



টিএসপি কমপ্লেক্স লিমিটেড

**TSP Complex Limited**

An Enterprise of BCIC

**TENDER DOCUMENT (TD)**

**FOR**

**SUPPLY, INSTALLATION, COMMISSIONING & TEST RUN OF 33KV GIS PANEL & 05 NOS CEILING TYPE AIR CONDITIONER FOR 33KV SUBSTATION AT TSPCL WITH ACCESSORIES ON LUMP SUM TURN-KEY (LSTK) BASIS.**

**Open Tendering Method  
(One Stage Two Envelope)**

Tender No: **36.01.1565.673.07.092.22(E-10/22-23)/333**

**Dated: 03-11-2022**

*Tender Document will be sold on Payment of 5,000.00 BDT only.*

## Invitation for Tender

Triple Super Phosphate Complex Limited (TSPCL) hereby invites Open Tender (One Stage Two Envelope) for Supply, Installation, Commissioning & Test Run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis in accordance with the terms & conditions set out hereinafter:

| GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH |  |  |
|---|--|--|
| 1   | Ministry/Division  | Ministry of Industries.  |
| 2   | Agency   | Bangladesh Chemical Industries Corporation.  |
| 3   | Purchaser Name   | Managing Director, TSP Complex Ltd (An Enterprise of BCIC)   |
| 4   | Purchaser Code   | Not Applicable   |
| 5   | Purchaser District   | Chattogram   |
| 6   | Invitation for   | Supply, Installation, Commissioning & Test Run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis   |
| 7   | Invitation Ref No  | 36.01.1565.673.07.092.22(E-10/22-23)/333   |
| 8   | Date   | 03-11-2022   |
| KEY INFORMATION                                   |  |  |
| 9   | Procurement Method   | Open Tendering Method (One Stage Two Envelope)   |
| FUNDING INFORMATION                               |  |  |
| 10  | Budget and Source of Funds   | Own fund   |
| 11  | Development Partners (if applicable)   | Not applicable   |
| PARTICULAR INFORMATION                            |  |  |
| 12  | Project / Programme Code (if applicable)   | Not applicable   |
| 13  | Project / Programme Name (if applicable)   | Not applicable   |
| 14  | Tender Package No.   | 01(one)  |
| 15  | Tender Package Name  | Supply, Installation, Commissioning & Test Run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis   |
| 16  | Tender Publication Date  | 08-11-2022   |
| 17  | Tender Last Selling Date   | 11-12-2022   |
| 18  | Tender Closing Date and Time   | 12-12-2022 Time: 11.00 A.M. (BST)  |
| 19  | Tender Opening Date and Time   | 12-12-2022 Time: 02.00 P.M. (BST)  |
| 20  | Name & Address of the office-  |  |
|   | - Selling Tender Document (Principal)  | General Manager (A&F), TSP Complex Ltd, North Patenga, Chattogram-4204.  |
|   | - Selling Tender Documents (Others)  | (i) Controller of Accounts, BCIC, BCIC Bhaban (6th Floor), 30-31, Dilkusha C/A., Dhaka-1000.<br>(ii) General Manager, BCIC Branch Office, 6, Agrabad C/A., Chattogram-4000.<br>(iii) Office of the Deputy Commissioner, Chattogram.  |
|   | - Receiving Tender Document  | (i) General Manager (Com), TSP Complex Ltd., North Patenga, Chattogram. (Primary station)<br>(ii) Office of the Deputy Commissioner, Chattogram, (Secondary station)<br>(iii) Office of the Executive Engineer, PWD Division-3, CGO Building-1, Agrabad, Chattogram. (Secondary Station) |
|   | - Opening Tender Document  | Office of the General Manager (Commercial), TSP Complex Ltd, North Patenga, Chattogram. (in presence of the tenderers or their authorised agents who would wish to be present)   |
| 21  | Place / Date / Time of Pre-Tender Meeting (Optional)   | TSPCL Conference Room, TSP Complex Ltd, North Patenga, Chattogram. Date: 20-11-2022 Time: 10.00 A.M.   |
| INFORMATION FOR TENDERER                          |  |  |
| 22  | Eligibility of Tenderer  | As per Tender Document   |
| 23  | Brief Description of Plant & Equipment   | Supply, Installation, Commissioning & Test Run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis   |
| 24  | Brief Description of Services  | Supply, Installation, Commissioning & Test Run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis   |
| 25  | Price of Tender Document (Tk.)   | Tender Document will be sold on Payment of 5,000.00 BDT only.  |
| 26  | Time of Work Completion  | 06 (Six) Calendar Month.   |
| 27  | Amount of Tender Security  | 10,00,000.00 BDT   |
| 28  | Validity of Tender   | 120 (One hundred twenty) Days.   |
| PROCURING ENTITY DETAILS                          |  |  |
| 29  | Name of Official Inviting Tender   | Md. Ataur Rahman   |
| 30  | Designation of Official Inviting Tender  | Managing Director, TSP Complex Ltd.  |
| 31  | Address of Official Inviting Tender  | Managing Director, TSP Complex Ltd, North Patenga, Chattogram.   |
| 32  | Contact details of Official Inviting Tender  | +88 02333300458, E-mail: mdtspcomplex@gmail.com  |
| 33  | If it is not possible to receive/open the Tender on the schedule date for any unavoidable circumstances, the same will be received/opened on the next working day at the same time and same Place. |  |
| 34  | The Procuring Entity reserves the right to reject all tenders or annul the Tender proceedings  |  |

# Section 1. Instructions to Tenderers

## A. General

### 1. Scope of Tender

- 1.1 The Purchaser named in the Tender Data Sheet (**TDS**) (hereinafter referred to as the "Purchaser") wishes to issue these Tender Documents for the supply and installation of plant & equipment incidental thereto, as specified in the **TDS** and as detailed in Section 6: Employer's Requirements.
- 1.2 The name of the Tender and the number and identification of its constituent lot(s) are stated in the **TDS**.
- 1.3 Unless otherwise stated, throughout this Tender Document definitions and interpretations shall be as prescribed in the Section 3: General Conditions of Contract.

### 2. Interpretation

- 2.1 Throughout this Tender Document
  - (a) the term "in writing" means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail;
  - (b) if the context so requires, singular means plural and vice versa; and
  - (c) "day" means calendar days unless otherwise specified as working days;
  - (d) "Tender Document ", means the Document provided by a Purchaser to a Tenderer as a basis for preparation of its Tender;
  - (e) "Tender ", depending on the context, means a Tender submitted by a Tenderer for delivery of Goods and Related Services to a Purchaser in response to an Invitation for Tender ;

### 3. Source of Funds

- 3.1 The Purchaser has been allocated public funds from the source as indicated in the **TDS** and intends to apply a portion of the funds to eligible payments under the contract for which this Tender Document is issued.
- 3.2 For the purpose of this provision, "**public funds**" means any funds allocated to a Purchaser under Government budget, or loan, grants and credits placed at the disposal of a Purchaser through the Government by the development partners or foreign states or organizations.
- 3.3 Payments by the development partner, if so indicated in the **TDS**, will be made only at the request of the Government and upon approval by the development partner in accordance with the applicable Loan/Credit/Grant Agreement, and will be subject in all respects to the terms and conditions of that Agreement.

**4. Corrupt, Fraudulent, Collusive, Coercive (or Obstructive in case of Development Partner) Practices**

- 4.1 The Government and the Development Partner, if applicable requires that the Procuring Entity as well as the Tenderers and Contractors (including, sub-contractors, agents, personnel, consultants, and service providers) shall observe the highest standard of ethics during implementation of procurement proceedings and the execution of Contracts under public funds.
- 4.2 For the purposes of ITT Sub Clause 4.3, the terms set forth below as follows:
- (a) "corrupt practice" means offering, giving or promising to give, receiving or soliciting either directly or indirectly, to any officer or employee of the Procuring Entity or other public or private authority or individual, a gratuity in any form; employment or any other thing or service of value as an inducement with respect to an act or decision or method followed by the Procuring Entity in connection with a Procurement proceeding or Contract execution;
  - (b) "fraudulent practice" means the misrepresentation or omission of facts in order to influence a decision to be taken in a Procurement proceeding or Contract execution;
  - (c) "collusive practice" means a scheme or arrangement between two (2) or more Persons, with or without the knowledge of the Procuring Entity, that is designed to arbitrarily reduce the number of Tenders submitted or fix Tender prices at artificial, non-competitive levels, thereby denying the Procuring Entity the benefits of competitive price arising from genuine and open competition;
  - (d) "coercive practice" means harming or threatening to harm, directly or indirectly, Persons or their property to influence a decision to be taken in the Procurement proceeding or the execution of a Contract, and this will include creating obstructions in the normal submission process used for Tenders.
  - (e) "Obstructive practice" (applicable in case of Development Partner) means deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and /or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation.

- 4.3 Should any corrupt, fraudulent, collusive, coercive (or obstructive in case of Development Partner) practice of any kind is determined by the Procuring Entity or the Development Partner, if applicable, this will be dealt in accordance with the provisions of the Public Procurement Act and Rules and Guidelines of the Development Partners as stated in the ITT sub-clause 3.3.  
In case of obstructive practice, this will be dealt in accordance with Development Partners Guidelines.
- 4.4 If corrupt, fraudulent, collusive, coercive (or obstructive in case of Development Partner) practices of any kind is determined by the Procuring Entity against any Tenderer or Contracts (including sub-contractors, agents, personnel, consultants, and service providers) in competing for, or in executing, a contract under public fund:
- (a) Procuring Entity and/or the Development Partner shall exclude the concerned Tenderer from further participation in the concerned procurement proceedings;
  - (b) Procuring Entity and/or the Development Partner shall reject any recommendation for award that had been proposed for that concerned Tenderer;
  - (c) Procuring Entity and/or the Development Partner shall declare, at its discretion, the concerned Tenderer to be ineligible to participate in further Procurement proceedings, either indefinitely or for a specific period of time;
  - (d) Development Partner shall sanction the concerned Tenderer or individual, at any time, in accordance with prevailing Development Partner' sanctions procedures, including by publicly declaring such Tenderer or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Development Partner-financed contract; and (ii) to be a nominated sub-contractor, consultant, manufacturer or Contractor, or service provider of an otherwise eligible firm being awarded a Development Partner-financed contract; and
  - (e) Development Partner shall cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Procuring Entity or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, coercive or obstructive practices during the procurement or the execution of that Development Partner financed contract, without the Procuring Entity having taken timely and appropriate action satisfactory to the Development Partner to remedy the situation.
- 4.5 Tenderer shall be aware of the provisions on corruption, fraudulence, collusion, coercion (and obstruction, in case of Development Partner) of the Public Procurement Act, 2006, the Public Procurement Rules, 2008 and others as stated in GCC Clause 38.
- 4.6 In further pursuance of this policy, Tenderers, Contractors

and their sub-contractors, agents, personnel, consultants, service providers shall permit the Government and the Development Partner to inspect any accounts and records and other documents relating to the Tender submission and contract performance, and to have them audited by auditors appointed by the Government and/or the Development Partner during the procurement or the execution of that Development Partner financed contract.

## **5. Eligible Tenderers**

- 5.1 This Invitation for Tenders is open to all potential Tenderers from all countries, except for any specified in the **TDS**.
- 5.2 Tenderers shall have the legal capacity to enter into the Contract under the Applicable law.
- 5.3 Tenderers shall be enrolled in the relevant professional or trade organisations registered in Bangladesh.
- 5.4 Tenderers may be a physical or juridical individual or body of individuals, or company, association or any combination of them in the form of a Joint Venture (JV) invited to take part in public procurement or seeking to be so invited or submitting a Tender in response to an Invitation for Tenders.
- 5.5 Tenderers shall have fulfilled its obligations to pay taxes and social security contributions under the provisions of laws and regulations of the country of its origin.
- 5.6 Tenderers should not be associated, or have been associated in the past, directly or indirectly, with a consultant or any of its affiliates which have been engaged by the Procuring Entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the works to be performed under this Invitation for Tenders.
- 5.7 Tenderers in its own name or its other names or also in the case of its Persons in different names shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive or coercive practices as stated under ITT Sub Clause 4.4 (or obstructive practice, in case of Development Partner) in relation to the Development Partner's Guidelines in projects financed by Development Partner.
- 5.8 Tenderers are not restrained or barred from participating in Public Procurement on grounds of poor performance in the past under any Contract.
- 5.9 Tenderers shall not be insolvent, be in receivership, be bankrupt, be in the process of bankruptcy, be not temporarily barred from undertaking business and it shall not be the subject of legal proceedings for any of the foregoing.
- 5.10 Government-owned enterprise in Bangladesh may also participate in the Tender if it is legally and financially autonomous, it operates under commercial law, and it is not a dependent agency of the Procuring Entity.
- 5.11 Tenderers shall provide such evidence of their continued eligibility satisfactory to the Procuring Entity, as the

## 6. Eligible Plant and Services

- Procuring Entity will reasonably request.
- 5.12 These above requirements for eligibility will extend, as applicable, to each JV partner and Subcontractor proposed by the Tenderers.
- 5.13 Tenderers shall have the up-to-date valid license(s), issued by the corresponding competent authority, as specified in the **TDS**.
- 6.1 The plant and services to be supplied under the contract are eligible, unless their origin is from a country specified in the **TDS** and all expenditures under the contract will be limited to such plant, and services.
- 6.2 For purposes of this Clause, the term “plant” means permanent plant, equipment, machinery, apparatus, articles and things of all kinds to be provided in the facilities; and “installation services” means all those services ancillary to the supply of the Plant for the Facilities, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation, installation, testing, pre-commissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training etc.
- 6.3 For purposes of this clause, “origin” means the place where the plant, or component parts thereof are mined, grown, produced or manufactured, and from which the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially different in its basic characteristics or in purpose or utility from its components or country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 6.4 The origin of plant & equipment is distinct from the nationality of the Tenderer. The nationality of the firm that produces, assembles, distributes, or sells the goods shall not determine their origin.

## 7. Site Visit

- 7.1 The Tenderer is advised to visit and examine the site where the plant is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the tender and entering into a contract for the provision of Plant and Installation Services.
- 7.2 The Tenderer and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Tenderer, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.3 The Tenderer should ensure that the Purchaser is

- informed of the visit in adequate time to allow it to make appropriate arrangements.
- 7.4 The costs of visiting the Site shall be at the Tenderer's own expense.

## **B. Tender Document**

### **8. Tender Document: General**

- 8.1 The Sections comprising the Tender Document are listed below, and should be read in conjunction with any Addendum issued under ITT Clause 11.
- Section 1 Instructions to Tenderers (ITT)
  - Section 2 Tender Data Sheet (**TDS**)
  - Section 3 General Conditions of Contract (GCC)
  - Section 4 Particular Conditions of Contract (**PCC**)
  - Section 5 Tender and Contract Forms
  - Section 6 Employer's Requirements
  - Section 7 Drawings
- 8.2 The Purchaser shall reject any tender if the Tender Document was not purchased directly from the Purchaser, or through its agent as stated in the **TDS**.
- 8.3 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tender Document as well as addendum to Tender Documents.

### **9. Clarification of Tender Document**

- 9.1 A prospective Tenderer requiring any clarification of the Tender Document shall contact the Purchaser in writing at the Purchaser's address indicated in the **TDS** before **two-thirds** of time allowed for preparation and submission of Tender elapses.
- 9.2 The Procuring Entity is not obliged to answer any clarification request received after that date as stated under ITT Sub Clause 9.1.
- 9.3 The Procuring Entity shall respond in writing within five (5) working days of receipt of any such request for clarification received under ITT Sub Clause 9.1.
- 9.4 The Procuring Entity shall forward copies of its response to all those who have purchased the Tender Document, including a description of the enquiry but without identifying its source.
- 9.5 Should the Procuring Entity deem it necessary to revise the Tender Document as a result of a clarification, it will do so following the procedure under ITT Clause 11.



- 10. Pre-Tender Meeting**
- 10.1 To clarify issues and to answer questions on any matter arising in the Tender Document, the Purchaser may, if stated in the **TDS**, hold a Pre-Tender Meeting at the place, date and time as specified in the TDS. All Potential Tenderers are encouraged to attend the meeting, if it is held.
- 10.2 Minutes of the pre-Tender meeting, including the text of the questions raised and the responses given, together with any responses prepared after the meeting, will be transmitted within one week (7 days) after holding the meeting to all those who purchased the Tender Document and even those who did not attend the meeting.
- 10.3 Any amendment to the Tender Documents listed in ITT Sub-Clause 8.1 that may become necessary as a result of the pre-Tender meeting shall be made by the Purchaser exclusively through the issue of an Addendum as stated under ITT Sub-Clause 11 and not through the minutes of the pre-Tender meeting.
- 10.4 Non-attendance at the Pre-Tender meeting will not be a cause for disqualification of a Tenderer.
- 11. Addendum to Tender Document**
- 11.1 At any time prior to the deadline for submission of Tenders, the Purchaser on its own initiative or in response to a clarification request in writing from a Tenderer, having purchased the Tender Document or as a result of a Pre-Tender meeting, may revise the Tender Document by issuing an addendum pursuant to Rule 95 of the Public Procurement Rules, 2008.
- 11.2 The addendum issued under ITT Sub-Clause 11.1 shall become an integral part of the Tender Document and shall have a date and an issue number and shall be circulated by fax, mail or e-mail, to Tenderers who have purchased the Tender Documents within five (5) working days of issuance of such addendum, to enable Tenderers to take appropriate action.
- 11.3 The Tenderer shall acknowledge receipt of an addendum.
- 11.4 Tenderers who have purchased the Tender Documents but have not received any addendum issued under ITT Sub-clause 11.1 shall inform the Purchaser of the fact by fax, mail or e-mail before **two-thirds** of the time allowed for the submission of Tenders has elapsed.
- 11.5 Procuring Entities shall also ensure posting of relevant addenda with the reference number and date on their website.
- 11.6 To give a prospective Tenderer reasonable time in which to take an amendment into account in preparing its Tender, the Purchaser may, at its discretion, extend the deadline for the submission of Tenders, pursuant to Rule 95(6) of the Public Procurement Rule, 2008 and under ITT Clause 36.

- 11.7 If an addendum is issued when time remaining is less than one-third of the time allowed for the preparation of Tenders, a Purchaser shall extend the deadline by an appropriate number of days for the submission of Tenders, depending upon the nature of the Procurement requirement and the addendum. The minimum time for such extension shall not be less than seven (7) days.

## C. Qualification Criteria

### 12. General Criteria

- 12.1 The Tenderer shall possess the necessary professional and technical qualifications and competence, financial resources, equipment and other physical facilities, managerial capability, specific experience, reputation, and the personnel, to perform the contract.
- 12.2 In addition to meeting the eligibility criteria, as stated in ITT Clause 5, the Tenderer must satisfy the other criteria stated in ITT Clauses 13 to 15 inclusive.
- 12.3 To qualify for multiple number of contracts/lots in a package made up of this and other individual contracts/lots for which tenders are invited in the Invitation for Tenders, the Tenderer shall demonstrate having resources and experience sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

### 13. Litigation History

- 13.1 The maximum number of arbitration awards against the Tenderer over a period shall be as specified in the **TDS**.

### 14. Experience Criteria

- 14.1 Tenderers shall have the following minimum level of supply experience to qualify for supplying the Plant and Services under the contract:
- (a) a minimum number of years of general experience in the role of Contractor or Subcontractor or Management Contractor as specified in the **TDS**; and
  - (b) Specific experience as a Contractor or Subcontractor or Management Contractor that are similar to the proposed plant and services in at least a number of contract(s) and of a minimum value over the period, as specified in the **TDS**.

### 15. Financial Criteria

- 15.1 Tenderers shall have the following minimum level of financial capacity of qualify for the supply, execution and performance of plant and services under the contract.
- (a) the average annual turnover as specified in the **TDS** calculated as total certified payments received for contracts in progress or completed, during the period specified in the **TDS**;
  - (b) availability of minimum liquid assets or working capital or credit facilities, as specified in the **TDS**; and;
  - (c) Satisfactory resolution of all claims, arbitrations or other litigation cases and shall not have serious negative impact on the financial capacity of the Tenderer.

- 16. Personnel Capacity** 16.1 The Tenderer shall have the following minimum level of personnel capacity to qualify for the performance of the plant and services under the Contract.  
A Project Manager, Engineers, and other key staff with qualifications and experience as specified in the **TDS**;
- 17. Equipment Capacity** 17.1 The Tenderer shall own suitable equipment and other physical facilities or have proven access through contractual arrangement to hire or lease such equipment or facilities for the desired period, where necessary or have assured access through lease, hire, or other such method, of the essential equipment, in full working order, as specified in the **TDS**.
- 18. Joint Venture, Consortium or Association**
- 18.1 The Tenderer may participate in the procurement proceedings forming a Joint Venture, Consortium or Associations (JVCA) by an agreement, executed case by case on a non-judicial stamp of value as stated in **TDS** or alternately with the intent to enter into such an agreement supported by a Letter of Intent along with the proposed agreement duly signed by all partners of the intended JVCA and authenticated by a Notary Public.
- 18.2 The figures for each of the partners of a JVCA shall be added together to determine the Tenderer's compliance with the minimum qualifying criteria; however, for a JVCA to qualify, lead partner and its other partners must meet the criteria stated in the **TDS**. Failure to comply with these requirements will result in rejection of the JVCA Tender. Subcontractors' experience and resources will not be taken into account in determining the Tenderer's compliance with the qualifying criteria.
- 18.3 Each partner of the JVCA shall be jointly and severally liable for the execution of the Contract, all liabilities and ethical and legal obligations in accordance with the Contract terms.
- 18.4 The JVCA shall nominate a Representative (partner-in-charge/Lead Firm) who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVCA during the tendering process and, in the event the JVCA is awarded the Contract, during contract execution including the receipt of payments for and on behalf of the JVCA.
- 18.5 Each partner of the JVCA shall complete the JVCA Partner Information (**Form PG5A-2b**) for submission with the Tender
- 19. Subcontractor(s)**
- 19.1 Tenderer, pursuant to Rule 53 of the PPR2008, is allowed to sub-contract a portion of the Supply.
- 19.2 The Tenderer shall specify in its Tender all portion of the Plant and Services that will be subcontracted, if any, including the entity(ies) to whom each portion will be subcontracted to, subject to the maximum allowable limit for subcontracting of Plant and Services specified in the **TDS**.
- 19.3 The Purchaser may require Tenderers to provide more information about their subcontracting arrangements. If any Subcontractor is found ineligible or unsuitable to carry out the subcontracted tasks, the Procuring Entity may request

- the Tenderer to propose an acceptable substitute.
- 19.4 The Purchaser may also select nominated Subcontractor(s) to execute certain specific components of the Works and if so, those will be specified in the **TDS**.
- 19.5 The successful Tenderer shall under no circumstances assign the goods/works/services or any part of it to a Subcontractor
- 19.6 Subcontractors must comply with the provision of ITT Clause 5. For this purpose contractor shall complete the Subcontractor's information in Form **PG5A-2c** for submission with tender
- 19.7 If the Purchaser determines that a subcontractor is ineligible, the subcontracting of such portion of the Plants and Services assigned to the ineligible subcontractor shall be disallowed

## **D. Tender Preparation**

- 20. Only one Tender**      20.1 If a Tender for Plant and Services is invited on 'lot-by-lot' basis, each lot shall constitute a tender. A Tenderer shall submit only one (1) Tender for each lot, either individually or as a JVCA. The Tenderer who submits or participates in more than one (1) Tender for each lot will cause all the Tenders with that Tenderer's participation to be rejected.
- 21. Cost of Tendering**      21.1 Tenderers shall bear all costs associated with the preparation and submission of its Tender, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.
- 22. Issuance and Sale of Tender Document**      22.1 A Purchaser, pursuant to Rule 94 of the Public Procurement Rules, 2008 shall make Tender Documents available immediately to the potential Tenderers, requesting and willing to purchase at the corresponding price if the advertisement has been published in the newspaper pursuant to Rule 90 of the Public Procurement Rules, 2008.
- 22.2 Full contact details with mailing address, telephone and facsimile numbers and electronic mail address, as applicable, of those to whom Tender Documents have been issued shall be recorded with a reference number by the Purchaser or its agent.
- 22.3 There shall not be any pre-conditions whatsoever, for sale of Tender Document and the sale of such Document shall be permitted up to the day prior to the day of deadline for the submission of Tender.

- 23. Language of Tender**
- 23.1 Tenders shall be written in the English language. Correspondences and documents relating to the Tender may be written in English or *Bangla*. Supporting documents and printed literature furnished by the Tenderers that are part of the Tender may be in another language, provided they are accompanied by an accurate translation of the relevant passages in the English or *Bangla* language, in which case, for purposes of interpretation of the Tender, such translation shall govern.
- 23.2 Tenderers shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.
- 24. Contents of Tender (Document establishing the tender's qualification)**
- 24.1 The Tender prepared by the Tenderers shall comprise Two Envelope submitted simultaneously, one called the **Technical Offer (Envelope-01)** containing the documents listed in ITT 24.2 and other called the **Financial Offer** containing the documents listed in 24.3, both envelopes enclosed together in an outer Single envelope.
- 24.2 The **Technical Offer (Envelope-01)** prepared by the Tenderers will comprise the following:
- (a) Technical Submission Letter (**Form PG5A-1a**) as furnished in Section 5: Tender and Contract Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested
  - (b) Tenderer Information Sheet (**Form PG5A-2**) as furnished in Section 5: Tender and Contract Forms;
  - (c) Tender Security as stated under ITT Clause 32,33 and 34;
  - (d) Technical Proposal (Form PG5A-4) as furnished in Section 5: Tender and Contract Forms.
  - (e) Alternatives, if permitted, as stated under with ITT Clause 25;
  - (f) Written confirmation authorising the signatory of the Tender to commit the Tenderer, as stated under ITT Sub-Clause 37.3;
  - (g) The completed eligibility declarations, to establish its eligibility as stated under ITT Clause 5, in the Tender Submission Sheet (Form PG5A-1a & 1b), as furnished in section 5: Tender and Contract Forms;
  - (h) An affidavit confirming the legal capacity stating that there are no existing orders of any judicial court that prevents either the Tenderer or employees of a Tenderer entering into or signing a Contract with the Purchaser as stated under ITT clause 5;
  - (i) An affidavit confirming that the Tenderer is not insolvent, in receivership or not bankrupt or not in

the process of bankruptcy, not temporarily barred from undertaking their business for financial reasons and shall not be the subject of legal proceedings for any of the foregoing as stated under ITT Clause 5;

- (j) A certificate issued by the competent authority stating that the Tenderer is a Tax payer having valid Tax Identification Number (TIN) and VAT registration number or in lieu any other document acceptable to the Purchaser demonstrating that the Tenderer is a genuine Tax payer and has a VAT registration number as a proof of fulfillment of taxation obligations as stated under ITT Clause 5. In the case of foreign Tenderers, a certificate of competent authority in that country of which the Tenderer is citizen shall be provided;
- (k) Documentary evidence demonstrating that they are enrolled in the relevant professional or trade organizations registered in Bangladesh or in case of foreign tenderer in their country of origin or a certificate concerning their competency issued by a professional institution in accordance with the law of the country of their origin, as stated under ITT Clause 5;
- (l) The country of origin declarations, to establish the eligibility of the Plant and Services as stated under ITT Clause 6, in the Price Schedule for Plant and Services (**Form PG5A-3**) as, applicable, furnished in Section 5: Tender and Contract Forms;
- (m) Documentary evidence as stated under ITT Clauses 28, that the Goods and Related Services conform to the Tender Documents;
- (n) Documentary evidence as stated under ITT Clause 29 that the Tenderer's qualifications conform to the Tender Documents;
- (o) Documents establishing legal and financial autonomy and compliance with commercial law, as stated under ITT Sub-clause 5.3 in case of government owned entity; and
- (p) In addition to the requirements stated under ITT Sub Clause 18.1, Tenders submitted by a JVCA or proposing a Subcontractor shall include.
  - i. a Joint Venture Agreement entered into by all partners, executed on a non-judicial stamp of value or equivalent as stated under ITT Sub Clause 18.1; or
  - ii. a Letter of Intent along with the proposed agreement duly signed by all partners of the intended JVCA with the declaration that it will execute the Joint Venture agreement in the event



below, shall be used for each of the elements of the Plant and Installation Services. The total amount from each Schedule corresponding to an element of the Plant and Installation Services shall be summarized in the schedule titled Grand Summary, (Schedule 5), giving the total tender price(s) to be entered in the Letter of Tender.

Schedule No. 1 Plant (including Mandatory Spare Parts) Supplied from Abroad

Schedule No. 2 Plant (including Mandatory Spare Parts) Supplied from within the Purchaser's Country

Schedule No. 3 Design Services

Schedule No. 4 Civil works part

Schedule No. 5 Installation Services

Schedule No. 6 Grand Summary (Schedule Nos. 1 to 4)

Schedule No. 7 Recommended Spare Parts

Tenderers shall note that the plant and equipment included in Schedule Nos. 1 and 2 above **exclude** materials used for civil, building and other construction works. All such materials shall be included and priced under Schedule No. 4, Installation Services.

26.5 In the Schedules, tenderers shall give the required details and a breakdown of their prices as follows:

- (a) Plant to be supplied from abroad (Schedule No. 1):  
The price of the plant shall be quoted on CIP-named place of destination/CIF basis as **specified in the TDS** and as applicable.
- (b) Plant manufactured within the Purchaser's country (Schedule No. 2):
  - i) The price of the plant shall be quoted on an EXW INCOTERM basis (such as "ex-works," "ex-factory," "ex-warehouse" or "off-the-shelf," as applicable),
  - (ii) Sales tax and all other taxes payable in the Employer's country on the plant if the contract is awarded to the Tenderer, and
  - (iii) The total price for the item.
- (c) Design Services (Schedule No. 3).
- (d) Installation Services shall be quoted separately (Schedule No. 4) and shall include rates or prices for local transportation to named place of final destination as **specified in the TDS**, insurance and other services incidental to delivery of the plant, all labor, contractor's equipment, temporary works, materials, consumables and all matters and things of whatsoever nature, including operations and maintenance services, the provision of operations and maintenance manuals, training, etc., where identified in the Tender Document, as necessary for the proper execution of the installation and other services, including all taxes, duties, levies and charges payable in the Employer's country as of twenty-eight (28) days prior to the deadline for submission of tenders.



- (e) Recommended spare parts shall be quoted separately (Schedule 6) as specified in either subparagraph (a) or (b) above in accordance with the origin of the spare parts
- 26.6 The current edition of INCOTERMS, published by the International Chamber of Commerce shall govern.
- 26.7 The prices shall be either fixed or adjustable as specified in the **TDS**.
- 26.8 In the case of **Fixed Price**, prices quoted by the Tenderer shall be fixed during the Tenderer's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- 26.9 In the case of **Adjustable Price**, prices quoted by the Tenderer shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and contractor's equipment in accordance with the procedures specified in the corresponding Appendix to the Contract Agreement. A tender submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. Tenderers are required to indicate the source of labor and material indices in the corresponding Form in Section 5, Tender and Contract Forms
- 26.10 If so indicated in ITT 1.2, tenders are to be invited for individual lots or for any combination of lots (packages). Tenderers wishing to offer any price reduction (discount) for the award of more than one lot shall specify in their Tender Submission Letter the price reductions applicable to each package, or alternatively, to individual Contracts within the package, and the manner in which the price reductions will apply.
- 26.11 Tenderers wishing to offer any unconditional discount shall specify in their Letter of Tender the offered discounts and the manner in which price discounts will apply.
- 26.12 If so indicated under ITT Sub Clause 26.9, Tenders are being invited with a provision for price adjustments. The unit rates or prices quoted by the Tenderer are subject to adjustment during the performance of the Contract in accordance with the provisions of the relevant GCC Clause and, in such case the Employer shall provide the indexes and weightings or coefficients in **Appendix to the Tender** for the price adjustment formulae specified in the **PCC**.
- 26.13 The Employer may require the Tenderer to justify its proposed indexes, if any of those as stated under ITT Sub Clause 26.12, are instructed to be quoted by the Tenderer in **Appendix to the Tender**.
- 26.14 The price adjustment stated under ITT Sub Clause 26.9 and 26.12 shall be dealt with in accordance with the provisions in Section 12 and 22 of the Public Procurement

Act, 2006 and Rule 5 and 38 of the Public Procurement Rules, 2008.

- 27. Tender Currency**
- 27.1 For expenditures that will be incurred in Bangladesh, the Tenderer shall quote the prices in Bangladesh Taka
- 27.2 Suppliers offering Goods manufactured or assembled in Bangladesh are permitted to submit their Tender in a combination of local and foreign currencies.
- 27.3 In case of National Tender, all quoted price shall be in local currency.
- 27.4 In case of international competitive tender, for expenditures that will be incurred outside Bangladesh, the Tenderer may quote the prices as specified in **TDS**.
- 28. Documents Establishing the Conformity of Plant, and Services**
- 28.1 To establish the conformity of the plant and services to the Tender Documents, the Tenderer shall furnish as part of its Tender the documentary evidence that the Goods and Related services conform to the technical specifications and standards in Section 6, Employer's Requirement.
- a. a detailed description of the essential technical and performance characteristics of the plant and services, including the functional guarantees of the proposed plant and services, in response to the Specification
  - b. a list giving full particulars, including available sources, of all spare parts and special tools necessary for the proper and continuing functioning of the plant for the period named in the **TDS**, following completion of plant and services in accordance with provisions of contract; and
  - c. A commentary on the Employer's Specification and adequate evidence demonstrating the substantial responsiveness of the plant and services to those specifications. Tenderers shall note that standards for workmanship, materials and equipment designated by the Employer in the Tender Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Tenderer may substitute alternative standards, brand names and/or catalog numbers in its tender, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Specification.
- 29. Documents Establishing Eligibility of the Tenderer**
- 29.1 Tenderers, if applying as a sole Tenderer, shall submit documentary evidence to establish its eligibility as stated under ITT Clause 5 and, in particular, it shall:
- (a) Complete the eligibility declarations in the Tender Submission Letter (**Form PG5A-1a**);

- (b) Complete the Tenderer Information (**Form PG5A-2a**);
- (c) Complete Subcontractor Information (**Form PG5A-2c**), if it intends to engage any Subcontractor(s).

29.2 Tenderers, if applying as a partner of an existing or intended JV shall submit documentary evidence to establish its eligibility as stated under ITT Clause 5 and, in particular, in addition to as stated under ITT Sub Clause 29.1, it shall:

- (a) provide for each JV partner, completed JV Partner Information (**Form PG5A-2b**);
- (b) provide the JV agreement or Letter of Intent along with the proposed agreement of the intended JV as stated under ITT Sub Clause 18.1

**30. Validity Period of Tender**

30.1 Tender validities shall be determined on the basis of the complexity of the Tender and the time needed for its examination, evaluation, approval of the Tender and issuance of the Notification of Award (NOA).

30.2 Tenders shall remain valid for the period specified in the **TDS** after the date of Tender submission deadline prescribed by the Purchaser, as stated under ITT Clause 39. A Tender valid for a period shorter than that specified will be rejected by the Purchaser as non- responsive.

**31. Extension of Tender Validity and Tender Security**

31.1 In justified exceptional circumstances, prior to the expiration of the Tender validity period, the Purchaser following Rule 21 of the Public Procurement Rules, 2008 may solicit, **not later than ten (10) days** before the expiry date of the Tender validity, compulsorily all the Tenderers' consent to an extension of the period of validity of their Tenders.

31.2 The request for extension of Tender validity period shall state the new date of the validity of the Tender.

31.3 The request from the Purchaser and the responses from the Tenderers will be made in writing.

31.4 Tenderers consenting in writing to the request made by the Purchaser under ITT Sub-Clause 30.1 shall also correspondingly extend the validity of its Tender Security for twenty-eight (28) days beyond the new date for the expiry of Tender validity.

31.5 Tenderers consenting in writing to the request under ITT Sub-Clause 31.1 shall not be required or permitted to modify its Tender in any circumstances.

31.6 If the Tenderers are not consenting in writing to the request made by the Purchaser under ITT Sub-Clause 31.1, its Tender will not be considered for subsequent evaluation.

### 32. Tender Security

- 32.1 The Tender Security and its amount shall be determined sufficient to discourage the submission of frivolous and irresponsible tenders pursuant to Rule 22 of the Public Procurement Rule 2008 and shall be expressed as a rounded fixed amount and, shall not be stated as a precise percentage of the estimated total Contract value.
- 32.2 The Tenderer shall furnish as part of its Technical offer (**envelope-1**) Tender, in favour of the Purchaser or as otherwise directed on account of the Tenderer, a tender security in original form (not copy) and in the amount as specified in **TDS**.
- 32.3 If the Tender is a Joint Venture, the Tenderer shall furnish as part of its Tender, in favour of the Procuring Entity or as otherwise directed on account of the title of the existing or intended JVCA or any of the partners of that JVCA or in the names of all future partners as named in the Letter of Intent of the JVCA, a Tender Security in original form and in the amount as stated under ITT Sub Clause 32.1.

### 33. Form of Tender security

- 33.1 The Tender Security shall:
- (a) In case of NCT, at the Tender's option, be either;
- (i) In the form of a Bank Draft, Pay order or
- (ii) in the form of an irrevocable bank guarantee issued by any scheduled Bank of Bangladesh, in the format (**Form PG5A-6**) furnished in Section 5: Tender and Contract Forms.
- (b) In case of ICT, in the form of an irrevocable bank guarantee issued by an internationally reputable bank and shall require to be endorsed by its any correspondent bank located in Bangladesh, to make it enforceable, in the format (**Form PG5A-6**) furnished in Section 5: Tender and Contract Forms;
- 33.2 Tender security shall be payable promptly upon written demand by the Purchaser in the case of the conditions listed in ITT Clause 36 being invoked; and
- 33.3 Tender security shall remain valid for at least twenty eight (28) days beyond the expiry date of the Tender Validity in order to make a claim in due course against a Tenderer in the circumstances detailed under ITT Clause 36.

### 34. Authenticity of Tender Security

- 34.1 The authenticity of the Tender security submitted by a Tenderer shall be examined and verified by the Purchaser in writing from the Bank issuing the security, prior to finalization of the Evaluation Report pursuant to Rule, 24 of the Public Procurement Rule, 2008.
- 34.2 If a Tender Security is found to be not authentic, the Tender which it covers shall not be considered for subsequent evaluation and in such case the Purchaser shall proceed to take punitive measures against that Tenderer as stated under ITT Sub-Clause 4.6, pursuant to Rule 127 of the Public Procurement Rules, 2008 and in accordance with Section 64(5) of the Public Procurement Act, 2006.
- 34.3 Tender not accompanied by a valid Tender Security as stated under Sub-Clause 29, 30 and 31, shall be considered as non-responsive.

**35. Return of Tender Security**

- 35.1 No Tender security shall be returned by the Tender Opening Committee (TOC) during and after the opening of the Tenders pursuant to Rule 26 of the Public Procurement Rules 2008.
- 35.2 No Tender security shall be returned to the Tenderers before contract signing, except to those who are found non-responsive.
- 35.3 Tender securities of the non-responsive Tenders shall be returned immediately after the Evaluation Report has been approved by the Purchaser.
- 35.4 Tender securities of the responsive Tenderers shall be returned only after the lowest evaluated responsive Tenderer has submitted the performance security and signed the contract, that being even before the expiration of the validity period specified in Clause 30.
- 35.5 Tender Securities of the Tenderers not consenting within the specified date in writing to the request made by the Purchaser under ITT Sub-Clause 31.1 in regard to extension of its Tender validity shall be discharged or returned forthwith.

