



**BIDDING DOCUMENT**  
for  
Design, Supply, Erection, Testing &  
Commissioning of 400/230kV Madunaghat GIS  
Substation on Turnkey Basis  
(Bid Identification No.: PGCB/DCMPGSP/BD-P81/SS/02)

**Volume 1 of 3**

**Employer:** Power Grid Company of Bangladesh Limited  
**Country:** The People's Republic of Bangladesh  
**Project:** Dhaka-Chittagong Main Power Grid Strengthening Project  
**Loan No.:** BD-P81

**October 2017**

# Table of Contents

## VOLUME 1 OF 3

Invitation for Bids: Without Prequalification .....	IFB-1
<b>PART 1 - Bidding Procedures</b>	
Section I. Instructions to Bidders .....	ITB-1
Section II. Bid Data Sheet.....	BDS-1
Section III. Evaluation and Qualification Criteria (Without Prequalification).....	EQC-1
Section IV. Bidding Forms .....	BF-1
Section V. Eligible Source Countries of Japanese ODA Loans .....	ESC-1
<b>PART 2 - Employer's Requirements</b>	
Section VI. Employer's Requirements .....	ER-1
<b>PART 3 - Conditions of Contract and Contract Forms</b>	
Section VII. General Conditions (GC).....	GC-1
Section VIII. Particular Conditions.....	PC-1
Section IX. Contract Forms .....	CF-1

## VOLUME 2 OF 3

Scope of Work
Technical Specification for <b>Package SS-2</b>
Drawings forming part of Technical Specifications for <b>Package SS-2</b>

## VOLUME 3 OF 3

Section IV: Bidding Forms
Schedule A Introduction & Preamble to the Price & Technical Schedules
Schedule B Rates and Prices
Schedule C Delivery & Completion and Contract Completion Times
Schedule D Proposed Subcontractors / Manufacturers for Major Items of Plant and Services
Schedule E Technical Particulars and Guarantees
Schedule F Proposed Subcontractors
Schedule G Coefficient and Indices for Price Adjustment
Schedule H Proposed Contract & Site Organisation
Schedule I Drawings and Documents to be submitted with Tender and after Contract
Schedule J Proposed Alternative Standards to which Equipment shall be provided

# **Invitation for Bids: Without Prequalification**

**POWER GRID COMPANY OF BANGLADESH LIMITED (PGCB)**

**INVITATION FOR BIDS**

**Procurement of**

**Plant Design, Supply and Installation of Package SS-2**

**Design, Supply, Erection, Testing & Commissioning of 400/230kV Madunaghat GIS Substation on Turnkey Basis**

Date: 04 October, 2017,

Loan Agreement No: BD-P81

IFB No: 02/PGCB/Sec(SSD&QC)/2017/6159

Reference Identification No: PGCB/DCMPGSP/BD-P81/SS/02

Deadline for submission of Bid: 07 January, 2018

1. The Government of the People's Republic of Bangladesh has received a loan from Japan International Cooperation Agency (JICA) toward the cost of Dhaka-Chittagong Main Power Grid Strengthening Project. It is intended that part of the proceeds of this loan will be applied to eligible payments under the contract for procurement of Package SS-2: "Design, Supply, Erection, Testing & Commissioning of 400/230kV Madunaghat GIS Substation on Turnkey Basis".
2. Bidding will be conducted through procedures in accordance with the applicable Guidelines for Procurement under Japanese ODA Loans, and is open to all Bidders from eligible source countries, as defined in the Loan Agreement.
3. The Power Grid Company of Bangladesh Limited now invites sealed Bids from eligible Bidders for Package SS-2: "Design, Supply, Erection, Testing & Commissioning of 400/230kV Madunaghat GIS Substation on Turnkey Basis". International Competitive Bidding will be conducted in accordance with JICA's Single Stage Two Envelope Bidding Procedure.
4. Interested eligible Bidders may obtain further information from and inspect the Bidding Documents at the head office of the Power Grid Company of Bangladesh Limited (PGCB), Institution of Engineers Bangladesh (IEB) Bhaban (4<sup>th</sup> floor), 8/A Ramna, Dhaka-1000; E-mail: [se-design@pgcb.org.bd](mailto:se-design@pgcb.org.bd) or Web: [www.pgcb.org.bd](http://www.pgcb.org.bd).
5. A complete set of the Bidding Documents may be purchased by interested Bidders on the submission of a written application to the address above and upon payment of a non-refundable fee of USD 270.00 (United States Dollar two hundred seventy only) or Bangladesh Taka 20,000.00 (Taka twenty thousand only) in the form of Pay Order/ Demand Draft in favour of the Power Grid Company of Bangladesh Ltd. The Bidding Document may be sent through a courier for an additional fee of Bangladesh Taka 1,000.00 (local delivery) or US\$ 120.00 (International delivery) in the form of Pay Order/ Demand Draft in favour of Power Grid Company of Bangladesh Ltd.
6. Bids must be delivered to the above mentioned address on or before 11.00AM (Bangladesh Standard Time) on 07 January 2018, and must be accompanied by a Bid Security of USD 2,000,000 (US Dollar two million) only.
7. Bids will be opened at 11.05 AM (Bangladesh Standard Time) on 07 January 2018, at the head office of the Power Grid Company of Bangladesh Limited (PGCB), Institution of Engineers Bangladesh (IEB) Bhaban (4<sup>th</sup> floor), Ramna, Dhaka-1000 in the presence of Bidders' representatives who choose to attend.

