timing for examinations, measurements or tests.

6. EXCLUSIONS AND MODIFICATIONS TO SCHEDULE Q

*NONE*

EXHIBIT I OF ATTACHMENT VI TO SCHEDULE Q

CONSTRUCTION PHASE QUALITY PERSONNEL REQUIREMENTS

| **Position** | **Primary CONTRACTOR** | **Subcontractor(s)** |
| --- | --- | --- |
| Quality Assurance Manager | One (1) full time (He shall be approved and assigned within fifteen (15) calendar days from the effective date of this Contract. | N/A |
| Quality Control Manager | One (1) full time | One (1) full time for each subcontractor |
| Quality Control Supervisor | One (1) full time per discipline for each eight (8) inspectors | One (1) full time per discipline for each eight (8) inspectors |
| Procurement Quality Control Supervisor | One (1) full time per discipline | One (1) full time if the subcontractor is involved in procurement |
| Materials/Equipment Receiving Inspection | One (1) Inspector per discipline | N/A |
| Quality Record Controller | One (1) full time | N/A |

| **Construction Discipline** | **Primary Inspectors (CONTRACTOR or Subcontractor)** | **CONTRACTOR Supervising Inspectors** | **Pre-Commissioning Inspectors** |
| --- | --- | --- | --- |
| **Inspection Discipline: Civil / Structural** | | | |
| Bridges/ Buildings | One (1) full time Inspector per site(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Earth Work / Paving / Fencing / Thrust Boring | One (1) full time Inspector per site(1) / (2) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Foundation / Concrete | One (1) full time Inspector per site(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Steel Structure | One (1) full time Inspector per site(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Batch Plant (Concrete & Asphalt) | One (1) full time Inspector per Batch plant | One (1) Inspector | N/A |
| U/G Piping (RTR/PVC/ CPVC) | One (1) full time Inspector per fifteen (15) Installers(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | One (1) Inspector to be available for each system hydrostatic test. |
| Plumbing | One (1) full time Inspector per twenty five (25) Installers/ Craftsmen(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | One (1) full time Inspector |
| HVAC | One (1) full time Inspector per fifteen (15) Installers(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| **Inspection Discipline: Mechanical/ Piping** | | | |
| Equipment/ Mechanical | One (1) full time Inspector per fifteen (15) workers(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | One (1) Inspector during Commissioning |
| Piping | One (1) full time Inspector per fifteen (15) workers(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | One (1) full time Inspector per 25 workers or (10) hydrostatic packages**\*** |
| Valves Testing | One (1) full time Inspector per Hydrostatic testing location | One (1) full time Inspector | One (1) full time Inspector |
| Coatings / Insulations Testing | One (1) full time Inspector per three (3) crews per site(1) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Lowering/ Padding/ Bedding and Backfilling | One (1) full time inspector per site(1) | One (1) full time Inspector for every eight (8) Subcontractor Inspectors(1) | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| Package Units & Other Mechanical | Multidiscipline inspectors as needed(1) | One (1) Lead inspector | One (1) Lead inspector |
| **Inspection Discipline: Welding** | | | |
| Shop Welding | One (1) full time Inspector per fifteen (15) Welders**\*** | One (1) full time Inspector for every five (5) Subcontractor Inspectors**\*** | N/A |
| Field Welding | One (1) full time Inspector per ten (10) welders(1)(3) | One (1) full time Inspector for every five (5) Subcontractor Inspectors(1) | N/A |
| Positive Material Identification | One (1) full time technician per analysis unit | N/A | N/A |
| Heat Treatment | One (1) full time Inspector per ten (10) Heat Treatment technicians(1) | One (1) full time Inspector for every (5) Subcontractor Inspectors(1) | N/A |
| NDT Coordinator | One (1) full time NDT coordinator per site and/or fabrication shop | N/A | N/A |
| Radiographic Test Film Interpretation | One (1) full time COMPANY certified RTFI | One (1) COMPANY certified RTFI (4) | N/A |
| **Inspection Discipline: Electrical / Instrumentation/ Communication** | | | |
| Electrical/ Cathodic Protection | One (1) full time Inspector for every twenty (20) labors/ technicians per site(1) | One (1) full time Inspector for every five (5) Subcontractor inspectors(1) | N/A |
| Instrumentation | One (1) full time Inspector per twenty five (25) labors and/or three (3) crews(1) | One (1) full time Inspector for every five (5) Subcontractor inspectors(1) | N/A |
| Safety Relief Valves | One (1) full time inspector per crew | N/A | One (1) full time inspector |
| Communication | One (1) full time Inspector per site | N/A | N/A |

**Notes**:

1 If the personnel ratio in EXHIBIT I cannot be met, changes will be submitted to COMPANY for approval

1. One (1) Primary Inspector can conduct Earthwork, Foundation, Steel Structure and Thrust Boring inspections when Approved by COMPANY.
2. One (1) Primary Inspector can conduct multiple welding inspections within the same wellhead area when Approved by COMPANY.
3. An additional CONTRACTOR Supervising Inspector can be provided by a Subcontractor when Approved by COMPANY.

END OF ATTACHMENT VI TO SCHEDULE Q