**36. Forfeiture of Tender Security.**

- 36.1 The Tender security pursuant to Rule 25 of the Public Procurement Rules,2008 may be forfeited if a Tenderer:
  - (a) withdraws its Tender after opening of Tenders but within the validity of the Tender as stated under ITT Clauses 30,and 31, pursuant to Rule 19 of the Public Procurement Rules 2008; or
  - (b) refuses to accept a Notification of Award as stated under ITT Sub-Clause 65.3, pursuant to Rule 102 of the Public Procurement Rules 2008; or
  - (c) fails to furnish performance security as stated under ITT Sub-Clause 66.2, pursuant to Rule 102 of the Public Procurement Rules 2008; or
  - (d) refuses to sign the Contract as stated under ITT Sub-Clause 70.2 pursuant to Rule 102 of the Public Procurement Rules 2008; or
  - (e) does not accept the correction of the Tender price following the correction of arithmetic errors as stated under ITT Clause 55, pursuant to Rule 98(11) of the Public Procurement Rules 2008.

**37. Format and Signing of Tender**

- 37.1 Tenderers shall prepare one (1) original of the documents comprising the **Technical Offer** as described in ITT Clause 24.2 and clearly mark it "**ORIGINAL OF TECHNICAL OFFER**" In addition, the Tenderers shall prepare the number of copies of the Technical Offer, as specified in the **TDS** and clearly mark each of them "**COPY OF THE TECHNICAL OFFER.**" In the event of any discrepancy between the original and the copies, the **ORIGINAL** shall prevail.
- 37.2 Tenderers shall prepare one (1) original of the documents comprising the Financial Offer as described in ITT Clause 24.3 and clearly mark it "**ORIGINAL OF FINANCIAL OFFER**" In addition, the Tenderers shall prepare the number of copies of the Financial Offer, as specified in the

**TDS** and clearly mark each of them “**COPY OF THE FINANCIAL OFFER**” In the event of any discrepancy between the original and the copies, the **ORIGINAL** shall prevail.

- 37.3 Alternatives, if permitted under ITT Clause 25, shall be clearly marked “Alternative”.
- 37.4 The original and each copy of the Offer shall be typed or written in indelible ink and shall be signed by the Person duly authorized to sign on behalf of the Tenderer. This Tender specific authorization shall be attached to the Technical Offer Submission Letter (**Form PW5A-1a**) and Financial Offer Submission Letter (**Form PW5A-1b**). The name and position held by each Person(s) signing the authorization must be typed or printed below the signature. All pages of the original and of each copy of the Tender, except for un-amended printed literature, shall be numbered sequentially and signed by the person signing the Tender.
- 37.5 Any interlineations, erasures, or overwriting will be valid only if they are signed or initialled by the Person (s) signing the Tender.

## **E. Tender Submission**

### **38. Sealing, Marking and Submission of Tender**

- 38.1 Tenderers shall enclose the original of **Technical Offer** in one (1) envelope and all the copies of the **Technical Offer**, including the alternatives, if permitted under ITT Clause 25, in another envelope, duly marking the envelopes as “**ORIGINAL OF TECHNICAL OFFER**”, “**ALTERNATIVES**” (if permitted), “**COPY OF TECHNICAL OFFER**”, “**ALTERNATIVES**” (if permitted) These sealed envelopes for the original and copies of the technical Tender shall then be enclosed and sealed in one single envelope and clearly mark it “**Envelope-01: TECHNICAL OFFER**”.
- 38.2 The inner and outer envelopes of Technical Offer shall:
  - (a) be addressed to the Procuring Entity at the address as stated under ITT Sub Clause 39.1;
  - (b) bear the name of the Tender and the Tender Number as stated under ITT Sub Clause 1.1;
  - (c) bear the name and address of the Tenderer;
  - (d) bear a statement “DO NOT OPEN BEFORE -----  
-----” the time and date for Tender opening as stated under ITT Sub Clause 45.2
  - (e) bear any additional identification marks as specified in the **TDS**.
- 38.3 Tenderers shall enclose the original of **Financial Offer** in one (1) envelope and all the copies of the **Financial Offer** in another envelope, duly marking the envelopes as “**ORIGINAL OF FINANCIAL OFFER**” & “**COPY OF FINANCIAL OFFER**”. These sealed envelopes for the original and copies of the Financial Tender shall then be enclosed and sealed in one single envelope and clearly mark it “**ENVELOPE-02: FINANCIAL OFFER**”.

- 38.4 The inner and outer envelopes of Financial Offer shall:
- (a) be addressed to the Procuring Entity at the address as stated under ITT Sub Clause 39.1;
  - (b) bear the name of the Tender and the Tender Number as stated under ITT Sub Clause 1.1;
  - (c) bear the name and address of the Tenderer;
  - (d) bear a statement **“DO NOT OPEN BEFORE THE TECHNICAL OFFER EVALUATION AND APPROVAL”**.
  - (e) bear any additional identification marks as specified in the **TDS**.
- 38.5 **The Envelope-01** as stated in ITT Clause 38.1 and **Envelope-02** as in ITT Clause 38.3 shall then be enclosed and sealed in one single outer envelope which shall contain the information as stated under ITT Clause 38.2 (a) to (e) & ITT Clause 38.4 (a) to (e)
- 38.6 Tenderers are solely and entirely responsible for pre-disclosure of Tender information if the envelope(s) are not properly sealed and marked.
- 38.7 Tenders shall be delivered by hand or by mail, including courier services at the address(s) as stated under ITT Sub Clause 39.1.
- 38.8 The Procuring Entity will, on request, provide the Tenderer with acknowledgement of receipt showing the date and time when it's Tender was received.
- 39. Deadline for Submission of tenders**
- 39.1 Tenders shall be delivered to the Purchaser at the address specified in the **TDS** and no later than the date and time specified in the **TDS**.
- 39.2 The Purchaser may, at its discretion on justifiably acceptable grounds duly recorded, extend the deadline for submission of Tender as stated under ITT Sub Clause 39.1, in which case all rights and obligations of the Purchaser and Tenderers previously subject to the deadline will thereafter be subject to the new deadline as extended.
- 39.3 If submission of Tenders is allowed in more than one location, the date and time, for submission of Tenders for both the primary and the secondary place(s), shall be the **“same and not different”** as specified in the **TDS**.
- 39.4 The Procuring Entity shall ensure that the Tenders received at the secondary place(s) are hand-delivered at the primary place as stated under ITT Sub Clause 39.1, within **THREE (3) HOURS** after the deadline for submission of Tenders at the secondary place (s), in case of **MULTIPLE DROPPING** as stated under ITT Sub Clause 39.3, as specified in the **TDS**.
- 40. Late tender**
- 40.1 Any Tender received by the Purchaser after the deadline for submission of Tenders as stated under ITT Clause 39, shall be declared **LATE**, rejected, returned unopened to the Tenderer.
- 41. Modification, Substitution or Withdrawal of Tenders**
- 41.1 Tenderers may modify, substitute or withdraw its Tender after it has been submitted by sending a written notice duly signed by the authorized signatory and properly sealed, and shall include a copy of the authorization;

- provided that such written notice including the **affidavit** is received by the Procuring Entity prior to the deadline for submission of Tenders as stated under ITT Clause 39
- 42. Tender Modification** 42.1 Tenderers shall not be allowed to retrieve its original Tender, but shall be allowed to submit corresponding modification either to its original **Technical Offer** or **Financial Offer** or both, marked as “**MODIFICATION FOR TECHNICAL OFFER (MTO)**” or “**MODIFICATION FOR FINANCIAL OFFER (MFO)**” with two separate envelopes. The envelope/envelopes marked as MTO and/or MFO then be enclosed and sealed in one single outer envelope with a written notice duly as stated under ITT Sub Clause 41.1. The outer envelope shall contain the information as stated under ITT Sub Clause 38.2(a) to (d) and clearly marked as “**MODIFICATION (M)**”.
- 43. Tender Substitution** 43.1 Tenderers shall not be allowed to retrieve its original Tender, but shall be allowed to submit another **Technical Offer** or **Financial Offer** or both, marked as “**SUBSTITUTION FOR TECHNICAL OFFER (STO)**” or “**SUBSTITUTION FOR FINANCIAL OFFER (SFO)**” with two separate envelopes. The envelope/envelopes marked as STO and/or SFO then be enclosed and sealed in one single outer envelope with a written notice duly as stated under ITT Sub Clause 41.1. The outer envelope shall contain the information as stated under ITT Sub Clause 38.2(a) to (d) and clearly marked as “**SUBSTITUTION (S)**”.
- 44. Withdrawal of Tender** 44.1 The Tenderer shall be allowed to withdraw its Tender by a Letter of Withdrawal marked as “**WITHDRAWAL**” prior to the deadline for submission of Tenders as stated under ITT Clause 39.

## F. Tender Opening and Evaluation

- 45. Tender Opening** 45.1 Only the **Technical Offer (Envelope-01)** shall be opened immediately after the deadline for submission of Tenders at the primary place as specified in the **TDS** but not later than **ONE HOUR**, after expiry of the submission deadline at the same primary place unless otherwise stated under ITT Sub Clause 39.2. But within **THREE HOURS** after the deadline of submission of tender at primary place in case of multiple dropping. Tender opening shall not be delayed on the plea of absences of Tenderers or his or her representatives. Financial offer (**Envelope-02**) shall not open with Technical offer (**Envelope-01**) and shall be kept unopened at the Custody of the Head of the Procuring Entity or his Authorised Officer (AO).
- 45.2 Persons not associated with the Tender may not be allowed to attend the public opening of Technical Offers.
- 45.3 Tenderers’ representatives shall be duly authorised by the Tenderer. Tenderers or their authorised representatives will be allowed to attend and witness the



opening of **Technical Offers**, and will sign a register evidencing their attendance. Technical Offers Opening shall not be delayed on the plea of absence of Tenderers or his or her representatives.

45.4 The authenticity of withdrawal or substitution of, or modifications to original Tender, if any made by a Tenderer in specified manner, shall be examined and verified by the Tender Opening Committee (TOC) based on documents submitted as stated under ITT Sub Clause 41.1. Any envelope related to financial modification, substitute shall be recorded but not open with technical offer.

45.5 Verify **(M), (S), (W), (A), (O)** by following step by steps

(a) **Step 1:** envelopes marked "**Withdrawal (W)**" shall be opened and "Withdrawal" notice read aloud & recorded in the opening sheet. After verify the withdrawal letter is genuine, corresponding tender shall not be opened, but returned unopened to the Tenderer by Procuring Entity (**PE**) at a late time. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice shall be as stated in 41.1& 44.1 and in such case the Tender shall be opened and recorded.

(b) **Step 2:** the remaining Tenders will be sorted out and those marked "**SUBSTITUTION (S)**" or "**MODIFICATION (M)**" of Tender will be linked with their corresponding Original Tender.

(c) **Step 3:** outer envelopes marked "**SUBSTITUTION (S)**" shall be opened. The inner envelopes containing the "Substitution of Technical Offer (**STO**)" and/or "Substitution of Financial Offer (**SFO**)" shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Tenderer unopened by the Procuring Entity at a later time immediately after opening of Technical Offers. Only the Substitution of Technical Offer, if any, shall be opened, read out, and recorded. Substitution of Financial Offer will remain unopened in accordance with ITT Sub Clause45.1. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out and recorded at Technical Offer opening.

(d) **Step 4:** outer envelopes marked "**MODIFICATION (M)**" shall be opened. No Technical Offer and/or Financial Offer shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Offers. Only the Technical Offers, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Offers, both

Original as well as Modification, will remain unopened in accordance with ITT Sub Clause 45.1

- (e) **Step5:** if so specified in this Tender Document, the envelopes marked “Alternative of Technical Offer (ATO)” shall be opened and read aloud with the corresponding Technical Offer and recorded.

45.6 Ensuring that only the correct **(MTO), (STO), (ATO), (OTO)** envelopes are opened, details of each Technical Offer will be dealt with as follows:

- (a) the Chairperson of the **TOC** will read aloud each Technical Offer and record in the Technical Offer Opening Sheet **(TOOS)**:
  - (i) the name and address of the Tenderer;
  - (ii) state if it is a withdrawn, modified, substituted or original Technical Offer;
  - (iii) any alternatives;
  - (iv) record the rejection of the Tender which submitted Technical Offer and Financial Offer together in one envelope.
  - (v) the presence or absence of any requisite Tender Security; and
  - (vi) such other details as the Procuring Entity, at its discretion, may consider appropriate.
- (b) Only Technical Offer and alternatives read aloud at the Technical Offer Opening will be considered in evaluation.
- (c) all pages of the original version of the Technical Offer, except for un-amended printed literature, will be initialled by members of the TOC. **Remember, No financial Offer shall be open with Technical Offer**

45.7 Upon completion of Technical Offer opening, all members of the **TOC** and the Tenderers or Tenderer’s duly authorised representatives attending the Technical Offer opening shall sign by name, address, designation, the TOS, copies of which shall be issued to the Head of the Procuring Entity or an officer authorised by him or her and also to the members of the TOC and any authorised Consultants and, to the Tenderers immediately.

45.8 The omission of a Tenderer’s signature on the record shall not invalidate the contents and effect of the record under ITT Sub Clause 45.7

45.9 No tender i.e., Technical or Financial Offer shall be rejected at the Tender opening stage except the **LATE** Tenders as stated in the ITT Clause 40.

#### **46. Evaluation of Tenders**

46.1 Technical Offers shall be examined and evaluated only on the basis of the criteria specified in the Tender Document.

46.2 **Tender Evaluation Committee (TEC)** shall examine, evaluate and compare Tenders that are responsive to the requirements of Tender Documents in order to identify the successful Tenderer.

- 47. Evaluation Process**
- 47.1 TEC may consider a Tender Offer as responsive in the Evaluation, only if it is submitted in compliance with the mandatory requirements set out in the Tender Document. The evaluation process should begin immediately after Technical Offer opening following Two steps:
- (a) Preliminary examination
  - (b) Technical examination and responsiveness
- 48. Preliminary Examination**
- 48.1 Compliance, adequacy and authenticity of the documentary evidences for meeting the qualification criterion specified in the corresponding section of the Tender document shall have to be preliminarily examined and verified.
- 48.2 The TEC shall firstly examine the Tenders to confirm that all documentation requested in ITT Clause 24 has been provided. Examination of the compliance, adequacy and authenticity of the documentary evidence may follow the order below:
- (a) verification of the completeness of the eligibility declaration in the Tender Submission Letter (Form PG5A-1), to determine the eligibility of the tenderer as stated under ITT Sub-Clause 24(h). Any alterations to its format, filling in all blank spaces with the information requested, failing which the tender may lead to rejection of the Tender;
  - (b) verification of that the Tenderer is enrolled in the relevant professional or trade organisations as stated under ITT Clause 24(l);
  - (c) verification of the eligibility in terms of legal capacity and fulfilment of taxation obligation by the tenderer in accordance as stated under ITT Sub-Clause 24(i) and 24(k);
  - (d) verification of eligibility that the tenderer is not insolvent, in receivership, bankrupt, not in the process of bankruptcy, not temporarily barred as stated under ITT Sub-Clause 24(j);
  - (e) verification of eligibility of Tenderer's country of origin as stated under ITT Sub-Clause 24(b);
  - (f) verification of the written authorization confirming the signatory of the Tenderer to commit the Tender has been attached with Tender Submission Letter (Form PG5A-1) as stated under ITT Sub-Clause 24(g); in order to check the authenticity of Tender and Tenderer itself ;
  - (g) verification of the Tender Security as stated under ITT Sub-Clause 24(d); and
- 48.3 The TEC shall confirm that the above documents and information have been provided in the Tender and the completeness of the documents and compliance of instructions given in corresponding ITT Clauses shall be verified, failing which the tender shall be considered rejection of that tender.
- 49. Technical Evaluation and Responsiveness**
- 49.1 Only those Tenders surviving preliminary examination need to be examined in this phase.

49.2 Secondly, the TEC will examine the adequacy and authenticity of the documentary evidence which may follow the order below:

- (a) verification of the completeness of the country of origin declaration in the Price Schedule for Plant and Services (Form PG5A-3) as furnished in Section 5: Tender and Contract Forms to determine the eligibility of the Goods and Related Services as stated under ITT Sub Clause 24(m).
- (b) verification and examination of the documentary evidence and completed Technical Proposal (Form PG5A-4) as furnished in Section 5: Tender and Contract Forms to establish the conformity of the Goods and Related Services to the Tender Documents as stated under ITT Sub Clause 24(e) and 24(n).
- (c) verification and examination of the documentary evidence that the Tenderer's qualifications conform to the Tender Documents and the Tenderer meets each of the qualification criterion specified in Sub-Section C, Qualification Criteria as stated under ITT Sub Clause 24(o).
- (d) verification and examination of the documentary evidence that Tenderer has met all the requirements in regards under Section 6, Employer's Requirements, without any material deviation or reservation.
- (e) verification and examination of the documentary evidence and completed Specification Submission Sheet (**Form PG5A-4a**) to determine the conformity of the Goods and related services .

49.3 TEC may consider a Tender as responsive in the evaluation, only if comply with the mandatory requirements as stated under Clause 49.2.

49.4 The TEC's determination of a Tender's responsiveness is to be based on the documentary evidence as requested in Clause 49.2 without recourse to extrinsic evidence.

49.5 Information contained in a Tender, that was not requested in the Tender Document shall not be considered in evaluation of the Tender.

49.6 If a Tender is not responsive to the mandatory requirements set out in the Tender Document it shall be rejected by the TEC and shall not subsequently be made responsive by the Tenderer by correction of the material deviation, reservation.

- 49.7 A material deviation or reservation is one-
- (a) which affects in any substantial way the scope, quality, or performance of the Goods and Related Services and Tenderer's qualifications mentioned in the Tender Document
  - (b) which limits in any substantial way, inconsistent with the Tender Documents, the Purchaser's rights or the Tenderer's obligations under the Contract; or
  - (c) whose rectification would anyway affect unfairly the competitive position of other Tenderers presenting responsive Tenders.
- 49.8 During the evaluation of Tender, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the Tender Document;
  - (d) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Tender Document;
- 49.9 A TEC may regard a Tender as responsive, even if it contains-minor or insignificant deviations, which do not meaningfully alter or depart from the technical specifications, characteristics and commercial terms and conditions or other requirements set out in the Tender Document; errors or oversights, which if corrected, would not alter the key aspects of the Tender.

**50. Clarification on Technical Offer**

- 50.1 TEC may ask Tenderers for clarification of their Technical Offers in order to facilitate the examination and evaluation of Technical Offers. The request for clarification by the TEC and the response from the Tenderer shall be in writing, and Technical Offers clarifications which may lead to a change in the substance of the Technical Offers or in any of the key elements of the Technical Offers as stated under ITT Sub Clause 49.2, will neither be sought nor be permitted.
- 50.2 Any request for clarifications by the TEC shall not be directed towards making an apparently non-responsive Tender responsive and reciprocally the response from the concerned Tenderer shall not be articulated towards any addition, alteration or modification to its Technical Offer.
- 50.3 If a Tenderer does not provide clarifications of its Technical Offer by the date and time, its Tender shall not be considered in the evaluation

**51.Restrictions on Disclosure of Information**

- 51.1 Following the opening of Technical Offers until issuance of Notification of Award no Tenderer shall, unless requested to provide clarification to its Tender or unless necessary for submission of a complaint, communicate with the concerned Procuring Entity
- 51.2 Tenderers shall not seek to influence in anyway, the examination and evaluation of the Tenders
- 51.3 Any effort by a Tenderer to influence the Procuring Entity in its decision concerning the evaluation of

Tenders, Contract awards may result in the non-responsiveness of its Tender as well as further action in accordance with Section 64 (5) of the Public Procurement Act, 2006.

- 51.4 All clarification requests shall remind Tenderers of the need for confidentiality and that any breach of confidentiality on the part of the Tenderer may result in their Tender being non-responsive.
- 52. Approval of Technical Offer** 52.1 TEC shall prepare the Technical Offer Evaluation Report and shall directly submit the Evaluation Report to the Head of the Procuring Entity (**HOPE**) or **Authorized Officer for approval**.
- 53. Financial Offer Opening** 53.1 After receiving approval of the Technical Offer Evaluation Report, Financial Offer (**Envelope-2**) of only the Responsive Tenderers who have been determined as qualified to the requirements of the Technical Offer, shall be opened publicly, The Date, time and place of Financial Offer Opening shall be communicated to the Responsive Tenderers in writing by issuing a Financial Offer Opening notice not less than **SEVEN DAYS** before the opening.
- 53.2 Ensuring that only the correct **MFO, SFO, OFO** envelopes of the Responsive Tenderers shall be opened, in the presence of the Responsive Tenderer's representatives who choose to attend, on the date, time and at the place as notified by the Procuring Entity in accordance with ITT Clause 53.1. Details of each Financial Offer will be dealt with as follows:
- (a) the Chairperson of the Tender Evaluation Committee will read aloud each Financial Offer and record in the Financial Offer Opening Sheet (**FOOS**):
    - (i) the name and address of the Tenderer;
    - (ii) state if it is a modified, substituted or original Financial Offer;
    - (iii) the Tender Price;
    - (iv) the number of initialled corrections;
    - (v) any discounts; and
    - (vi) any other details as the Procuring Entity, at its discretion, may consider appropriate
  - (b) only the discounts and alternatives read aloud and recorded at the Financial Offer Opening will be considered in Financial Offer Evaluation. No Tenders shall be rejected at the opening of the Financial Offer.
  - (c) all pages of the original version of the Financial Offer, except for un-amended printed literature, will be initialled by members of the Tender Evaluation Committee.
  - (d) The Procuring Entity shall, in writing, notify the Non-responsive Tenderers who have not been determined as qualified to the requirements of the Technical Offer and shall return their Financial Offers (Envelope-02) unopened after signing of the contract.
- 54. Clarification on** 54.1 TEC may ask Tenderers for clarification of their Financial

- Financial Offer** Offers, about the breakdowns of unit rates, in order to facilitate the examination and evaluation of Financial Offers. The request for clarification by the TEC and the response from the Tenderer shall be in writing.
- 54.2 Changes in the Tender price shall not be sought or permitted, except to confirm the correction of arithmetical errors discovered by the TEC in the evaluation of the Tenders, as stated under ITT Sub Clause 55.1.
- 54.3 If a Tenderer does not provide clarifications of its Financial Offer by the date and time, its Tender shall not be considered in the evaluation.
- 54.4 Requests for clarifications on Financial Offers shall be duly signed only by the TEC Chairperson.
- 55. Correction of Arithmetical Errors**
- 55.1 The TEC shall correct any arithmetic errors that are discovered during the examination of Tenders, and shall promptly notify the concerned Tenderer(s) of any such correction(s) pursuant to Rule 98(11) of the Public Procurement Rule, 2008.
- 55.2 Provided that the Tender is responsive, TEC shall correct arithmetical errors on the following basis:
- (a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the TEC there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected;
- (b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the sub-totals shall prevail and the total shall be corrected.
- 55.3 Any Tenderer that does not accept the correction of the Tender amount following correction of arithmetic errors as determined by the application of ITT Sub-Clause 55.2 shall be considered as non-responsive.
- 56. Conversion to Single Currency**
- 56.1 For evaluation and comparison purpose, TEC shall convert all Tender prices expressed in the amounts in various currencies into an amount in Bangladeshi Taka currency, using the **selling exchange rates** established by the Bangladesh Bank, on the date of **Tender opening**.
- 57. Financial Evaluation**
- 57.1 Thirdly the TEC, pursuant to Rule 98 of the Public Procurement Rules, 2008 shall evaluate each Tender that has been determined, up to this stage of the evaluation, to be responsive to the mandatory requirements in the Tender Document..
- 57.2 To evaluate a Tender in this stage , the Purchaser shall consider the following
- (a) Verification and examination of the Price Schedule for Plant and Services (Form PG5-3) as furnished by the Tenderer and checking the compliance with the instructions provided under ITT Clause 26;
- (b) Evaluation will be done for Items or lot by lot as

- stated under ITT Clause 26 and the Total Tender Price as quoted in accordance with Clause 26;
- (c) Adjustment for correction of arithmetical errors as stated under ITT Sub-Clause 55.2;
- (d) Adjustment for price modification offered as stated under ITT Clause 41;
- (e) Adjustment due to discount as stated under ITT Sub-Clauses 26.11 and 57.3;
- (f) Adjustment due to the application of economic factors of evaluation as stated under ITT Sub-Clause 57.5 if any;
- (g) Adjustment due to the assessment of the price of unpriced items as stated under ITT Clause 58 if any;

57.3 If Tenders are invited for a single lot or for a number of lots as stated under ITT Sub-clauses 26.10, TEC shall evaluate only lots that have included at least the percentage of items per lot. The TEC shall evaluate and compare the Tenders taking into account:

- (a) Lowest evaluated tender for each lot ;
- (b) The price discount/reduction per lot;
- (c) Least cost combination for the Purchaser, considering discounts and the methodology for its application as stated under ITT Sub-clauses 26.10 and 26.11 offered by the Tenderer in its Tender.

57.4 Only those spare parts and tools which are specified as a item in the List of Goods and Related Services in Section 6, Employer's Requirement or adjustment as stated under ITT Sub-clause 54.5, shall be taken into account in the Tender evaluation. Supplier-recommended spare parts for a specified operating requirement as stated under ITT Sub-clause 28.2(b) shall not be considered in Tender evaluation.

57.5 The Purchaser's evaluation of a tender may require the consideration of other factors, in addition to the Tender Price quoted as stated under ITT Clause 26. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of tenders. The factors, methodologies and criteria to be used shall be as specified in **TDS**. The applicable economic factors, for the purposes of evaluation of Tenders shall be:

- (a) Adjustment for Deviations in the Delivery and Completion Schedule.
- (b) Cost of major replacement components, mandatory spare parts, and service.

57.6 Variations, deviations, and alternatives and other factors which are in excess of the requirements of the Tender Document or otherwise result in unsolicited benefits for the Purchaser will not be taken into account in Tender evaluation.

## 58. Price Comparison

58.1 The TEC shall compare all responsive Tenders to determine the lowest-evaluated Tender, as stated in ITT 57.2.



**59. Post-qualification**

- 58.2 In the extremely unlikely event that there is a tie for the lowest evaluated price, the Tenderer with the superior past performance with the Purchaser shall be selected, whereby factors such as delivery period, quality of Goods delivered, complaints history and performance indicators could be taken into consideration.
- 58.3 In the event that there is a tie for the lowest price and none of the Tenderers has the record of past performance with the Purchaser, then the Tenderer shall be selected, subject to firm confirmation through the Post-qualification process described in ITT Clause 61, after consideration as to whether the quality of Goods that is considered more advantageous by the end-users.
- 58.4 The successful Tenderer as stated under ITT Sub Clauses 58.1, 60.2 and 60.3 shall not be selected through lottery under any circumstances.
- 59.1 After determining the lowest-evaluated responsive tender as sated under ITT Sub-Clause 58.1, the Purchaser's TEC pursuant to Rule 100 of the Public Procurement Rules, 2008, shall carry out the Post-Qualification of the Tenderer, using only the requirements specified in Sub-Section C, Qualification Criteria.
- 59.2 The TEC shall contact the references given by Tenderers about their previous Supply experiences to verify, if necessary, statements made by them in their Tender and to obtain the most up-to-date information concerning the Tenderers.
- 59.3 The TEC may visit the premises of the Tenderer as a part of the post-qualification process, if practical and appropriate, to verify information contained in its Tender.
- 59.4 The TEC shall determine to its satisfaction whether the Tenderer that is selected as having submitted the lowest evaluated responsive Tender is qualified to perform the Contract satisfactorily.
- 59.5 The objective of any visit under ITT Sub-Clause 59.3 shall be limited to a general and visual inspection of the Tenderer's facilities and its plant and equipment, and there shall be no discussion concerning the Tender or its evaluation with the Tenderer during such visit(s).
- 59.6 In the event that the Tenderer with lowest evaluated cost fails the post-qualification, the TEC shall make a similar determination for the Tenderer offering the next lowest evaluated cost and so on from the remaining responsive Tenders, provided that,
  - (a) such action shall only be taken if the evaluated costs of the Tenders under consideration are acceptable to the Purchaser;
  - (b) when the point is reached whereby the evaluated costs of the remaining responsive Tenders are significantly higher than that of the official estimate, or the market price, the Purchaser may take action

pursuant to Rule 33 of the PPR 2008 and may proceed for re-Tendering, using a revised Tender Document designed to achieve a more successful result.

## **60. Negotiation**

- 60.1 No negotiations shall be held during the financial offer evaluation or award, with the lowest or any other Tenderer.
- 60.2 The Procuring Entity through the TEC may, however, negotiate with the lowest evaluated Tenderer with the objective to reduce the Contract Price by reducing the scope of works or a reallocation of risks and responsibilities, only when it is found that the lowest evaluated Tender is significantly higher than the official estimated cost; the reasons for such higher price being duly investigated.
- 60.3 If the Procuring Entity decides to negotiate for reducing the scope of the requirements under ITT Sub Clause 60.2, it will be required to guarantee that the lowest Tenderer remains the lowest Tenderer even after the scope of work has been revised and shall further be ensured that the objective of the Procurement will not be seriously affected through this reduction.
- 60.4 In the event that the Procuring Entity decides because of a high Tender price to reduce the scope of the requirements to meet the available budget, the Tenderer is not obliged to accept the award and shall not be penalised in any way for un-accepting the proposed award.

## **61. Rejection of All Tenders**

- 61.1 The Purchaser may, in the circumstances as stated under ITT Sub-Clause 61.2 and pursuant to Rule 33 of the Public Procurement Rules 2008, reject all Tenders following recommendations from the Tender Evaluation Committee only after the approval of such recommendations by the Head of the Purchaser. rejected, if –
- 61.2 All Tenders can be rejected, if -
  - (a) the price of the lowest evaluated Tender exceeds the official estimate, provided the estimate is realistic; or
  - (b) there is evidence of lack of effective competition; such as non-participation by a number of potential Tenderers; or
  - (c) the Tenderers are unable to propose completion of the delivery within the stipulated time in its offer, though the stipulated time is reasonable and realistic; or
  - (d) all Tenders are non-responsive; or
  - (e) evidence of professional misconduct, affecting seriously the Procurement process, is established pursuant to Rule 127 of the Public Procurement Rules, 2008.
- 61.3 Notwithstanding anything contained in ITT Sub-Clause 61.2 Tenders may not be rejected if the lowest evaluated price is in conformity with the market price.
- 61.4 A Purchaser may pursuant to Rule 35 of the Public Procurement Rules, 2008, on justifiable grounds, annul

the Procurement proceedings prior to the deadline for the submission of Tenders.

61.5 All Tenders received by the Purchaser shall be returned unopened to the Tenderers in the event Procurement proceedings are annulled under ITT Sub-Clause 61.4.

**62. Informing Reasons for Rejection**

62.1 Notice of the rejection, pursuant to Rule 35 of the Public Procurement Rules, 2008, will be given promptly within seven (7) days of decision taken by the Purchaser to all Tenderers and, the Purchaser will, upon receipt of a written request, communicate to any Tenderer the reason(s) for its rejection but is not required to justify those reason(s).

**G. Contract Award**

**63. Award Criteria**

63.1 The Purchaser shall award the Contract to the Tenderer whose offer is responsive to the Tender Document and that has been determined to be the lowest evaluated Tender, provided further that the Tenderer is determined to be Post-Qualified as stated under ITT Clause 59.

63.2 A Tenderer shall not be required, as a condition for award of contract, to undertake obligations not stipulated in the Tender Document, to change its price, or otherwise to modify its Tender.

**64. Notification of Award**

64.1 Prior to the expiry of the Tender validity period and within seven (7) working days of receipt of the approval of the award by the Approving Authority, the Purchaser pursuant to Rule 102 of the Public procurement Rules, 2008, shall issue the Notification of Award (NOA) to the successful Tenderer.

64.2 The Notification of Award, attaching the contract as per the sample (**Form PG5A-7**) to be signed, shall state:

- (a) the acceptance of the Tender by the Purchaser;
- (b) the price at which the contract is awarded;
- (c) the amount of the Performance Security and its format;
- (d) the date and time within which the Performance Security shall be submitted; and
- (e) the date and time within which the contract shall be signed.

64.3 The Notification of Award shall be accepted in writing by the successful Tenderer within seven (7) working days from the date of issuance of **NOA**.

64.4 Until a formal contract is signed, the Notification of Award shall constitute a Contract, which shall become binding upon the furnishing of a Performance Security and the signing of the Contract by both parties.

64.5 The Notification of Award establishes a Contract between the Purchaser and the successful Tenderer and the existence of a Contract is confirmed through the signature of the Contract Document that includes all agreements between the Purchaser and the successful Tenderer.

- 65. Performance Security**
- 65.1 The Performance Security shall be determined sufficient to protect the performance of the Contract pursuant to Rule 27 of the Public Procurement Rules, 2008.
- 65.2 Performance Security shall be furnished by the successful Tenderer in the amount specified in the **TDS** and **denominated in the currencies** in which the Contract Price is payable pursuant to Rule 102 (8) of the Public Procurement Rules, 2008.
- 65.3 The proceeds of the Performance Security shall be payable to the Purchaser unconditionally upon first written demand as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 66. Form and Time Limit for furnishing of Performance security**
- 66.1 The Performance Security shall be in the form of irrevocable Bank Guarantee in the format (Form PG5A-9) as stated under ITT Clause 65, shall be issued by an internationally reputable bank and it shall have correspondent bank located in Bangladesh, to make it enforceable pursuant to Rule 27(4) of the Public Procurement Rules, 2008..
- 66.2 Within twenty-eight (28) days from issue of the Notification of Award, the successful Tenderer shall furnish the Performance Security for the due performance of the Contract in the amount specified under ITT Sub Clause 65.2.
- 67. Validity of Performance Security**
- 67.1 The Performance Security shall be required to be valid until a date twenty-eight (28) days beyond the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations.
- 67.2 If under any circumstances date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations is to be extended, the Performance Security shall correspondingly be extended for the extended period.
- 68. Authenticity of performance Security**
- 68.1 The Purchaser shall verify the authenticity of the Performance Security submitted by the successful Tenderer by sending a written request to the branch of the bank issuing irrevocable Bank Guarantee in specified format.
- 68.2 If the Performance Security submitted under ITT Sub Clause 65.2 is not found to be authentic, the Purchaser shall proceed to take measures against the Tenderer in accordance with Section 64 of the Act and pursuant to Rule 127 of the Public Procurement Rules, 2008.

## **69. Contract Signing**

- 69.1 At the same time as the Purchaser issues the Notification of Award, the Purchaser shall send the draft Contract Agreement and all documents forming the Contract pursuant to Rule 102 of the Public Procurement Rule, 2008, to the successful Tenderer.
- 69.2 Within twenty-eight (28) days of the issuance of Notification of Award, the successful Tenderer and the Purchaser shall sign the contract provided that the Performance Security submitted by the Tenderer is found to be genuine.
- 69.3 If the successful Tenderer fails to provide the required Performance Security, as stated under ITT Clause 65 or to sign the Contract , as stated under ITT Sub-Clause 69.2, Purchaser shall proceed to award the Contract to the next lowest evaluated Tenderer, and so on, by order of ranking pursuant to Rule 102 of the Public Procurement Rules,2008.

## **70. Publication of Notification of Award of Contract**

- 70.1 Notification of Awards for Contracts of Taka 10 (ten) million and above shall be notified by the Purchaser to the Central Procurement Technical Unit within 7(seven) days of issuance of the NOA for publication in their website, and that notice shall be kept posted for not less than a month pursuant to Rule 37 of the Public Procurement Rules, 2008.
- 70.2 Notification of Award for Contracts below Taka 10(ten) million, shall be published by the Purchaser on its Notice Board and where applicable on the website of the Purchaser and that notice shall be kept posted for not less than a month pursuant to Rule 37 of the Public Procurement Rules, 2008..

## **71. Debriefing of Tenderers**

- 71.1 Debriefing of Tenderers by Purchaser shall outline the relative status and weakness only of his or her Tender requesting to be informed of the grounds for not accepting the Tender submitted by him or her pursuant to Rule 37 of the Public Procurement Rule, 2008, without disclosing information about any other Tenderer.
- 71.2 In the case of debriefing confidentiality of the evaluation process shall be maintained.

## **72. Right to Complain**

- 72.1 Any Tenderer has the right to complain if it has suffered or likely to suffer loss or damage due to a failure of a duty imposed on the Purchaser to fulfil its obligations in accordance with Section 29 of the Public Procurement Act 2006 and pursuant to Part 12 of Chapter Three of the Public Procurement Rules, 2008.
- 72.2 Circumstances in which a formal complaint may be lodged in sequence by a potential Tenderer against a Purchaser pursuant to Rule 56 of the Public Procurement Rules, 2008, and the complaints, if any, be also processed pursuant to Rule 57 of the Public Procurement Rules 2008.
- 72.3 The potential Tenderer shall submit his or her complaint in

writing within seven (7) calendar days of becoming aware of the circumstances giving rise to the complaint.