(Md. Ashraf Hossain)  
Company Secretary

## **PART 1 - Bidding Procedures**

## Section I. Instructions to Bidders

The Instructions to Bidders governing this bidding process are the “Instructions to Bidders included in **Option A**, Single-Stage Two-Envelope Bidding, Section I,” of the Standard Bidding Documents for Procurement of Plant Design, Supply and Installation (version 1.1) published by JICA in February 2013. Those Instructions to Bidders are available on the JICA’s web site shown below:

[http://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/index.htm](http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/index.htm)  
1

A copy of the Instructions to Bidders is attached to these Bidding Documents.

## Section I. Instructions to Bidders

*[Note to the Employer: The instructions to Bidders governing all Single-Stage Two-Envelope bidding processes for Plant Design, Supply and Installation Contracts funded with Japanese ODA Loans are the Standard Instructions to Bidders included in Option A, Single-Stage Two-Envelope Bidding, of the Standard Bidding Documents for Procurement of Plant Design, Supply and Installation (SBD (Plant)) (version 1.0) published by JICA in February 2013.*

*A copy of the Standard Instructions to Bidders may be attached to the Bidding Documents prepared by the Employer for reference purposes only. If the Instructions to Bidders in the Bidding Documents prepared by the Employer contain modifications from the Standard Instructions to Bidders, JICA will not consider them valid and the Standard Instructions to Bidders, as defined above, shall apply.*

*Instead of attaching a copy of the Standard Instructions to Bidders, the Employer may use the following introductory text.]*

The Instructions to Bidders governing this bidding process are the “Instructions to Bidders included in **Option A**, Single-Stage Two-Envelope Bidding, Section I,” of the Standard Bidding Documents for Procurement of Plant Design, Supply and Installation (version 1.0) published by JICA in February 2013. Those Instructions to Bidders are available on the JICA’s web site shown below:

[http://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/index.html](http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/index.html)

A copy of the Instructions to Bidders is not attached to these Bidding Documents.

# Table of Clauses

<b>A. General.....</b>	<b>3</b>
1. Scope of Bid .....	3
2. Source of Funds .....	3
3. Corrupt and Fraudulent Practices .....	3
4. Eligible Bidders .....	5
5. Eligible Plant and Installation Services .....	6
<b>B. Contents of Bidding Documents.....</b>	<b>7</b>
6. Sections of Bidding Documents .....	7
7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting.....	8
8. Amendment of Bidding Documents.....	9
<b>C. Preparation of Bids .....</b>	<b>9</b>
9. Cost of Bidding .....	9
10. Language of Bid .....	10
11. Documents Comprising the Bid .....	10
12. Letters of Bid and Schedules.....	11
13. Alternative Bids.....	11
14. Documents Establishing the Eligibility of the Plant and Installation Services .....	12
15. Documents Establishing the Eligibility and Qualifications of the Bidder .....	12
16. Documents establishing conformity of the Plant and Installation Services .....	13
17. Technical Proposal, Subcontractors .....	13
18. Bid Prices and Discounts.....	14
19. Currencies of Bid and Payment.....	17
20. Period of Validity of Bids .....	17
21. Bid Security .....	17
22. Format and Signing of Bid .....	19
<b>D. Submission and Opening of Bids .....</b>	<b>20</b>
23. Submission, Sealing and Marking of Bids .....	20
24. Deadline for Submission of Bids.....	20
25. Late Bids.....	21
26. Withdrawal, Substitution, and Modification of Bids .....	21