- 72.4 In the first instance, the potential Tenderer shall submit his or her complaint to the Purchaser who issued the Tender Document.
- 72.5 The place and address for the first stage in the submission of complaints to the Administrative Authority is provided in the **TDS**.
- 72.6 The Tenderer may appeal to a Review Panel only if the Tenderer has exhausted all his or her options of complaints to the administrative authority as stated under ITT Sub-Clause 72.2.

| <b>Section 2. Tender Data Sheet</b>   |  |
|---|--|
| <i>Instructions for completing the Tender Data Sheet are provided, as needed, in the notes in italics and under lined mentioned for the relevant ITT clauses.</i> |  |
| <b>ITT Clause</b>   | <b>Amendments of, and Supplements to, Clauses in the Instruction to Tenderers</b>  |
| <b>A. General</b>   |  |
| <b>ITT 1.1</b>  | The Purchaser is: <b>TRIPLE SUPER PHOSPHATE COMPLEX LIMITED (TSPCL) NORTH PATENGA, CHATTOGRAM, BANGLADESH.</b>   |
| <b>ITT 1.2</b>  | The Name of tender: <b>Supply, Installation, Commissioning &amp; Test Run of 33KV GIS Panel &amp; 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis.</b><br>Identification number of Tender: <b>36.01.1565.673.07.092.22(E-10/22-23)/333</b><br><b>Dated: 03-11-2022</b>   |
| <b>ITT 3.1</b>  | The source of funds: Own fund.   |
| <b>ITT 3.2</b>  | Public fund: Not applicable.   |
| <b>ITT 3.3</b>  | Development Partner: Not Applicable.   |
| <b>ITT 5.1</b>  | Tenderers from the following countries are not eligible :<br><i>Any country which has no diplomatic and trade relationship with GOB.</i>   |
| <b>ITT 5.13</b>   | Tenderers shall have the following up to date valid License:<br><br><b>1. ISO Certificate.</b>   |
| <b>ITT 6.1</b>  | Materials, Equipment and associated services from the following countries are not eligible:<br><i>Any country which has no diplomatic and trade relationship with GOB.</i>   |
| <b>B. Tender Document</b>   |  |
| <b>ITT8.2</b>   | The following are the offices of the Purchaser or authorised agents for the purpose of providing the Tender Document:<br>(i) General Manager (A&F), TSP Complex Ltd, North Patenga, Chattogram-4204.<br>(ii) Controller of Accounts, BCIC, BCIC Bhaban (6th Floor), 30-31, Dilkusha C/A., Dhaka-1000.<br>(iii) General Manager, BCIC Branch Office, 6, Agrabad C/A., Chattogram-4000.<br>(iv) Office of the Deputy Commissioner, Chattogram. |
| <b>ITT9.1</b>   | For <b>clarification of Tender Document purposes</b> only, the Procuring Entity's address is:<br>Attention: Managing Director<br>Address: Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram<br>Telephone: +88 02333300455, +88 02333300456, +88 02333300458,<br>Fax No.: +88 02333300457, E-mail: <a href="mailto:mdtspcomplex@gmail.com">mdtspcomplex@gmail.com</a>   |
| <b>ITT10.1</b>  | TSPCL Conference Room,<br>TSP Complex Ltd., North Patenga, Chattogram. <b>Date: 20-11-2022 Time: 10.00 A.M.</b>  |
| <b>C. Qualification Criteria</b>  |  |
| <b>ITT 13.1</b>   | The maximum 3 (three) numbers of arbitration against the Tenderer over a period last five years.   |
| <b>ITT 14.1(a)</b>  | The minimum number of years of overall supply experience of the <b>Tenderer</b> shall be: 05 (Five) years of overall experience in supply of goods.  |

| <b>ITT 14.1(b)</b> | <p>i) The Bidder must submit 3 Nos job completion certificate for GIS Panel of 33KV/11KV GIS substation of different organization and who has the experience doing work with PDB, PGCB, DESCO, DPDC, Government Sector &amp; Corporation for the same type of work will be given preference.</p> <p>ii) In support of experience as mentioned in ITT 14.1(b)(i), Tenderer shall submit Satisfactory Performance Certificate(s) (SPC) (at least 3 Nos) from the end users in end user's letter head pad. The Certificate(s) shall mention the name &amp; commissioning date of Sub-station, capacity &amp; voltage level which were designed, supplied constructed, tested and commissioned by Tenderer and shall contain end-user's full mailing address, e-mail address, website address, fax number and phone number for the convenience of authentication.</p> <p>iii) The bidder has to submit a Bond containing that the proposed brand of GIS panel has office in Bangladesh; having experienced &amp; competent manpower and setup to provide after sales services. Along with a list of Engineers having more than 05 years' experience in the Manufacturer's letterhead pad.</p> <p>iv) GIS Manufacturer shall have experience of supplying at least 20 nos. 33KV/11KV GIS panels in Bangladesh. The bidders have to provide the supply record of last 5years in the letter head of the manufacturer.</p>   |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
|--------------------|--|---------------------------------------|--|---------------------------------------|--|----|-----------------|----|----|----|-----------------------|----|----|----|---------------------|----|----|----|------------------|----|----|----|---------------------|----|----|----|---------------------|----|----|----|-----------------------------------|----|----|
| <b>ITT 15.1(a)</b> | The required average annual turnover shall be greater than BDT <b>5,00,00,000 (Five Crore BDT)</b> for the last <b>05(five)</b> years.   |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 15.1(b)</b> | The minimum amount of liquid asset or working capital or credit facility is BDT <b>3,00,00,000 (Three Crore BDT)</b> . Auditors report issued by the chartered accounts firms for liquid assets or working capital as supporting documents and Letter of Commitments for Bank's Undertaking for Line of Credit in the format ( <b>Form PG5A-6a</b> ) shall have to be submitted with the tender by the tenderer.   |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 16.1</b>    | <p>The tenderer shall have the following minimum level of personnel:</p> <table border="1" data-bbox="370 1010 1372 1352"> <thead> <tr> <th data-bbox="370 1010 477 1100"><b>No</b></th> <th data-bbox="477 1010 850 1100"><b>Position</b></th> <th data-bbox="850 1010 1078 1100"><b>Total Works Experience (Years)</b></th> <th data-bbox="1078 1010 1372 1100"><b>in similar and service Experience works (Years)</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="370 1100 477 1136">1.</td> <td data-bbox="477 1100 850 1136">Project manager</td> <td data-bbox="850 1100 1078 1136">10</td> <td data-bbox="1078 1100 1372 1136">05</td> </tr> <tr> <td data-bbox="370 1136 477 1171">2.</td> <td data-bbox="477 1136 850 1171">Manufacturing Manager</td> <td data-bbox="850 1136 1078 1171">05</td> <td data-bbox="1078 1136 1372 1171">05</td> </tr> <tr> <td data-bbox="370 1171 477 1207">3.</td> <td data-bbox="477 1171 850 1207">Procurement Manager</td> <td data-bbox="850 1171 1078 1207">05</td> <td data-bbox="1078 1171 1372 1207">05</td> </tr> <tr> <td data-bbox="370 1207 477 1243">4.</td> <td data-bbox="477 1207 850 1243">Process Engineer</td> <td data-bbox="850 1207 1078 1243">05</td> <td data-bbox="1078 1207 1372 1243">05</td> </tr> <tr> <td data-bbox="370 1243 477 1278">5.</td> <td data-bbox="477 1243 850 1278">Mechanical Engineer</td> <td data-bbox="850 1243 1078 1278">05</td> <td data-bbox="1078 1243 1372 1278">05</td> </tr> <tr> <td data-bbox="370 1278 477 1314">6.</td> <td data-bbox="477 1278 850 1314">Electrical Engineer</td> <td data-bbox="850 1278 1078 1314">05</td> <td data-bbox="1078 1278 1372 1314">05</td> </tr> <tr> <td data-bbox="370 1314 477 1352">7.</td> <td data-bbox="477 1314 850 1352">Safety and Environmental Engineer</td> <td data-bbox="850 1314 1078 1352">05</td> <td data-bbox="1078 1314 1372 1352">05</td> </tr> </tbody> </table> | <b>No</b>                             | <b>Position</b>  | <b>Total Works Experience (Years)</b> | <b>in similar and service Experience works (Years)</b> | 1. | Project manager | 10 | 05 | 2. | Manufacturing Manager | 05 | 05 | 3. | Procurement Manager | 05 | 05 | 4. | Process Engineer | 05 | 05 | 5. | Mechanical Engineer | 05 | 05 | 6. | Electrical Engineer | 05 | 05 | 7. | Safety and Environmental Engineer | 05 | 05 |
| <b>No</b>          | <b>Position</b>  | <b>Total Works Experience (Years)</b> | <b>in similar and service Experience works (Years)</b> |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 1.                 | Project manager  | 10                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 2.                 | Manufacturing Manager  | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 3.                 | Procurement Manager  | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 4.                 | Process Engineer   | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 5.                 | Mechanical Engineer  | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 6.                 | Electrical Engineer  | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| 7.                 | Safety and Environmental Engineer  | 05                                    | 05   |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 17.1</b>    | <p>The Tenderer shall own or have proven access to hire or lease of the major equipment, in full working order as follows :</p> <table border="1" data-bbox="370 1457 1349 1598"> <thead> <tr> <th data-bbox="370 1457 448 1549"><b>No</b></th> <th data-bbox="448 1457 911 1549"><b>Equipment Characteristics Type and</b></th> <th data-bbox="911 1457 1349 1549"><b>Minimum Number Required</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="370 1549 448 1598"></td> <td data-bbox="448 1549 911 1598"></td> <td data-bbox="911 1549 1349 1598"></td> </tr> </tbody> </table>   | <b>No</b>                             | <b>Equipment Characteristics Type and</b>              | <b>Minimum Number Required</b>        |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>No</b>          | <b>Equipment Characteristics Type and</b>  | <b>Minimum Number Required</b>        |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
|                    |  |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 18.1</b>    | The value of non-judicial stamp for execution of the Joint Venture Agreement shall be: <b>Not applicable.</b>  |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 18.2</b>    | Maximum number of partners in the JV shall be: Not applicable.   |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |
| <b>ITT 19</b>      | <i>Subcontractors</i> : Not Applicable   |                                       |  |                                       |  |    |                 |    |    |    |                       |    |    |    |                     |    |    |    |                  |    |    |    |                     |    |    |    |                     |    |    |    |                                   |    |    |



## D. Tender Preparation

|                   |  |
|-------------------|--|
| <b>ITT 20.1</b>   | Tenders are being invited for <i>Single lot</i>  |
| <b>ITT24.2(r)</b> | <p>The Tenderer shall submit with its Tender in following systems:</p> <ul style="list-style-type: none"> <li>i) The tender shall be SINGLE STAGE - TWO ENVELOPE Tendering Procedure, One containing the "TECHNICAL OFFER" and the other the "PRICE OFFER" both envelope duly sealed and signed, address to the Purchaser.</li> <li>ii) The Tenderer shall prepare one original set of "TECHNICAL OFFER" and clearly mark each "ORIGINAL TECHNICAL OFFER" and "ORIGINAL PRICED OFFER" respectively. In addition, the Tenderer shall submit 01(One) copies of "TECHNICAL OFFER" and "PRICED OFFER" each and clearly mark them "COPY TECHNICAL OFFER" and "COPY OF. PRICE OFFER". In the event of any discrepancy between the original and the copies, the original shall prevail.</li> <li>iii) The following documents to be submitted by the Tenderer along with the "TECHNICAL OFFER" duly filled in: <ul style="list-style-type: none"> <li>a) Tender submission Letter (PG5A – 1a)</li> <li>b) Tender Information sheet (PG5A – 2a)</li> <li>c) JVCA partner Information if applicable (PG5A – 2b)</li> <li>d) List of the Equipment and Machineries (PG5A – 3 <b>Unpriced</b>)</li> <li>e) List of the recommended Spare parts (PG5A – 3 Schedule 8 <b>Unpriced</b>)</li> <li>f) Technical Proposal (PG5A – 4)</li> <li>g) Manufacturer`s Authorization Letter (PG5A – 5)</li> <li>h) Tender security (PG5A – 6)</li> <li>i) Brand, Model, Suffix codes, Name of the manufacturer, Manufacturing country &amp; Detail Technical Specification of offered items must be mentioned in letter head pad of the bidder with the technical offer.</li> <li>j) Updated ISO Certificates.</li> <li>k) Original official money receipt of purchase of Tender Document.</li> <li>l) Documentary evidences of experience (like Contract Agreement, Scope of works and supplies, Final acceptance certificates from end users with address including street address, contact person, phone number, E-mail number etc.)</li> <li>m) All other relevant documents as per the requirement of the Tender.</li> </ul> </li> <li>iv) The following documents to be submitted by the Tenderer along with the "PRICED OFFER" <ul style="list-style-type: none"> <li>a) Tender submission Letter (PG5A – 1b)</li> <li>b) Price Schedule for Equipment and Machinery (PG5A – 3)</li> <li>c) Price Schedule for Design and Engineering Services (PG5A – 3)</li> <li>d) Price Schedule for Civil Works (PG5A – 3)</li> <li>e) Price Schedule for Fabrication, Installation and Other Services (PG5A – 3)</li> <li>f) Price Schedule for Commissioning and Testing (PG5A – 3)</li> <li>g) Price of recommended Spare parts (PG5A – 3 <b>Schedule 8</b>)</li> <li>h) All other relevant documents as per requirement of the Tender.</li> </ul> </li> </ul> <p>In addition the Tenderer shall have to submit all documents as stated in ITT 24.2 and the following other documents to be submitted with tender documents:</p> <ul style="list-style-type: none"> <li>1 Details drawing with dimensions, circuit diagram, data and descriptive literature as required in the specifications must be submitted with the technical offer and shall include sufficient detailed performance to information to enable the evaluation of the item as soundness, reliability, serviceability and efficiency. If standard drawing data or literature are submitted any modification should be clearly indicated thereon. Failure of</li> </ul> |

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|                    | <p>such information to show that the item offered confirms to the specifications shall cause for rejection of the bid.</p> <ol style="list-style-type: none"> <li>2 Original Money Receipt issued by BCIC/TSPCL as evidence that the tender document was purchased.</li> <li>3 Declaration regarding Country of Manufacturing certificate to be issued by the Chamber of Commerce of the concerned country shall be submitted along with the supply.</li> <li>4 Declaration regarding Free Maintenance Service: 03 (Three) years minimum (Manpower only).</li> <li>5 All documents, Literature, Catalogue, Drawing, data Sheet etc. must be submitted by the bidder with the technical offer in English Language.</li> <li>6 Declaration regarding Training: Train up 05 (Five) person for operation &amp; maintenance of the above system as per TSPCL's requirement.</li> <li>7 The manufacturer of the offered equipment's &amp; other Component parts must be ISO certified and such certificates must be submitted along with the offer. Standards of the offered instruments, equipment's &amp; other component parts should be IEC/BS/ASTM/ANSI or equivalent.</li> <li>8 Declaration regarding supply of written confirmation regarding the On call maintenance service or yearly contractual maintenance service after the warranty period.</li> <li>9 Declaration regarding supply of written confirmation that they are able to supply required spares of the offered panels for next 10 (Ten) years.</li> <li>10 Declaration regarding supply of installation manuals, Operation manuals, maintenance manuals, service manuals, Catalogue/ Brochures etc. of the equipment's &amp; Accessories 04 (four) sets of each in binding form should be supplied.</li> </ol> |
| <b>24.3(d)</b>     | <p>The Tenderer shall submit with its financial offer the following additional documents: All other relevant documents as per requirement of the Tender.</p> <ol style="list-style-type: none"> <li>1. Proforma Invoice in original from the Manufacturing Company or duly Authorized Export House of the Manufacturing Company showing price of the commodity with breakup of unit and total price. Schedule of the tender enquiry should be duly filled in, sealed and signed in duplicate.</li> <li>2 Bank details of the tenderer.</li> </ol>  |
| <b>ITT 25.1</b>    | Alternatives <i>shall not be</i> "permitted"   |
| <b>ITT 26.1</b>    | Tenderers shall quote for the entire 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner with the accessories to supply and Installation Services on a single responsibility basis  |
| <b>26.5(a)</b>     | Place of Destination: Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram, Bangladesh.   |
| <b>26.5(d)</b>     | Local transportation to named place of final destination is:<br>Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram, Bangladesh  |
| <b>ITT 26.7</b>    | The prices quoted by the Tenderer shall be fixed for the duration of the Contract.   |
| <b>ITT 27.4</b>    | Name of the currency: Bangladeshi Taka (BDT)   |
| <b>ITT28.1 (a)</b> | <b>Spare parts are: "required"</b><br><b>Period of time the Equipment are expected to be functioning (for the purpose of spare parts): 02 (Two) years</b>  |
| <b>ITT 28.1(b)</b> | <b>Manufacturer's authorization is: "required"</b>   |
| <b>ITT 30.2</b>    | The Tender validity period shall be 120 days.  |
| <b>ITT 32.2</b>    | The amount of the Tender Security shall be <b>10,00,000.00 BDT</b>   |
| <b>ITT 37.1</b>    | In addition to the <b>ORIGINAL</b> of the Tender, <b>01 (one)</b> copy shall be submitted.   |

| <b>E. Submission of Tender</b>              |   |
|---|---|
| <b>ITT 38.2(e)</b>                          | The inner and outer envelopes shall bear the following additional identification marks:<br><b>Tender Ref. No.:</b> 36.01.1565.673.07.092.22(E-10/22-23)/333 <b>Dated:</b> 03-11-2022  |
| <b>ITT 38.4(e)</b>                          | The inner and outer envelopes shall bear the following additional identification marks :<br><b>Supply, Installation, Commissioning &amp; Test Run of 33KV GIS Panel &amp; 05 nos Ceiling Type Air Conditioner For 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) basis.</b>  |
| <b>ITT 39.1</b>                             | For <b>Tender submission purposes</b> ,the Purchaser's address is:<br>Managing Director, Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram.<br>Telephone:+88 02333300455, +88 02333300456, +88 02333300458,<br>Fax No.: +88 02333300457, E-mail: mdtspcomplex@gmail.com<br>The deadline for submission of Tenders is:<br>Date : 12-12-2022<br>Time : On or Before 11.00 AM BST  |
| <b>ITT 39.3</b>                             | For <b>Tender submission purposes</b> only, the Procuring Entity's address is:<br><b>PRIMARY PLACE:</b><br>(i) General Manager (Com), TSP Complex Ltd., North Patenga, Chattogram.<br>(Primary station)<br><b>SECONDARY PLACES:</b><br>(ii) Attn: General Section, Office of the Deputy Commissioner, Chattogram,<br>(Secondary station)<br>(iii) Office of the Executive Engineer, PWD Division-3, CGO Building-1,<br>Agrabad, Chattogram. (Secondary Station)<br><br>The deadline for the submission of Tenders is:<br>Time & Date: 12-12-2022; On or Before 11.00 AM BST     |
| <b>ITT 39.4</b>                             | The deadline for hand-delivering of the Tenders at the <b>PRIMARY PLACE</b> is Office of the General Manager Commercial, North Patenga, Chattogram, Bangladesh.<br>Time & Date: 12-12-2022; On or Before 11.00 AM BST   |
| <b>F. Opening and Evaluation of Tenders</b> |   |
| <b>ITT 45.1</b>                             | The technical offer opening shall take place at:<br>Address: Office of the General Manager (Commercial), TSPCL North Patenga, Chattogram, Bangladesh on 12-12-2022, Time: 02.00 p.m. BST  |
| <b>ITT 57.5</b>                             | The applicable economic factors, for the purpose of evaluation of Tenders shall be:<br><b>Not Applicable.</b>   |
| <b>G. Award of Contract</b>                 |   |
| <b>ITT 65.2</b>                             | <b>Performance Security:</b><br>The amount of performance security shall be 10% (Ten) percent of the contract price. The Performance Security shall be in the form of irrevocable Bank Guarantee in the format (Form PG5A-9) as stated under ITT Clause 65 <b>shall be issued by any schedule bank of Bangladesh, to make it enforceable</b> pursuant to Rule 27(4) of the Public Procurement Rules, 2008.<br>Performance security shall remain valid until a date twenty-eight days beyond the date of completion of the supplier's performance obligation under the contract. |

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| <b>ITT 72.5</b> | The name and address of the office where complaints to the Purchaser are to be submitted is:<br>Managing Director,<br>Triple Super Phosphate Complex Limited (TSPCL),<br>North Patenga, Chattogram, Bangladesh  |
| New ITT         | <p><b>SPECIAL CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1 Conditional and alternative tender shall not be accepted.</li> <li>2 Any addition or alteration to the specifications, prices or any other terms of the tenders after opening of Tender shall not only be ignored but shall also cause rejection of the tenders.</li> <li>3 Third party Bill of Lading on liner term shall not be acceptable.</li> <li>4 Tenders shall be signed by a person who has an authority to enter into a contract with the purchaser. If it is detected afterwards that the person signing the tenderer documents forming part of the contract had no authority to do so, the purchaser may without prejudice and other civil and criminal remedies cancel the contract, forfeit the performance security/ guarantee and hold the signatory liable for all costs and damages.</li> <li>5 The tenderer must submit full specifications of material, nature and data sheet from the manufacturer.</li> <li>6 Submission of tenders shall mean acceptance of all terms and conditions laid down in the Tender document.</li> <li>7 No tenderer shall quote unconfirmed rates both unit and total price. Unconfirmed rates shall summarily be rejected irrespective of price.</li> <li>8 Shipment shall be made from the port of the Country of Manufacturing. Shipment from third country not acceptable except landlocked country.</li> <li>9 Rate must not be written in ink, if the entire offer is type written. If, however, the entire offer is hand written with ink, no overwriting under any circumstances shall be accepted.</li> <li>10 Payment against the invoice will be made after successful commissioning and as per terms of payment of Appendix-1.</li> <li>11 Purchaser at its discretion may defer, advance or extend completion time.</li> <li>12 Any other points advantageous to the BCIC/TSPCL.</li> <li>13 The tender shall be conducted as per Public Procurement Act-2006 and Public Procurement Regulations-2008</li> <li>14 Tenderer must submit tender on the basis of terms and condition set out in the standard tender documents.</li> <li>15 The tenderer must submit the bid with signature mentioning full name, designation, date &amp; seal having appropriate &amp; valid authority to submit, sign the tender and contract along with supporting documents with attestation of sign of signatory.</li> <li>16 Manufacturer's Certificate from which countries will be submitted along with the offer shall be treated as Country of Manufacturing.</li> <li>17 After opening of the tender, any alteration to the name of the manufacturer shall not be acceptable. Even after opening of the tender, any addition to the manufacturer and/or Country of Manufacturing shall not be acceptable.</li> <li>18 Bus bar should be fully SF6 gas insulated and the full bus bar must be inserted in SF6 gas chamber.</li> <li>19 Equipment's and materials must be suitable for operation in dusty and acidic corrosive environment having ambient temperature 400C.</li> <li>20 Shipment of the equipment's must be made from EU, Japan, UK, USA &amp; Canada.</li> <li>21 A notice will be issued by TSPCL after arrival of the goods, prior to Installation &amp; commissioning. Within 03 (three) days of the notice, Installation &amp; commissioning must be started.</li> <li>22 Bidder must complete the installation &amp; commissioning work within 7(seven) days (max.) after receiving of notice.</li> </ol> |

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|         | <p>23 In case of Equivalent brand bidder have to Submit all related technical documents in favor of Equivalency.</p> <p>24 The bidder may visit at their own cost and without any obligation to TSP Complex Ltd. North Patenga, Chattogram. The purpose of visit is to get acquainted with the volume and nature of work and to get clarification on any point /points mentioned the tender documents.</p> <p>25 Manufacturers test certificates with test data, Bill of lading and Country of Manufacturing certificate issue by chamber of commerce of concerned country of the instruments and equipment's etc. should be submitted with the supply of the imported Materials.</p>  |
| New ITT | <p><b>Causes of non-responsiveness of the Tender</b></p> <ol style="list-style-type: none"> <li>1. If the tenderer does not comply any terms and condition set out in the standard tender documents.</li> <li>2. If the schedule of price and specification is not enclosed with the tender duly filled in, signed and sealed.</li> <li>3. If the Pro-forma Invoice in original showing unit and total price as well as manufacturer's certificate as mentioned herein is not submitted along with the financial offer.</li> <li>4. If Tender Security in proper form and in proper amount is not submitted along-with the tender.</li> <li>5. If the amount and validity of the Tender Security do not conform to the requirements of the Tender Enquiry.</li> <li>6. If the official Money Receipt in original evidencing purchase of Tender Documents is not furnished with the tenders.</li> <li>7. If the tenderers make any addition or alternation to prices, specifications or any other terms and conditions of his tender after opening of tender.</li> <li>8. If each and every page of the Tender Documents is not signed and sealed by the tenderers as a confirmation of his acceptance of the Tender Terms.</li> <li>9. If the tender is made on behalf of a country with whom Bangladesh does not have any diplomatic relation.</li> <li>10. If the tenderer does not quote their firm and final price for the full lot on turn-key basis.</li> <li>11. If any bidder or tenderer fails to submit their bid bond beyond the conditions shown in specimen of Bid bond/Tender Security.</li> <li>12. If the documents are not furnished with the bids as per clause no. ITT 24.2 and 24.3 of TDS.</li> <li>13. If the tender validity is less than 120 (one hundred twenty) days after the date of tender submission.</li> <li>14. Alternative and Conditional tender shall be treated as non-responsive.</li> <li>15. If the bidders submit literature / catalogue prepared specially to the bid and if such literature/catalogue contains any statement data inconsistent with the requirements of the bid documents those statements and data will be considered intended and shall be cause for rejection of the bid.</li> </ol> |

## Section 3. General Conditions of Contract

### A. General

#### 1. Definitions

1.1 In the Conditions of Contract, which include Particular Conditions and these General Conditions, the following words and expressions shall have the meaning hereby assigned to them. Boldface type is used to identify the defined terms:

- (a) **Approving Authority** means the authority which, in accordance with the Delegation of Financial powers, approves the award of Contract for the Procurement of Goods, Works and Services.
- (b) **Act means** The Public Procurement Act, 2006 (Act 24 of 2006).
- (c) **Commissioning** means operation of the Facilities or any part thereof by the Contractor following Completion, which operation is to be carried out by the Contractor for the purpose of carrying out Guarantee Test(s).
- (d) **Competent Authority** means the authority that gives decision on specific issues as per delegation of administrative and/or financial powers.
- (e) **Completion** means that the Facilities (or a specific part thereof where specific parts are specified in the Contract) have been completed operationally and structurally and put in a tight and clean condition, that all work in respect of Pre Commissioning of the Facilities or such specific part thereof has been completed, and that the Facilities or specific part thereof are ready for Commissioning.
- (f) **Completion Certificate** means the Certificate issued by the Project Manager as evidence that the Contractor has executed the services in all respects as per design, drawing, specifications and Conditions of Contract.
- (g) **Completion Date** is the actual date of completion of the plant and services certified by the Project Manager, in accordance with GCC Clause 24.
- (h) **Contract Agreement** means the Agreement entered into between the Procuring Entity and the Contractor, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein to supply and install Plant & Equipment
- (i) **Contract Documents** means the documents listed in GCC Clause 6, including any amendments thereto.
- (j) **Contractor/supplier** means the Person under contract with the Procuring Entity for the supply and installation of Plant & Equipment under the Rules and the Act as stated in the **PCC**.
- (k) **Contractor's Representative** means any person nominated by the Contractor and approved by the Employer to perform the duties delegated by the Contractor.
- (l) **Contract Price** means the price payable to the Contractor as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, for the supply and installation of plant & equipment in accordance with the provisions of the Contract, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (m) **Cost** means all expenditures reasonably incurred or to be

incurred by the Contractor, whether on or off the Site, including overhead ,profit, taxes, duties, fees, and such other similar levies

- (n) **Day** means calendar day unless otherwise specified as working days.
- (o) **Day works** means work carried out following the instructions of the Procuring Entity or the authorised Project Manager and is paid for on the basis of time spent by the Contractor's workers and equipment at the rates specified in the Schedules, in addition to payments for associated Materials and Plant.
- (p) **Defect** is any part of the Works not completed in accordance with the Contract.
- (q) **Defect Liability Period** means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in contract document.
- (r) **Defects Correction Certificate** is the certificate issued by the Project Manager upon correction of defects by the Contractor.
- (s) **Drawings** include calculations and other information provided in Section 7 or as approved by the Project Manager for the execution and completion of the Contract.
- (t) **Effective Date** means the date of fulfillment of all conditions of the Contract Agreement, from which the Time for Completion shall be counted.
- (u) **Equipment** means all facilities, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant, or other things intended to form or forming part of the Facilities.
- (v) **Facilities** means the Plant to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract. It also includes any ancillary building or infra structure that needs to be constructed/built/erected to support the plant.
- (w) **Force Majeure** means an event or situation beyond the control of the Contractor that is not foreseeable, is unavoidable, and its origins not due to negligence or lack of care on the part of the Contractor; such events may include, but not be limited to, acts of the Government in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes or more as included in GCC Clause 52.
- (x) **Goods** mean the Contractor's Plant, Equipment, Materials or any of them as appropriate.
- (y) **GCC** means the General Conditions of Contract.
- (z) **Government** means the Government of the People's Republic of Bangladesh.
- (aa) **Guarantee Test(s)** means the test(s) specified in the Employer's Requirements to be carried out to ascertain whether the Facilities or a specified part thereof is able to

attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, in accordance with the provisions of GCC Sub-Clause 25.2 (Guarantee Test) hereof.

- (bb) **Head of the Procuring Entity** means the Secretary of a Ministry or a Division, the Head of a Government Department or Directorate; or the Chief Executive, by whatever designation called, of a local Government agency, an autonomous or semi-autonomous body or a corporation, or a corporate body established under the Companies Act;
- (cc) **Installation Services** means all those services ancillary to the supply of the Plant for the Facilities, to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor's Equipment and the supply of all construction materials required), installation, testing, pre-commissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require.
- (dd) **Intended Completion Date** is the date calculated from the Commencement Date as specified in the PCC, on which it is intended that the Contractor shall complete the Works and Physical services as specified in the Contract and may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (ee) **Materials** means things of all kinds other than Plant intended to form or forming part of the Permanent Works, including the supply-only materials, if any, to be supplied by the Contractor under the Contract.
- (ff) **Month** means calendar month.
- (gg) **Original Contract Price** is the Contract Price stated in the Procuring Entity's Notification of Award (Form PG5A-7) and further clearly determined in the PCC.
- (hh) **Operational Acceptance** means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor's fulfillment of the Contract in respect of Functional Guarantees of the Facilities (or the relevant part thereof) in accordance with the provisions of contract
- (ii) **PCC** means the Particular Conditions of Contract.
- (jj) **Plant** means permanent plant, equipment, machinery, apparatus, materials, articles, ancillary buildings/structure and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor), but does not include Contractor's Equipment.
- (kk) **Pre Commissioning** means the testing, checking and other requirements specified in the Employer's Requirements that are to be carried out by the Contractor in preparation for Commissioning.
- (ll) **Procuring Entity/Employer/Purchaser** means, as the context so applies, an Entity having administrative and financial powers to undertake procurement of Plant and



Physical services using public funds and is as named in the **PCC** who employs the Contractor to carry out the contractual obligations.

- (mm) **Project Manager** is the person named in the **PCC** or any other competent person appointed by the Procuring Entity and notified to the Contractor who is responsible for supervising the execution and completion of the plant and services and administering the Contract.
- (nn) **Schedules** means the document(s) entitled schedules, completed by the Contractor and submitted with the Tender Submission Letter, as included in the Contract. Such document may include the data, lists and schedules of rates and/or prices.
- (oo) **Site** means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the **PCC** as forming part of the Site
- (pp) **Site Investigation Reports** are those that were included in the Tender Document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (qq) **Specification** means the Specification of the goods/works/related services included in the Contract and any modifications or additions to the specifications made or approved by the Project Manager in accordance with the Contract.
- (rr) **Start Date** is the date defined in the **PCC** and it is the last date when the Contractor shall commence execution of the goods/works/services under the Contract.
- (ss) **Subcontractor** means a person or corporate body, who has a contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (tt) **Time for Completion** means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained, in accordance with the relevant provisions of the Contract.
- (uu) **Variation** means any change to the plant and services directly procured from the original Contractor to cover increases or decreases in quantities, including the introduction of new work items that are either due to change of plans, design or alignment to suit actual field conditions, within the general scope and physical boundaries of the contract.
- (vv) **Works** means all works associated with the construction, reconstruction, site preparation, demolition, repair, maintenance or renovation of railways, roads, highways, or a building, an infrastructure or structure or an installation or any construction work relating to excavation, installation of equipment and materials, decoration, as well as physical services ancillary to works as detailed in the **PCC**, if the value of those services does not exceed that of the Works themselves.
- (ww) **Writing** means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail.

## 2. Interpretation

2.1 In interpreting the GCC, singular also means plural, male also means female or neuter, and the other way around. Headings in the GCC shall not be deemed part thereof or be taken into consideration in the interpretation or construance of the Contract. Words have their normal meaning under the language of the Contract unless specifically defined.

### 2.2 Entire Agreement.

The Contract constitutes the entire agreement between the Employer and the Contractor and supersedes all communications, negotiations and agreements (whether written or verbal) of parties with respect thereto made prior to the date of Contract Agreement; except those stated under GCC Sub Clause 6.1(j).

### 2.3 Non waiver.

(a) Subject to GCC Sub Clause 2.3(b), no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

(b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

### 2.4. Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

### 2.5. Sectional completion

If sectional completion is specified in the **PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

## 3. Communications & Notices

3.1 Communications between Parties such as notice, request or consent required or permitted to be given or made by one party to the other pursuant to the Contract shall be in writing to the addresses specified in the **PCC**.

3.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

3.3 A Party may change its address for notice hereunder by giving the other Party notice of such change to the address.

## 4. Governing Law

4.1 The Contract shall be governed by and interpreted in accordance with the laws of the People's Republic of Bangladesh.

## 5. Governing Language

5.1 The Contract shall be written in English. All correspondences and documents relating to the Contract may be written in English. Supporting documents and printed literature that are part of the Contract may be in another language, provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Contract, such translation shall govern.

5.2 The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

- 6. Documents Forming the Contract and Priority of Documents**
- 6.1 The following documents forming the Contract shall be interpreted in the following order of priority:
- (a) the signed Contract Agreement (**Form PG5A-8**);
  - (b) the Notification of Award (**PG5A-7**);
  - (c) the completed Tender and the **Appendix to the Tender**;
  - (d) the Price Schedule for Plant and Services (**PG5A-3**);
  - (e) the Particular Conditions of Contract;
  - (f) the General Conditions of Contract;
  - (g) the Technical Specifications;
  - (h) Personnel Information;
  - (i) Equipment Information;
  - (j) the Drawings; and
  - (k) Any other document listed in the PCC forming part of the Contract.
- 7. Contract Agreement**
- 7.1 The parties shall enter into a Contract Agreement within twenty eight (28) days from the date of issuance of the Notification of Award (NOA). The costs of stamp duties and similar charges, if any, designated by the applicable law in connection with entry into the Contract Agreement, shall be borne by the Employer.
- 8. Assignment**
- 8.1 Neither the Contractor nor the Employer shall assign, in whole or in part, its obligations under the Contract; except with the Employer's prior written approval.
- 9. Eligibility**
- 9.1 The Contractor and its Subcontractor(s) shall have the nationality of a country other than that specified in the PCC.
- 9.2 All materials, equipment, plant, and supplies used by the Contractor in both permanent and temporary works and services supplied under the Contract shall have their origin in the countries except any specified in the PCC.
- 10. Gratuities / Agency fees**
- 10.1 No fees, gratuities, rebates, gifts, commissions or other payments, other than those included in the Contract, shall be given or received in connection with the procurement process or in the Contract execution.
- 11. Confidential Details**
- 11.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor such documents, data, and other information it receives from the Employer to the extent required for the Subcontractor to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Contractor under GCC Clause 11.
- 11.2 The Employer shall not use such documents, data, and other information received from the Contractor for any purposes unrelated to the Contract. Similarly, the Contractor shall not use such documents, data, and other information received from the Employer for any purpose other than the design, construction, or other work and services required for the performance of the Contract.

- 11.3 The obligations of a party under GCC Sub Clauses 11.1 and 11.2 above, however, shall not apply to information that: the Employer or Contractor needs to share with institutions participating in the financing of the Contract; now or hereafter enters the public domain through no fault of that party; can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 11.4 The above provisions of GCC Clause 11 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Works or any part thereof.
- 11.5 The provisions of GCC Clause 11 shall survive completion or termination, for whatever reason.

**12. Joint Venture (JV)**

- 12.1 If the Contractor is a Joint Venture, Consortium, or Association (JVCA ),
  - (a) each partner of the JV shall be jointly and severally liable for all liabilities and ethical or legal obligations to the Employer for the performance of the Contract;
  - (b) the JV partners shall nominate a representative who shall have the authority to conduct all business including the receipt of payments for and on behalf of all partners of the JV;
  - (c) in the event of a dispute that results in legal action against all partners of the JV, if they are available and if only one partner is available, then that partner alone shall answer on behalf of all partners and, if the complaint lodged is proven, the penalty shall be applicable on that lone partner as whatever penalty all the partners would have received.
  - (d) the JV shall notify the Employer of its composition and legal status which shall not be altered without the prior approval of the Employer.
  - (e) alteration of partners shall only be allowed if any of the partners is found to be incompetent or has any serious difficulties which may impact the overall implementation of the goods/works/service, whereby the incoming partner shall require to possess qualifications equal to or higher than that of the outgoing partner.
  - (f) if any of the partners of JV has been debarred from participating in any procurement activity due to corrupt, fraudulent, collusive or coercive practices, that JV partner shall be altered following provisions under GCC Sub Clause 12.1 (d) and (e), while in case the Leading Partner has been debarred due to the same reasons stated herein the Contract shall be terminated as stated under GCC Sub Clause 67.1(b).

**13. Possession of the Site**

- 13.1 The Employer shall give possession of the Site or part(s) of the Site, to the Contractor on the date(s) stated in the PCC. If possession of a part of the Site is not given by the date stated in the PCC, the Employer will be deemed to have delayed the start of the relevant activities, and this will be a Compensation Event.

**14. Access to the Site**

- 14.1 The Contractor shall allow the Engineer and any person authorised by the Engineer access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

- 15. Safety, Security and Protection of the Environment**
- 15.1 The Contractor shall throughout the execution and completion of the Works and the remedying of any defects therein:
- (a) take all reasonable steps to safeguard the health and safety of all workers working on the Site and other persons entitled to be on it, and to keep the Site in an orderly state;
  - (b) provide and maintain at the Contractor's own cost all lights, guards, fencing, warning signs and watching for the protection of the Works or for the safety on-site; and
  - (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of the Contractor's methods of operation.
- 16. Working Hours**
- 16.1 The Contractor shall not perform any work on the Site on the weekly holidays, or during the night or outside the normal working hours, or on any religious or public holiday, without the prior written approval of the Project Manager.
- 17. Welfare of Laborers**
- 17.1 The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's personnel relating to their employment, health, safety, welfare, immigration and shall allow them all their legal rights.
- 17.2 The Contractor, in particular, shall provide proper accommodation to his or her labourers and arrange proper water supply, conservancy and sanitation arrangements at the site for all necessary hygienic requirements and for the prevention of epidemics in accordance with relevant regulations, rules and orders of the government.
- 17.3 The Contractor, further in particular, shall pay reasonable wages to his or her labourers, and pay them in time. In the event of delay in payment the Employer may effect payments to the labourers and recover the cost from the Contractor.
- 17.4 The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take appropriate protective measures to prevent accidents that could result in injury. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.
- 18. Child Labor**
- 18.1 The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development in compliance with the applicable laws and other relevant treaties ratified by the government.
- 19. Fossils & antiquities**
- 19.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

**20. Corrupt, Fraudulent, Collusive or Coercive Practices**

- 19.2 The Contractor shall, upon discovery of any such finding, promptly give notice to the Project Manager, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs cost from complying with the instructions, the Contractor shall give a further notice to the Project Manager and shall be entitled subject to Claims under GCC Clause 71
- 20.1 The Government requires that Employer, as well as the Contractor shall observe the highest standard of ethics during the implementation of procurement proceedings and the execution of the Contract.
- 20.2 The Government requires that Employer, as well as the Contractor shall, during the Procurement proceedings and the execution of the Contract under public funds, ensure-
- (a) strict compliance with the provisions of Section 64 of the Public Procurement Act, 2006
  - (b) abiding by the code of ethics as mentioned in the Rule 127 of the Public Procurement Rules, 2008;
  - (c) that neither it, nor any other member of its staff, or any other agents or intermediaries working on its behalf engages in any such practice as detailed in GCC Sub Clause 20.2.
- 20.3 For the purposes of GCC Sub Clause 20.2, the terms set forth below as follows
- (a) **“corrupt practice”** means offering, giving or promising to give, receiving, or soliciting either directly or indirectly, to any officer or employee of a Employer or other public or private authority or individual, a gratuity in any form; employment or any other thing or service of value as an inducement with respect to an act or decision or method followed by a Employer in connection with a Procurement proceeding or Contract execution;
  - (b) **“fraudulent practice”** means the misrepresentation or omission of facts in order to influence a decision to be taken in a Procurement proceeding or Contract execution;
  - (c) **collusive practice”** means a scheme or arrangement between two (2) or more Persons, with or without the knowledge of the Employer, that is designed to arbitrarily reduce the number of Tenders submitted or fix Tender prices at artificial, non-competitive levels, thereby denying a Employer the benefits of competitive price arising from genuine and open competition; or
  - (d) **“Coercive practice”** means harming or threatening to harm, directly or indirectly, Persons or their property to influence a decision to be taken in the Procurement proceeding or the execution of the Contract, and this will include creating obstructions in the normal submission process used for Tenders.
- 20.4 Should any corrupt, fraudulent, collusive or coercive practice of any kind come to the knowledge of the Employer, it will, in the first place, allow the Contractor to provide an explanation and shall, take actions only when a satisfactory explanation is not received. Such decision and the reasons thereof, shall be recorded in the record of the procurement proceedings and promptly communicated to the Contractor. Any communications between

the Contractor and the Employer related to matters of alleged fraud or corruption shall be in writing.

- 20.5 If corrupt, fraudulent, collusive or coercive practices of any kind determined by the Employer against the Contractor alleged to have carried out such practices, the Employer will :
- (a) exclude the Contractor from further participation in the particular Procurement proceeding; or
  - (b) declare, at its discretion, the Contractor to be ineligible to participate in further Procurement proceedings, either indefinitely or for a specific period of time.

20.6 20.6 The Contractor shall be aware of the provisions on corruption, fraudulence, collusion and coercion in Section 64 of the Public Procurement Act, 2006 and Rule 127 of the Public Procurement Rules, 2008.