27. Bid Opening .....	21
<b>E. Evaluation and Comparison of Bids.....</b>	<b>24</b>
28. Confidentiality.....	24
29. Clarification of Bids .....	24
30. Deviations, Reservations, and Omissions .....	24
31. Preliminary Examination of Technical Bids .....	25
32. Qualification of the Bidders .....	25
33. Determination of Responsiveness of Technical Bids.....	26
34. Nonmaterial Nonconformities .....	26
35. Detailed Evaluation of Technical Bids.....	27
36. Correction of Arithmetical Errors .....	28
37. Conversion to Single Currency .....	28
38. Evaluation of Price Bids.....	28
39. Comparison of Bids.....	29
40. Employer's Right to Accept Any Bid, and to Reject Any or All Bids.....	29
<b>F. Award of Contract.....</b>	<b>30</b>
41. Award Criteria.....	30
42. Notification of Award .....	30
43. Signing of Contract .....	30
44. Performance Security .....	31

## A. General

1. **Scope of Bid**
  - 1.1 In connection with the Invitation for Bids **specified in the Bid Data Sheet (BDS)**, the Employer, as **specified in the BDS**, issues these Bidding Documents (hereinafter referred to as “Bidding Documents”) for the procurement of Plant and Installation Services as specified in Section VI, Employer’s Requirements. The name, identification, and number of the lot(s) (contract(s)) comprising this International Competitive Bidding (ICB) are **specified in the BDS**.
  - 1.2 Throughout these Bidding Documents:
    - (a) the term “in writing” means communicated in written form and delivered against receipt;
    - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
    - (c) “day” means calendar day.
2. **Source of Funds**
  - 2.1 The Borrower **specified in the BDS** has applied for or received a Japanese ODA Loans from Japan International Cooperation Agency (hereinafter referred to as “JICA”), with the number, in the amount and on the signed date of the Loan Agreement **specified in the BDS**, toward the cost of the project **specified in the BDS**. The Borrower intends to apply a portion of the proceeds of the Loan to eligible payments under the Contract(s) for which these Bidding Documents are issued.
  - 2.2 Disbursement of a Japanese ODA Loans by JICA will be subject, in all respects, to the terms and conditions of the Loan Agreement, including the disbursement procedures and the applicable Guidelines for Procurement under Japanese ODA Loans **specified in the BDS**. No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to the Loan proceeds.
  - 2.3 The above Loan Agreement will cover only part of the project cost. As for the remaining portion, the Borrower will take appropriate measures for finance.
3. **Corrupt and Fraudulent Practices**
  - 3.1 It is JICA’s policy to require that Bidders and Contractors, as well as Borrowers, under contracts funded with Japanese ODA Loans and other Japanese ODA, observe the highest standard

of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA:

- (a) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (b) will recognize a Bidder or Contractor as ineligible, for a period determined by JICA, to be awarded a contract funded with Japanese ODA Loans if it, at any time, determines that the Bidder or the Contractor has engaged in corrupt or fraudulent practices in competing for, or in executing, another contract funded with Japanese ODA Loans or other Japanese ODA; and
- (c) will recognize a Contractor as ineligible to be awarded a contract funded with Japanese ODA Loans if the Contractor or a Subcontractor, who has a direct contract with the Contractor, is debarred under the cross debarment decisions by the Multilateral Development Banks. Such period of ineligibility shall not exceed three (3) years from (and including) the date on which the cross debarment is imposed.

“Cross debarment decisions by the Multilateral development Banks” is a corporate sanction in accordance with the agreement among the African Development Bank Group, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and the World Bank Group signed on 9 April, 2010 (as amended from time to time). JICA will recognize the World Bank Group’s debarment of which period exceeds one year, imposed after 19 July, 2010, the date on which the World Bank Group started cross debarment, as “cross debarment decisions by the Multilateral Development Banks.”