**21. License/ Use of  
Technical  
Information**

21.1 For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and non-transferable license (without the right to sub-license) to the Employer under the patents, utility models or other industrial property rights owned by the Contractor or by a third Party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a non-exclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how or other intellectual property right from the Contractor or any third Party to the Employer.

21.2 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third Party, including suppliers of materials, the copyright in such materials shall remain vested in such third Party.

## **B. Subject Matter of Contract**

**22. Scope of Facilities**

22.1 Unless otherwise expressly limited in the Employer's Requirements, the Contractor's obligations cover the provision of all Plant and the performance of all Installation Services required for the design, and the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Pre Commissioning and delivery) of the Plant, and the installation, completion and commissioning of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Section, Employer's Requirements. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts and accessories; Contractor's Equipment; construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer.

- 22.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.
- 22.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period **specified in the PCC** and the provisions, if any, **specified in the PCC**. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in **Price Schedule No.1 & 2 under form PG5A-3**, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefor and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts.
- 23. Time for Commencement**
- 23.1 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time **stated in the PCC** or within such extended time to which the Contractor shall be entitled under GCC Clause 65.1 hereof.
- 24. Time for Completion**
- 24.1 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time **stated in the PCC** or within such extended time to which the Contractor shall be entitled under GCC Clause 65.1 hereof.
- 25. Employer's Responsibilities**
- 25.1 All information and/or data to be supplied by the Employer as described in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, shall be deemed to be accurate, except when the Employer expressly states otherwise
- 25.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in that Appendix.
- 25.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which (a) such authorities or undertakings require the Employer to obtain in the Employer's name, (b) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract, and (c) are specified in the Appendix (Scope of Works and Supply by the Employer).
- 25.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses



necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain

- 25.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all raw materials, utilities, lubricants, chemicals, catalysts, other materials and facilities; and shall perform all work and services of whatsoever nature, including those required by the Contractor to properly carry out Pre Commissioning, Commissioning and Guarantee Tests, all in accordance with the provisions of the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, at or before the time specified in the program furnished by the Contractor under the provisions of contract specified or as otherwise agreed upon by the Employer and the Contractor.
- 25.6 The Employer shall be responsible for the continued operation of the Facilities after Completion, in accordance with GCC Sub-Clause 39.8, and shall be responsible for facilitating the Guarantee Test(s) for the Facilities, in accordance with GCC Sub-Clause 40.2.
- 25.7 All costs and expenses involved in the performance of the obligations under this GCC Clause 25 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests, in accordance with GCC Sub-Clause 40.2.
- 25.8 In the event that the Employer shall be in breach of any of his obligations under this Clause, the additional cost incurred by the Contractor in consequence thereof shall be determined by the Project Manager and added to the Contract Price
- 26.1 The Contractor shall design, manufacture including associated purchases and/or subcontracting, install and complete the Facilities in accordance with the Contract. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract.
- 26.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities including any data as to boring tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site if access thereto was available and of other data readily available to it relating to the Facilities as of the date twenty-eight (28) days prior to tender submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.
- 26.3 The Contractor shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor's and Subcontractor's personnel and entry permits

**26. Contractor's  
Responsibilities**

- for all imported Contractor's Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GCC Sub-Clause 25.3 hereof and that are necessary for the performance of the Contract.
- 27. Employer's and Contractor's Risks** 27.1 The Employer carries the risks that the Contract states are Employer's risks and the Contractor carries the risks that the Contract states are Contractor's risks.
- 28. Employer's Risks** 28.1 From the Start Date until the Defects Correction Certificate has been issued, the following are Employer's risks:
- (f) the risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
    - i. use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
    - ii. negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or Contracted to him except the Contractor.
    - iii. the risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 28.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is Employer's risk, except loss or damage due to:
- (a) a Defect which existed on the Completion Date;
  - (b) an event occurring before the Completion Date, which was not itself Employer's risk; or
  - (c) the activities of the Contractor on the Site after the Completion Date.
- 29. Contractor's Risks** 29.1 From the Start Date until the Defects Correction Certificate has been issued the risks of personal injury, death, and loss of or damage to property including without limitation, the Works, Plant, Materials, and Equipment, which are not Employer's risks are Contractor's risks.

## C. Execution of the Facilities

- 30. Representatives** 31.1 Project Manager  
 If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the Facilities. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the performance of the Contract. All notices, instructions, orders, certificates, approvals and all other

communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as herein otherwise provided.

30.2 Contractor's Representative & Construction Manager

30.2.1 If the Contractor's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within fourteen (14) days, the Contractor's Representative shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefor, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GCC Sub-Clause 30.2.1 shall apply thereto.

30.2.2 The Contractor's Representative shall represent and act for the Contractor at all times during the performance of the Contract and shall give to the Project Manager all the Contractor's notices, instructions, information and all other communications under the Contract.

The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in GCC Sub-Clause 30.2.1.

30.2.3 . The Contractor's Representative may, subject to the approval of the Employer which shall not be unreasonably withheld, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Sub-Clause 30.2.3 shall be deemed to be an act or exercise by the Contractor's Representative.

30.2.4 From the commencement of installation of the Facilities at the Site until Completion, the Contractor's Representative shall appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as the Construction Manager's deputy.

30.2.5 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GCC Sub-Clause 37.4. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

30.2.6 If any representative or person employed by the Contractor is removed in accordance with GCC Sub-Clause 30.2.5, the Contractor shall, where required, promptly appoint a replacement.

## **31. Work Program**

### **31.1 Contractor's Organization**

The Contractor shall supply to the Employer and the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities within twenty-one (21) days of the Effective Date. The chart shall include the identities of the key personnel and the curricula vitae of such key personnel to be employed shall be supplied together with the chart. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart.

### **31.2 Program of Performance**

Within twenty-eight (28) days after the Effective Date, the Contractor shall submit to the Project Manager a detailed program of performance of the Contract, made in a form acceptable to the Project Manager and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and Pre Commission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion, Commissioning and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in the Appendix to the Contract Agreement titled Time Schedule, and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion specified in the PCC pursuant to Sub-Clause 24.1 and any extension granted in accordance with GCC Clause 65.1, and shall submit all such revisions to the Project Manager.

31.3 **Progress Report**

The Contractor shall monitor progress of all the activities specified in the program referred to in GCC Sub-Clause 31.2 above, and supply a progress report to the Project Manager every month.

The progress report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

31.4 **Progress of Performance**

If at any time the Contractor's actual progress falls behind the program referred to in GCC Sub-Clause 31.2, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GCC Sub-Clause 24.1, any extension thereof entitled under GCC Sub-Clause 65.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

31.5 **Procedures**

The Contract shall be executed in accordance with the Contract Documents including the procedures given in the Forms and Procedures of the Employer's Requirements. The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.

**32. Subcontractor**

32.1 Subcontracting the whole of the Plant and Service by the Contractor shall not be permissible. The Contractor shall be responsible for the acts or defaults of any Subcontractor, his or her agents or employees, as if they were the acts or defaults of the Contractor.

32.2 The Contractor shall not be required to obtain consent from the Project Manager or his representative, for suppliers solely of Materials or to a subcontract for which the Specialist Subcontractor(s) is already named in the Contract.

32.3 The prior consent, in writing, of the Engineer shall however be obtained for other proposed Subcontractor(s).

**33. Nominated Subcontractor**

33.1 Nominated Subcontractor named in the Contract shall be entitled to execute the specific components of the Works stated in the **PCC**.

33.2 The Contractor shall not be under obligations to employ a Nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars while there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength, or does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, or does not

accept to enter into a subcontract which specifies that, for the subcontracted work including design, if any, the Nominated Subcontractor shall undertake to the Contractor such obligations and liabilities as will enable the contractor to discharge his or her liabilities under the Contract.

**34. Other Contractors**

34.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, the Engineer and the Employer between the dates given in the Schedule of other Contractors. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of other Contractors, and shall notify the Contractor of any such modification.

**35. Design and Engineering**

**35.1 Specifications and Drawings**

35.1.1 The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice. The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

35.1.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager.

**35.2 Codes and Standards**

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of tender submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied subject to approval by the Employer and shall be treated in accordance with GCC Clause 64.

**35.3. Approval/Review of Technical Documents by Project Manager**

35.3.1 The Contractor shall prepare or cause its Subcontractors to prepare, and furnish to the Project Manager the documents listed in the Appendix to the Contract Agreement titled List of Documents for Approval or Review, for its approval or review as specified and in accordance with the requirements of GCC Sub-Clause 31.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof. GCC Sub-Clauses 35.3.2 through 35.3.6 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

- 35.3.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Sub-Clause 35.3.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes. If the Project Manager fails to take such action within the said fourteen (14) days, then the said document shall be deemed to have been approved by the Project Manager.
- 35.3.3. The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practice.
- 35.3.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Sub-Clause 35.3.2. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.
- 35.3.5 The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.
- 35.3.6 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager's approval thereof, pursuant to the provisions of this GCC Sub-Clause 35.3. If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GCC Clause 64 shall apply to such request.

## **36. Procurement**

### **36.1 Plant**

Subject to GCC Sub-Clause 60.2, the Contractor shall procure and transport all Plant in an expeditious and orderly manner to the Site.

### **36.2 Employer-Supplied Plant**

If the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, provides that the Employer shall furnish any specific items to the Contractor, the following provisions shall apply:

**36.2.1** The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the Parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GCC Sub-Clause 31.2, unless otherwise mutually agreed.

**36.2.2** Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect or default. The Employer shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy

such shortage, defect or default at the Employer's cost and expense. After inspection, such item shall fall under the care, custody and control of the Contractor. The provision of this GCC Sub-Clause 36.2.2 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired.

**36.2.3** The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Employer of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default whether under GCC Clause 42 or under any other provision of Contract.

36.3 **Transportation**

**36.3.1** The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

**36.3.2** Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor's Equipment.

**36.3.3** Upon dispatch of each shipment of materials and the Contractor's Equipment, the Contractor shall notify the Employer by telex, cable, facsimile or electronic means, of the description of the materials and of the Contractor's Equipment, the point and means of dispatch, and the estimated time and point of arrival in the country where the Site is located, if applicable, and at the Site. The Contractor shall furnish the Employer with relevant shipping documents to be agreed upon between the Parties.

**36.3.4** The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials and the Contractor's Equipment to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the materials and the Contractor's Equipment to the Site.

36.4 **Customs Clearance**

The Contractor shall, at its own expense, handle all imported materials and Contractor's Equipment at the point(s) of import and shall handle any formalities for customs clearance, subject to the Employer's obligations under GCC Sub-Clause 60.2, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer shall take all necessary steps to comply with such laws or regulations. In the event of delays in customs clearance that are not the fault of the Contractor, the Contractor shall be entitled to an extension in the Time for Completion, pursuant to GCC Clause 65.

**37. Installation**

37.1 **Setting Out/Supervision**

37.1.1 Bench Mark: The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench



marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

**37.1.2 Contractor's Supervision:** The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

## **37.2 Labor:**

### **37.2.1 Engagement of Staff and Labor**

(a) Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.

(b) The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.

(c) The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the Site is located. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.

(d) The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

### **37.2.2 Persons in the Service of Employer**

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

### **37.2.3 Facilities for Staff and Labor**

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works

**37.3 Contractor's Equipment**

37.3.1 All Contractor's Equipment brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager's consent that such Contractor's Equipment is no longer required for the execution of the Contract.

37.3.2 Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon.

37.3.3 The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for the export of the Contractor's Equipment imported by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

**37.4 Site Regulations and Safety**

The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer's approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention. reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

**37.5 Site Clearance**

37.5.1 Site Clearance in Course of Performance: In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract

**37.6 Opportunities for Other Contractors**

37.6.1 The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other contractors employed by the Employer on or near the Site.

37.6.2 If the Contractor, upon written request from the Employer or the Project Manager, makes available to other contractors any roads or ways the maintenance for which the Contractor is

responsible, permits the use by such other contractors of the Contractor's Equipment, or provides any other service of whatsoever nature for such other contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipment or the provision of such services.

**37.7 Emergency Work**

37.7.1 If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work.

If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract.

37.7.2 Clearance of Site after Completion: After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities in a clean and safe condition.

**37.8 Watching and Lighting**

The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

**38. Test & Inspection**

38.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.

38.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

38.3 38.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third Party or manufacturer any necessary permission or consent to enable the Employer and the Project Manager or their designated representatives to attend the test and/or inspection.

- 38.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection. If the Employer or Project Manager or their designated representatives fails to attend the test and/or inspection, or if it is agreed between the Parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof.
- 38.5 38.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of work on the Facilities and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected.
- 38.6 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GCC Sub-Clause 38.3.
- 38.7 If any dispute or difference of opinion shall arise between the Parties in connection with or arising out of the test and/or inspection of the Plant or part of the Facilities that cannot be settled between the Parties within a reasonable period of time, it may be referred to an 72.2.
- 38.8 The Contractor shall afford the Employer and the Project Manager, at the Employer's expense, access at any reasonable time to any place where the Plant are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice.
- 38.9 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GCC Sub-Clause 38.4, shall release the Contractor from any other responsibilities under the Contract.

- 38.10 39.10 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.
- 38.11 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.
- 38.12 If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GCC Sub-Clause 38.10 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

**39. Completion of the Facilities**

- 39.1 As soon as the Facilities or any part thereof has, in the opinion of the Contractor, been completed operationally and structurally and put in a tight and clean condition as specified in the Employer's Requirements, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor shall so notify the Employer in writing.
- 39.2 Within seven (7) days after receipt of the notice from the Contractor under GCC Sub-Clause 39.1, the Employer shall supply the operating and maintenance personnel specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer for Pre Commissioning of the Facilities or any part thereof.  
  
Pursuant to the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, the Employer shall also provide, within the said seven (7) day period, the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Pre Commissioning of the Facilities or any part thereof.
- 39.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters have been provided by the Employer in accordance with GCC Sub-Clause 39.2, the Contractor shall commence Pre-commissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GCC Sub-Clause 40.5.
- 39.4 As soon as all works in respect of Pre-commissioning are completed and, in the opinion of the Contractor, the Facilities or

39.5 The Project Manager shall, within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 39.4, either issue a Completion Certificate in the form specified in the Employer's Requirements (Forms and Procedures), stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's notice under GCC Sub-Clause 39.4, or notify the Contractor in writing of any defects and/or deficiencies.

If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub-Clause 39.4.

39.6 If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeated notice, issue a Completion Certificate stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's repeated notice.

39.7 If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.

39.8 If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 39.4 or within seven (7) days after receipt of the Contractor's repeated notice under GCC Sub-Clause 39.5, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor's notice or repeated notice, or as of the Employer's use of the Facilities, as the case may be.

39.9 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

39.10 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.

#### **40. Commissioning and Operational Acceptance**

##### **40.1 Commissioning**

40.1.1 Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the Completion Certificate by the Project Manager, pursuant to GCC Sub-Clause 39.5, or immediately after the date of the deemed Completion, under GCC Sub-Clause 39.6.

40.1.2 The Employer shall supply the operating and maintenance personnel and all raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters required for Commissioning.

40.1.3 In accordance with the requirements of the Contract, the Contractor's and Project Manager's advisory personnel shall attend the Commissioning, including the Guarantee Test, and shall advise and assist the Employer.

**40.2 Guarantee Test**

40.2.1 Subject to GCC Sub-Clause 40.5, the Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Test and any repeats thereof.

40.2.2 If for reasons not attributable to the Contractor, the Guarantee Test of the Facilities or the relevant part thereof cannot be successfully completed within the period from the date of Completion **specified in the PCC** or any other period agreed upon by the Employer and the Contractor, the Contractor shall be deemed to have fulfilled its obligations with respect to the Functional Guarantees, and GCC Sub-Clauses 43.2 and 43.3 shall not apply.

**40.3 Operational Acceptance**

40.3.2 At any time after any of the events set out in GCC Sub-Clause 40.3.1 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in the form provided in the Employer's Requirements (Forms and Procedures) in respect of the Facilities or the part thereof specified in such notice as of the date of such notice.

40.3.3 The Project Manager shall, after consultation with the Employer, and within seven (7) days after receipt of the Contractor's notice, issue an Operational Acceptance Certificate.

40.3.4 If within seven (7) days after receipt of the Contractor's notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as of the date of the Contractor's said notice.

40.4 **Partial Acceptance**

40.4.1 If the Contract specifies that Completion and Commissioning shall be carried out in respect of parts of the Facilities, the provisions relating to Completion and Commissioning including the Guarantee Test shall apply to each such part of the Facilities individually, and the Operational Acceptance Certificate shall be issued accordingly for each such part of the Facilities.

40.4.2 If a part of the Facilities comprises facilities such as buildings, for which no Commissioning or Guarantee Test is required, then the Project Manager shall issue the Operational Acceptance Certificate for such facility when it attains Completion, provided that the Contractor shall thereafter complete any outstanding minor items that are listed in the Operational Acceptance Certificate

40.5 **Delayed Pre-commissioning and/or Guarantee Test**

40.5.1 In the event that the Contractor is unable to proceed with the Pre-commissioning of the Facilities pursuant to Sub-Clause 39.3, or with the Guarantee Test pursuant to Sub-Clause 40.2, for reasons attributable to the Employer either on account of non-availability of other facilities under the responsibilities of other contractor(s), or for reasons beyond the Contractor's control, the provisions leading to "deemed" completion of activities such as Completion, pursuant to GCC Sub-Clause 39.6, and Operational Acceptance, pursuant to GCC Sub-Clause 40.3.4, and Contractor's obligations regarding Defect Liability Period, pursuant to GCC Sub-Clause 42.2, Functional Guarantee, pursuant to GCC Clause 43, and Care of Facilities, pursuant to GCC Clause 48, and GCC Clause 66.1, Suspension, shall not apply. In this case, the following provisions shall apply.

40.5.2 When the Contractor is notified by the Project Manager that he will be unable to proceed with the activities and obligations pursuant to clauses 58 & 59, the Contractor shall be entitled to the following:

- (a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GCC Sub-Clause 41.2;
- (b) payments due to the Contractor in accordance with the provision specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which would not have been payable in normal circumstances due to non-completion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Sub-Clause 40.5.3 below;



- (c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer;
  - (d) the additional charges towards the care of the Facilities pursuant to GCC Sub-Clause 48.1 shall be reimbursed to the Contractor by the Employer for the period between the notification mentioned above and the notification mentioned in Sub-Clause 40.5.4 below. The provision of GCC Sub-Clause 49.2 shall apply to the Facilities during the same period.
- 40.5.3 In the event that the period of suspension under above Sub-Clause 40.5.1 actually exceeds one hundred eighty (180) days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor.
- 40.5.4 When the Contractor is notified by the Project Manager that the plant is ready for Pre-commissioning, the Contractor shall proceed without delay in performing Pre-commissioning, in accordance with Clause 39.

## **D. Guarantees and Liabilities**

### **41. Completion Time Guarantee**

- 41.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified) within the Time for Completion specified in the PCC pursuant to GCC Sub-Clause 24.1, or within such extended time to which the Contractor shall be entitled under GCC Clause 65 hereof
- 41.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 65, the Contractor shall pay to the Employer liquidated damages in the amount specified in the PCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as "Maximum" in the PCC as a percentage rate of the Contract Price. Once the "Maximum" is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 67.2.2.
- Such payment shall completely satisfy the Contractor's obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 65. The Contractor shall have no further liability whatsoever to the Employer in respect thereof.
- However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.
- Save for liquidated damages payable under this GCC Sub-Clause 41.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix to the Contract Agreement titled Time Schedule, and/or other program of work prepared pursuant to GCC Sub-Clause 31.2 shall not render the Contractor liable for any loss or damage thereby suffered by the Employer..

41.3 If the Contractor attains Completion of the Facilities or any part thereof before the Time for Completion or any extension thereof under GCC Clause 65, the Employer shall pay to the Contractor a bonus in the amount **specified in the PCC**. The aggregate amount of such bonus shall in no event exceed the amount **specified as “Maximum” in the PCC**.

#### **42. Defect Liability**

42.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant supplied and of the work executed.

42.2 The Defect Liability Period shall be five hundred and forty (540) days from the date of Completion of the Facilities (or any part thereof) or one year from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the PCC pursuant to GCC Sub-Clause 42.10.

If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good as the Contractor shall determine at its discretion, such defect as well as any damage to the Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes:

- (a) improper operation or maintenance of the Facilities by the Employer;
- (b) operation of the Facilities outside specifications provided in the Contract; or
- (c) Normal wear and tear.

42.3 The Contractor's obligations under this GCC Clause 42 shall not apply to:

- (a) any materials that are supplied by the Employer under GCC Sub-Clause 36.2, are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
- (b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein; or
- (c) Any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GCC Sub-Clause 42.7.

42.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.

42.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this GCC Clause 42.

The Contractor may, with the consent of the Employer, remove from the Site any Plant or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the

Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.

42.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good, as the case may be, until that part of the Facilities passes such tests. The tests shall be agreed upon by the Employer and the Contractor.

42.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security.

42.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons.

42.9 Except as provided in GCC Clauses 42 and 49, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, or criminal or willful action of the Contractor.

42.10 In addition, any such component of the Facilities, and during the period of time as may be **specified in the PCC**, shall be subject to an extended defect liability period. Such obligation of the Contractor shall be in addition to the defect liability period specified under GCC Sub-Clause 42.2.

#### **43. Functional Guarantees**

43.1 The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, subject to and upon the conditions therein specified.

- 43.2 If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall request the Employer to repeat the Guarantee Test until the minimum level of the Guarantees has been met. If the Contractor eventually fails to meet the minimum level of Functional Guarantees, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 64.2.2.
- 43.3 If, for reasons attributable to the Contractor, the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not attained either in whole or in part, but the minimum level of the Functional Guarantees specified in the said Appendix to the Contract Agreement is met, the Contractor shall, at the Contractor's option, either
- (a) make such changes, modifications and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Employer to repeat the Guarantee Test or
  - (b) pay liquidated damages to the Employer in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Appendix to the Contract Agreement titled Functional Guarantees.
- 43.4 The payment of liquidated damages under GCC Sub-Clause 43.3, up to the limitation of liability specified in the Appendix to the Contract Agreement titled Functional Guarantees, shall completely satisfy the Contractor's guarantees under GCC Sub-Clause 43.3, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.

#### **44. Patent Indemnity**

- 44.1 The Contractor shall, subject to the Employer's compliance with GCC Sub-Clause 44.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use

of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

44.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Sub-Clause 29.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

44.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Employer.

#### **45. Limitation of Liability**

45.1 Except in cases of criminal negligence or willful misconduct,  
(a) neither Party shall be liable to the other Party, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, which may be suffered by the other Party in connection with the Contract, other than specifically provided as any obligation of the Party in the Contract, and  
(b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the PCC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.

### **E. Risk Distribution**

#### **46. Transfer of Ownership**

46.1 Ownership of the Plant (including spare parts) to be imported into the country where the Site is located shall be transferred to the Employer upon loading on to the mode of transport to be used to convey the Plant from the country of origin to that country.

- 46.2 Ownership of the Plant (including spare parts) procured in the country where the Site is located shall be transferred to the Employer when the Plant are brought on to the Site.
- 46.3 Ownership of the Contractor's Equipment used by the Contractor and its Subcontractors in connection with the Contract shall remain with the Contractor or its Subcontractors.
- 46.4 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.
- 46.5 Notwithstanding the transfer of ownership of the Plant, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GCC Clause 32 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant are incorporated.

**47. Care of Facilities**

- 47.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 39 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Subcontractors in the course of any work carried out, pursuant to GCC Clause 42. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clauses 48.2.
- 47.2 If any loss or damage occurs to the Facilities or any part thereof or to the Contractor's temporary facilities by reason of
  - (a) insofar as they relate to the country where the Site is located, nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance, including War Risks and Political Risks, taken out under GCC Clause 34 hereof; or
  - (b) any use or occupation by the Employer or any third Party other than a Subcontractor, authorized by the Employer of any part of the Facilities; or
  - (c) any use of or reliance upon any design, data or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,

- 47.3 the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed or damaged, and will pay to the Contractor the replacement value of all temporary facilities and all parts thereof lost, destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GCC Clause 64. If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GCC Clause 64, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to GCC Sub-Clause 66.1 hereof.
- 47.4 The Contractor shall be liable for any loss of or damage to any Contractor's Equipment, or any other property of the Contractor used or intended to be used for purposes of the Facilities, except (i) as mentioned in GCC Sub-Clause 42.2 with respect to the Contractor's temporary facilities, and (ii) where such loss or damage arises by reason of any of the matters specified in GCC Sub-Clauses 47.2 (b) and (c).

**48. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification**

- 48.1 Subject to GCC Sub-Clause 48.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its contractors, employees, officers or agents.
- 48.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GCC Sub-Clause 48.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 48.3 If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.  
The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.
- 48.4 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from any liability for loss

of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 49, provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.

48.5 The Party entitled to the benefit of an indemnity under this GCC Clause 48 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the Party fails to take such measures, the other Party's liabilities shall be correspondingly reduced.

## 49. Insurance

49.1 To the extent specified in the Appendix to the Contract Agreement titled Insurance Requirements, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.

(a) Cargo Insurance During Transport  
Covering loss or damage occurring while in transit from the Contractor's or Subcontractor's works or stores until arrival at the Site, to the Plant (including spare parts therefor) and to the Contractor's Equipment.

(b) Installation All Risks Insurance  
Covering physical loss or damage to the Facilities at the Site, occurring prior to Completion of the Facilities, with extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the Defect Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defect Liability Period.

(c) Third Party Liability Insurance  
Covering bodily injury or death suffered by third Parties including the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities.

(d) Automobile Liability Insurance  
Covering use of all vehicles used by the Contractor or its Subcontractors, whether or not owned by them, in connection with the execution of the Contract.

(e) Workers' Compensation  
In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.

(f) Employer's Liability  
In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed.

(g) Other Insurances  
Such other insurances as may be specifically agreed upon by the Parties hereto as listed in the Appendix to the Contract Agreement titled Insurance Requirements.

49.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 49.1, except for the Third Party Liability, Workers' Compensation



and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 49.1 except for the Cargo Insurance during Transportation, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

- 49.3 The Contractor shall, in accordance with the provisions of the Appendix to the Contract Agreement titled Insurance Requirements, deliver to the Employer certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty-one (21) days' notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.
- 49.4 The Contractor shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor.
- 49.5 The Employer shall at its expense take out and maintain in effect during the performance of the Contract those insurances specified in the Appendix to the Contract Agreement titled Insurance Requirements, in the sums and with the deductibles and other conditions specified in the said Appendix. The Contractor and the Contractor's Subcontractors shall be named as co-insured under all such policies. All insurers' rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such policies. The Employer shall deliver to the Contractor satisfactory evidence that the required insurances are in full force and effect. The policies shall provide that not less than twenty-one (21) days' notice shall be given to the Contractor by all insurers prior to any cancellation or material modification of the policies. If so requested by the Contractor, the Employer shall provide copies of the policies taken out by the Employer under this GCC Sub-Clause 49.5.
- 49.6 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GCC Sub-Clause 49.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due to the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor. If the Employer fails to take out and/or maintain in effect the insurances referred to in GCC 49.5, the Contractor may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Employer under the Contract any premium that the Contractor shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Employer. If the Contractor fails to or is unable to take out and maintain in effect any such insurances, the Contractor shall nevertheless have no liability or responsibility towards the Employer, and the Contractor

shall have full recourse against the Employer for any and all liabilities of the Employer herein.

49.7 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies affected by it pursuant to this GCC Clause 49, and all monies payable by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer's interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor's interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

**50. Unforeseen  
Conditions**

50.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions other than climatic conditions, or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Facilities including any data as to boring tests, provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site if access thereto was available, or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant or Contractor's Equipment, notify the Project Manager in writing beforehand:

- (a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen;
- (b) the additional work and/or Plant and/or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions;
- (c) the extent of the anticipated delay; and
- (d) the additional cost and expense that the Contractor is likely to incur.)

On receiving any notice from the Contractor under this GCC Sub-Clause 50.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

50.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Sub-Clause 50.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.

- 50.3 If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Sub-Clause 50.1, the Time for Completion shall be extended in accordance with GCC Clause 60.
- 51. Change in Laws and Regulation**
- 51.1 Unless otherwise specified in the Contract, if after the Contract, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Bangladesh (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract.
- 52. Force Majeure**
- 52.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:
- (a) which is beyond a Party's control;
  - (b) which such Party could not reasonably have provided against before entering into the Contract;
  - (c) which, having arisen, such Party could not reasonably have avoided or overcome; and
  - (d) which is not substantially attributable to the other Party.
- 52.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:
- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;
  - (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war;
  - (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel;
  - (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
  - (v) natural catastrophes such as cyclone, hurricane, typhoon, tsunami, storm surge, floods, earthquake, landslides, fires, epidemics, quarantine restrictions, or volcanic activity;
  - (vi) freight embargoes;
  - (vii) acts of the Government in its sovereign capacity.
- 53. Notice of Force Majeure**
- 53.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure
- 53.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

- 53.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.
- 54. Duty to Minimize Delay**
- 54.1 Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.
- 54.2 A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.
- 55. Consequences of Force Majeure**
- 55.1 The Contractor shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure:
- 55.2 The Employer may suspend the delivery or contract implementation, wholly or partly, by written order for a certain period of time, as it deems necessary due to force majeure as defined in the contract.
- 55.3 Delivery made either upon the lifting or the expiration of the suspension order. However, if the Employer terminates the contract as stated under GCC clause 66, resumption of delivery cannot be done.
- 55.4 The Employer determines the existence of a force majeure that will be the basis of the issuance of suspension of order.

## **F. Payment**

- 56. Contract Price**
- 56.1 The Contract Price shall be paid as specified in the Contract Agreement Form **PG5A- 8**.
- 56.2 Unless an adjustment clause is **provided for in the PCC**, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract.
- 56.3 Subject to GCC Sub-Clauses 25.2, 26.1 and 50 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
- 56.4 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the PCC. If so provided, the amounts as certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amount. The generic formula indicated below in the form as specified in the PCC applies:

$$P = A + B (I_m/I_o)$$

where:

**P** is the adjustment factor

**A** and **B** are Coefficients specified in the PCC, representing the nonadjustable and adjustable portions, respectively, of the Contract; and

**I<sub>m</sub>** is the Index during the month the work has been executed and **I<sub>o</sub>** is the Index prevailing twenty eight (28) days prior to the deadline for submission of Tender.

The Indexes to be used is as published by the Bangladesh Bureau of Statistics (BBS) on a monthly basis. In case not available, then other countries or authorities of the sources mentioned in **Appendix to the Tender** may be used.

- 56.5 If the value of the Index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next or in the final payment certificate. The Index value shall be deemed to take account of all changes in price due to fluctuations.
- 57. Terms of Payment**
- 57.1 The Contract Price shall be paid as specified in the Contract Agreement and **in the Appendix to the Contract Agreement titled Terms and Procedures of Payment**, which also outlines the procedures to be followed in making application for and processing payments.
- 57.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.
- 57.3 In the event that the Employer fails to make any payment by its respective due date or within the period set forth in the Contract, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate(s) shown in the Appendices to the Contract Agreement titled Terms and Procedures of Payment, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.
- 57.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendices to the Contract Agreement titled Terms and Procedures of Payment, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated in the Contractor's tender.
- 58. Advance Payment Security**
- 58.1 The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to the advance payment calculated in accordance with the Appendix to the Contract Agreement titled Terms and Procedures of Payment, and in the same currency or currencies.
- 58.2 The security shall be in the form provided in the tender documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Facilities executed by and paid to the Contractor from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor immediately after its expiration.
- 59. Performance Security**
- 59.1 The Contractor shall, within twenty-eight (28) days of the notification of contract award, provide a security for the due performance of the Contract in the amount **specified in the PCC**.
- 59.2 The performance security shall be denominated in the currency or currencies of the Contract, or in a freely convertible currency acceptable to the Employer, and shall be in the form provided in Section 5, Tender and Contract Forms, corresponding to the type of bank guarantee stipulated by the Employer in the PCC, or in another form acceptable to the Employer.
- 59.3 Unless otherwise specified in the PCC, the security shall be reduced by half on the date of the Operational Acceptance. The

Security shall become null and void, or shall be reduced pro rata to the Contract Price of a part of the Facilities for which a separate Time for Completion is provided, five hundred and forty (540) days after Completion of the Facilities or three hundred and sixty five (365) days after Operational Acceptance of the Facilities, whichever occurs first; provided, however, that if the Defects Liability Period has been extended on any part of the Facilities pursuant to GCC Sub-Clause 42.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediately after its expiration, provided, however, that if the Contractor, pursuant to GCC Sub-Clause 42.10, is liable for an extended defect liability obligation, the performance security shall be extended for the period specified in the PCC pursuant to GCC Sub-Clause 42.10 and up to the amount specified in the PCC.

59.4 The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract. The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer was not entitled to make the claim.

## **60. Taxes and Duties**

60.1 The Contractor shall be entirely responsible for all kinds of taxes, duties, fees, levies, and such other charges assessed on the Contractor, its Subcontractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.

60.2 Notwithstanding GCC Sub-Clause 60.1 above, the Employer shall bear and promptly pay

(a) all customs and import duties for the Plant specified in Price Schedule No. 1; and

(b) other domestic taxes such as, sales tax and value added tax (VAT) on the Plant specified in Price Schedules No. 1 and No. 2 and that is to be incorporated into the Facilities, and on the finished goods, imposed by the law of the country where the Site is located.

60.3 If any tax exemptions, reductions, allowances or privileges may be available to the Contractor in the country where the Site is located, the Employer shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent.

## **61. Payments to Nominated Subcontractor(s)**

61.1 The Contractor shall pay to the Nominated Subcontractor(s) the amounts shown on the Nominated Subcontractor's invoices approved by the Contractor in accordance with the subcontract included under the Contract.

## **62. Price Adjustment**

62.1 Where the Contract Period (excluding the Defects Liability Period) exceeds eighteen (18) months, it is normal procedure that prices payable to the Contractor shall be subject to adjustment during the performance of the Contract to reflect changes occurring in the cost of labour and material components. In such cases the tender documents shall include in the Appendix 2, a formula of such price adjustment.

**63. Liquidated Damages**

- 62.2 Where Contracts are of a shorter duration than eighteen (18) months or in cases where there is to be no Price Adjustment, the following provision shall not be included. Instead, it shall be indicated under this Appendix 2 that the prices are to remain firm and fixed for the duration of the Contract.
- 62.3 If the value of the Index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next or in the final payment certificate. The Index value shall be deemed to take account of all changes in price due to fluctuations.
- 63.1 The Contractor shall be liable to pay Liquidated Damages or in other words the Delay Damages to the Employer at the rate per day as specified in the PCC for each day of delay from the Intended Completion Date, for the uncompleted delivery of goods/works/services or for any part thereof.
- 63.2 The total amount of Liquidated Damages shall not exceed the amount defined in the PCC.
- 63.3 Once the cumulative amount of Liquidated Damages reaches ten (10) percent of the Contract price, the Employer may rescind the Contract, without prejudice to other courses of action and remedies open to it.
- 63.4 The amount of Liquidated Damages may be deducted from any money due or which may become due to the Contractor under the Contract and/or collect such amount of Liquidated Damages from the Retention Money (if any) or other securities posted by the Contractor whichever is convenient to the Employer. In an extreme situation that no such foregoing recourse is available, the contractor be asked to make good the damages from his own finances in writing failing which necessary action as per the provisions of this GCC or PCC be taken.
- 63.5 Payment of Liquidated Damages by the Contractor shall not relieve the Contractor from its obligations.
- 63.6 If the Intended Completion Date is extended after Liquidated Damages have been paid, the Engineer shall correct any overpayment of Liquidated Damages by the Contractor by adjusting the next payment certificate.

**64. Change in the Facilities**

**G. Change in Contract Elements**

- 64.1 Introducing a Change
- 64.1.1 Subject to GCC Sub-Clauses 64.2.5 and 64.2.7, the Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities hereinafter called "Change", provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract
- 64.1.2 The Contractor may from time to time during its performance of the Contract propose to the Employer with a copy to the Project Manager, any Change that the Contractor considers necessary or desirable to improve the quality, efficiency or safety of

the Facilities. The Employer may at its discretion approve or reject any Change proposed by the Contractor, provided that the Employer shall approve any Change proposed by the Contractor to ensure the safety of the Facilities.

64.1.3 Notwithstanding GCC Sub-Clauses 64.1.1 and 64.1.2, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.

64.1.4 The procedure on how to proceed with and execute Changes is specified in GCC Sub-Clauses 64.2 and 64.3, and further details and forms are provided in the Employer's Requirements (Forms and Procedures).

**64.2 Changes Originating from Employer**

64.2.1 If the Employer proposes a Change pursuant to GCC Sub-Clause 64.1.1, it shall send to the Contractor a "Request for Change Proposal," requiring the Contractor to prepare and furnish to the Project Manager as soon as reasonably practicable a "Change Proposal," which shall include the following:

- (a) brief description of the Change
- (b) effect on the Time for Completion
- (c) estimated cost of the Change
- (d) effect on Functional Guarantees (if any)
- (e) effect on the Facilities
- (f) effect on any other provisions of the Contract.

64.2.2 Prior to preparing and submitting the "Change Proposal," the Contractor shall submit to the Project Manager an "Estimate for Change Proposal," which shall be an estimate of the cost of preparing and submitting the Change Proposal.

Upon receipt of the Contractor's Estimate for Change Proposal, the Employer shall do one of the following:

- (a) accept the Contractor's estimate with instructions to the Contractor to proceed with the preparation of the Change Proposal
- (b) advise the Contractor of any part of its Estimate for Change Proposal that is unacceptable and request the Contractor to review its estimate
- (c) advise the Contractor that the Employer does not intend to proceed with the Change.

64.2.3 Upon receipt of the Employer's instruction to proceed under GCC Sub-Clause 64.2.2 (a), the Contractor shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GCC Sub-Clause 64.2.1.

64.2.4 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If such rates and prices are inequitable, the Parties thereto shall agree on specific rates for the valuation of the Change.



64.2.5 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate effect of compliance therewith and with all other Change Orders that have already become binding upon the Contractor under this GCC Clause 64 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen percent (15%), the Contractor may give a written notice of objection thereto prior to furnishing the Change Proposal as aforesaid. If the Employer accepts the Contractor's objection, the Employer shall withdraw the proposed Change and shall notify the Contractor in writing thereof.

The Contractor's failure to so object shall neither affect its right to object to any subsequent requested Changes or Change Orders herein, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Contractor represents.

64.2.6 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within fourteen (14) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order.

If the Employer is unable to reach a decision within fourteen (14) days, it shall notify the Contractor with details of when the Contractor can expect a decision.

If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Contractor accordingly. Under such circumstances, the Contractor shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Contractor in its Estimate for Change Proposal submitted in accordance with GCC Sub-Clause 64.2.2.

64.2.7 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a "Pending Agreement Change Order." Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The Parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal.

### 64.3 Changes Originating from Contractor

64.3.1 If the Contractor proposes a Change pursuant to GCC Sub-Clause 64.1.2, the Contractor shall submit to the Project Manager a written "Application for Change Proposal," giving reasons for the proposed Change and including the information specified in GCC Sub-Clause 64.2.1.

Upon receipt of the Application for Change Proposal, the Parties shall follow the procedures outlined in GCC Sub-Clauses 64.2.6 and

64.3.2. However, should the Employer choose not to proceed, the Contractor shall not be entitled to recover the costs of preparing the Application for Change Proposal.

### 65. Extension of Time for Completion

65.1 The Time(s) for Completion specified in the PCC pursuant to GCC Sub-Clause 8.2 shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

- (a) any Change in the Facilities as provided in GCC Clause 64
  - (b) any occurrence of Force Majeure as provided in GCC Clause 52, unforeseen conditions as provided in GCC Clause 50, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clause 47.2
  - (c) any suspension order given by the Employer under GCC Clause 41 hereof or reduction in the rate of progress pursuant to GCC Sub-Clause 66.2 or
  - (d) any changes in laws and regulations as provided in GCC Clause 51 or
  - (e) any default or breach of the Contract by the Employer, Appendix to the Contract Agreement titled , or any activity, act or omission of the Employer, or the Project Manager, or any other contractors employed by the Employer, or
  - (f) any delay on the part of a sub-contractor, provided such delay is due to a cause for which the Contractor himself would have been entitled to an extension of time under this sub-clause, or
  - (g) delays attributable to the Employer or caused by customs, or
  - (h) any other matter specifically mentioned in the Contract
- by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

65.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

In all cases where the Contractor has given a notice of a claim for an extension of time under GCC 65.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall there after comply with all reasonable instructions which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GCC 65.1, the amount of such extra costs shall be added to the Contract Price.

## 66. Suspension

66.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons thereof. The Contractor shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Facilities, until ordered in writing to resume such performance by the Project Manager..

If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty-eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GCC Clause 64, excluding the performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GCC Clause 64 or, where it affects the whole of the Facilities, as termination of the Contract under GCC Sub-Clause 66.1.

### 66.2 **If**

(a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that

requires payment of such sum, with interest thereon as stipulated in GCC Sub-Clause 57.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor's notice or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas in accordance with GCC Sub-Clause 25.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities,

then the Contractor may by fourteen (14) days' notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

- 66.3 If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GCC Clause 66, then the Time for Completion shall be extended in accordance with GCC Sub-Clause 40.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract.
- 66.4 During the period of suspension, the Contractor shall not remove from the Site any Plant, any part of the Facilities or any Contractor's Equipment, without the prior written consent of the Employer.

## **H. Termination and Settlement of Disputes**

### **67. Termination**

#### **67.1 Termination for Default**

- (a) The Employer or the Contractor, without prejudice to any other remedy for breach of Contract, by giving twenty eight (28) days written notice of default to the other party, may terminate the Contract in whole or in part if the other party causes a fundamental breach of Contract.
- (b) Fundamental breaches of the Contract shall include, but shall not be limited to, the following:
- (i) the Contractor stops work for twenty-eight (28) days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
  - (ii) the Engineer instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within twenty-eight (28) days;
  - (iii) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;

- (iv) the Engineer gives Notice that the failure to achieve the progress in accordance with the updated Programme of Works by the Contractor is a non-fulfilment of contractual obligations and the Contractor fails to restore it within a reasonable period of time instructed by the Engineer;
  - (v) the Contractor does not maintain a Security, which is required;
  - (vi) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of Liquidated Damages can be paid, as specified in GCC Sub Clause 41.2;
  - (vii) the Contractor has subcontracted the whole of the Works or has assigned the Contract without the required agreement and without the approval of the Engineer;
  - (viii) the Contractor, in the judgment of the Employer has engaged in practices, as defined in GCC Sub Clause 39, in competing for or in executing the Contract.
- (c) A payment certified by the Engineer is not paid by the Employer to the Contractor within twenty eight (28) days of the date of the Engineer's certificate.

**67.2 Termination for Insolvency**

The Employer and the Contractor may at any time terminate the Contract by giving twenty eight (28) days written notice to the other party if either of the party becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to any party, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the other party.

**67.3 Termination for Convenience**

(a) The Employer, by giving twenty eight (28) days written notice sent to the Contractor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Employer's convenience, the extent to which performance of the Contractor under the Contract is terminated, and the date upon which such termination becomes effective. The termination shall take effect twenty eight (28) days after the later dates on which the Contractor receives this notice or the Employer returns the Performance Security.

(b) The Employer shall not terminate the contract under GCC Sub Clause 67.1 (a) in order to execute the contract itself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor as stated under GCC Sub Clause 67.1(a).

67.4 In the event the Employer terminates the Contract in whole or in part, the Employer shall accept the portion of the Works that are complete and ready for handing over after the Contractor's receipt of notice of termination of the Contract. For the remaining portion of the Works, the Employer may elect:

- (a) to have any portion completed by the Contractor at the Contract terms and prices; and /or
- (b) to cancel the remainder and pay to the Contractor an agreed amount for partially completed Works and for materials and parts previously procured by the Contractor, or
- (c) except in the case of termination for convenience as stated under GCC Sub Clause 67, engage another Contractor to

complete the Works, and in that case the Contractor shall be liable to the Employer for any cost that may be incurred in excess of the sum that would have been paid to the Contractor, if the work would have been executed and completed by him or her.

67.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as is reasonably possible

## **68. Payment upon Termination**

68.1 If the Contract is terminated because of a fundamental breach of Contract under GCC Sub Clause 67.1 by the Contractor, the Project Manager shall issue a certificate for the value of the Works done and Plant and Materials ordered less advance payments received up to the date of the issue of the certificate and less the amount from percentage to apply to the contract value of the works not completed, as indicated in the PCC. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

68.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a payment certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's foreign personnel employed solely on the Works and recruited specifically for the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

68.3 If the Contract is terminated for reasons of Force Majeure, the Project Manager shall determine the value of the work done and issue a Payment Certificate which shall include.

- (a) the amounts payable for any work carried out for which unit rates or prices are stated in the Contract;
- (b) the cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) other costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;
- (d) the cost of removal of Temporary Works and Contractor's Equipment from the Site; and
- (e) the cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.

## **69. Property**

69.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default stated under GCC Sub Clause 67.1.

## 70. Frustration

- 70.1 If the Contract is frustrated by the occurrence of a situation of Force Majeure as defined in GCC Sub Clause 52, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all works carried out before receiving it and for any work carried out afterwards to which a commitment was made.

## I. Claims, Disputes and Arbitration

### 71. Contractor's Claims

- 71.1 If the Contractor considers himself to be entitled to any extension of the Completion Time and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Employer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than twenty eight (28) days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 71.2 If the Contractor fails to give notice of a claim within such period of twenty eight (28) days, the Intended Completion Date shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim.
- 71.3 Within forty two (42) days after the Contractor became aware or should have become aware of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed, for settlement.

### 72. Settlement of Disputes

- Amicable settlement**
- 72.1 The Employer and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

- Arbitration**
- 72.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation as stated under GCC Clause 72.1, then either the Employer or the Contractor may give notice to the other party of its intention to commence arbitration in accordance with GCC Sub Clause 72.3, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration.
- 72.3 Arbitration shall be commenced prior to or after execution of the Works under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the PCC.
- 72.4 Notwithstanding any reference to arbitration hereinabove the parties shall continue to perform their respective responsibilities under the Contract unless agreed otherwise and, the Employer shall pay any monies due to the Contractor.

## Section 4. Particular Conditions of Contract

*Instructions for completing the Particular Conditions of Contract are provided in italics in parenthesis for the relevant GCC Clauses.*

| <b>GCC Clause</b>  | <b>Amendments of, and Supplements to, Clauses in the General Conditions of Contract</b>   |
|--------------------|---|
| <b>GCC 1.1(j)</b>  | The Contractor is<br><i>[Name, address, and name of authorized representative]</i>  |
| <b>GCC 1.1(ii)</b> | The Employer is<br>Managing Director<br>Address: Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram.<br>Telephone: +88 02333300455, +88 02333300456, +88 02333300458,<br>Fax No. : +88 02333300457, E-mail: mdtspcomplex@gmail.com   |
| <b>GCC 1.1(oo)</b> | The Site is located at <i>North patenga, Chattogram</i> and is defined in drawings No: Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram.<br>Telephone: +88 02333300455, +88 02333300456, +88 02333300458,<br>Fax No.: +88 02333300457, E-mail: mdtspcomplex@gmail.com  |
| <b>GCC 3.1</b>     | The Procuring Entity's address for the purpose of communications under this contract is :<br>Contact person: Md. Ataur Rahman, Managing Director<br>Address: Triple Super Phosphate Complex Limited (TSPCL), North Patenga, Chattogram.<br>Telephone: +88 02333300455, +88 02333300456, +88 02333300458,<br>Fax No.: +88 02333300457, E-mail: mdtspcomplex@gmail.com                                |
|                    | The Contractor's address for the purpose of communications under this contract is :<br>Contact person:<br>Address:<br>Tel:<br>Fax:<br>e-mail address:   |
| <b>GCC 6.1 (k)</b> | Other documents forming part of the Contract are;<br>a. Minutes of pre-Tender meeting.<br>b. Total time Schedule for execution of the Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with accessories.<br>c. Any amendments/addendum made in the Contract.<br>d. Other relevant correspondences and documents. |
| <b>GCC 9.2</b>     | Materials, Equipment Plants and supplies shall not have their origin in the following countries:<br><i>Any country which has no diplomatic and trade relationship with GOB.</i>   |



|                     |  |
|---------------------|--|
| <b>GCC 13.1</b>     | Possession of the Site or part(s) of the Site, to the Contractor shall be given on the following date(s);<br>Not applicable.   |
| <b>GCC 22.3</b>     | <b>The Contractor agrees to supply spare parts as listed in Price Schedule [insert years]</b><br><b><i>In addition the contractor agrees to supply spare parts as required by the recommendation of Vendor/Manufacturer for a period of 10 (Ten) Years.</i></b><br><b><i>Sample Addition to PCC22.3</i></b><br><b><i>The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within six (6) months of placing the order and opening the letter of credit. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.</i></b> |
| <b>GCC 23.1</b>     | The Contractor shall commence work on the Facilities within 15 (Fifteen) days from the Effective Date for determining Time for Completion as specified in the Contract Agreement.  |
| <b>GCC 24.1</b>     | <b>The time for completion of the whole of the facilities within 06 (six) months from the effective date of Contract.</b>  |
| <b>GCC 32.1</b>     | A Subcontractor that is a national of, or registered in, the following countries are not eligible: <b>Not applicable</b>   |
| <b>GCC 33.1</b>     | Nominated Subcontractor(s) named below; <b>Not applicable</b>  |
| <b>GCC 36.3</b>     | Transportation of Goods (as per Appendix – 8).   |
| <b>GCC 40.2.2</b>   | The Guarantee Test (PGTR) of the Facilities shall be successfully completed within 07 (Seven) days from the date of Completion.<br>The bidder is responsible for testing & commissioning the supplied panels for continuous 72 (Seventy two) hours on full load running condition of the plant.  |
| <b>GCC 41.3</b>     | Applicable ( <i>amount or rate</i> ) for the bonus for early Completion:<br>No bonus will be given for earlier Completion of the Facilities or part thereof.   |
| <b>GCC 42.3</b>     | The amount to be withheld for late submission of an updated Programme is <b>BDT 10,000.00 (ten thousand).</b>  |
| <b>GCC 42.10</b>    | The critical components covered under the extended defect liability are <i>[insert components, the period shall be within 01 (One) year from date of final acceptance.]</i><br>a) 33KV GIS Panel (Complete set)<br>b) Switchgear unit<br>c) Bus Sectionalize panels<br>d) Bus Bars and Connectors<br>e) Circuit breaker<br>f) Current Transformer<br>g) Potential Transformer<br>h) Auxiliary/Control Wiring<br>i) Air Conditioner   |
| <b>GCC 45.1 (b)</b> | The multiplier of the Contract Price is: Not applicable  |
| <b>GCC 49.1 (a)</b> | 1. Cargo insurance to be covered by the Contractor.<br>2. Installation all Risk insurance, Third party liability insurance, Automobile liability insurance, Worker's compensation and other insurances (if any) to be borne by the Contractor.   |
| <b>GCC 56.2</b>     | The Contract Price shall be adjusted in accordance with the provisions of the Appendix to the Contract Agreement titled Adjustment Clause: Not applicable  |
| <b>GCC 58</b>       | Advance Payment is not applicable.   |

|                   |   |
|-------------------|---|
| <b>GCC 59.3.1</b> | The amount of performance security shall be 10% of the contract Price.  |
| <b>GCC 59.3.3</b> | The performance security shall not be reduced on the date of the Operational Acceptance.  |
| <b>GCC 59.3.3</b> | The performance security shall be reduced to ten percent (10%) of the value of the component covered by the extended defect liability to cover the Contractor's extended defect liability in accordance with the provision in the PCC, pursuant to GCC Sub-Clause 42.10. Not applicable.  |
| <b>GCC 63.0</b>   | <p>The applicable rate for liquidated damages for delay shall be:</p> <p>(i) Installation, Testing and Commissioning in time is the essence of purchase order/contract and therefore, the suppliers/contractors or their principals shall complete Installation, Testing and Commissioning not later than the time specified in the order/contract, if commissioning with successful PGTR is not made within the stipulated period, in the absence of force majeure there shall be deducted from the order/contract price as liquidated damage and not as penalty at sum equivalent to ½% (half percent) of the price for each calendar week of delay or part thereof upto 3 (three) months &amp; ¼% (quarter percent) per week or part thereof for the period beyond 3(three) months for the undelivered goods. In case where the undelivered goods held up use of other goods, liquidated damages shall be recovered on the total value of the order/contract.</p> <p>(ii) Delay in excess of 100 (one hundred) calendar days may cause termination of order/contract and forfeiture of the performance security/guarantee.</p> <p>(iii) The maximum amount of liquidated damages shall be: 10%</p> |
| <b>GCC 72.2</b>   | <p><b>The rules of procedure for Arbitration proceeding shall be as follows:</b></p> <p>(i) All Disputes arising in connection with the present contract shall be finally settled in accordance with the laws of the Bangladesh i.e. Arbitration Act (Act No. 1 of 2001) of Bangladesh as a present in force in case of a Contract with a national of the Purchaser's country.</p> <p>(ii) The place of Arbitration shall be: Dhaka, Bangladesh.</p>  |
| <b>New GCC(1)</b> | <p>Shipping terms and Instruction:</p> <p>(i) Shipment of goods shall not be effected on vessels of any quantity with whom Bangladesh does not have any diplomatic relations.</p> <p>(ii) Shipment of goods shall be made on vessels of Conference Line. If Conference Line fails to provide shipping space, a certificate from the concerned Conference Line office shall be provided by the supplier/ contractor or the Shipper to the effect that conference Line Vessels are not available for shipment of goods. If any port of shipment is not covered by Conference Line, the goods shall be shipped on regular liner vessel. In all cases preference shall, however, be given to Bangladesh Flag Vessel when such vessels are available at the time of shipment.</p>  |
| <b>New GCC(2)</b> | <p>Guarantee Certificate:</p> <p>The supplier/contractor or their Principals shall furnish a guarantee certificate to the effect that The supplier/contractor or their Principals shall furnish a guarantee certificate to the effect that the goods exactly conform to the specifications laid down in the purchase order/contract and that in the event of the materials being found defective or not conforming to the specifications governing the supply, the supplier/contractor shall be hold responsible for all losses and consequences and that the unacceptable goods will be replaced by acceptable ones by the supplier/contractor free of charge if called upon to do so.</p>   |

|                   |  |
|-------------------|--|
| <b>New GCC(3)</b> | <p>Warranty:</p> <p>i) The bidder warrants that the items shall be new and first quality workmanship and materials shall have no defect in design or manufacturer shall meet the requirements of specifications and shall be in all respects suited for the purpose intended. The warranty provided by the bidder will be relied upon and strictly enforced by the buyer. The warranty shall be for a period of 01 (One) year from the date of final acceptance.</p> <p>The bidder shall remedy, free of cost to the buyer all defects in design materials and workmanship which may develop under normal use and which have been called to the attention of the bidder prior to the expiration of the warranty period.</p> <p>ii) 10% of the total contract value will be kept as Warranty Bond for 12 (twelve) months onward the date of Final acceptance of the same.</p> |
| <b>New GCC(4)</b> | <p>Undertaking:</p> <p>The supplier/contractor or their principals shall give a written undertaking to the effect that they have dispatched the goods strictly in conformity with the quality and quantity specified in the purchase order/contract and that they shall replace the defective materials and replenish the short-supplied quantity free of charge on demand by the Purchaser. Such certificate shall form an integral part of the shipping documents required to be produced to the shipping documents required to be produced to the Bank for drawal of payment against letter of credit.</p>  |
| <b>New GCC(5)</b> | <p><b>Taxes and Levies:</b></p> <p>a. The rates quoted should include all types of taxes, levies, duties paid in accordance with government rules or as an agency.</p> <p>b. It is important to note here that all such things, including taxes, levies, etc. to be levied by the government from time to time, will be applicable from the day the government asks it to be levied.</p> <p>c. Moreover, all types of taxes, levies, duties and other applicable taxes will be deducted by the government as per the rules while paying the bills.</p>   |

## Appendix to the Tender

**Table 1.1: Price Adjustment Data: Not applicable**  
[ITT sub clause

**Table 1.2: Price Adjustment Data: Not applicable**  
[ITT sub clause 56.4]

**APPENDICES [This appendixes shall be the part of the contract]**

- Appendix 1 - Terms and Procedures of Payment
- Appendix 2 - Insurance Requirements
- Appendix 3 - Time Schedule
- Appendix 4 - List of Major Items of Plant and Services and List of Approved Subcontractors
- Appendix 5 - Scope of Works and Supply by the Employer
- Appendix 6 - List of Documents for Approval or Review
- Appendix 7 - Functional Guarantees
- Appendix 8 - Employer's Involvement
- Appendix 9 - Employer's Requirement

## **Appendix 1. Terms and Procedures of Payment**

### **(B) Payment Schedule:**

Payment of contractor price shall be made in the following manner:

Advance Payment: **Not Applicable**

#### **Schedule No. 1 - 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with accessories supplied from aboard with transportation up to project site.**

- i) Ninety percent (90%) of the total amount upon delivery of the goods to the factory within Fifteen (15) working days upon issuance of job completion certificate and submission of documents mentioned below:
  - a. Detailed Commercial Invoice signed in ink-03 (Three) Copies.
  - b. Clean on Board Bill of Lading/ Air Way Bill marked " Freight Prepaid"-03 (Three) Copies – as proof of foreign goods.
  - c. Packing list-03 (Three) Copies.
  - d. Certificate of Origin issued by the Chamber of Commerce or Government authorized agency -03 (Three) Copies.
  - e. Manufacturer's Guarantee as to the quality of material -03 (Three) Copies.
  - f. Warranty Certificate as to the quality of material 03 (Three) Copies.
  - g. Undertaking Certificate related to the supplied goods -03 (Three) Copies.
  - h. Manufacturer's shop test report-03 (Three) Copies.
- ii) Rest ten percent (10%) of the total amount will be kept as warranty money.

#### **Schedule No. 2 - Plant and Mandatory Spare Parts Supplied from within the Employer's Country**

- i) Ninety percent (90%) of the total amount upon delivery of the goods to the factory within Fifteen (15) working days upon issuance of job completion certificate and submission of documents mentioned below.
  - a. Detailed Commercial Invoice signed in ink-03 (Three) Copies.
  - b. Manufacturer's Guarantee as to the quality of material -03 (Three) Copies.
  - c. Warranty Certificate as to the quality of material 03 (Three) Copies.
  - d. Undertaking Certificate related to the supplied goods -03 (Three) Copies.
  - e. Manufacturer's shop test report-03 (Three) Copies.
- ii) Rest ten percent (10%) of the total amount will be kept as warranty money.

#### **Schedule No. 3 - Design and Engineering Services: Not applicable**

#### **Schedule No. 4 - Civil works: Not applicable**

#### **Schedule No. 5 - Fabrication & Installation and other Services:**

- i) Ninety percent (90%) payment shall be made after completion of all fabrication, installation and other works upon issuance of job completion certificate within Ten (10) working days after receipt of invoice.
- ii) Rest ten percent (10%) of the amount will be kept as warranty money.

#### **Schedule No. 6 - Commissioning and testing:**

- i) Ninety percent (90%) payment shall be made upon issuance of job completion certificate, within Ten (10) working days after receipt of invoice.
- ii) Rest ten percent (10%) of the amount will be kept as warranty money.

## Appendix 2. Insurance Requirements

*(Note: This form is recommended for application in a contract after consultation with the Scheduled Insurance Companies. A different structure/ method can be applied after approval of competent authority, but should be incorporated in the Tender documents to be sold/ issued to the prospective tenderers).*

*Details are to be completed by the Employer prior to issuing the tender documents. In the event that the Employer provides any insurance under the Contract, appropriate details must also be given.*

### Insurances to Be Taken Out By the Contractor

In accordance with the provisions of GCC Clause 49, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

#### (a) Cargo Insurance

Covering loss or damage occurring, while in transit from the supplier's or manufacturer's works or stores until arrival at the Site, to the Facilities (including spare parts therefore) and to the construction equipment to be provided by the Contractor or its Subcontractors.

| <b>Amount</b><br>[in currency(ies)] | <b>Deductible limits</b><br>[in currency(ies)] | <b>Parties insured</b><br>[names] | <b>From</b><br>[place] | <b>To</b><br>[place] |
|-------------------------------------|--|-----------------------------------|------------------------|----------------------|
|                                     |  |                                   |                        |                      |
|                                     |  |                                   |                        |                      |

#### (b) Installation All Risks Insurance

Covering physical loss or damage to the Facilities at the Site, occurring prior to completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period.

| <b>Amount</b><br>[in currency(ies)] | <b>Deductible limits</b><br>[in currency(ies)] | <b>Parties insured</b><br>[names] | <b>From</b><br>[place] | <b>To</b><br>[place] |
|-------------------------------------|--|-----------------------------------|------------------------|----------------------|
|                                     |  |                                   |                        |                      |
|                                     |  |                                   |                        |                      |

#### (c) Third Party Liability Insurance

Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities that have been accepted by the Employer) occurring in connection with the supply and installation of the Facilities.

| <b>Amount</b><br>[in currency(ies)] | <b>Deductible limits</b><br>[in currency(ies)] | <b>Parties insured</b><br>[names] | <b>From</b><br>[place] | <b>To</b><br>[place] |
|-------------------------------------|--|-----------------------------------|------------------------|----------------------|
|                                     |  |                                   |                        |                      |
|                                     |  |                                   |                        |                      |

(d) Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the supply and installation of the Facilities. Comprehensive insurance in accordance with statutory requirements.

(e) Workers' Compensation

In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(f) Employer's Liability

In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(g) Other Insurances

The Contractor is also required to take out and maintain at its own cost the following insurances:

Details:

| <b>Amount</b><br>[in currency(ies)] | <b>Deductible limits</b><br>[in currency(ies)] | <b>Parties insured</b><br>[names] | <b>From</b><br>[place] | <b>To</b><br>[place] |
|-------------------------------------|--|-----------------------------------|------------------------|----------------------|
|                                     |  |                                   |                        |                      |
|                                     |  |                                   |                        |                      |

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 49.1, except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 49.1, except for the Cargo, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.



**Insurances to be Taken Out By The Employer (For TSPCL Accounts): Not Applicable.**

### **Appendix 3. Time Schedule**

*The Employer should normally provide a Time Schedule to be followed by the Contractor during the performance of the Contract. This schedule should be provided with the tender documents under this Appendix. All completion times indicated must be in accordance with the information regarding Time(s) for Completion given in the Tender Data Sheet.*

*Except under exceptional circumstances, the Time Schedule should indicate periods of time: **06 months** and not specify calendar dates. All periods should be shown from the Effective Date of the Contract.*

*Should it become necessary to amend the Time Schedule to reflect any agreements made with the selected Tenderer prior to award of Contract, the amended Time Schedule shall replace the original Time Schedule prior to signature of the Contract Agreement.*

*If the tender documents contain no Time Schedule, the Tenderer shall be required to submit with its tender a detailed program, normally in the form of a bar chart, showing how and the order in which it intends to perform the Contract and showing the key events requiring action or decision by the Employer. In preparing this Program, the Tenderer shall adhere to the Time(s) for Completion given in the Tender Data Sheet or give its reasons for not adhering thereto. The Time Schedule submitted by the selected Tenderer and amended as necessary prior to award of Contract shall be included as Appendix to the Contract Agreement before the Contract is signed*

## Appendix 4. List of Major Items of Plant and Services and List of Approved Subcontractors

*Prior to issuing the Tender Document, the Employer has established a list of major item of plant and services for which approval of the Employer is required. Prior to award of Contract, the details of approved subcontractor, including manufacturers shall be completed, indicating those subcontractors proposed by the Tenderer in the corresponding Attachment to its tender that are approved by the Employer for engagement by the Contractor during the performance of the Contract.*

A list of major items of plant and services is provided below.

The following Subcontractors and/or manufacturers are approved for carrying out the item of the facilities indicated. Where more than one Subcontractor is listed, the Contractor is free to choose between them, but it must notify the Employer of its choice in good time prior to appointing any selected Subcontractor. In accordance with GCC Sub-Clause 32.1, the Contractor is free to submit proposals for Subcontractors for additional items from time to time. No Subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Employer and their names have been added to this list of Approved Subcontractors.

| <b>Major Items of Plant and Services</b> | <b>Approved Subcontractors/Manufacturers</b> | <b>Nationality</b> |
|--|--|--------------------|
| <b>a) 33KV GIS Panel (Complete set)</b>  |  |                    |
| <b>b) Switchgear unit</b>                |  |                    |
| <b>c) Bus Sectionalize panels</b>        |  |                    |
| <b>d) Bus Bars and Connectors</b>        |  |                    |
| <b>e) Circuit breaker</b>                |  |                    |
| <b>f) Current Transformer</b>            |  |                    |
| <b>g) Potential Transformer</b>          |  |                    |
| <b>h) Auxiliary/ Control Wiring</b>      |  |                    |
| <b>i) Air Conditioner</b>                |  |                    |

## **Appendix 5. Scope of Works and Supply by the Employer**

*Prior to issuing the tender documents, the Employer shall indicate in this Appendix details of all personnel and Facilities it will provide for use by the Contractor and indicate, where applicable, the charges that it will make in respect of their use.*

*The Employer shall also identify any part(s) of the facilities it intends to carry out itself (or by other contractors), and any plant, equipment, or materials that it proposes to purchase itself and supply to the Contractor for incorporation in the facilities, indicating, where applicable, the charges that it will make in respect thereof.*

The following personnel, facilities, works and supplies shall apply as appropriate.

All personnel, facilities, works and supplies will be provided by the Employer in good time so as not to delay the performance of the Contractor, in accordance with the approved Time Schedule and Program of Performance pursuant to GCC Sub-Clause 31.2.

Unless otherwise indicated, all personnel, facilities, works and supplies will be provided free of charge to the Contractor.

### **RESPONSIBILITY OF TSPCL:**

- i) Control & Power cables (beyond the panel)
- ii) Civil foundation, structural support.
- iii) Welding machine, Gas cutter with welder & cutting man.
- vi) Crane/shovel loader with operator.

## **Appendix 6. List of Documents for Approval or Review**

General contractor is require to prepare the following, but not limited to, documents, manuals and drawings as stipulated elsewhere in the contract.

The submission of such documents, manuals and drawings must be approved by the owner.

The list of drawings, documents but not limited to is given below.

1. Master schedule.
2. Detail procurement procedure.
3. Equipment list of 33KV GIS Panel.
4. P & I diagram.
5. Equipment data sheet.
6. Design calculation.
7. Detail Engineering drawings.
8. Electrical and Instrument detail drawings.
9. Layout drawings.
10. Painting.

## Appendix 7. Functional Guarantees

### 1. General

This Appendix sets out

- (a) the functional guarantees referred to in GCC Clause43 (Functional Guarantees)
- (b) the preconditions to the validity of the functional guarantees, either in production and/or consumption, set forth below
- (c) the minimum level of the functional guarantees
- (d) the formula for calculation of liquidated damages for failure to attain the functional guarantees.

### 2. Preconditions

The Contractor gives the functional guarantees (specified herein) for the facilities, subject to the following preconditions being fully satisfied: *[ List any conditions for the carrying out of the Guarantee Test referred to in GCC Sub-Clause 40.2. ]*

### 3. Functional Guarantees

Subject to compliance with the foregoing preconditions, the Contractor guarantees as follows:

**3.1 Production Capacity** *[List here the production capacity that the Contractor is to guarantee, making sure to use, as functional guarantees, the figures offered by the Contractor in its tender]*

**3.2 Raw Materials and Utilities Consumption** *[List here the guaranteed items of consumption per unit of production (e.g., kg, tons, kcal, kWh, etc.) that the Contractor is to guarantee, making sure to use, as functional guarantees, the figures offered by the Contractor in its tender]*

### 4. Failure in Guarantees and Liquidated Damages

#### 4.1 Failure to Attain Guaranteed Production Capacity

If the production capacity of the facilities attained in the guarantee test, pursuant to GCC Sub-Clause40.2, is less than the guaranteed figure specified in para. 3.1 above, but the actual production capacity attained in the guarantee test is not less than the minimum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities, pursuant to GCC Sub-Clause 43.3, then the Contractor shall pay liquidated damages at the rate of *[amount in the contract currency]* for every complete one percent (1%) of the deficiency in the production capacity of the Facilities, or at a proportionately reduced rate for any deficiency, or part thereof, of less than a complete one percent (1%).

#### 4.2 Raw Materials and Utilities Consumption in Excess of Guaranteed Level

*[To be specified in the appropriate wording for the type of facilities if there are consumption guarantee]*

If the actual measured figure of specified raw materials and utilities consumed per unit (or their average total cost of consumption) exceeds the guaranteed figure specified in para. 3.2 above (or their specified average total cost of consumption), but the actual consumption attained in the guarantee test, pursuant to GCC Sub-Clause 25.2, is not more than the maximum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities pursuant to GCC Sub-Clause43.3, then the Contractor shall pay liquidated damages at the rate of *[amount in the contract currency]* for every complete one percent (1%) of the excess consumption of the Facilities, or part thereof, of less than a complete one percent (1%).

*[ The rate of liquidated damages specified in paras. 4.1 and 4.2 above shall be at least equivalent to the rate specified in Section 3 (General Conditions of Contract) for the comparison of functional guarantees provided by the Tenderers ]*

**4.3 Minimum Levels**

Notwithstanding the provisions of this paragraph, if as a result of the guarantee test(s), the following minimum levels of performance guarantees (and consumption guarantees) are not attained by the Contractor, the Contractor shall at its own cost make good any deficiencies until the Facilities reach any of such minimum performance levels, pursuant to GCC Sub-Clause 43.2:

- (a) production capacity of the Facilities attained in the guarantee test: ninety-five percent (95%) of the guaranteed production capacity
- and/or
- (b) average total cost of consumption of all the raw materials and utilities of the Facilities: one hundred and five percent (105%) of the guaranteed figures.

**4.4 Limitation of Liability**

Subject to para. 4.3 above, the Contractor's aggregate liability to pay liquidated damages for failure to attain the functional guarantees shall not exceed 10% (ten percent) of the Contract price

## **APPENDIX: 8. EMPLOYER'S INVOLVEMENT**

The following are some of the areas where Employer's personnel shall be involved by Contractor/contractors:

1. Procurement and Expediting
2. Inspection at Vendor's Shops
3. Checking of Quality of Works at Site
4. Checking of Quality and Quantity of Materials and Equipment received at Site
5. Reporting on Damages, Losses and Short Shipped Items
6. Storing, Material Coding, Inventory Control
7. Progress Reporting
8. Checking of Quantity of Works Completed
9. Preparation of Schedules and Progress Monitoring
10. Quality Control
11. Material Control and Schedule
12. Pre-commissioning and Commissioning
13. Performance Testing of the Equipment and the Project
14. Maintenance at Site in association with Contractor's personnel.
15. Control & Power cables (beyond the panel)
16. Civil foundation, structural support.
17. Welding machine, Gas cutter with welder & cutting man.
18. Crane/shovel loader with operator.



## APPENDIX: 9. EMPLOYER'S REQUIREMENT

Followings are the minimum requirements of goods (Equipment, Machinery, Materials, Fittings, Instruments, Auxiliaries and Accessories etc.) to be included for Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL on Lump Sum Turn-Key (LSTK) Basis. To facilitate unloading/receiving from the equipment, transportation, of the Factory site.

| Item No  | Description of Item   | Country of Manufacturing                        | Quantity    | Unit                    | Unit price (BDT) | Total Price (BDT)                          |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|----------|---|---|-------------|-------------------------|------------------|--|-----|----|-----------|--------|----|---------------|-------|----|------------------------|-------|----|---|-----------|----|--|---------|----|---|---|----|------------------------|-------|----|--|-----------|-----|---|---|-----|---|---------|-----|---|------|-----|---------------------------------|-------|-----|------------|----------------------------|--|--|--|--|--|
| <u>1</u> | <u>2</u>  | <u>3</u>  | <u>4</u>    | <u>5</u>                |                  | <u>7</u>                                   |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|          | Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with the accessories mentioned below :  |   | 01<br>(One) | Set                     |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 1        | <p><b>1.0 GENERAL</b></p> <p>The specification covers, the design manufacture, testing and supply of 36KV, 3 phase, 50 Hz gas insulated Metal clad indoor VCB type switchgear unit having SCADA/SAS Compatible facilities. Circuit breaker as per IS 13118 (1991)/IEC-60056 and other standards as specified below. All the equipment shall be suitable for satisfactory operation in tropical climate and dry dust laden atmosphere. The equipment shall be able to withstand wide range of temperature variation (-5° to 50°C). Temperature rise shall be guided by as per IEC: 600694. The plant/apparatus/equipment supplied shall comply in all respect with the requirement of Indian Electricity Rule 1956/ISS/IEC with latest amendment.</p> <p><b>STANDARD TECHNICAL PARAMETERS</b></p> <table border="1"> <thead> <tr> <th>SL</th> <th>Description</th> <th>Values/<br/>Informations</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Type of Switch Gear as per Arc Interrupter</td> <td>VCB</td> </tr> <tr> <td>2.</td> <td>Frequency</td> <td>50 c/s</td> </tr> <tr> <td>3.</td> <td>Rated Voltage</td> <td>33 KV</td> </tr> <tr> <td>4.</td> <td>Maximum Design Voltage</td> <td>36 KV</td> </tr> <tr> <td>5.</td> <td>Power Frequency withstand Voltage ( 1min)</td> <td>70 KV rms</td> </tr> <tr> <td>6.</td> <td>LI withstand Voltage ( 1.2 / 50 micro-sec)</td> <td>170 kVp</td> </tr> <tr> <td>7.</td> <td>Rated Current –<br/>i) Bus bar<br/>ii) Breaker<br/>iii) Disconnecter</td> <td>i) 2000 A<br/>ii) 1600 A<br/>iii) 1600 A &amp; above.</td> </tr> <tr> <td>8.</td> <td>Rated breaking current</td> <td>25 KA</td> </tr> <tr> <td>9.</td> <td>Rated Short Time Withstand Current for 3 sec – Symmetrical</td> <td>25 KA rms</td> </tr> <tr> <td>10.</td> <td>Rated Short Time Withstand Current for 3 sec - Asymmetrical</td> <td>As per relevant IEC/IS &amp; shall be type tested</td> </tr> <tr> <td>11.</td> <td>Rated dynamic peak withstand current (KA<sub>p</sub>)</td> <td>62.5 KA</td> </tr> <tr> <td>12.</td> <td>Cable charging current for C2 duty tested</td> <td>25 A</td> </tr> <tr> <td>13.</td> <td>Capacitor duty (C2 duty tested)</td> <td>400 A</td> </tr> <tr> <td>14.</td> <td>Duty Cycle</td> <td>0-0.3 sec.-CO-3.0 min.- CO</td> </tr> </tbody> </table> | SL  | Description | Values/<br>Informations | 1.               | Type of Switch Gear as per Arc Interrupter | VCB | 2. | Frequency | 50 c/s | 3. | Rated Voltage | 33 KV | 4. | Maximum Design Voltage | 36 KV | 5. | Power Frequency withstand Voltage ( 1min) | 70 KV rms | 6. | LI withstand Voltage ( 1.2 / 50 micro-sec) | 170 kVp | 7. | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. | 8. | Rated breaking current | 25 KA | 9. | Rated Short Time Withstand Current for 3 sec – Symmetrical | 25 KA rms | 10. | Rated Short Time Withstand Current for 3 sec - Asymmetrical | As per relevant IEC/IS & shall be type tested | 11. | Rated dynamic peak withstand current (KA <sub>p</sub> ) | 62.5 KA | 12. | Cable charging current for C2 duty tested | 25 A | 13. | Capacitor duty (C2 duty tested) | 400 A | 14. | Duty Cycle | 0-0.3 sec.-CO-3.0 min.- CO |  |  |  |  |  |
| SL       | Description   | Values/<br>Informations                         |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 1.       | Type of Switch Gear as per Arc Interrupter  | VCB   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 2.       | Frequency   | 50 c/s  |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 3.       | Rated Voltage   | 33 KV   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 4.       | Maximum Design Voltage  | 36 KV   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 5.       | Power Frequency withstand Voltage ( 1min)   | 70 KV rms                                       |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 6.       | LI withstand Voltage ( 1.2 / 50 micro-sec)  | 170 kVp   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 7.       | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter   | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 8.       | Rated breaking current  | 25 KA   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 9.       | Rated Short Time Withstand Current for 3 sec – Symmetrical  | 25 KA rms                                       |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 10.      | Rated Short Time Withstand Current for 3 sec - Asymmetrical   | As per relevant IEC/IS & shall be type tested   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 11.      | Rated dynamic peak withstand current (KA <sub>p</sub> )   | 62.5 KA   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 12.      | Cable charging current for C2 duty tested   | 25 A  |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 13.      | Capacitor duty (C2 duty tested)   | 400 A   |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 14.      | Duty Cycle  | 0-0.3 sec.-CO-3.0 min.- CO                      |             |                         |                  |  |     |    |           |        |    |               |       |    |                        |       |    |   |           |    |  |         |    |   |   |    |                        |       |    |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |

### 1.1 STANDARDS

The circuit breaker and Metal Clad Switchgear Panels shall conform to latest revision with amendment available of relevant standards, rules and codes some of which are listed herein for ready reference.

| Sl. No | Standard   | Item   |
|--------|--|--|
| 1.     | IEC-60056 / IS 13118 /IEC                        | Circuit Breaker  |
| 2.     | IEC-62271-100,200 ; IEC-600298 / 600694; IS-3427 | Metal enclosed switchgear and control gear.                            |
| 3.     | IS-2705 / IEC 60185                              | Current Transformers   |
| 4.     | IS-3156 / IEC 60186                              | Voltage Transformer  |
| 5.     | IS-3231 & 3842 / IEC 60255                       | Protective Relays  |
| 6.     | IS-1248  | Ammeter & Voltmeter  |
| 7.     | IEC 60129  | Alternating current disconnectors (isolators)                          |
| 8.     | IEC 60529  | Classification of degrees of protection.                               |
| 9.     | IS-375   | Arrangement of breakers Bus bars main connection and auxiliary wiring. |
| 10.    | IEC-687/CBIP Report                              | Tri Vector Meter   |

**The design of the switchgear shall be based on safety to personnel and equipment during operation and maintenance, reliability of service, ease of maintenance, mechanical protection of equipment, interchangeability of equipment and ready addition of future loads.**

### 2.0 STRUCTURAL & MECHANICAL CONSTRUCTION

**2.1** The Switchgear shall be factory assembled, totally enclosed, metal clad, dead front cubicle. It shall be of sheet Steel (preferably galvanized to avoid rusting) construction and shall be dust, moisture and vermin proof complying with degree of protection of not less than IP-4x as per IS-3427 (1997). The panels shall be of Metal Clad compartmentalized design with all the High Voltage compartments viz. Circuit Breaker, Bus Bar etc. separated by metallic partitions. The switchgear panels shall be rigid without using any external bracing. The switchboard panels should comply with relevant ISS/IEC and revision thereof and shall be designed for easy operation maintenance and further extension. Bus bar, metering, circuit breaker chamber, cables and cable box chamber should have proper access for maintenance, proper interlocks should be provided. The switchgear shall be complete with all necessary wiring fuses, auxiliary contacts, terminal boards etc.