The list of debarred firms and individuals is available at the electronic address **specified in the BDS**.

JICA will recognize a Bidder or Contractor as ineligible to be awarded a contract funded with Japanese ODA Loans if the Bidder or Contractor is debarred by the World Bank Group for the period starting from the date of the Invitation for Bid, if prequalification has not been conducted; or the date of Advertisements for Prequalification, if prequalification has been conducted, up to the signing of the contract, unless (i) such debarment period does not exceed one year, or (ii) three

(3) years have passed since such debarment decision.

If it is revealed that the Contractor was ineligible to be awarded a contract according to the above, JICA will, in principle, impose sanctions against the Contractor.

If it is revealed that a Subcontractor, who has a direct contract with the Contractor, was debarred by the World Bank Group on the subcontract date, JICA will, in principle, require the Borrower to have the Contractor cancel the subcontract immediately, unless (i) such debarment period does not exceed one year, or (ii) three (3) years have passed since such debarment decision. If the Contractor refuses, JICA will require the Borrower to declare invalidity or cancellation of the contract and demand the refund of the relevant proceeds of the Loan or any other remedies on the grounds of contractual violation.

3.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 42.2.1 (c) of Section VII. General Conditions.

#### **4. Eligible Bidders**

4.1 A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a JV:

- (a) all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and
- (b) the JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during Contract execution.

4.2 A Bidder shall not have a conflict of interest. A Bidder shall not be employed under any of the circumstances set forth below throughout the bidding/selection process and/or the execution of the Contract unless the conflict has been resolved in a manner acceptable to JICA.

- (a) A firm shall be disqualified from providing goods or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any

affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm. This provision does not apply to the various firms (consultants, contractors, or suppliers) only due to the reason that those firms together are performing the Contractor's obligations under a turnkey or design and build contract.

- (b) A firm that has a close business relationship with the Borrower's professional personnel, who are directly or indirectly involved in any part of: (i) the preparation of the prequalification and Bidding Documents for the Contract, (ii) the prequalification and Bid evaluation, or (iii) the supervision of such Contract, shall be disqualified.
- (c) Based on the "One Bid Per Bidder" principle, which is to ensure fair competition, a firm and any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm shall not be allowed to submit more than one Bid, either individually or as a member in a JV. A firm (including its affiliate), if acting in the capacity of a Subcontractor in one Bid, may participate in other Bids, only in that capacity.
- (d) A firm having any other form of conflict of interest other than (a) through (c) above shall be disqualified.

- 4.3 A Bidder shall be from any of the eligible source countries indicated in Section V, Eligible Source Countries of Japanese ODA Loans.
- 4.4 A Bidder that has been determined to be ineligible by JICA in accordance with ITB 3.1 shall not be eligible to be awarded a Contract.
- 4.5 This bidding is open only to prequalified Bidders unless **specified in the BDS.**
- 4.6 A Bidder shall provide such evidence of its continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

## 5. Eligible Plant and Installation Services

- 5.1 The Plant and Installation Services to be supplied under the Contract shall have their origin in any of the eligible source countries indicated in Section V, Eligible Source Countries of Japanese ODA Loans, and all expenditures under the Contract will be limited to such Plant and Installation Services.

- 5.2 For purposes of ITB 5.1 above, “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.

## **B. Contents of Bidding Documents**

### **6. Sections of Bidding Documents**

- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

#### **PART 1 Bidding Procedures**

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (BDS)
- Section III. Evaluation and Qualification Criteria (EQC)
- Section IV. Bidding Forms
- Section V. Eligible Source Countries of Japanese ODA Loans

#### **PART 2 Employer’s Requirements**

- Section VI. Employer’s Requirements

#### **PART 3 Conditions of Contract and Contract Forms**

- Section VII. General Conditions (GC)
- Section VIII. Particular Conditions (PC)
- Section IX. Contract Forms

- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Documents.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the Bidding Documents, responses to requests for clarification, the minutes of the pre-bid meeting (if any), or Addenda to the Bidding Documents in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer

shall prevail.

- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents, and to furnish with its Bid all information and documentation as is required by the Bidding Documents.