**2.2** The panels shall be constructed from prime quality folded steel sheet of 2 mm thick or Al-Zn sheet steel. Only doors and end covers shall be painted with paint shade as specified.

The observation window on the CB compartment door shall be provided. Observation window shall be of same material and construction as the type tested design/ construction.

**The design of the panels shall be such that no permanent or harmful distortion occurs either when being lifted by eyebolts or when moved into position by rollers or trans pallets.**

The switchgear and control gear should have the minimum degree of protection (in accordance with IEC 60529)

- IP 4X for the enclosure for rated current up to 1600A
- IP 3X for the enclosure for rated current up to 2500A
- IP 2X for the partition between compartments

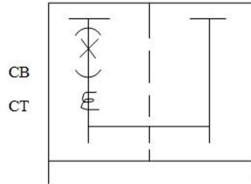
**The switchgear must be readily extendable in either direction.**

**2.3** For Seismic Applications: The switchboard may be subject to seismic disturbance, hence the switchgear supplier shall provide the type test report or documentation to support the same.

**2.4** Each cubicle shall be equipped with anti-condensation heater controlled by thermostat.

**2.5 Bus Sectionalize panels**

In bus Sectionalize panel one panel shall be used for truck with the C.B. and second panel for connection of bus bar to the top. The bus Sectionalize panel can be combined with a metering panel.



**Bus Sectionalize Panels (Typical)**

**2.6** Assembly of all current carrying parts shall be such that they shall be easily accessible for inspection and maintenance.

**2.7** Switchgear cubicles shall be satisfied the requirement of IEC:62271-200, IEC:60298, IEC:60694.

**2.8** Each switch gear shall be supplied with basic operating tools like – rack-in rack-out handle etc.

**2.9** The switchgear and control gear shall be suitable for continuous operation under the basic service conditions indicated below.

Ambient temperature °C - 5 to + 50

Relative humidity up to 95%

Altitude of installation up to 1000m, IEC 120

**3.0 BUS BARS AND CONNECTORS**

Bus bars and all other electrical connections between various components shall be made of Electrolytic copper of adequate cross-section. The bus bar section shall be of ample capacity to carry the rated current continuously without excessive heating and for adequately meeting the thermal and dynamic stresses in the case of short circuit in the system up to full fault MVA. Cross section of the Bus bars shall have to be designed to limit

the current density within 0.75A/sq.mm in case of Aluminum & 1.75A/sq.mm in case of Copper.

All bus bars shall be rigidly and firmly mounted. Spacious bus bar chamber shall be provided with use of tubular bus bar design and free from any high voltage stresses by avoiding all sharp edges and bringing them to uniform potential. Bus bar shall be sleeved for full voltage. Sleeve shall be heat shrinkable BTM type of Raychem make. **No PVC sleeve in bus bar for 36KV is acceptable.**

Bus bar shall be located in a separate metal clad chamber and shall be air insulated. It shall be adequately supported on insulators or integral epoxy spouts to withstand dynamic stress due to the short circuit current as specified.

Bus bar shall be extensible on either side to make it in switch board configuration of any make.

**4.0 CIRCUIT BREAKER**

**4.1** The Circuit Breaker shall be suitable for installation in the switchgear cubicle. The breakers shall comply with IS-13118/IEC-60056 conforms to latest amendment thereof.

**4.2** The Circuit Breaker shall be spring operated, Motor charged, manually released spring closing mechanism with three pole simultaneous operation. The indicating device shall show the OPEN and CLOSE position of breaker visible from front of the cubicle. The spring charging time of the motor shall not exceed 15 sec. The “TRIP” and “CLOSE”

|   |  |  |  |  |
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| <p>coils shall be of reliable design and low consumption preferably less than 300W. It shall be possible to manually charge the circuit breaker operating spring in case of auxiliary supply failure.</p> <p><b>4.3</b> The breakers shall be capable of Making &amp; Breaking the short time current in accordance with the requirement of ISS 13118 / IEC 60056 conform to latest amendment thereof and shall have 3 phase rupturing capacity of 25KA at 33KV. The continuous current rating of breaker shall not be less than 1600A for all items.</p> <p><b>4.4</b> The circuit breaker shall be isolated by horizontal racking and positively fixing the unit into any one of the following positions;</p> <ul style="list-style-type: none"> <li>- <b>Service position;</b> main and auxiliary circuits connected</li> <li>- <b>Test position;</b> main circuits disconnected auxiliary circuits connected. Circuit breaker in its isolated position shall be completely contained in the apparatus compartment with shutters on main circuit closed and compartment front door closed.</li> </ul> <p>Locking of circuit breaker in the test position shall be possible by means of key lock on the earth switch manoeuvre.</p> <p>A position indicator switch or viewing window must be provided for visual indication of the circuit breaker position. Comprehensive interlocking system to prevent any dangerous or inadvertent operation shall be provided. Isolation of circuit breaker from bus bar or insertion into bus bar shall only be possible when the breaker is in the "OPEN" position.</p> <p><b>4.5</b> Each circuit breaker shall be provided with following accessories.</p> <ol style="list-style-type: none"> <li>i) ON-OFF indicator for indicating circuit breaker position.</li> <li>ii) Trip push button</li> <li>iii) Shunt trip coil operating between 70% - 110% of rated control voltage.</li> <li>iv) Close coil, operating between 85% - 110% of rated control voltage.</li> <li>v) Spring charge motor, operating between 90% - 110% of rated control voltage.</li> <li>vi) Two trip coils and one closing coils shall be provided in all the breakers.</li> </ol> <p><b>4.6</b> The switchgear shall be provided with facilities for full operation from a remote point. In case of Local Operation of circuit breakers, Control switch of Circuit Breaker shall be located at such a height so that a man can operate standing on ground/floor. It shall be possible to trip the circuit breaker locally by mechanical means.</p> <p><b>4.7</b> The circuit breaker truck shall ensure earth in both connected and disconnected positions.</p> <p><b>4.8</b> An electro-mechanical device shall be provided to ensure the auxiliary circuits have been securely connected between the fixed and moving portions of the switchgear, before allowing closing operation of the circuit breaker. The voltage rating of the device shall be the same as the voltage used for the closing circuit.</p> <p><b>4.9</b> Tripping and/or release coils shall be continuous rated to ensure longer life but rating should not exceed 300 W each. The electrical tripping device shall be of a type which acts directly on the circuit breaker mechanism and shall give positive operation for a supply voltage of 70% of nominal at dc and 85% of nominal at ac control voltage.</p> <p><b>4.10</b> Circuit breakers will be provided with at least one spare normally-open and one spare normally-closed contact, each wired out to terminals for the connection of external wiring.</p> <p><b>4.11</b> Each circuit breaker shall be interlocked to prevent:</p> <ul style="list-style-type: none"> <li>- the breaker being inserted into service position unless it is open</li> <li>- the breaker being withdrawn from the service position unless it is open</li> <li>- the breaker being closed unless it is fully in the service or test position</li> <li>- remote operation whilst in the withdrawn/test position</li> </ul> <p><b>4.12</b> Circuit breakers shall be mechanical latching and electrical and mechanical tripping. The operating mechanism</p> |  |  |  |  |
|---|--|--|--|--|

|  |  |  |  |  |
|--|--|--|--|--|
| <p>shall be trip-free and shall include an anti-pumping device.</p> <p><b>4.13 Shutters:</b> Circuit breaker compartment should have automatic shutters, which shall be opened and closed by the mechanical drive of the circuit breaker. The bus bar and circuit spout covers shall be operated independently of each other. Padlock facilities can be provided on the metal shutters.</p> <p><b>4.14 INTERLOCKING</b><br/>Isolation and connection of the circuit breaker shall be carried out inside the compartment with the door closed. The following mechanical interlocks shall be provided for service safety: - interlocking which prevents racking-in and racking-out of the circuit breaker when closed - interlocking which prevents manual or electrical closing of the circuit breaker in the intermediate positions between connected or isolated - interlocking which prevents either the circuit breaker from being racked in when the relative earth switch is closed and the earth switch from being closed with the circuit breaker racked in.</p> <p><b>5.0 Current Transformer :</b><br/>The current transformer should be ring core, Di-electrically non stressed type and should be located outside the gas chamber. The CT shall be mounted in a manner to make it very easy for fitting / replacement at site. It shall be designed with built in adjustable cable holding clamps, makes it very easy for removal/sturdy fitting of power cables and to prevent any swing due to forces encountered during short circuit. P1 of primary side of the in-built CT shall be at bus side of all the panels.</p> <p><b>6.0 POTENTIAL TRANSFORMER</b><br/>Three numbers Single phase draw out type PT of ratio <math>33000/\sqrt{3}</math>; <math>110/\sqrt{3}</math> Volts with HT/LT fuses mounted on an independent trolley housed at the same feeder/transformer panel. This Line PT shall not get disconnected along with the Circuit Breaker in case the breaker is drawn out from 'SERVICE' position. Bus potential transformer shall be housed in separate trolley, placed in a separate panel. Arrangement shall be made in such a way so that PT primary fuse can be replaced without switching OFF the breaker.</p> <p><b>7.0 AUXILIARY/CONTROL WIRING</b><br/>All the secondary wiring in the panel shall have high quality PVC insulation 1100 volts grade and the same shall be of standard Copper Conductor of size not less than 1.5 sq. mm. for control circuit and 2.5 sq. mm. for CT circuits. Colors of the secondary / auxiliary wiring should conform to ISS 375/1963 conform to latest amendments thereof. All wiring shall be neatly run and group of wiring shall be securely fixed with clips so that wiring can be checked without necessity of removing the clamps. Ferrules with number shall be provided on both end of the wiring.</p> <p><b>8.0 EARTHING</b><br/>(a) An earth bus of size minimum 40 mm x 6 mm or equivalent copper shall be provided and shall be extended throughout the length of the switch board with a provision to extend further on both sides of the end switchboard for future extension of switchboards.<br/>(b) It shall be possible to connect each bay of the switchgear to earth, through earthing switches suitable for fault make current. And provision of bus earthing is also required.<br/>(c) Earthing switch shall be mechanically interlocked with the associated breaker as per interlock requirement.<br/>(d) Earthing circuit shall be suitable for testing at 25KA for 1.0 sec.<br/>(e) Breaker compartment shall have scrapping earth bar and spring load finger shall be provided in withdrawal truck.<br/>(f) Provision of Bus bar earthing at both side of Bus-Coupler is to be provided.</p> |  |  |  |  |
|--|--|--|--|--|

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|---|---|--|--|--|--|--|
|   | <b>9. TYPE TESTS</b><br>The bidder shall submit following Type test reports to prove the capability and suitability of his offered switchgear.<br>i) Short Time Current Test for 25KA for 3 second.<br>ii) Short Circuit Test duties on Circuit Breaker.<br>iii) Impulse withstands Test.<br>iv) Power Frequency withstands Test.<br>v) Temperature Rise Test.<br>vi) Internal Arc Test.<br>vii) Mechanical Endurance test on Circuit Breaker.<br>viii) Test to prove Degree of Protection of enclosure |  |  |  |  |  |
| 2 | <b>Air Conditioner :</b><br>Capacity : 4 Ton, 48000 BTU with Remote Control = 05(Five) Nos, Ceiling Type.<br>Input Voltage : 380-440 VAC, 50Hz, 3 Phase.<br>Brand : General (Esquire Electronics limited Bd.)<br>Model : ABG 45 ABAS.<br>Country of Manufacturing: Japan, Assemble in Thailand.<br>Warranty : 2 Years compressor, Spare parts & 3 Years after sales service.  |  |  |  |  |  |
| 3 | <b>PAINTING</b><br>The Panels shall be pre-treated using 7-Tank process and then Epoxy Powder Coated with Paint shade of RAL 7032.  |  |  |  |  |  |
| 4 | (i) <b>Installation &amp; Commissioning:</b> Offer to be submitted on turn-key basis i.e. Supply, installation and commissioning to be done by the bidder<br>(ii) The bidder is responsible for testing & commissioning the supplied panels for continuous 72 hours on full load running condition of the plant.  |  |  |  |  |  |
|   | Others (To be Specified by The Contractor)  |  |  |  |  |  |

|  |  |  |  |  |                   |  |
|--|--|--|--|--|-------------------|--|
|  |  |  |  |  | Total Value (BDT) |  |
|  |  |  |  |  | =                 |  |
|  |  |  |  |  |                   |  |

## Section 5. Tender and Contract Forms

| Form                  | Title  |
|-----------------------|--|
| <b>Tender Forms</b>   |  |
| PG5A – 1a             | Tender Submission Letter for Technical Proposal                                      |
| PG5A – 1b             | Tender Submission Letter for Financial (Price) Proposal                              |
| PG5A – 2a             | Tenderer Information Sheet   |
| PG5A – 2b             | JVCA Partner Information   |
| PG5A – 3              | Price Schedule for Plant and Services  |
| PG5A – 4              | Technical Proposal   |
| PG5A – 4a             | Specification submission & compliance sheet.   |
| PG5A– 5               | Manufacturer's Authorisation Letter  |
| PG5A – 6              | Bank Guarantee for Tender Security   |
| PG5A – 6a             | <b>Letter of Commitment for Bank's undertaking for Line of Credit (Form PG5A-6a)</b> |
| <b>Contract Forms</b> |  |
| PG5A – 7              | Notification of Award  |
| PG5A – 8              | Contract Agreement   |
| PG5A – 9              | Bank Guarantee for Performance Security  |
|                       | Bank Guarantee for Payment   |

Forms PG5A-1a, PG5A-1b to PG5A-6, PG5A-6a comprises part of the Tender and should be completed as stated in ITT Clause 24.

Forms PG5A-7 and the appendices of the tender comprises part of the Contract as stated in GCC Clause 6.

## Tender Submission Letter for Technical offer (Form PG5A-1a)

*[This letter should be completed and signed by the Authorised Signatory preferably on the Letter-Head Pad of the Tenderer and be appended in the technical proposal envelope]*

To:  
Managing Director,  
Triple Super Phosphate Complex Limited (TSPCL), North Patenga,  
Chattogram.

Date:

Telephone: +88 02333300455, +88 02333300456, +88 02333300458,  
Fax No.: +88 02333300457, E-mail: mdtspcomplex@gmail.com

Tender No: **36.01.1565.673.07.092.22(E-10/22-23)/333**

**Dated: 03-11-2022**

We, the undersigned, offer to design, manufacture, test, deliver, install, pre-commission and commissioning conformity with the Tender Document, the following Plant and Services, viz:

In signing this letter, and in submitting our Tender, we also confirm that:

- (a) our Tender shall be valid for the period stated in the Tender Data Sheet (ITT Sub Clause 30.2) and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) a Tender Security is attached in the form of a *[state pay order, bank draft, bank guarantee]* in the amount stated in the Tender Data Sheet (ITT Sub Clause 32.2) and valid for a period of twenty eight (28) days beyond the Tender validity date;
- (c) we have examined and have no reservations to the Tender Document, issued by you on **03-11-2022**; including Addendum to Tender Document No(s) *[Safe number]*; issued in accordance with the Instructions to Tenderers (ITT Clause 11). *[insert the number and issuing date of each addendum; or delete this sentence if no Addendum has been issued]*;
- (d) we are submitting this Tender as a sole Tenderer in accordance with ITT Sub Clause 38.3
- (e) *we are not a Government owned entity as defined in ITT Sub Clause 5.3 or we are a Government owned entity, and we meet the requirements of ITT Sub Clause 5.3;*  
*(delete one of the above as appropriate)*
- (f) furthermore, we are aware of ITT Clause 4 concerning such practices and pledge not to indulge in such practices in competing for or in executing the Contract;
- (g) we intend to subcontract an activity or part of the Works, in accordance with ITT Sub Clause 19.1, to the following Subcontractor(s);
- (h) we are not participating as Tenderers in more than one Tender in this Tendering process. We understand that your written Notification of Award shall constitute the acceptance of our Tender and shall become a binding Contract between us, until a formal Contract is prepared and executed;
- (i) we understand that you reserve the right to reject all the Tenders or annul the Tender proceedings, without incurring any liability to Tenderers, in accordance with ITT Clause 59.



|  |   |
|--|---|
| Signature:   | <i>[insert signature of authorised representative of the Tenderer]</i>        |
| Name:  | <i>[insert full name of signatory with National ID Number, if applicable]</i> |
| In the capacity of:  | <i>[insert capacity of signatory]</i>   |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |   |

## Tender Submission Letter for Financial offer (Form PG5A-1b)

*[This letter should be completed and signed by the Authorised Signatory preferably on the Letter-Head Pad of the Tenderer and be appended in the financial proposal envelope]*

To:  
 Managing Director,  
 Triple Super Phosphate Complex Limited (TSPCL), North Patenga,  
 Chattogram.  
 Telephone: +88 02333300455, +88 02333300456, +88 02333300458,  
 Fax No.: +88 02333300457, E-mail: mdtspcomplex@gmail.com

Date:

**Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333**  
**Dated:03-11-2022**

We, the undersigned, offer to supply, install, commissioning and PGTR conformity with the Tender Document, the following Plant and Services, viz:

In accordance with ITT Clauses 26 and 27, the following prices and discounts apply to our Tender:

|  |   |
|--|---|
| The Tender Price is:<br>(ITT Sub-Clause 26.1)  | <i>[state amount in figures]<br/>and [state amount in words]</i>          |
| Plant (including Mandatory Spare Parts)<br>Supplied from abroad                        | <i>[state amount in figures]<br/>and [state amount in words]</i>          |
| Plant (including Mandatory Spare Parts)<br>supplied from within the Employer's Country | <i>Taka[state amount in figures]<br/>And Taka [state amount in words]</i> |
| Installation and Other Services  | <i>[state amount in figures]<br/>and [state amount in words]</i>          |
| Recommended Spare parts Price<br>(If economic Factor is applicable)                    | <i>[state amount in figures]<br/>and [state amount in words]</i>          |
| The Unconditional discount is<br>(ITT Sub-Clause 23.11)                                | <i>[state amount in figures]<br/>and [state amount in words]</i>          |
| The methodology for Application of the<br>discount is:                                 | <i>[state the methodology]</i>  |

In signing this letter, and in submitting our Tender, we also confirm that:

- a) our Tender shall be valid for the period stated in the Tender Data Sheet (ITT Sub Clause 30.1) and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- b) a Tender Security is attached in the form of a [state pay order, bank draft, bank guarantee] in the amount stated in the Tender Data Sheet (ITT Sub Clause 32) and valid for a period of twenty eight (28) days beyond the Tender validity date;
- c) if our Tender is accepted, we commit to furnishing a Performance Security within the time stated under ITT Sub Clause 65.1) and in the form specified in the Tender Data Sheet (ITT Sub Clause 66.1) valid for a period of twenty eight (28) days beyond the date of issue of the Completion Certificate of the Plants and Services;
- d) we have examined and have no reservations to the Tender Document, issued by you on [insert date]; including Addendum to Tender Document No(s) [state numbers], issued in accordance with the Instructions to Tenderers (ITT Clause 11). [insert the

number and issuing date of each addendum; or delete this sentence if no Addendum has been issued];

- e) we are not a Government owned entity as defined in ITT Sub Clause 5.3 or we are a Government owned entity, and we meet the requirements of ITT Sub Clause 5.3;

*(delete one of the above as appropriate)*

- f) furthermore, we are aware of ITT Clause 4 concerning such practices and pledge not to indulge in such practices in competing for or in executing the Contract;
- g) we are not participating as Tenderers in more than one Tender in this Tendering process. We understand that your written Notification of Award shall constitute the acceptance of our Tender and shall become a binding Contract between us, until a formal Contract is prepared and executed;
- h) we understand that you reserve the right to reject all the Tenders or annul the Tender proceedings, without incurring any liability to Tenderers, in accordance with ITT Clause 61

|  |  |
|--|--|
| Signature:   | <i>[insert signature of authorised representative of the Tenderer]</i> |
| Name:  | <i>[insert full name of signatory with National ID Number]</i>         |
| In the capacity of:  | <i>[insert capacity of signatory]</i>                                  |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |

## Tenderer Information (Form PG5A-2a)

[This Form should be completed only by the Tenderer, preferably on its Letter-Head Pad]

Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333

Dated:03-11-2022

Tender Package No: 36.01.1565.673.07.092.22(E-10/22-23)/333

Dated:03-11-2022

This Package is divided into the following Number of Lots: **01**

|   |  |   |                |
|---|--|---|----------------|
| <b>1. Eligibility Information of the Tenderer [ITT –Clauses 5 &amp; 29]</b>   |  |   |                |
| 1.1   | Nationality of individual or country of registration   |   |                |
| 1.2   | Tenderer's legal title   |   |                |
| 1.3   | Tenderer's registered address  |   |                |
| 1.4   | Tenderer's legal status <i>[complete the relevant box]</i>   |   |                |
|   | Proprietorship   |   |                |
|   | Partnership  |   |                |
|   | Limited Liability Concern  |   |                |
|   | Government-owned Enterprise  |   |                |
|   | Others<br>[please describe, if applicable]   |   |                |
| 1.5   | Tenderer's year of registration  |   |                |
| 1.6   | Tenderer's authorised representative details   |   |                |
|   | Name   |   |                |
|   | National ID number   |   |                |
|   | Address  |   |                |
|   | Telephone / Fax numbers  |   |                |
|   | e-mail address   |   |                |
| 1.7   | Litigation [ITT Cause 13]  |   |                |
|   | If there is no history of litigation or no pending litigation then state opposite "None". If there is a history of litigation, or a number of awards, against the Tenderer provide details below |   |                |
|   | <b>A. Arbitration Awards made against</b>  |   |                |
|   | Arbitration  | Matter in dispute                                   | Value of Award |
|   |  |   | Value of Claim |
|   |  |   |                |
|   |  |   |                |
|   |  |   |                |
|   | <b>B. Arbitration Awards pending</b>   |   |                |
|   | Year   | Matter in dispute                                   | Value of Claim |
|   |  |   |                |
|   |  |   |                |
|   |  |   |                |
| 1.8   | Tenderer to attach photocopies of the original documents mentioned aside   | [All documents required under ITT Clauses 5 and 29] |                |
| The following two information are applicable for National Tenderers   |  |   |                |
| 1.9   | Tenderer's Value Added Tax Registration (VAT) Number   |   |                |
| 1.10  | Tenderer's Tax Identification Number(TIN)  |   |                |
| [The foreign Tenderers, in accordance with ITT Sub Clause 5.1, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion] |  |   |                |

| 16. Qualification Information of the Tenderer [ITT Clause 29]   |  |                     |   |   |   |
|---|--|---------------------|---|---|---|
| 2.1 General Experience in Plant and Services of Tenderer  |  |                     |   |   |   |
|   | Start Month Year   | End Month Year      | Years   | Contract No and Name of Contract<br>Name and Address of Procuring Entity<br>Brief description of Plant and Services | Role of Tenderer<br>[Contractor/Subcontractor /Management Contractor] |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
| 2.2 Specific Experience in Key Activities   |  |                     |   |   |   |
|   | Contract No<br>Name of Contract  |                     | [ insert reference no] of [ insert year]<br>[insert name]                         |   |   |
|   | Role in Contract<br><i>[tick relevant box].</i>  |                     | Contractor  | Subcontractor   | Management Contractor   |
|   | Award date<br>Completion date<br>Total Contract Value  |                     | [insert date]<br>[insert date]<br>[insert amount]                                 |   |   |
|   | Procuring Entity's Name<br>Address<br>Tel / Fax<br>e-mail<br>Brief description with justifications of the similarity compared to the Procuring Entity's requirements |                     | [state justification in support of its similarity compared to the proposed works] |   |   |
| 2.3 Average annual turnover [ITT Sub Clause 15.1(a)]<br><i>[amount invoiced to Procuring Entity(s) for each year of works in progress or completed, using rate of exchange at the end of the period reported]</i> |  |                     |   |   |   |
|   | Year   | Amount & Currency   |   | amount in figures   |   |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
| 2.4 Financial Resources available to meet the cash flow [ITT Sub Clause 15.1(b)]  |  |                     |   |   |   |
|   | No   | Source of Financing |   |   | Amount Available  |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
|   |  |                     |   |   |   |
| In order to confirm the above statements the Tenderer shall submit , as applicable, the documents mentioned in ITT Sub Clause 14.1(a), (b) and 15.1 (a), (b) & (c)  |  |                     |   |   |   |
| 2.5 Contact Details   |  |                     |   |   |   |
|   | Name, address, and other contact details of Tenderer Bankers and other Procuring   |                     |   |   |   |

|   |  |  |  |
|---|--|--|--|
|   | Entity(s) that may provide references, if contacted by this Procuring Entity   |  |  |
| 2.6   | Qualifications and experience of key technical and administrative personnel proposed for Contract administration and management [ITT Sub Clause 16.1 ] |  |  |
|   | Position<br>Name<br>Years of General Experience  | Years of Specific Experience               |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
| <i>[Tenderer to complete details of as many personnel as are applicable. Each personnel listed above should complete the Personnel Information (Form PG5A-5)]</i> |  |  |  |
| 2.7   | Major Equipment proposed to carry out the Contract [ITT Sub Clause 17.1 ]  |  |  |
|   | Item of Equipment  | Condition<br>(new, good, average,<br>poor) | Owned, leased or to be<br>purchased<br>(state owner, lessor<br>seller) |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
| <i>[Tenderer to list details of each item of major equipment, as applicable]</i>  |  |  |  |

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

## JVCA Partner Information (Form PG5A-2b)

*[This Form should be completed by each JVCA partner].*

Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333

Tender Package No: 36.01.1565.673.07.092.22(E-10/22-23)/333

This Package is divided into the following Number of Lots: **01**

|   |  |   |                |                |
|---|--|---|----------------|----------------|
| <b>1. Eligibility Information of the JVCA Partner [ITT –Clauses 5 &amp; 29]</b> |  |   |                |                |
| 1.1   | Nationality of Individual or country of Registration   |   |                |                |
| 1.2   | JVCA Partner's legal title   |   |                |                |
| 1.3   | JVCA Partner's registered address  |   |                |                |
| 1.4   | JVCA Partner's legal status <i>[complete the relevant box]</i>   |   |                |                |
|   | Proprietorship   |   |                |                |
|   | Partnership  |   |                |                |
|   | Limited Liability Concern  |   |                |                |
|   | Government-owned Enterprise  |   |                |                |
|   | Other<br>(please describe, if applicable)  |   |                |                |
| 1.5   | JVCA Partner's year of registration  |   |                |                |
| 1.6   | JVCA Partner's authorised representative details   |   |                |                |
|   | Name   |   |                |                |
|   | National ID number   |   |                |                |
|   | Address  |   |                |                |
|   | Telephone / Fax numbers  |   |                |                |
|   | e-mail address   |   |                |                |
| 1.7   | Litigation [ITT Sub Cause 13]  |   |                |                |
|   | If there is no history of litigation or no pending litigation then state "None". If there is a history of litigation, or a number of awards, against the JVCA Partner provide details below: |   |                |                |
|   | <b>A. Arbitration Awards made against</b>  |   |                |                |
|   | Year   | Matter in dispute                                   | Value of Award | Value of Claim |
|   |  |   |                |                |
|   |  |   |                |                |
|   |  |   |                |                |
|   | <b>B. Arbitration Awards pending</b>   |   |                |                |
|   | Year   | Matter in dispute                                   | Value of Claim |                |
|   |  |   |                |                |
|   |  |   |                |                |
|   |  |   |                |                |
| 1.8   | JVCA Partner to attach copies of the original documents mentioned aside  | [All documents required under ITT Clauses 5 and 29] |                |                |

|  |   |                   |   |  |  |
|--|---|-------------------|---|--|--|
| The following two information are applicable for national JVCA Partners only   |   |                   |   |  |  |
| 1.9  | JVCA Partner's Value Added Tax Registration (VAT) Number            |                   |   |  |  |
| 1.10   | JVCA Partner's Tax Identification Number (TIN)                      |                   |   |  |  |
| [The foreign JVCA Partners, in accordance with ITT Sub Clause 5.1, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion]  |   |                   |   |  |  |
| 2. Key Activity(ies) for which it is intended to be joint ventured [ITT Sub Clause 18.2 & 18.3]  |   |                   |   |  |  |
|  | Elements of Activity  |                   | Brief description of Activity   |  |  |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |
| 3. Qualification Information of the JVCA Partner [ITT Clause 18]   |   |                   |   |  |  |
| 3.1 General Experience in Plant and Services of JVCA Partner   |   |                   |   |  |  |
|  | Start Month Year  | End Month Year    | Years   | Contract No and & Name of Contract<br>Name and Address of Procuring Entity<br>Brief description of Works | Role of JVCA Partner<br>[Contractor/Subcontractor/Management Contractor] |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |
| 3.2 Specific Experience in Key Activities  |   |                   |   |  |  |
|  | Contract No<br>Name of Contract                                     |                   | [insert reference no] of [insert year]<br>[insert name]   |  |  |
|  | Role in Contract<br>[tick relevant box]                             |                   | Contractor  | Subcontractor  | Management Contractor  |
|  | Award date<br>Completion date<br>Total Contract Amount              |                   | [insert date]<br>[insert date]<br>[insert amount]   |  |  |
|  | Procuring Entity's<br>Name<br>Address<br>Tel / Fax<br><u>e-mail</u> |                   | [state justification in support of its similarity compared to the proposed plants and service]<br><br>Brief description with justifications of the similarity compared to the Procuring Entity's requirements |  |  |
| 3.3 Average annual construction turnover [ITT Sub Clause 15.1 (a)]<br><i>[amount invoiced to Procuring Entity(s) for each year of work in progress or completed, using rate of exchange at the end of the period reported]</i> |   |                   |   |  |  |
|  | Year  | Amount & Currency |   | Amount in Figures  |  |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |
|  |   |                   |   |  |  |



|     |  |   |   |
|-----|--|---|---|
|     |  |   |   |
| 3.4 | Financial Resources available to meet the cash flow [ITT Sub-Clause 15.1(b)]   |   |   |
|     | Source of financing  |   | Amount available  |
|     |  |   |   |
|     | In order to confirm the above statements the JVCA Partner shall submit , as applicable, the documents mentioned in ITT Sub Clause 14.1 (a) & (b)15.1 (a), (b), (c) & (d) |   |   |
| 3.5 | Contact Details  |   |   |
|     | Name, address, and contact details of Tenderer's Bankers and other Procuring Entity(s) that may provide references if contacted by this Procuring Entity                 |   |   |
| 3.6 | Qualifications and experience of key technical and administrative personnel proposed for Contract administration and management [ITT Sub Clause 16.1]                    |   |   |
|     | Position<br>Name<br>Years of General Experience  | Years of Specific Experience            |   |
|     |  |   |   |
|     | <i>[Tenderer to complete details of as many personnel as are applicable. Each personnel listed above should complete the Personnel Information (Form PG5A-5)]</i>        |   |   |
| 3.7 | Major items of Construction Equipment proposed for carrying out the works [ITT Sub-Clause 17.1]  |   |   |
|     | Item of Equipment  | Condition<br>(new, good, average, poor) | Owned, leased or to be purchased<br>(state owner, leaser or seller) |
|     |  |   |   |
|     | <i>[Tenderer to list details of each item of Major equipment, as applicable]</i>   |   |   |

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

## Price Schedule for Plant and Service (Form PG5A-3)

(This form should be completed and submitted by the tenderer and appended in the financial proposal envelope)

|   |
|---|
| Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333<br>Dated: 03-11-2022 |
| Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333<br>Dated: 03-11-2022 |
| This Package is divided into the following Number of Lots: <b>01</b>                    |

### General

1. The Price Schedules are divided into separate Schedules as follows:  
Schedule No. 1: 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner (including Mandatory Spare Parts) Supplied from Abroad  
Schedule No. 2: 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner (including Mandatory Spare Parts) Supplied from within the Employer's Country  
Schedule No. 3: Fabrication, Installation and Other Services  
Schedule No. 4: Civil works  
Schedule No. 5: Commissioning and Testing  
Schedule No. 6: Grand Summery  
Schedule No. 7: Recommended Spare Parts
2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Tenderers shall be deemed to have read the Employer's Requirements and other sections of the Tender Document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
3. If tenderers are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITT 9.1 prior to submitting their tender.

### Pricing

4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Tenderer.  
As specified in the Tender Data Sheet and Special Conditions of Contract, prices shall be fixed and firm for the duration of the Contract, or prices shall be subject to adjustment in accordance with the corresponding Appendix (Price Adjustment) to the Contract Agreement.
5. Tender prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Tenderers in the Tender Document.  
For each item, tenderers shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.  
Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Tender Document.
6. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
7. When requested by the Employer for the purposes of making payments or partial payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules

## Schedules of Rates and Prices

### Schedule No. 1 – Supply, installation and commissioning with Spare Parts

**Supplied from Abroad with transportation up to TSPCL plant site.**

Followings are the minimum requirements of goods (Equipment, Machinery, Materials, Fittings, Instruments, Auxiliaries and Accessories etc.) to be included for **Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) Basis.**

| Item No | Description of Item   | Country of Manufacturing                        | Quantity    | Unit                    | Unit price (BDT) | Total Price (BDT)                          |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|---------|---|---|-------------|-------------------------|------------------|--|-----|-----|-----------|--------|-----|---------------|-------|-----|------------------------|-------|-----|---|-----------|-----|--|---------|-----|---|---|-----|------------------------|-------|-----|--|-----------|-----|---|---|-----|---|---------|-----|---|------|-----|---------------------------------|-------|-----|------------|----------------------------|--|--|--|--|--|
| 1       | 2   | 3   | 4           | 5                       |                  | 7  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|         | Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with the accessories mentioned below :  |   | 01<br>(One) | Set                     |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 1       | <p><b>1.0 GENERAL</b><br/>The specification covers, the design manufacture, testing and supply of 36KV, 3 phase, 50 Hz gas insulated Metal clad indoor VCB type switchgear unit having SCADA/SAS Compatible facilities. Circuit breaker as per IS 13118 (1991)/IEC-60056 and other standards as specified below. All the equipment shall be suitable for satisfactory operation in tropical climate and dry dust laden atmosphere. The equipment shall be able to withstand wide range of temperature variation (-5° to 50°C). Temperature rise shall be guided by as per IEC: 600694. The plant/apparatus/equipment supplied shall comply in all respect with the requirement of Indian Electricity Rule 1956/ISS/IEC with latest amendment.</p> <p><b>STANDARD TECHNICAL PARAMETERS</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SL</th> <th style="text-align: center;">Description</th> <th style="text-align: center;">Values/<br/>Informations</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">15.</td> <td>Type of Switch Gear as per Arc Interrupter</td> <td>VCB</td> </tr> <tr> <td style="text-align: center;">16.</td> <td>Frequency</td> <td>50 c/s</td> </tr> <tr> <td style="text-align: center;">17.</td> <td>Rated Voltage</td> <td>33 KV</td> </tr> <tr> <td style="text-align: center;">18.</td> <td>Maximum Design Voltage</td> <td>36 KV</td> </tr> <tr> <td style="text-align: center;">19.</td> <td>Power Frequency withstand Voltage ( 1min)</td> <td>70 KV rms</td> </tr> <tr> <td style="text-align: center;">20.</td> <td>LI withstand Voltage ( 1.2 / 50 micro-sec)</td> <td>170 kVp</td> </tr> <tr> <td style="text-align: center;">21.</td> <td>Rated Current –<br/>i) Bus bar<br/>ii) Breaker<br/>iii) Disconnecter</td> <td>i) 2000 A<br/>ii) 1600 A<br/>iii) 1600 A &amp; above.</td> </tr> <tr> <td style="text-align: center;">22.</td> <td>Rated breaking current</td> <td>25 KA</td> </tr> <tr> <td style="text-align: center;">23.</td> <td>Rated Short Time Withstand Current for 3 sec – Symmetrical</td> <td>25 KA rms</td> </tr> <tr> <td style="text-align: center;">24.</td> <td>Rated Short Time Withstand Current for 3 sec - Asymmetrical</td> <td>As per relevant IEC/IS &amp; shall be type tested</td> </tr> <tr> <td style="text-align: center;">25.</td> <td>Rated dynamic peak withstand current (KA<sub>p</sub>)</td> <td>62.5 KA</td> </tr> <tr> <td style="text-align: center;">26.</td> <td>Cable charging current for C2 duty tested</td> <td>25 A</td> </tr> <tr> <td style="text-align: center;">27.</td> <td>Capacitor duty (C2 duty tested)</td> <td>400 A</td> </tr> <tr> <td style="text-align: center;">28.</td> <td>Duty Cycle</td> <td>0-0.3 sec.-CO-3.0 min.- CO</td> </tr> </tbody> </table> <p><b>1.1 STANDARDS</b></p> | SL  | Description | Values/<br>Informations | 15.              | Type of Switch Gear as per Arc Interrupter | VCB | 16. | Frequency | 50 c/s | 17. | Rated Voltage | 33 KV | 18. | Maximum Design Voltage | 36 KV | 19. | Power Frequency withstand Voltage ( 1min) | 70 KV rms | 20. | LI withstand Voltage ( 1.2 / 50 micro-sec) | 170 kVp | 21. | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. | 22. | Rated breaking current | 25 KA | 23. | Rated Short Time Withstand Current for 3 sec – Symmetrical | 25 KA rms | 24. | Rated Short Time Withstand Current for 3 sec - Asymmetrical | As per relevant IEC/IS & shall be type tested | 25. | Rated dynamic peak withstand current (KA <sub>p</sub> ) | 62.5 KA | 26. | Cable charging current for C2 duty tested | 25 A | 27. | Capacitor duty (C2 duty tested) | 400 A | 28. | Duty Cycle | 0-0.3 sec.-CO-3.0 min.- CO |  |  |  |  |  |
| SL      | Description   | Values/<br>Informations                         |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 15.     | Type of Switch Gear as per Arc Interrupter  | VCB   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 16.     | Frequency   | 50 c/s  |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 17.     | Rated Voltage   | 33 KV   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 18.     | Maximum Design Voltage  | 36 KV   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 19.     | Power Frequency withstand Voltage ( 1min)   | 70 KV rms                                       |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 20.     | LI withstand Voltage ( 1.2 / 50 micro-sec)  | 170 kVp   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 21.     | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter   | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 22.     | Rated breaking current  | 25 KA   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 23.     | Rated Short Time Withstand Current for 3 sec – Symmetrical  | 25 KA rms                                       |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 24.     | Rated Short Time Withstand Current for 3 sec - Asymmetrical   | As per relevant IEC/IS & shall be type tested   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 25.     | Rated dynamic peak withstand current (KA <sub>p</sub> )   | 62.5 KA   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 26.     | Cable charging current for C2 duty tested   | 25 A  |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 27.     | Capacitor duty (C2 duty tested)   | 400 A   |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 28.     | Duty Cycle  | 0-0.3 sec.-CO-3.0 min.- CO                      |             |                         |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |

The circuit breaker and Metal Clad Switchgear Panels shall conform to latest revision with amendment available of relevant standards, rules and codes some of which are listed herein for ready reference.

| Sl. No | Standard   | Item   |
|--------|--|--|
| 11.    | IEC-60056 / IS 13118 /IEC                        | Circuit Breaker  |
| 12.    | IEC-62271-100,200 ; IEC-600298 / 600694; IS-3427 | Metal enclosed switchgear and control gear.                            |
| 13.    | IS-2705 / IEC 60185                              | Current Transformers   |
| 14.    | IS-3156 / IEC 60186                              | Voltage Transformer  |
| 15.    | IS-3231 & 3842 / IEC 60255                       | Protective Relays  |
| 16.    | IS-1248  | Ammeter & Voltmeter  |
| 17.    | IEC 60129  | Alternating current disconnectors (isolators)                          |
| 18.    | IEC 60529  | Classification of degrees of protection.                               |
| 19.    | IS-375   | Arrangement of breakers Bus bars main connection and auxiliary wiring. |
| 20.    | IEC-687/CBIP Report                              | Tri Vector Meter   |

**The design of the switchgear shall be based on safety to personnel and equipment during operation and maintenance, reliability of service, ease of maintenance, mechanical protection of equipment, interchangeability of equipment and ready addition of future loads.**

**2.0 STRUCTURAL & MECHANICAL CONSTRUCTION**

**2.1** The Switchgear shall be factory assembled, totally enclosed, metal clad, dead front cubicle. It shall be of sheet Steel (preferably galvanized to avoid rusting) construction and shall be dust, moisture and vermin proof complying with degree of protection of not less than IP-4x as per IS-3427 (1997). The panels shall be of Metal Clad compartmentalized design with all the High Voltage compartments viz. Circuit Breaker, Bus Bar etc. separated by metallic partitions. The switchgear panels shall be rigid without using any external bracing. The switchboard panels should comply with relevant ISS/IEC and revision thereof and shall be designed for easy operation maintenance and further extension. Bus bar, metering, circuit breaker chamber, cables and cable box chamber should have proper access for maintenance, proper interlocks should be provided. The switchgear shall be complete with all necessary wiring fuses, auxiliary contacts, terminal boards etc.