**7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting**

- 7.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Employer in writing at the Employer's address **specified in the BDS** or raise his enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of Bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so **specified in the BDS**, the Employer shall also promptly publish its response at the web page **identified in the BDS**. Should the clarification result in changes to the essential elements of the Bidding Documents, the Employer shall amend the Bidding Documents following the procedure under ITB 8 and ITB 24.2.
- 7.2 The Bidder 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 Bid and entering into a contract for the provision of Plant and Installation Services. The costs of visiting the site shall be at the Bidder's own expense.
- 7.3 The Bidder 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 Bidder, 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.

- 7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if **so specified in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. A site visit will be conducted by the Employer at the time of the pre-bid meeting, if **so specified in the BDS**.
- 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than one (1) week before the meeting.
- 7.6 Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting. Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

**8. Amendment of Bidding Documents**

- 8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Employer in accordance with ITB 6.3. If **so specified in the BDS**, the Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
- 8.3 To give Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may extend the deadline for the submission of Bids, pursuant to ITB 24.2.

**C. Preparation of Bids**

**9. Cost of Bidding**

- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.



- 10. Language of Bid**      10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language of Bid, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 11. Documents  
Comprising the  
Bid**                      11.1 The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in ITB 11.2 and the other the Price Bid containing the documents listed in ITB 11.3, both envelopes enclosed together in an outer single envelope.
- 11.2 The Technical Bid submitted by the Bidder shall comprise the following:
- (a) Letter of Technical Bid;
  - (b) Bid Security, in accordance with ITB 21;
  - (c) Acknowledgment of Compliance with the Guidelines for Procurement under Japanese ODA Loans (Form ACK), which shall be signed and dated by the Bidder's authorized representative;
  - (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22.2;
  - (e) in the case of a Bid submitted by a JV, a copy of the JV agreement, or letter of intent, signed by all members, to enter into a JV including a draft agreement, indicating at least the parts of the Plant to be executed by the respective members;
  - (f) documentary evidence establishing in accordance with ITB 14 that the Plant and Installation Services offered by the Bidder in its Bid or in any alternative Bid, if permitted, are eligible;
  - (g) documentary evidence in accordance with ITB 15 establishing the Bidder's eligibility and qualifications to perform the Contract if its Bid is accepted;
  - (h) Technical Proposal in accordance with ITB 17;
  - (i) documentary evidence establishing in accordance with ITB 16 that the Plant and Installation Services offered by

the Bidder conform to the Bidding Documents;

- (j) alternative Bids, if permissible, in accordance with ITB 13;
- (k) list of Subcontractors, in accordance with ITB 17.2 and 17.3; and
- (l) any other document **required in the BDS**.

11.3 The Price Bid submitted by the Bidder shall comprise the following:

- (a) Letter of Price Bid;
- (b) completed Price Schedules, in accordance with ITB 12 and 18;
- (c) alternative Price Bids, at the Bidder's option and if permissible, in accordance with ITB 13; and
- (d) any other document **required in the BDS**.

## 12. Letters of Bid and Schedules

12.1 The Bidder shall complete the Letters of Technical Bid and Price Bid, including the appropriate Technical and Price Schedules, using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 22.2. All blank spaces shall be filled in with the information requested.

## 13. Alternative Bids

13.1 **The BDS indicates** whether alternative Bids are allowed. If they are allowed, **the BDS will also indicate** whether they are permitted in accordance with ITB 13.3, **or** invited in accordance with ITB 13.2 and/or ITB 13.4.

13.2 When alternatives to the Time Schedule are explicitly invited, a statement to that effect will be **included in the BDS**, and the method of evaluating different time schedules will be described in Section III, Evaluation and Qualification Criteria.

13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the Employer's requirements as described in the Bidding Documents must also provide: (i) a price at which they are prepared to offer a plant meeting the Employer's requirements; and (ii) all information necessary for a complete evaluation of the alternatives by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed installation methodology and

other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

- 13.4 When Bidders are **invited in the BDS** to submit alternative technical solutions for specified parts of the facilities, such parts shall be described in Section VI, Employer's Requirements. Technical alternatives that comply with the performance and technical criteria specified for the Plant and Installation Services shall be considered by the Employer on their own merits, pursuant to ITB 35.2.

**14. Documents  
Establishing the  
Eligibility of the  
Plant and  
Installation  
Services**

- 14.1 To establish the eligibility of the Plant and Installation Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.