**2.2** The panels shall be constructed from prime quality folded steel sheet of 2 mm thick or Al-Zn sheet steel. Only doors and end covers shall be painted with paint shade as specified.

The observation window on the CB compartment door shall be provided. Observation window shall be of same material and construction as the type tested design/ construction.

**The design of the panels shall be such that no permanent or harmful distortion occurs either when being lifted by eyebolts or when moved into position by rollers or trans pallets.**

The switchgear and control gear should have the minimum degree of protection (in accordance with IEC 60529)  
 - IP 4X for the enclosure for rated current up to 1600A  
 - IP 3X for the enclosure for rated current up to 2500A

- IP 2X for the partition between compartments

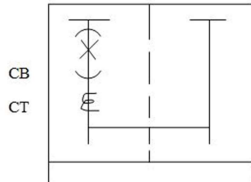
**The switchgear must be readily extendable in either direction.**

**2.3** For Seismic Applications: The switchboard may be subject to seismic disturbance, hence the switchgear supplier shall provide the type test report or documentation to support the same.

**2.4** Each cubicle shall be equipped with anti-condensation heater controlled by thermostat.

**2.5 Bus Sectionalize panels**

In bus Sectionalize panel one panel shall be used for truck with the C.B. and second panel for connection of bus bar to the top. The bus Sectionalize panel can be combined with a metering panel.



**Bus Sectionalize Panels (Typical)**

**2.6** Assembly of all current carrying parts shall be such that they shall be easily accessible for inspection and maintenance.

**2.7** Switchgear cubicles shall be satisfied the requirement of IEC:62271-200, IEC:60298, IEC:60694.

**2.8** Each switch gear shall be supplied with basic operating tools like – rack-in rack-out handle etc.

**2.9** The switchgear and control gear shall be suitable for continuous operation under the basic service conditions indicated below.

Ambient temperature °C - 5 to + 50

Relative humidity up to 95%

Altitude of installation up to 1000m, IEC 120

**3.0 BUS BARS AND CONNECTORS**

Bus bars and all other electrical connections between various components shall be made of Electrolytic copper of adequate cross-section. The bus bar section shall be of ample capacity to carry the rated current continuously without excessive heating and for adequately meeting the thermal and dynamic stresses in the case of short circuit in the system up to full fault MVA. Cross section of the Bus bars shall have to be designed to limit

the current density within 0.75A/sq.mm in case of Aluminum & 1.75A/sq.mm in case of Copper.

All bus bars shall be rigidly and firmly mounted. Spacious bus bar chamber shall be provided with use of tubular bus bar design and free from any high voltage stresses by avoiding all sharp edges and bringing them to uniform potential. Bus bar shall be sleeved for full voltage. Sleeve shall be heat shrinkable BTM type of Raychem make. **No PVC sleeve in bus bar for 36KV is acceptable.**

Bus bar shall be located in a separate metal clad chamber and shall be air insulated. It shall be adequately supported on insulators or integral epoxy spouts to withstand dynamic stress due to the short circuit current as specified.

Bus bar shall be extensible on either side to make it in switch board configuration of any make.

**4.0 CIRCUIT BREAKER**

**4.1** The Circuit Breaker shall be suitable for installation in the switchgear cubicle. The breakers shall comply with IS-13118/IEC-60056 conforms to latest amendment thereof.

**4.2** The Circuit Breaker shall be spring operated, Motor charged, manually released spring closing mechanism with three pole simultaneous operation. The indicating device shall show the OPEN and CLOSE position of breaker visible from front of the cubicle. The spring charging time of the motor shall not exceed 15 sec. The “TRIP” and “CLOSE” coils shall be of reliable design and low consumption preferably less than 300W. It shall be possible to manually

|   |  |  |  |  |  |
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| <p>charge the circuit breaker operating spring in case of auxiliary supply failure.</p> <p><b>4.3</b> The breakers shall be capable of Making &amp; Breaking the short time current in accordance with the requirement of ISS 13118 / IEC 60056 conform to latest amendment thereof and shall have 3 phase rupturing capacity of 25KA at 33KV. The continuous current rating of breaker shall not be less than 1600A for all items.</p> <p><b>4.4</b> The circuit breaker shall be isolated by horizontal racking and positively fixing the unit into any one of the following positions;</p> <ul style="list-style-type: none"> <li>- <b>Service position;</b> main and auxiliary circuits connected</li> <li>- <b>Test position;</b> main circuits disconnected auxiliary circuits connected. Circuit breaker in its isolated position shall be completely contained in the apparatus compartment with shutters on main circuit closed and compartment front door closed.</li> </ul> <p>Locking of circuit breaker in the test position shall be possible by means of key lock on the earth switch manoeuvre.</p> <p>A position indicator switch or viewing window must be provided for visual indication of the circuit breaker position. Comprehensive interlocking system to prevent any dangerous or inadvertent operation shall be provided. Isolation of circuit breaker from bus bar or insertion into bus bar shall only be possible when the breaker is in the "OPEN" position.</p> <p><b>4.5</b> Each circuit breaker shall be provided with following accessories.</p> <ol style="list-style-type: none"> <li>i) ON-OFF indicator for indicating circuit breaker position.</li> <li>ii) Trip push button</li> <li>iii) Shunt trip coil operating between 70% - 110% of rated control voltage.</li> <li>iv) Close coil, operating between 85% - 110% of rated control voltage.</li> <li>v) Spring charge motor, operating between 90% - 110% of rated control voltage.</li> <li>vi) Two trip coils and one closing coils shall be provided in all the breakers.</li> </ol> <p><b>4.6</b> The switchgear shall be provided with facilities for full operation from a remote point. In case of Local Operation of circuit breakers, Control switch of Circuit Breaker shall be located at such a height so that a man can operate standing on ground/floor. It shall be possible to trip the circuit breaker locally by mechanical means.</p> <p><b>4.7</b> The circuit breaker truck shall ensure earth in both connected and disconnected positions.</p> <p><b>4.8</b> An electro-mechanical device shall be provided to ensure the auxiliary circuits have been securely connected between the fixed and moving portions of the switchgear, before allowing closing operation of the circuit breaker. The voltage rating of the device shall be the same as the voltage used for the closing circuit.</p> <p><b>4.9</b> Tripping and/or release coils shall be continuous rated to ensure longer life but rating should not exceed 300 W each. The electrical tripping device shall be of a type which acts directly on the circuit breaker mechanism and shall give positive operation for a supply voltage of 70% of nominal at dc and 85% of nominal at ac control voltage.</p> <p><b>4.10</b> Circuit breakers will be provided with at least one spare normally-open and one spare normally-closed contact, each wired out to terminals for the connection of external wiring.</p> <p><b>4.11</b> Each circuit breaker shall be interlocked to prevent:</p> <ul style="list-style-type: none"> <li>- the breaker being inserted into service position unless it is open</li> <li>- the breaker being withdrawn from the service position unless it is open</li> <li>- the breaker being closed unless it is fully in the service or test position</li> <li>- remote operation whilst in the withdrawn/test position</li> </ul> <p><b>4.12</b> Circuit breakers shall be mechanical latching and electrical and mechanical tripping. The operating mechanism shall be trip-free and shall include an anti-pumping device.</p> <p><b>4.13 Shutters:</b> Circuit breaker compartment should have</p> |  |  |  |  |  |
|---|--|--|--|--|--|

|   |  |  |  |
|---|--|--|--|
| <p>automatic shutters, which shall be opened and closed by the mechanical drive of the circuit breaker. The bus bar and circuit spout covers shall be operated independently of each other. Padlock facilities can be provided on the metal shutters.</p> <p><b>4.14 INTERLOCKING</b><br/>Isolation and connection of the circuit breaker shall be carried out inside the compartment with the door closed. The following mechanical interlocks shall be provided for service safety: - interlocking which prevents racking-in and racking-out of the circuit breaker when closed - interlocking which prevents manual or electrical closing of the circuit breaker in the intermediate positions between connected or isolated - interlocking which prevents either the circuit breaker from being racked in when the relative earth switch is closed and the earth switch from being closed with the circuit breaker racked in.</p> <p><b>5.0 Current Transformer :</b><br/>The current transformer should be ring core, Di-electrically non stressed type and should be located outside the gas chamber. The CT shall be mounted in a manner to make it very easy for fitting / replacement at site. It shall be designed with built in adjustable cable holding clamps, makes it very easy for removal/sturdy fitting of power cables and to prevent any swing due to forces encountered during short circuit. P1 of primary side of the in-built CT shall be at bus side of all the panels.</p> <p><b>6.0 POTENTIAL TRANSFORMER</b><br/>Three numbers Single phase draw out type PT of ratio <math>33000/\sqrt{3}</math>; <math>110/\sqrt{3}</math> Volts with HT/LT fuses mounted on an independent trolley housed at the same feeder/transformer panel. This Line PT shall not get disconnected along with the Circuit Breaker in case the breaker is drawn out from 'SERVICE' position. Bus potential transformer shall be housed in separate trolley, placed in a separate panel. Arrangement shall be made in such a way so that PT primary fuse can be replaced without switching OFF the breaker.</p> <p><b>7.0 AUXILIARY/CONTROL WIRING</b><br/>All the secondary wiring in the panel shall have high quality PVC insulation 1100 volts grade and the same shall be of standard Copper Conductor of size not less than 1.5 sq. mm. for control circuit and 2.5 sq. mm. for CT circuits. Colors of the secondary / auxiliary wiring should conform to ISS 375/1963 conform to latest amendments thereof. All wiring shall be neatly run and group of wiring shall be securely fixed with clips so that wiring can be checked without necessity of removing the clamps. Ferrules with number shall be provided on both end of the wiring.</p> <p><b>8.0 EARTHING</b><br/>(a) An earth bus of size minimum 40 mm x 6 mm or equivalent copper shall be provided and shall be extended throughout the length of the switch board with a provision to extend further on both sides of the end switchboard for future extension of switchboards.<br/>(b) It shall be possible to connect each bay of the switchgear to earth, through earthing switches suitable for fault make current. And provision of bus earthing is also required.<br/>(c) Earthing switch shall be mechanically interlocked with the associated breaker as per interlock requirement.<br/>(d) Earthing circuit shall be suitable for testing at 25KA for 1.0 sec.<br/>(e) Breaker compartment shall have scrapping earth bar and spring load finger shall be provided in withdrawal truck.<br/>(f) Provision of Bus bar earthing at both side of Bus-Coupler is to be provided.</p> <p><b>9. TYPE TESTS</b><br/>The bidder shall submit following Type test reports to prove the capability and suitability of his offered switchgear.<br/>i) Short Time Current Test for 25KA for 3 second.</p> |  |  |  |
|---|--|--|--|

|   |  |  |  |  |                        |  |
|---|--|--|--|--|------------------------|--|
|   | ii) Short Circuit Test duties on Circuit Breaker.<br>iii) Impulse withstands Test.<br>iv) Power Frequency withstands Test.<br>v) Temperature Rise Test.<br>vi) Internal Arc Test.<br>vii) Mechanical Endurance test on Circuit Breaker.<br>viii) Test to prove Degree of Protection of enclosure   |  |  |  |                        |  |
| 2 | <b>Air Conditioner :</b><br>Capacity : 4 Ton, 48000 BTU with Remote Control = 05(Five) Nos, Ceiling Type.<br>Input Voltage : 380~440 VAC, 50Hz, 3 Phase.<br>Brand : General (Esquire Electronics limited Bd.)<br>Model : ABG 45 ABAS.<br>Country of Manufacturing: Japan, Assemble in Thailand.<br>Warranty : 2 Years compressor, Spare parts & 3 Years after sales service. |  |  |  |                        |  |
| 3 | <b>PAINTING</b><br>The Panels shall be pre-treated using 7-Tank process and then Epoxy Powder Coated with Paint shade of RAL 7032.   |  |  |  |                        |  |
| 4 | (i) <b>Installation &amp; Commissioning:</b> Offer to be submitted on turn-key basis i.e. Supply, installation and commissioning to be done by the bidder<br>(ii) The bidder is responsible for testing & commissioning the supplied panels for continuous 72 hours on full load running condition of the plant.   |  |  |  |                        |  |
|   | Others (To be Specified by The Contractor)   |  |  |  |                        |  |
|   |  |  |  |  | Total Value (BDT)<br>= |  |



**Schedule No. 2 - Plant and Mandatory Spare Parts Supplied from within the Employer's****Country:** যদি কোন মালামাল লোকালি সরবরাহ দিতে চায় তাহলে এই ঘরটি পূরণ করার প্রয়োজন হবে।

| Line Item No.   | Description of Item | Quantity | Unit Price EXW (Foreign Currency or Taka) | Total EXW Price (Foreign Currency or Taka) | Sales Tax (Foreign Currency or Taka) | Total Price (Foreign Currency or Taka) |
|---|---------------------|----------|---|--|--------------------------------------|--|
| 1   | 2                   | 3        | 4   | 5 = 3x 4                                   | 6                                    | 7 = 5 + 6                              |
|   |                     |          |   |  |                                      |  |
| TOTAL Column 5 to be carried forward to Schedule No. 7. Grand Summary |                     |          |   |  |                                      |  |

*Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies*

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

**Schedule No. 3- Design and Engineering Services: Not Applicable**

| Item  | Description | Quantity | Unit Price             |                          | Total Price            |                          |
|---|-------------|----------|------------------------|--------------------------|------------------------|--------------------------|
|   |             |          | Local Currency Portion | Foreign Currency Portion | Local Currency Portion | Foreign Currency Portion |
| 1   | 2           | 3        | 4                      | 5                        | 6 = 3 x 4              | 7 = 3 x 5                |
| N/A   | N/A         | N/A      | N/A                    | N/A                      | N/A                    | N/A                      |
|   |             |          |                        |                          |                        |                          |
|   |             |          |                        |                          |                        |                          |
|   |             |          |                        |                          |                        |                          |
| <b>TOTAL Columns 6 and 7 to be carried forward to Schedule No. 7. Grand Summary</b> |             |          |                        |                          | <b>N/A</b>             | <b>N/A</b>               |

*Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for*

*Unit Price and Total Price as there are currencies*

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

**Schedule No. 4- Civil works: Not Applicable**

| Item  | Description | Quantity | Unit Price             |                          | Total Price            |                          |
|---|-------------|----------|------------------------|--------------------------|------------------------|--------------------------|
|   |             |          | Local Currency Portion | Foreign Currency Portion | Local Currency Portion | Foreign Currency Portion |
| 1   | 2           | 3        | 4                      | 5                        | 6 = 3 x 4              | 7 = 3 x 5                |
| N/A   | N/A         | N/A      | N/A                    | N/A                      | N/A                    | N/A                      |
|   |             |          |                        |                          |                        |                          |
|   |             |          |                        |                          |                        |                          |
|   |             |          |                        |                          |                        |                          |
| <b>TOTAL Columns 6 and 7 to be carried forward to Schedule No. 7. Grand Summary</b> |             |          |                        |                          | <b>N/A</b>             | <b>N/A</b>               |

*Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for*

*Unit Price and Total Price as there are currencies*

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

### Schedule No. 5- Fabrication, Installation and Other Services

| Item | Description                                  | Quantity    | Unit Price             |                          | Total Price            |                          |
|------|--|-------------|------------------------|--------------------------|------------------------|--------------------------|
|      |  |             | Local Currency Portion | Foreign Currency Portion | Local Currency Portion | Foreign Currency Portion |
| 1    | 2  | 3           | 4                      | 5                        | 6 = 3 x 4              | 7 = 3 x 5                |
|      | Fabrication, Installation and Other Services | 01(One) Lot |                        | N/A                      |                        | N/A                      |
|      |  |             |                        |                          |                        |                          |
|      |  |             |                        |                          |                        |                          |
|      |  |             |                        |                          |                        |                          |

TOTAL Columns 6 and 7 to be carried forward to Schedule No. 7. Grand Summary

|  |     |
|--|-----|
|  | N/A |
|--|-----|

Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for

Unit Price and Total Price as there are currencies

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

## Schedule No. 6- Commissioning and Testing (PGTR)

| Item  | Description   | Quantity    | Unit Price             |                          | Total Price            |                          |
|---|---|-------------|------------------------|--------------------------|------------------------|--------------------------|
|   |   |             | Local Currency Portion | Foreign Currency Portion | Local Currency Portion | Foreign Currency Portion |
| 1   | 2   | 3           | 4                      | 5                        | 6 = 3 x 4              | 7 = 3 x 5                |
|   | Commissioning and Testing of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner | 01(One) Lot |                        | N/A                      |                        | N/A                      |
|   |   |             |                        |                          |                        |                          |
|   |   |             |                        |                          |                        |                          |
|   | <b>Commissioning and Testing Procedure to be mentioned</b>                        |             |                        |                          |                        |                          |
| <b>TOTAL Columns 6 and 7 to be carried forward to Schedule No. 7. Grand Summary</b> |   |             |                        |                          |                        | <b>N/A</b>               |

Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

## Schedule No. 7 - Grand Summary

| Schedule No.   | Title   | Total Price         |                |
|--|---|---------------------|----------------|
|  |   | Foreign Currency    | Local Currency |
| 1  | Supply of 01(one) set 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner. | N/A                 |                |
| 2  | Plant and Mandatory Spare Parts Supplied from within the Employer's Country | N/A                 |                |
| 3  | Design and Engineering Services<br>- Not applicable.                        | N/A                 | N/A            |
| 4  | Civil works:<br>- Not applicable.   | N/A                 | N/A            |
| 5  | Fabrication, Installation and Other Services                                | N/A                 |                |
| 6  | Commissioning and Testing   | N/A                 |                |
| <b>GRAND TOTAL to be carried forward to Form PG5A-1b</b> |   | <b>Grand Total=</b> |                |

Grand Total:  
(Total amount of Schedule No. (1+2+5+6) = Foreign Currency: **N/A** + Local Currency.....)

Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies  
2. Create additional columns for up to a maximum of 3 Foreign Currencies if so required

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

**Schedule No. 7 - Recommended Spare Parts**

| Item         | Description | Qty | Unit Price                                 |   | Total Price                  |                                |
|--------------|-------------|-----|--|---|------------------------------|--------------------------------|
|              |             |     | EXW<br>Local<br>Parts<br>Local<br>Currency | CIP<br>Imported<br>Parts<br>Foreign<br>Currency | Local<br>Currency<br>Portion | Foreign<br>Currency<br>Portion |
| 1            | 2           | 3   | 4  | 5   | 6 = 3 x 4                    | 7 = 3 x 5                      |
|              |             |     |  | N/A   |                              | N/A                            |
| <b>TOTAL</b> |             |     |  |   |                              | <b>N/A</b>                     |

**Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies**

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorized to sign the Tender for and on behalf of the Tenderer |  |                                     |

## **Technical Proposal (Form PG5A-4)**

To be filled by the Tenderer

*[The Revised Technical Proposal, if any, shall follow the same format and structure]*

Site Organization

Method Statement

Mobilization Structure

Construction Structure

Plant

Safety Plan

Personnel

Equipment

Proposed subcontractors for Major Items of Plant and Services

Time Schedule



## **Site Organization**

*[insert technical proposal for site organization]*

*[The Tenderer shall include in the tender an appropriate organization chart. This shall include head office as well as site components and clearly demonstrate that the Tenderer possesses the staff and organizational resources to complete the Supply and Installation of Plant & Equipment.]*

## **Method Statement**

*[insert technical proposal for Method Statement]*

*[The Tenderer shall furnish an overall description covering all activities and processes from*

*inception to site works and commissioning.*

*In particular methods of minimizing the impact on the environment in accordance with the*

*relevant laws and regulations during the construction phase shall be described.]*

## **Mobilization Schedule**

*[insert technical proposal for Mobilization Schedule]*

*[This shall be included in the overall time schedule to be provided by the Tenderer as per "Time Schedule" in Section 5.Tendering Forms*

## **Construction Schedule**

*[insert technical proposal for Construction Schedule]*

*[This shall be included in the overall time schedule to be provided by the Tenderer as per "Time Schedule" in Section 5. Tendering Forms]*

## **Plant**

*[insert technical proposal for **Plant**]*

*[The Tenderer shall provide the plant and equipment it intends to use in the construction process to demonstrate that it has the capability to complete the Supply and Installation of Plant & Equipment.]*

## **Safety Plan**

*[insert technical proposal for **Safety Plan**]*

*[The Tenderer shall demonstrate that it has a comprehensive safety system that will be used during the construction and installation phase. This system shall meet all safety requirements in accordance with all relevant laws, rules and regulations.]*

# Personnel Information

[This Form should be completed for each person proposed by the Tenderer on Form PG5A-2a& PG5A-2b, where applicable]

|  |
|--|
| Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333   |
| Tender Package No: 36.01.1565.673.07.092.22(E-10/22-23)/333          |
| This Package is divided into the following Number of Lots: <b>01</b> |

|  |         |                 |  |
|--|---------|-----------------|--|
| <b>A. Proposed Position</b> (tick the relevant box)  |         |                 |  |
| <b>B. Personal Data</b>  |         |                 |  |
| Name   |         |                 |  |
| Date of Birth  |         |                 |  |
| Years overall experience   |         |                 |  |
| Years of specific experience   |         |                 |  |
| National ID Number   |         |                 |  |
| Years of employment with the Tenderer  |         |                 |  |
| B. Professional Qualifications:  |         |                 |  |
| 1.   |         |                 |  |
| 2.   |         |                 |  |
| <b>C. Present Employment</b> [to be completed only if not employed by the Tenderer]  |         |                 |  |
| Name of Procuring Entity:  |         |                 |  |
| Address of Procuring Entity:   |         |                 |  |
| Present Job Title:   |         |                 |  |
| Years with present Procuring Entity:   |         |                 |  |
| Tel No:  | Fax No: | e-mail address: |  |
| Contact [manager/personnel officer]:   |         |                 |  |
| <b>D. Professional Experience</b>  |         |                 |  |
| Summarise professional experience over the last twenty years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project. |         |                 |  |
|  | From    | To              | Company / Project / Position / Relevant technical and management experience. |
| 1  |         |                 |  |
| 2  |         |                 |  |
| 3  |         |                 |  |

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |

# Equipment Information

*[The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in TDS . A Separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Tenderer]*

|  |
|--|
| Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333   |
| Tender Package No: 36.01.1565.673.07.092.22(E-10/22-23)/333          |
| This Package is divided into the following Number of Lots: <b>01</b> |

|                       |  |                        |
|-----------------------|--|------------------------|
| Item of equipment     |  |                        |
| Equipment information | Name of manufacturer   | Model and power rating |
|                       | Capacity   | Year of manufacture    |
| Current status        | Current location   |                        |
|                       | Details of current commitments   |                        |
| Source                | Indicate source of the equipment<br><input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured |                        |

Omit the following information for equipment owned by the Tenderer.

|            |  |                        |
|------------|--|------------------------|
| Owner      | Name of owner  |                        |
|            | Address of owner   |                        |
|            | Telephone  | Contact name and title |
|            | Fax  | Telex                  |
| Agreements | Details of rental / lease / manufacture agreements specific to the project |                        |

|  |  |                                     |
|--|--|-------------------------------------|
| Name:  | <i>[insert full name of signatory]</i>   | <i>Signature with Date and Seal</i> |
| In the capacity of:  | <i>[insert designation of signatory]</i> | <i>[ Sign]</i>                      |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |                                     |



**Specifications Submission and Compliance Sheet (Form PG5A-4a)**  
**To be filled by the Tenderer**

Invitation for Tender No: 36.01.1565.673.07.092.22(E-10/22-23)/333 Date: 03-11-2022

Tender Package No: 36.01.1565.673.07.092.22(E-10/22-23)/333 Package Description:

Tender Lot No: **01** Lot Description:

| Item No. | Name of Goods or Related Service | Country of Manufacturing | Make and Model (when applicable) | Full Technical Specifications and Standards |
|----------|----------------------------------|--------------------------|----------------------------------|---|
| 1        | <b>2</b>                         | 3                        | 4                                | 5   |
|          | <b>FOR GOODS</b>                 |                          |                                  | Note 1                                      |
|          |                                  |                          |                                  |   |
|          | <b>FOR RELATED SERVICES</b>      |                          |                                  |   |
|          |                                  |                          |                                  |   |
|          |                                  |                          |                                  |   |

*[The Tenderer should complete all the columns as required]*

|  |  |
|--|--|
| Signature:   | <i>[insert signature of authorised representative of the Tenderer]</i> |
| Name:  | <i>[insert full name of signatory with National ID]</i>                |
| In the capacity of:  | <i>[insert designation of signatory]</i>                               |
| Duly authorised to sign the Tender for and on behalf of the Tenderer |  |

**Manufacturer's Authorisation Letter (Form PG5A - 5)**  
**To be filled by the Tenderer**

*[The Tenderer shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Tenderer shall include it in its tender, if so indicated in the TDS as stated under ITT Sub-Clause 29.1(b)]*

|  |  |
|--|--|
| Invitation for Tender No:                | Date:                                    |
| 36.01.1565.673.07.092.22(E-10/22-23)/333 | 03-11-2022                               |
| Tender Lot No:                           | 36.01.1565.673.07.092.22(E-10/22-23)/333 |
| To:<br>Name and address of Employer]     |  |

WHEREAS

We *[insert complete name of Manufacturer]*,

who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby

authorize *[insert complete name of Tenderer]* to supply the following Plant and Equipment, manufactured by us *[insert name and or brief description of the Goods]*.

We hereby extend our full guarantee and warranty as stated under GCC Clause 42 of the General Conditions of Contract, with respect to the Goods offered by the above Tenderer.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Address: *[insert full address including Fax and e-mail]*

Title: *[insert title]*

Date: *[insert date of signing]*

## Bank Guarantee for Tender Security (Form PG5A– 6) To be filled by the Tenderer

[this is the format for the Tender Security to be issued by a scheduled bank of Bangladesh as stated under ITT Clauses 32 and 33]

Invitation for Tender No:  
36.01.1565.673.07.092.22(E-10/22-23)/333  
Tender Package No:

Date: 03-11-2022  
36.01.1565.673.07.092.22(E-10/22-23)/333

Tender Lot No:  
To:  
[Name and address of Employer]

01

### TENDER GUARANTEE No:

We have been informed that *TSP Complex Limited* (hereinafter called “the Tenderer”) intends to submit to you its Tender dated 03-11-2022 (hereinafter called “the Tender”) for the supply and installation of [description of plant and services] under the above Invitation for Tenders (hereinafter called “the IFT”).

Furthermore, we understand that, according to your conditions, Tenders must be supported by a Bank Guarantee for Tender Security.

At the request of the Tenderer, we [insert name of bank] hereby irrevocably and unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk. [insert amount in figures and in words] upon receipt by us of your first written demand accompanied by a written statement that the Tenderer is in breach of its obligation(s) under the Tender conditions, because the Tenderer:

- a. has withdrawn its Tender after opening of Tenders but within the validity of the Tender Security ; or
- b. refused to accept the Notification of Award (NOA) within the period as stated under Instructions to Tenderers (ITT) ; or
- c. failed to furnish Performance Security within the period as stipulated in the NOA; or
- d. refused to sign the Contract Agreement by the time specified in the NOA; or
- e. did not accept the correction of the Tender price following the correction of the arithmetic errors in accordance with the ITT; or

This guarantee will expire:

- (a) if the Tenderer is the successful Tenderer, upon our receipt of a copies of the contract signed by the Tenderer and the Performance Security issued to you in accordance with the ITT; or
- (b) if the Tenderer is not the successful Tenderer, twenty eight (28) days after the expiration of the Tenderer’s Tender validity period, being [date of expiration of the Tender validity plus twenty eight(28) days]

Consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

# Letter of Commitment for Bank's undertaking for Line of Credit (Form PG5A-6a)

To be filled by the Tenderer

[This is the format for the Credit Line to be issued by any scheduled Bank of Bangladesh in accordance with ITT Clause 15.1(b)]

Invitation for Tender No: **36.01.1565.673.07.092.22(E-10/22-23)/333** Date: **03-11-2022**  
Tender Package No: **36.01.1565.673.07.092.22(E-10/22-23)/333**  
Lot No (when applicable) 01  
To:

[Name and address of the Procuring Entity]

## CREDIT COMMITMENT No: [insert number]

We have been informed that [name of Tenderer] (hereinafter called "the Tenderer") intends to submit to you its Tender (hereinafter called "the Tender") for the execution of the Supply and Installation of Plant & Equipment of [description of works] under the above Invitation for Tenders (hereinafter called "the IFT").

Furthermore, we understand that, according to your conditions, the Tenderer's Financial Capacity i.e. Liquid Asset must be substantiated by a Letter of Commitment of Bank's Undertaking for Line of Credit.

At the request of, and arrangement with, the Tenderer, we [name and address of the Bank] do hereby agree and undertake that [name and address of the Tenderer] will be provided by us with a revolving line of credit, in case awarded the Contract, for execution of the Works viz. [insert name of works], for an amount not less than BDT [in figure]( in words) for the sole purpose of the execution of the above Contract. This Revolving Line of Credit will be maintained by us until issuance of "Taking-Over Certificate" by the Procuring Entity.

In witness whereof, authorised representative of the Bank has hereunto signed and sealed this Letter of Commitment.

Signature

Signature

## Notification of Award (Form PG5A - 7)

Contract No:  
To:

Date:

*[Name of Contractor]*

This is to notify you that your Tender dated *[insert date]* for the supply and installation of plant and Services for *[name of contract]* for the Contract Price of *[state amount in figures and in words]* as corrected and modified in accordance with the Instructions to Tenderers, has been approved by *[name of Employer]*.

You are thus requested to take following actions:

- i. accept in writing the Notification of Award within seven (7) working days of its issuance pursuant to ITT Sub-Clause 64.1
- ii. furnish a Performance Security in the specified format and in the amount of Tk.*[state amount in figures and words]*, within Twenty-eight (28) days from issue of this Notification of Award but not later than *(specify date)*, in accordance with ITT Clause 64.3
- iii. sign the Contract within twenty eight (28 ) days of issuance of this Notification of Award but not later than *(specify date)*, in accordance with ITT Clause 69.2

You may proceed with the execution of the supply of Plant and Services only upon completion of the above tasks. You may also please note that this Notification of Award shall constitute the formation of this Contract, which shall become binding upon you.

We attach the draft Contract and all other documents for your perusal and signature.

Signed

Duly authorised to sign for and on behalf of *[name of Employer]*

Date:

## Contract Agreement (Form PG5A - 8)

THIS AGREEMENT made the [day] day of [month][year] between [name and address of Employer] (hereinafter called "the Employer") of the one part and [name and address of Contractor] (hereinafter called "the Contractor") of the other part:

WHEREAS the Employer invited Tenders for certain plant and services, viz, [brief description of plant and services] and has accepted a Tender by the Contractor for the supply of those plant and services in the sum of Taka [Contract Price in figures and in words] (hereinafter called "the Contract Price").

### NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract hereafter referred to.
2. The following documents forming the Contract shall be in the following order of precedence, namely :
  - (a) the signed Form of Contract Agreement;
  - (b) the Notification of Award
  - (c) The Tender and the appendices to the Tender
  - (d) Particular Conditions of Contract;
  - (e) General Conditions of Contract;
  - (f) Technical Specifications;
  - (g) Drawings;
  - (h) Price Schedules of Plant and Equipment and;
  - (i) other document including correspondences listed in the PCC forming part of the Contract
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to provide the plants and related services and to remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the provision of the plant and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
5. The Appendices listed in the attached List of Appendices shall be deemed to form an integral part of this Contract Agreement. Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS whereof the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives in accordance with the laws of Bangladesh on the day, month and year first written above.

Signed by, for and on behalf of the Employer

**For the Employer:**

**For the Contractor:**

Signature

Print Name

Title

In the presence  
of Name  
Address

## Bank Guarantee for Performance Security (Form PG5A – 9)

*[This is the format for the Performance Security to be issued by an internationally reputable bank and it shall have correspondent bank located in Bangladesh, to make it enforceable in accordance with ITT Sub-Clause 67.1 pursuant to Rule 27(4) of the Public Procurement Rules, 2008.]*

Contract No:

Date:

To:

[Name and address of Employer]

**PERFORMANCE GUARANTEE No:** *[insert Performance Guarantee number]*

We have been informed that *[name of Contractor]* (hereinafter called “the Contractor”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”) for the supply and installation of *[description of plant and services]* under the Contract.

Furthermore, we understand that, according to your conditions, Contracts must be supported by a performance guarantee.

At the request of the Contractor, we *[name of bank]* hereby irrevocably and unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk. *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Supplier is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

*[Signatures of authorized representatives of the bank]*

Signature

Seal

## Bank Guarantee for Payment (Form)

*[this is the format for the Payment Security to be issued by an internationally reputable bank and it shall have correspondent bank located in Bangladesh, to make it enforceable in accordance with Appendix 1: Terms and Procedures of Payment: Additional Clause: (a)]*

Contract No:

Date:

To:

Triple Super Phosphate Complex Limited,  
North Patenga, Chattogram.

### **PAYMENT GUARANTEE No.:**

We have been informed that *[name of Contractor]* (hereinafter called “the Contractor”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”) for the Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with accessories on Lump Sum Turn-Key (LSTK) Basis under the Contract.

Furthermore, we understand that, according to **your Appendix 1: Terms and Procedures of Payment: Additional Clause: (a)**. All payment will be made against equivalent of irrevocable unconditional Bank Guarantee in BDT encashable on demand.

At the request of the Contractor, we *[name of bank]* hereby irrevocably unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk.*[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Contractor is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

We further agree that no change, addition or other modification of the terms of the Contract to be performed, or of any of the Contract documents which may be made between the Employer and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

*[Signatures of authorized representatives of the bank]*

Signature

Seal



## Section 6. Employer's Requirements

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|  |                |
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| <b>1.1 Scope of Supply of Plant and Installation Services by the Contractor<br/>(As per Schedule-1-6 )</b> | inset page #]  |
| <b>6.2 Technical Specification (as same as TSPCL Technical specification)</b>                              | [inset page #] |
| <b>6.3 Form of Completion Certificate</b>  | [inset page #] |
| <b>6.4 Form of Operational Acceptance Certificate</b>  | [inset page #] |
| <b>6.5 Supplementary Information</b>   | ?              |

## 6.1 Scope of Supply of Plant and Installation Services by the Contractor

| Item No  | Description of Item  | Country of Manufacturing                        | Quantity    | Unit                 | Unit price (BDT) | Total Price (BDT)                          |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
|----------|--|---|-------------|----------------------|------------------|--|-----|-----|-----------|--------|-----|---------------|-------|-----|------------------------|-------|-----|---|-----------|-----|--|---------|-----|---|---|-----|------------------------|-------|-----|--|-----------|-----|---|---|-----|---|---------|-----|---|------|-----|---------------------------------|-------|-----|------------|----------------------------|--|--|--|--|
| <u>1</u> | <u>2</u>   | <u>3</u>  | <u>4</u>    | <u>5</u>             |                  | <u>7</u>                                   |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
|          | Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with the accessories mentioned below :   |   | 01<br>(One) | Set                  |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 1        | <p><b>1.0 GENERAL</b></p> <p>The specification covers, the design manufacture, testing and supply of 36KV, 3 phase, 50 Hz gas insulated Metal clad indoor VCB type switchgear unit having SCADA/SAS Compatible facilities. Circuit breaker as per IS 13118 (1991)/IEC-60056 and other standards as specified below. All the equipment shall be suitable for satisfactory operation in tropical climate and dry dust laden atmosphere. The equipment shall be able to withstand wide range of temperature variation (-5° to 50°C). Temperature rise shall be guided by as per IEC: 600694. The plant/apparatus/equipment supplied shall comply in all respect with the requirement of Indian Electricity Rule 1956/ISS/IEC with latest amendment.</p> <p><b>STANDARD TECHNICAL PARAMETERS</b></p> <table border="1"> <thead> <tr> <th>SL</th> <th>Description</th> <th>Values/ Informations</th> </tr> </thead> <tbody> <tr> <td>29.</td> <td>Type of Switch Gear as per Arc Interrupter</td> <td>VCB</td> </tr> <tr> <td>30.</td> <td>Frequency</td> <td>50 c/s</td> </tr> <tr> <td>31.</td> <td>Rated Voltage</td> <td>33 KV</td> </tr> <tr> <td>32.</td> <td>Maximum Design Voltage</td> <td>36 KV</td> </tr> <tr> <td>33.</td> <td>Power Frequency withstand Voltage ( 1min)</td> <td>70 KV rms</td> </tr> <tr> <td>34.</td> <td>LI withstand Voltage ( 1.2 / 50 micro-sec)</td> <td>170 kVp</td> </tr> <tr> <td>35.</td> <td>Rated Current –<br/>i) Bus bar<br/>ii) Breaker<br/>iii) Disconnecter</td> <td>i) 2000 A<br/>ii) 1600 A<br/>iii) 1600 A &amp; above.</td> </tr> <tr> <td>36.</td> <td>Rated breaking current</td> <td>25 KA</td> </tr> <tr> <td>37.</td> <td>Rated Short Time Withstand Current for 3 sec – Symmetrical</td> <td>25 KA rms</td> </tr> <tr> <td>38.</td> <td>Rated Short Time Withstand Current for 3 sec - Asymmetrical</td> <td>As per relevant IEC/IS &amp; shall be type tested</td> </tr> <tr> <td>39.</td> <td>Rated dynamic peak withstand current (KA<sub>p</sub>)</td> <td>62.5 KA</td> </tr> <tr> <td>40.</td> <td>Cable charging current for C2 duty tested</td> <td>25 A</td> </tr> <tr> <td>41.</td> <td>Capacitor duty (C2 duty tested)</td> <td>400 A</td> </tr> <tr> <td>42.</td> <td>Duty Cycle</td> <td>0-0.3 sec.-CO-3.0 min.- CO</td> </tr> </tbody> </table> <p><b>1.1 STANDARDS</b></p> <p>The circuit breaker and Metal Clad Switchgear Panels shall conform to latest revision with amendment available of relevant standards, rules and codes some of which are listed</p> | SL  | Description | Values/ Informations | 29.              | Type of Switch Gear as per Arc Interrupter | VCB | 30. | Frequency | 50 c/s | 31. | Rated Voltage | 33 KV | 32. | Maximum Design Voltage | 36 KV | 33. | Power Frequency withstand Voltage ( 1min) | 70 KV rms | 34. | LI withstand Voltage ( 1.2 / 50 micro-sec) | 170 kVp | 35. | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. | 36. | Rated breaking current | 25 KA | 37. | Rated Short Time Withstand Current for 3 sec – Symmetrical | 25 KA rms | 38. | Rated Short Time Withstand Current for 3 sec - Asymmetrical | As per relevant IEC/IS & shall be type tested | 39. | Rated dynamic peak withstand current (KA <sub>p</sub> ) | 62.5 KA | 40. | Cable charging current for C2 duty tested | 25 A | 41. | Capacitor duty (C2 duty tested) | 400 A | 42. | Duty Cycle | 0-0.3 sec.-CO-3.0 min.- CO |  |  |  |  |
| SL       | Description  | Values/ Informations                            |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 29.      | Type of Switch Gear as per Arc Interrupter   | VCB   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 30.      | Frequency  | 50 c/s  |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 31.      | Rated Voltage  | 33 KV   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 32.      | Maximum Design Voltage   | 36 KV   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 33.      | Power Frequency withstand Voltage ( 1min)  | 70 KV rms                                       |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 34.      | LI withstand Voltage ( 1.2 / 50 micro-sec)   | 170 kVp   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 35.      | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter  | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 36.      | Rated breaking current   | 25 KA   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 37.      | Rated Short Time Withstand Current for 3 sec – Symmetrical   | 25 KA rms                                       |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 38.      | Rated Short Time Withstand Current for 3 sec - Asymmetrical  | As per relevant IEC/IS & shall be type tested   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 39.      | Rated dynamic peak withstand current (KA <sub>p</sub> )  | 62.5 KA   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 40.      | Cable charging current for C2 duty tested  | 25 A  |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 41.      | Capacitor duty (C2 duty tested)  | 400 A   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |
| 42.      | Duty Cycle   | 0-0.3 sec.-CO-3.0 min.- CO                      |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |

herein for ready reference.

| Sl. No | Standard   | Item   |
|--------|--|--|
| 21.    | IEC-60056 / IS 13118 /IEC                        | Circuit Breaker  |
| 22.    | IEC-62271-100,200 ; IEC-600298 / 600694; IS-3427 | Metal enclosed switchgear and control gear.                            |
| 23.    | IS-2705 / IEC 60185                              | Current Transformers   |
| 24.    | IS-3156 / IEC 60186                              | Voltage Transformer  |
| 25.    | IS-3231 & 3842 / IEC 60255                       | Protective Relays  |
| 26.    | IS-1248  | Ammeter & Voltmeter  |
| 27.    | IEC 60129  | Alternating current disconnectors (isolators)                          |
| 28.    | IEC 60529  | Classification of degrees of protection.                               |
| 29.    | IS-375   | Arrangement of breakers Bus bars main connection and auxiliary wiring. |
| 30.    | IEC-687/CBIP Report                              | Tri Vector Meter   |

**The design of the switchgear shall be based on safety to personnel and equipment during operation and maintenance, reliability of service, ease of maintenance, mechanical protection of equipment, interchangeability of equipment and ready addition of future loads.**

**2.0 STRUCTURAL & MECHANICAL CONSTRUCTION**

**2.1** The Switchgear shall be factory assembled, totally enclosed, metal clad, dead front cubicle. It shall be of sheet Steel (preferably galvanized to avoid rusting) construction and shall be dust, moisture and vermin proof complying with degree of protection of not less than IP-4x as per IS-3427 (1997). The panels shall be of Metal Clad compartmentalized design with all the High Voltage compartments viz. Circuit Breaker, Bus Bar etc. separated by metallic partitions. The switchgear panels shall be rigid without using any external bracing. The switchboard panels should comply with relevant ISS/IEC and revision thereof and shall be designed for easy operation maintenance and further extension. Bus bar, metering, circuit breaker chamber, cables and cable box chamber should have proper access for maintenance, proper interlocks should be provided. The switchgear shall be complete with all necessary wiring fuses, auxiliary contacts, terminal boards etc.