**15. Documents  
Establishing the  
Eligibility and  
Qualifications of  
the Bidder**

- 15.1 In accordance with Section III, Evaluation and Qualification Criteria, if the prequalification process was conducted prior to the bidding process, the Bidder shall provide in the corresponding information sheets included in Section IV, Bidding Forms, (i) updated information on any assessed aspect that changed from that time to establish that the Bidder continues to meet the criteria used at the time of prequalification and (ii) the requested information on the additional qualification criteria stated in Section III, Evaluation and Qualification Criteria, or if the assessment of qualification criteria was not conducted prior to the bidding process, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.

- 15.2 Any change in the structure or formation of a Bidder after being prequalified and invited to bid (including, in the case of a JV, any change in the structure or formation of any member thereto) shall be subject to the written approval of the Employer prior to the deadline for submission of Bids. Such approval shall be denied if (i) such change has not taken place by the free choice of the firms involved; (ii) as a consequence of the change, the Bidder no longer substantially meets the qualification criteria set forth in the Prequalification Documents; or (iii) in the opinion of the Employer, the change may result in a substantial reduction in competition. Any such change should be submitted to the Employer not later than fourteen (14) days after the date of the Invitation for Bids.

**16. Documents establishing conformity of the Plant and Installation Services**

16.1 The documentary evidence of the conformity of the Plant and Installation Services with the Bidding Documents may be in the form of literature, drawings and data, and shall include:

- (a) a detailed description of the essential technical and performance characteristics of the Plant and Installation Services, including the functional guarantees of the proposed Plant and Installation Services, in response to the Specifications. The functional guarantees of the proposed Plant and Installation Services shall be stated in the applicable form in Section IV, Bidding Forms;
- (b) a list giving full particulars, including available sources, of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the plant for the period **specified in the BDS**, following completion of Plant and Installation Services in accordance with the provisions of Contract; and
- (c) adequate evidence demonstrating the substantial responsiveness of the Plant and Installation Services to those Specifications. Bidders shall note that standards for workmanship, materials and equipment designated by the Employer in the Bidding Documents are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalog numbers in its Technical Proposal, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Specifications.

**17. Technical Proposal, Subcontractors**

17.1 The Bidder shall furnish a Technical Proposal, including a statement of work methods, equipment, personnel, schedule, safety plan, and any other information as stipulated in Section IV, Bidding Forms in sufficient detail to demonstrate substantial responsiveness of the Bidder's proposal to the Employer's Requirements and the completion time.

17.2 For major items of Plant and Installation Services as listed by the Employer in Section III, Evaluation and Qualification Criteria, which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including manufacturers, for each of those items. In addition, the Bidder shall include in its Technical Proposals information establishing compliance with the requirements specified by the Employer for these items.

Bidders are free to list more than one Subcontractor against each item of the Plant and Installation Services. Quoted rates and prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the rates and prices will be permitted.

- 17.3 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB 4, and that any Plant or Installation Services to be provided by the Subcontractor comply with the requirements of ITB 5 and ITB 16.1.

## **18. Bid Prices and Discounts**

- 18.1 **Unless otherwise specified in the BDS**, Bidders shall quote for the entire Plant and Installation Services on a “single responsibility” basis such that the total Bid Price covers all the Contractor’s obligations mentioned in or to be reasonably inferred from the Bidding Documents in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the plant. This includes all requirements under the Contractor’s responsibilities for testing, pre-commissioning and commissioning of the plant and, where so required by the Bidding Documents, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Documents, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
- 18.2 Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the Bidding Documents.
- 18.3 Bidders shall give a breakdown of the prices in the manner and detail called for in the Price Schedules included in Section IV, Bidding Forms.
- 18.4 Depending on the scope of the Contract, the Price Schedules may comprise up to the seven (7) schedules listed below. Separate numbered Schedules included in Section IV, Bidding Forms, from those numbered 1-4 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 6) giving the

total Bid Price(s) to be entered in the Letter of Price Bid.

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

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

Schedule No. 3 Design Services

Schedule No. 4 Installation Services

Schedule No. 5 Provisional Sums

Schedule No. 6 Grand Summary (Schedule Nos. 1 to 5)

Schedule No. 7 Recommended Spare Parts (Spare Parts for  
Operation and Maintenance)

Bidders 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.