**2.2** The panels shall be constructed from prime quality folded steel sheet of 2 mm thick or Al-Zn sheet steel. Only doors and end covers shall be painted with paint shade as specified.

The observation window on the CB compartment door shall be provided. Observation window shall be of same material and construction as the type tested design/ construction.

**The design of the panels shall be such that no permanent or harmful distortion occurs either when being lifted by eyebolts or when moved into position by rollers or trans pallets.**

The switchgear and control gear should have the minimum degree of protection (in accordance with IEC 60529)  
 - IP 4X for the enclosure for rated current up to 1600A  
 - IP 3X for the enclosure for rated current up to 2500A  
 - IP 2X for the partition between compartments

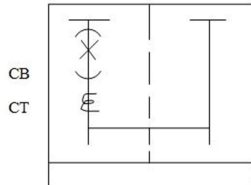
**The switchgear must be readily extendable in either direction.**

2.3 For Seismic Applications: The switchboard may be subject to seismic disturbance, hence the switchgear supplier shall provide the type test report or documentation to support the same.

2.4 Each cubicle shall be equipped with anti-condensation heater controlled by thermostat.

#### 2.5 Bus Sectionalize panels

In bus Sectionalize panel one panel shall be used for truck with the C.B. and second panel for connection of bus bar to the top. The bus Sectionalize panel can be combined with a metering panel.



**Bus Sectionalize Panels (Typical)**

2.6 Assembly of all current carrying parts shall be such that they shall be easily accessible for inspection and maintenance.

2.7 Switchgear cubicles shall be satisfied the requirement of IEC:62271-200, IEC:60298, IEC:60694.

2.8 Each switch gear shall be supplied with basic operating tools like – rack-in rack-out handle etc.

2.9 The switchgear and control gear shall be suitable for continuous operation under the basic service conditions indicated below.

Ambient temperature °C - 5 to + 50

Relative humidity up to 95%

Altitude of installation up to 1000m, IEC 120

#### 3.0 BUS BARS AND CONNECTORS

Bus bars and all other electrical connections between various components shall be made of Electrolytic copper of adequate cross-section. The bus bar section shall be of ample capacity to carry the rated current continuously without excessive heating and for adequately meeting the thermal and dynamic stresses in the case of short circuit in the system up to full fault MVA. Cross section of the Bus bars shall have to be designed to limit

the current density within 0.75A/sq.mm in case of Aluminum & 1.75A/sq.mm in case of Copper.

All bus bars shall be rigidly and firmly mounted. Spacious bus bar chamber shall be provided with use of tubular bus bar design and free from any high voltage stresses by avoiding all sharp edges and bringing them to uniform potential. Bus bar shall be sleeved for full voltage. Sleeve shall be heat shrinkable BTPM type of Raychem make. **No PVC sleeve in bus bar for 36KV is acceptable.**

Bus bar shall be located in a separate metal clad chamber and shall be air insulated. It shall be adequately supported on insulators or integral epoxy spouts to withstand dynamic stress due to the short circuit current as specified.

Bus bar shall be extensible on either side to make it in switch board configuration of any make.

#### 4.0 CIRCUIT BREAKER

4.1 The Circuit Breaker shall be suitable for installation in the switchgear cubicle. The breakers shall comply with IS-13118/IEC-60056 conforms to latest amendment thereof.

4.2 The Circuit Breaker shall be spring operated, Motor charged, manually released spring closing mechanism with three pole simultaneous operation. The indicating device shall show the OPEN and CLOSE position of breaker visible from front of the cubicle. The spring charging time of the motor shall not exceed 15 sec. The “TRIP” and “CLOSE” coils shall be of reliable design and low consumption preferably less than 300W. It shall be possible to manually charge the circuit breaker operating spring in case of auxiliary supply failure.

4.3 The breakers shall be capable of Making & Breaking the

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| <p>short time current in accordance with the requirement of ISS 13118 / IEC 60056 conform to latest amendment thereof and shall have 3 phase rupturing capacity of 25KA at 33KV. The continuous current rating of breaker shall not be less than 1600A for all items.</p> <p><b>4.4</b> The circuit breaker shall be isolated by horizontal racking and positively fixing the unit into any one of the following positions;</p> <ul style="list-style-type: none"> <li>- <b>Service position;</b> main and auxiliary circuits connected</li> <li>- <b>Test position;</b> main circuits disconnected auxiliary circuits connected. Circuit breaker in its isolated position shall be completely contained in the apparatus compartment with shutters on main circuit closed and compartment front door closed.</li> </ul> <p>Locking of circuit breaker in the test position shall be possible by means of key lock on the earth switch manoeuvre.</p> <p>A position indicator switch or viewing window must be provided for visual indication of the circuit breaker position. Comprehensive interlocking system to prevent any dangerous or inadvertent operation shall be provided. Isolation of circuit breaker from bus bar or insertion into bus bar shall only be possible when the breaker is in the "OPEN" position.</p> <p><b>4.5</b> Each circuit breaker shall be provided with following accessories.</p> <ol style="list-style-type: none"> <li>i) ON-OFF indicator for indicating circuit breaker position.</li> <li>ii) Trip push button</li> <li>iii) Shunt trip coil operating between 70% - 110% of rated control voltage.</li> <li>iv) Close coil, operating between 85% - 110% of rated control voltage.</li> <li>v) Spring charge motor, operating between 90% - 110% of rated control voltage.</li> <li>vi) Two trip coils and one closing coils shall be provided in all the breakers.</li> </ol> <p><b>4.6</b> The switchgear shall be provided with facilities for full operation from a remote point. In case of Local Operation of circuit breakers, Control switch of Circuit Breaker shall be located at such a height so that a man can operate standing on ground/floor. It shall be possible to trip the circuit breaker locally by mechanical means.</p> <p><b>4.7</b> The circuit breaker truck shall ensure earth in both connected and disconnected positions.</p> <p><b>4.8</b> An electro-mechanical device shall be provided to ensure the auxiliary circuits have been securely connected between the fixed and moving portions of the switchgear, before allowing closing operation of the circuit breaker. The voltage rating of the device shall be the same as the voltage used for the closing circuit.</p> <p><b>4.9</b> Tripping and/or release coils shall be continuous rated to ensure longer life but rating should not exceed 300 W each. The electrical tripping device shall be of a type which acts directly on the circuit breaker mechanism and shall give positive operation for a supply voltage of 70% of nominal at dc and 85% of nominal at ac control voltage.</p> <p><b>4.10</b> Circuit breakers will be provided with at least one spare normally-open and one spare normally-closed contact, each wired out to terminals for the connection of external wiring.</p> <p><b>4.11</b> Each circuit breaker shall be interlocked to prevent:</p> <ul style="list-style-type: none"> <li>- the breaker being inserted into service position unless it is open</li> <li>- the breaker being withdrawn from the service position unless it is open</li> <li>- the breaker being closed unless it is fully in the service or test position</li> <li>- remote operation whilst in the withdrawn/test position</li> </ul> <p><b>4.12</b> Circuit breakers shall be mechanical latching and electrical and mechanical tripping. The operating mechanism shall be trip-free and shall include an anti-pumping device.</p> <p><b>4.13 Shutters:</b> Circuit breaker compartment should have automatic shutters, which shall be opened and closed by the mechanical drive of the circuit breaker. The bus bar and circuit spout covers shall be operated independently of each</p> |  |  |  |  |  |
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| <p>other. Padlock facilities can be provided on the metal shutters.</p> <p><b>4.14 INTERLOCKING</b><br/>Isolation and connection of the circuit breaker shall be carried out inside the compartment with the door closed. The following mechanical interlocks shall be provided for service safety: - interlocking which prevents racking-in and racking-out of the circuit breaker when closed - interlocking which prevents manual or electrical closing of the circuit breaker in the intermediate positions between connected or isolated - interlocking which prevents either the circuit breaker from being racked in when the relative earth switch is closed and the earth switch from being closed with the circuit breaker racked in.</p> <p><b>5.0 Current Transformer :</b><br/>The current transformer should be ring core, Di-electrically non stressed type and should be located outside the gas chamber. The CT shall be mounted in a manner to make it very easy for fitting / replacement at site. It shall be designed with built in adjustable cable holding clamps, makes it very easy for removal/sturdy fitting of power cables and to prevent any swing due to forces encountered during short circuit. P1 of primary side of the in-built CT shall be at bus side of all the panels.</p> <p><b>6.0 POTENTIAL TRANSFORMER</b><br/>Three numbers Single phase draw out type PT of ratio <math>33000/\sqrt{3}</math>; <math>110/\sqrt{3}</math> Volts with HT/LT fuses mounted on an independent trolley housed at the same feeder/transformer panel. This Line PT shall not get disconnected along with the Circuit Breaker in case the breaker is drawn out from 'SERVICE' position. Bus potential transformer shall be housed in separate trolley, placed in a separate panel. Arrangement shall be made in such a way so that PT primary fuse can be replaced without switching OFF the breaker.</p> <p><b>7.0 AUXILIARY/CONTROL WIRING</b><br/>All the secondary wiring in the panel shall have high quality PVC insulation 1100 volts grade and the same shall be of standard Copper Conductor of size not less than 1.5 sq. mm. for control circuit and 2.5 sq. mm. for CT circuits. Colors of the secondary / auxiliary wiring should confirm to ISS 375/1963 conform to latest amendments thereof. All wiring shall be neatly run and group of wiring shall be securely fixed with clips so that wiring can be checked without necessity of removing the clamps. Ferrules with number shall be provided on both end of the wiring.</p> <p><b>8.0 EARTHING</b><br/>(a) An earth bus of size minimum 40 mm x 6 mm or equivalent copper shall be provided and shall be extended throughout the length of the switch board with a provision to extend further on both sides of the end switchboard for future extension of switchboards.<br/>(b) It shall be possible to connect each bay of the switchgear to earth, through earthing switches suitable for fault make current. And provision of bus earthing is also required.<br/>(c) Earthing switch shall be mechanically interlocked with the associated breaker as per interlock requirement.<br/>(d) Earthing circuit shall be suitable for testing at 25KA for 1.0 sec.<br/>(e) Breaker compartment shall have scrapping earth bar and spring load finger shall be provided in withdrawal truck.<br/>(f) Provision of Bus bar earthing at both side of Bus-Coupler is to be provided.</p> <p><b>9. TYPE TESTS</b><br/>The bidder shall submit following Type test reports to prove the capability and suitability of his offered switchgear.<br/>i) Short Time Current Test for 25KA for 3 second.<br/>ii) Short Circuit Test duties on Circuit Breaker.</p> |  |  |  |  |  |
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|   | iii) Impulse withstands Test.<br>iv) Power Frequency withstands Test.<br>v) Temperature Rise Test.<br>vi) Internal Arc Test.<br>vii) Mechanical Endurance test on Circuit Breaker.<br>viii) Test to prove Degree of Protection of enclosure  |  |  |  |  |  |
| 2 | <b>Air Conditioner :</b><br>Capacity : 4 Ton, 48000 BTU with Remote Control = 05(Five) Nos, Ceiling Type.<br>Input Voltage : 380-440 VAC, 50Hz, 3 Phase.<br>Brand : General (Esquire Electronics limited Bd.)<br>Model : ABG 45 ABAS.<br>Country of Manufacturing: Japan, Assemble in Thailand.<br>Warranty : 2 Years compressor, Spare parts & 3 Years after sales service. |  |  |  |  |  |
| 3 | <b>PAINTING</b><br>The Panels shall be pre-treated using 7-Tank process and then Epoxy Powder Coated with Paint shade of RAL 7032.   |  |  |  |  |  |
| 4 | (i) <b>Installation &amp; Commissioning:</b> Offer to be submitted on turn-key basis i.e. Supply, installation and commissioning to be done by the bidder<br>(ii) The bidder is responsible for testing & commissioning the supplied panels for continuous 72 hours on full load running condition of the plant.   |  |  |  |  |  |
|   | Others (To be Specified by The Contractor)   |  |  |  |  |  |

- i) Dismantling old panel.
- ii) The bidder will be responsible for supply installation, Testing & commissioning of new HT panel consist of 03 (three) nos. GIS Panel with VCB (1600A, 33KV) with necessary materials, control equipment, Tools, consumables etc.
- iii) It is obligation of the bidder to complete the job mentioned under scope of work with Equipment's and materials including other items not mentioned in the tender documents in order to make the control panel fully operational conditions.
- iv) Other works as mentioned in the special terms & conditions.

## 6.2 Specification

( as same as TSPCL Technical specification)

[Templates/Tables should be provided below:]

The Plant & Equipment shall comply with following Technical Specifications:

| Item No  | Description of Item   | Country of Manufacturing                        | Quantity    | Unit                 | Unit price (BDT) | Total Price (BDT)                          |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|----------|---|---|-------------|----------------------|------------------|--|-----|-----|-----------|--------|-----|---------------|-------|-----|------------------------|-------|-----|---|-----------|-----|--|---------|-----|---|---|-----|------------------------|-------|-----|--|-----------|-----|---|---|-----|---|---------|-----|---|------|-----|---------------------------------|-------|-----|------------|----------------------------|--|--|--|--|--|
| <u>1</u> | <u>2</u>  | <u>3</u>  | <u>4</u>    | <u>5</u>             |                  | <u>7</u>                                   |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
|          | Supply, installation, Commissioning & Test run of 33KV GIS Panel & 05 Nos Ceiling Type Air Conditioner for 33KV Substation at TSPCL with the accessories mentioned below :  |   | 01<br>(One) | Set                  |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 1        | <p><b>1.0 GENERAL</b></p> <p>The specification covers, the design manufacture, testing and supply of 36KV, 3 phase, 50 Hz gas insulated Metal clad indoor VCB type switchgear unit having SCADA/SAS Compatible facilities. Circuit breaker as per IS 13118 (1991)/IEC-60056 and other standards as specified below. All the equipment shall be suitable for satisfactory operation in tropical climate and dry dust laden atmosphere. The equipment shall be able to withstand wide range of temperature variation (-5° to 50°C). Temperature rise shall be guided by as per IEC: 600694. The plant/apparatus/equipment supplied shall comply in all respect with the requirement of Indian Electricity Rule 1956/ISS/IEC with latest amendment.</p> <p><b>STANDARD TECHNICAL PARAMETERS</b></p> <table border="1"> <thead> <tr> <th>SL</th> <th>Description</th> <th>Values/ Informations</th> </tr> </thead> <tbody> <tr> <td>43.</td> <td>Type of Switch Gear as per Arc Interrupter</td> <td>VCB</td> </tr> <tr> <td>44.</td> <td>Frequency</td> <td>50 c/s</td> </tr> <tr> <td>45.</td> <td>Rated Voltage</td> <td>33 KV</td> </tr> <tr> <td>46.</td> <td>Maximum Design Voltage</td> <td>36 KV</td> </tr> <tr> <td>47.</td> <td>Power Frequency withstand Voltage ( 1min)</td> <td>70 KV rms</td> </tr> <tr> <td>48.</td> <td>LI withstand Voltage ( 1.2 / 50 micro-sec)</td> <td>170 kVp</td> </tr> <tr> <td>49.</td> <td>Rated Current –<br/>i) Bus bar<br/>ii) Breaker<br/>iii) Disconnecter</td> <td>i) 2000 A<br/>ii) 1600 A<br/>iii) 1600 A &amp; above.</td> </tr> <tr> <td>50.</td> <td>Rated breaking current</td> <td>25 KA</td> </tr> <tr> <td>51.</td> <td>Rated Short Time Withstand Current for 3 sec – Symmetrical</td> <td>25 KA rms</td> </tr> <tr> <td>52.</td> <td>Rated Short Time Withstand Current for 3 sec - Asymmetrical</td> <td>As per relevant IEC/IS &amp; shall be type tested</td> </tr> <tr> <td>53.</td> <td>Rated dynamic peak withstand current (KA<sub>p</sub>)</td> <td>62.5 KA</td> </tr> <tr> <td>54.</td> <td>Cable charging current for C2 duty tested</td> <td>25 A</td> </tr> <tr> <td>55.</td> <td>Capacitor duty (C2 duty tested)</td> <td>400 A</td> </tr> <tr> <td>56.</td> <td>Duty Cycle</td> <td>O-0.3 sec.-CO-3.0 min.- CO</td> </tr> </tbody> </table> <p><b>1.1 STANDARDS</b></p> <p>The circuit breaker and Metal Clad Switchgear Panels shall conform to latest revision with amendment available of</p> | SL  | Description | Values/ Informations | 43.              | Type of Switch Gear as per Arc Interrupter | VCB | 44. | Frequency | 50 c/s | 45. | Rated Voltage | 33 KV | 46. | Maximum Design Voltage | 36 KV | 47. | Power Frequency withstand Voltage ( 1min) | 70 KV rms | 48. | LI withstand Voltage ( 1.2 / 50 micro-sec) | 170 kVp | 49. | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. | 50. | Rated breaking current | 25 KA | 51. | Rated Short Time Withstand Current for 3 sec – Symmetrical | 25 KA rms | 52. | Rated Short Time Withstand Current for 3 sec - Asymmetrical | As per relevant IEC/IS & shall be type tested | 53. | Rated dynamic peak withstand current (KA <sub>p</sub> ) | 62.5 KA | 54. | Cable charging current for C2 duty tested | 25 A | 55. | Capacitor duty (C2 duty tested) | 400 A | 56. | Duty Cycle | O-0.3 sec.-CO-3.0 min.- CO |  |  |  |  |  |
| SL       | Description   | Values/ Informations                            |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 43.      | Type of Switch Gear as per Arc Interrupter  | VCB   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 44.      | Frequency   | 50 c/s  |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 45.      | Rated Voltage   | 33 KV   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 46.      | Maximum Design Voltage  | 36 KV   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 47.      | Power Frequency withstand Voltage ( 1min)   | 70 KV rms                                       |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 48.      | LI withstand Voltage ( 1.2 / 50 micro-sec)  | 170 kVp   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 49.      | Rated Current –<br>i) Bus bar<br>ii) Breaker<br>iii) Disconnecter   | i) 2000 A<br>ii) 1600 A<br>iii) 1600 A & above. |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 50.      | Rated breaking current  | 25 KA   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 51.      | Rated Short Time Withstand Current for 3 sec – Symmetrical  | 25 KA rms                                       |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 52.      | Rated Short Time Withstand Current for 3 sec - Asymmetrical   | As per relevant IEC/IS & shall be type tested   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 53.      | Rated dynamic peak withstand current (KA <sub>p</sub> )   | 62.5 KA   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 54.      | Cable charging current for C2 duty tested   | 25 A  |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 55.      | Capacitor duty (C2 duty tested)   | 400 A   |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |
| 56.      | Duty Cycle  | O-0.3 sec.-CO-3.0 min.- CO                      |             |                      |                  |  |     |     |           |        |     |               |       |     |                        |       |     |   |           |     |  |         |     |   |   |     |                        |       |     |  |           |     |   |   |     |   |         |     |   |      |     |                                 |       |     |            |                            |  |  |  |  |  |



relevant standards, rules and codes some of which are listed herein for ready reference.

| Sl. No | Standard   | Item   |
|--------|--|--|
| 31.    | IEC-60056 / IS 13118 /IEC                        | Circuit Breaker  |
| 32.    | IEC-62271-100,200 ; IEC-600298 / 600694; IS-3427 | Metal enclosed switchgear and control gear.                            |
| 33.    | IS-2705 / IEC 60185                              | Current Transformers   |
| 34.    | IS-3156 / IEC 60186                              | Voltage Transformer  |
| 35.    | IS-3231 & 3842 / IEC 60255                       | Protective Relays  |
| 36.    | IS-1248  | Ammeter & Voltmeter  |
| 37.    | IEC 60129  | Alternating current disconnectors (isolators)                          |
| 38.    | IEC 60529  | Classification of degrees of protection.                               |
| 39.    | IS-375   | Arrangement of breakers Bus bars main connection and auxiliary wiring. |
| 40.    | IEC-687/CBIP Report                              | Tri Vector Meter   |

**The design of the switchgear shall be based on safety to personnel and equipment during operation and maintenance, reliability of service, ease of maintenance, mechanical protection of equipment, interchangeability of equipment and ready addition of future loads.**

## **2.0 STRUCTURAL & MECHANICAL CONSTRUCTION**

**2.1** The Switchgear shall be factory assembled, totally enclosed, metal clad, dead front cubicle. It shall be of sheet Steel (preferably galvanized to avoid rusting) construction and shall be dust, moisture and vermin proof complying with degree of protection of not less than IP-4x as per IS-3427 (1997). The panels shall be of Metal Clad compartmentalized design with all the High Voltage compartments viz. Circuit Breaker, Bus Bar etc. separated by metallic partitions. The switchgear panels shall be rigid without using any external bracing. The switchboard panels should comply with relevant ISS/IEC and revision thereof and shall be designed for easy operation maintenance and further extension. Bus bar, metering, circuit breaker chamber, cables and cable box chamber should have proper access for maintenance, proper interlocks should be provided. The switchgear shall be complete with all necessary wiring fuses, auxiliary contacts, terminal boards etc.

**2.2** The panels shall be constructed from prime quality folded steel sheet of 2 mm thick or Al-Zn sheet steel. Only doors and end covers shall be painted with paint shade as specified.

The observation window on the CB compartment door shall be provided. Observation window shall be of same material and construction as the type tested design/ construction.

**The design of the panels shall be such that no permanent or harmful distortion occurs either when being lifted by eyebolts or when moved into position by rollers or trans pallets.**

The switchgear and control gear should have the minimum degree of protection (in accordance with IEC 60529)  
 - IP 4X for the enclosure for rated current up to 1600A  
 - IP 3X for the enclosure for rated current up to 2500A  
 - IP 2X for the partition between compartments

**The switchgear must be readily extendable in either**

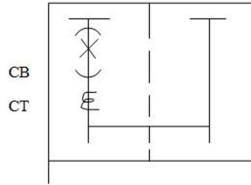
**direction.**

**2.3** For Seismic Applications: The switchboard may be subject to seismic disturbance, hence the switchgear supplier shall provide the type test report or documentation to support the same.

**2.4** Each cubicle shall be equipped with anti-condensation heater controlled by thermostat.

**2.5 Bus Sectionalize panels**

In bus Sectionalize panel one panel shall be used for truck with the C.B. and second panel for connection of bus bar to the top. The bus Sectionalize panel can be combined with a metering panel.



**Bus Sectionalize Panels (Typical)**

**2.6** Assembly of all current carrying parts shall be such that they shall be easily accessible for inspection and maintenance.

**2.7** Switchgear cubicles shall be satisfied the requirement of IEC:62271-200, IEC:60298, IEC:60694.

**2.8** Each switch gear shall be supplied with basic operating tools like – rack-in rack-out handle etc.

**2.9** The switchgear and control gear shall be suitable for continuous operation under the basic service conditions indicated below.

Ambient temperature °C - 5 to + 50

Relative humidity up to 95%

Altitude of installation up to 1000m, IEC 120

**3.0 BUS BARS AND CONNECTORS**

Bus bars and all other electrical connections between various components shall be made of Electrolytic copper of adequate cross-section. The bus bar section shall be of ample capacity to carry the rated current continuously without excessive heating and for adequately meeting the thermal and dynamic stresses in the case of short circuit in the system up to full fault MVA. Cross section of the Bus bars shall have to be designed to limit

the current density within 0.75A/sq.mm in case of Aluminum & 1.75A/sq.mm in case of Copper.

All bus bars shall be rigidly and firmly mounted. Spacious bus bar chamber shall be provided with use of tubular bus bar design and free from any high voltage stresses by avoiding all sharp edges and bringing them to uniform potential. Bus bar shall be sleeved for full voltage. Sleeve shall be heat shrinkable BTM type of Raychem make. **No PVC sleeve in bus bar for 36KV is acceptable.**

Bus bar shall be located in a separate metal clad chamber and shall be air insulated. It shall be adequately supported on insulators or integral epoxy spouts to withstand dynamic stress due to the short circuit current as specified.

Bus bar shall be extensible on either side to make it in switch board configuration of any make.

**4.0 CIRCUIT BREAKER**

**4.1** The Circuit Breaker shall be suitable for installation in the switchgear cubicle. The breakers shall comply with IS-13118/IEC-60056 conforms to latest amendment thereof.

**4.2** The Circuit Breaker shall be spring operated, Motor charged, manually released spring closing mechanism with three pole simultaneous operation. The indicating device shall show the OPEN and CLOSE position of breaker visible from front of the cubicle. The spring charging time of the motor shall not exceed 15 sec. The “TRIP” and “CLOSE” coils shall be of reliable design and low consumption preferably less than 300W. It shall be possible to manually charge the circuit breaker operating spring in case of auxiliary supply failure.

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| <p><b>4.3</b> The breakers shall be capable of Making &amp; Breaking the short time current in accordance with the requirement of ISS 13118 / IEC 60056 conform to latest amendment thereof and shall have 3 phase rupturing capacity of 25KA at 33KV. The continuous current rating of breaker shall not be less than 1600A for all items.</p> <p><b>4.4</b> The circuit breaker shall be isolated by horizontal racking and positively fixing the unit into any one of the following positions;</p> <ul style="list-style-type: none"> <li>- <b>Service position;</b> main and auxiliary circuits connected</li> <li>- <b>Test position;</b> main circuits disconnected auxiliary circuits connected. Circuit breaker in its isolated position shall be completely contained in the apparatus compartment with shutters on main circuit closed and compartment front door closed.</li> </ul> <p>Locking of circuit breaker in the test position shall be possible by means of key lock on the earth switch manoeuvre.</p> <p>A position indicator switch or viewing window must be provided for visual indication of the circuit breaker position. Comprehensive interlocking system to prevent any dangerous or inadvertent operation shall be provided. Isolation of circuit breaker from bus bar or insertion into bus bar shall only be possible when the breaker is in the "OPEN" position.</p> <p><b>4.5</b> Each circuit breaker shall be provided with following accessories.</p> <ul style="list-style-type: none"> <li>i) ON-OFF indicator for indicating circuit breaker position.</li> <li>ii) Trip push button</li> <li>iii) Shunt trip coil operating between 70% - 110% of rated control voltage.</li> <li>iv) Close coil, operating between 85% - 110% of rated control voltage.</li> <li>v) Spring charge motor, operating between 90% - 110% of rated control voltage.</li> <li>vi) Two trip coils and one closing coils shall be provided in all the breakers.</li> </ul> <p><b>4.6</b> The switchgear shall be provided with facilities for full operation from a remote point. In case of Local Operation of circuit breakers, Control switch of Circuit Breaker shall be located at such a height so that a man can operate standing on ground/floor. It shall be possible to trip the circuit breaker locally by mechanical means.</p> <p><b>4.7</b> The circuit breaker truck shall ensure earth in both connected and disconnected positions.</p> <p><b>4.8</b> An electro-mechanical device shall be provided to ensure the auxiliary circuits have been securely connected between the fixed and moving portions of the switchgear, before allowing closing operation of the circuit breaker. The voltage rating of the device shall be the same as the voltage used for the closing circuit.</p> <p><b>4.9</b> Tripping and/or release coils shall be continuous rated to ensure longer life but rating should not exceed 300 W each. The electrical tripping device shall be of a type which acts directly on the circuit breaker mechanism and shall give positive operation for a supply voltage of 70% of nominal at dc and 85% of nominal at ac control voltage.</p> <p><b>4.10</b> Circuit breakers will be provided with at least one spare normally-open and one spare normally-closed contact, each wired out to terminals for the connection of external wiring.</p> <p><b>4.11</b> Each circuit breaker shall be interlocked to prevent:</p> <ul style="list-style-type: none"> <li>- the breaker being inserted into service position unless it is open</li> <li>- the breaker being withdrawn from the service position unless it is open</li> <li>- the breaker being closed unless it is fully in the service or test position</li> <li>- remote operation whilst in the withdrawn/test position</li> </ul> <p><b>4.12</b> Circuit breakers shall be mechanical latching and electrical and mechanical tripping. The operating mechanism shall be trip-free and shall include an anti-pumping device.</p> <p><b>4.13 Shutters:</b> Circuit breaker compartment should have automatic shutters, which shall be opened and closed by the mechanical drive of the circuit breaker. The bus bar and</p> |  |  |  |  |  |
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| <p>circuit spout covers shall be operated independently of each other. Padlock facilities can be provided on the metal shutters.</p> <p><b>4.14 INTERLOCKING</b><br/>Isolation and connection of the circuit breaker shall be carried out inside the compartment with the door closed. The following mechanical interlocks shall be provided for service safety: - interlocking which prevents racking-in and racking-out of the circuit breaker when closed - interlocking which prevents manual or electrical closing of the circuit breaker in the intermediate positions between connected or isolated - interlocking which prevents either the circuit breaker from being racked in when the relative earth switch is closed and the earth switch from being closed with the circuit breaker racked in.</p> <p><b>5.0 Current Transformer :</b><br/>The current transformer should be ring core, Di-electrically non stressed type and should be located outside the gas chamber. The CT shall be mounted in a manner to make it very easy for fitting / replacement at site. It shall be designed with built in adjustable cable holding clamps, makes it very easy for removal/sturdy fitting of power cables and to prevent any swing due to forces encountered during short circuit. P1 of primary side of the in-built CT shall be at bus side of all the panels.</p> <p><b>6.0 POTENTIAL TRANSFORMER</b><br/>Three numbers Single phase draw out type PT of ratio <math>33000/\sqrt{3}</math>; <math>110/\sqrt{3}</math> Volts with HT/LT fuses mounted on an independent trolley housed at the same feeder/transformer panel. This Line PT shall not get disconnected along with the Circuit Breaker in case the breaker is drawn out from 'SERVICE' position. Bus potential transformer shall be housed in separate trolley, placed in a separate panel. Arrangement shall be made in such a way so that PT primary fuse can be replaced without switching OFF the breaker.</p> <p><b>7.0 AUXILIARY/CONTROL WIRING</b><br/>All the secondary wiring in the panel shall have high quality PVC insulation 1100 volts grade and the same shall be of standard Copper Conductor of size not less than 1.5 sq. mm. for control circuit and 2.5 sq. mm. for CT circuits. Colors of the secondary / auxiliary wiring should conform to ISS 375/1963 conform to latest amendments thereof. All wiring shall be neatly run and group of wiring shall be securely fixed with clips so that wiring can be checked without necessity of removing the clamps. Ferrules with number shall be provided on both end of the wiring.</p> <p><b>8.0 EARTHING</b><br/>(a) An earth bus of size minimum 40 mm x 6 mm or equivalent copper shall be provided and shall be extended throughout the length of the switch board with a provision to extend further on both sides of the end switchboard for future extension of switchboards.<br/>(b) It shall be possible to connect each bay of the switchgear to earth, through earthing switches suitable for fault make current. And provision of bus earthing is also required.<br/>(c) Earthing switch shall be mechanically interlocked with the associated breaker as per interlock requirement.<br/>(d) Earthing circuit shall be suitable for testing at 25KA for 1.0 sec.<br/>(e) Breaker compartment shall have scrapping earth bar and spring load finger shall be provided in withdrawal truck.<br/>(f) Provision of Bus bar earthing at both side of Bus-Coupler is to be provided.</p> <p><b>9. TYPE TESTS</b><br/>The bidder shall submit following Type test reports to prove the capability and suitability of his offered switchgear.<br/>i) Short Time Current Test for 25KA for 3 second.<br/>ii) Short Circuit Test duties on Circuit Breaker.<br/>iii) Impulse withstands Test.</p> |  |  |  |  |  |
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|   | iv) Power Frequency withstands Test.<br>v) Temperature Rise Test.<br>vi) Internal Arc Test.<br>vii) Mechanical Endurance test on Circuit Breaker.<br>viii) Test to prove Degree of Protection of enclosure  |  |  |  |  |  |
| 2 | <b><u>Air Conditioner :</u></b><br>Capacity : 4 Ton, 48000 BTU with Remote Control =<br>05(Five) Nos, Ceiling Type.<br>Input Voltage : 380~440 VAC, 50Hz, 3 Phase.<br>Brand : General (Esquire Electronics limited Bd.)<br>Model : ABG 45 ABAS.<br>Country of Manufacturing: Japan, Assemble in Thailand.<br>Warranty : 2 Years compressor, Spare parts & 3 Years after<br>sales service. |  |  |  |  |  |
| 3 | <b>PAINTING</b><br>The Panels shall be pre-treated using 7-Tank process and<br>then Epoxy Powder Coated with Paint shade of RAL 7032.   |  |  |  |  |  |
| 4 | (i) <b>Installation &amp; Commissioning:</b> Offer to be submitted on<br>turn-key basis i.e. Supply, installation and commissioning to<br>be done by the bidder<br>(ii) The bidder is responsible for testing & commissioning<br>the supplied panels for continuous 72 hours on full load<br>running condition of the plant.  |  |  |  |  |  |
|   | Others (To be Specified by The Contractor)  |  |  |  |  |  |

## 6.3 Form of Completion Certificate

Contract No:  
To:

Date:

*[Name of Contractor]*

Pursuant to GCC Clause 39 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[insert date]*, for the supply and installation of plant and Services for *[name of contract]*, we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the Facilities or part thereof:  
\_\_\_\_\_
2. Date of Completion: \_\_\_\_\_

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

for and on behalf of the Employer

[ **Signature** ]

[ **Title of the Project Manager** ]

## 6.4 Form of Operational Acceptance Certificate

Contract No:  
To:

Date:

*[Name of Contractor]*

Pursuant to GCC Clause 40.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[insert date]*, for the supply and installation of plant and Services for *[name of contract]*, we hereby notify you that the Functional Guarantees of the following part(s) of the Facilities were satisfactorily attained on the date specified below.

1. Description of the Facilities or part thereof:  
\_\_\_\_\_
2. Date of Operational Acceptance: \_\_\_\_\_

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

for and on behalf of the Employer

[ **Signature** ]

[ **Title of the Project Manager** ]

## **6.5 Supplementary Information**

*[The Tenderer shall furnish additional description/information covering all activities, if any]*



## Section 7. Drawings

### Specification

#### 1. 33KV Gas Insulated Switchgear (GIS) panels

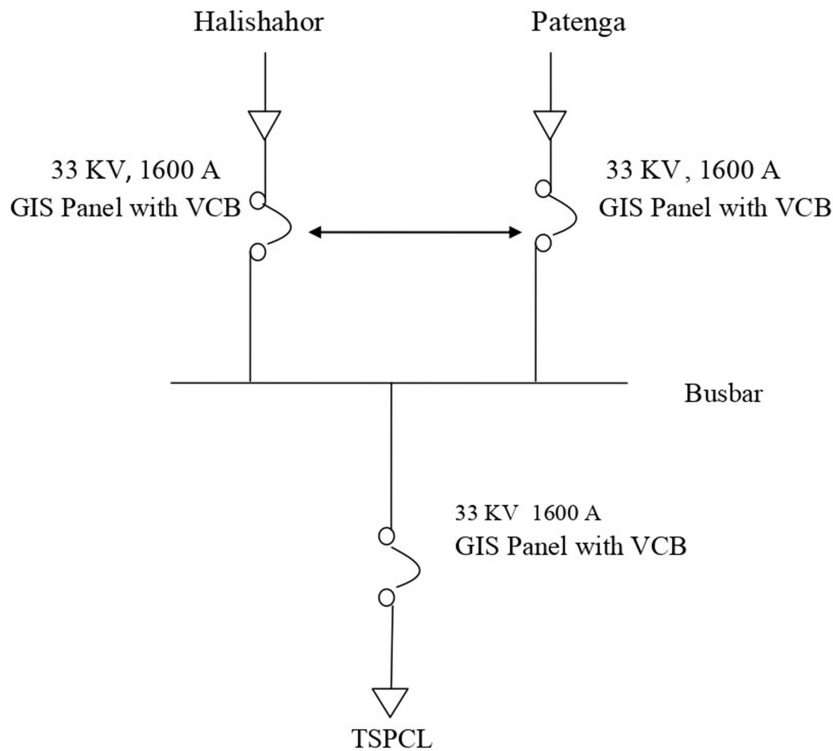
- 1 Set

Capacity : 33 KV, 1600A, 25 KA for 3 Sec

Incoming Switchgear Panel : 33KV, 1600A, 25 KA GIS Panel with VCB - 02Nos.

Outgoing Switchgear Panel : 33KV, 1600A, 25 KA GIS Panel with VCB - 01 No

Auxiliary Supply : 110 V AC/DC and 230VAC.



**Fig:** Single line diagram of 33 KV (GIS) panel.

#### **Control Equipments:**

Ammeter, voltmeter, CT, PT, Watt hour meter, Earth Fault, over current & Phase failure Relays, ON – OFF & Trip Signal etc.

#### **Notes on Drawings**

*Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section or annexed in a separate folder. The Drawings shall be dated, numbered and show the revision number.*