- 18.5 In the Schedules, Bidders shall give the required details and a breakdown of their prices as follows, **unless otherwise provided in the BDS** as for tax liabilities in the Employer's country:

- (a) Plant to be supplied from abroad (Schedule No. 1):

The price of the plant shall be quoted on CIP-named place of destination basis as **specified in the BDS**.

- (b) Plant manufactured within the Employer's country (Schedule No. 2):

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), and includes sales tax and all other taxes payable in the Employer's country on the Plant, as of twenty-eight (28) days prior to the deadline for submission of Bids, if the Contract is awarded to the Bidder.

- (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 BDS**, 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 Bidding Documents, 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 Bids.

- (e) Recommended spare parts shall be quoted separately (Schedule 7) as specified in either subparagraph (a) or (b) above in accordance with the origin of the spare parts.

18.6 The latest edition (as of the Base Date) of Incoterms, published by the International Chamber of Commerce shall govern.

18.7 The prices shall be either fixed or adjustable as **specified in the BDS**.

- (a) In the case of **Fixed Price**, prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

- (b) In the case of **Adjustable Price**, prices quoted by the Bidder 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 Bid submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. Bidders are required to indicate the source of labor and material indices in the corresponding Form in Section IV, Bidding Forms.

18.8 If so indicated in ITB 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify in their Letter of Price Bid 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.

- 18.9 Bidders wishing to offer any unconditional discount shall specify in their Letter of Price Bid the offered discounts and the manner in which price discounts will apply.

**19. Currencies of Bid and Payment**

- 19.1 The currency(ies) of the Bid shall be, as **specified in the BDS**. Payment of the Contract Price shall be made in the currency or currencies in which the Bid Price is expressed in the Bid of the successful Bidder.

- 19.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements.

**20. Period of Validity of Bids**

- 20.1 Bids shall remain valid for the period **specified in the BDS** after the Bid submission deadline date prescribed by the Employer pursuant to ITB 24.1. A Bid valid for a shorter period shall be rejected by the Employer as non-responsive.

- 20.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security shall also be extended for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 20.3.

- 20.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity, the Contract Price shall be determined as follows:

- (a) In the case of Fixed Price Contracts, the Contract Price shall be the Bid Price adjusted by the factor **specified in the BDS**.
- (b) In the case of Adjustable Price Contracts, to determine the Contract Price, the fixed portion of the Bid Price shall be adjusted by the factor **specified in the BDS**.
- (c) In any case, Bid evaluation shall be based on the Bid Price without taking into consideration the effect of the corrections indicated above.

**21. Bid Security**

- 21.1 The Bidder shall furnish as part of its Bid a Bid Security in the



amount and currency **specified in the BDS.**

21.2 The Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company);
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) another security **specified in the BDS**

from a reputable source from an eligible source country. If the unconditional guarantee is issued by an insurance company or a bonding company located outside the Employer's Country, the issuer shall have a correspondent financial institution located in the Employer's Country to make it enforceable. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another substantially similar format approved by the Employer prior to Bid submission. In either case, the form must include the complete name of the Bidder. The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 20.2.

21.3 Any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.

21.4 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing of the Contract and furnishing of the Performance Security pursuant to ITB 44.

21.5 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.

21.6 The Bid Security may be forfeited:

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid, or any extension thereto provided by the Bidder; or
- (b) if the successful Bidder fails to:
  - (i) sign the Contract in accordance with ITB 43; or
  - (ii) furnish a Performance Security in accordance with ITB 44.

21.7 The Bid Security of a JV shall be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the Bid Security shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.

**22. Format and  
Signing of Bid**

22.1 The Bidder shall prepare one original of the Technical Bid and one original of the Price Bid as described in ITB 11 and clearly mark it "TECHNICAL BID - ORIGINAL" and "PRICE BID - ORIGINAL." Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the Technical and Price Bids, in the number **specified in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

22.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.

22.3 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

22.4 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

## **D. Submission and Opening of Bids**

### **23. Submission, Sealing and Marking of Bids**

23.1 Bidders may submit their Bids by mail or by hand. Procedures for submission, sealing and marking are as follows:

Bidders shall enclose the original of the Technical Bid, the original of the Price Bid, and each copy of the Technical Bid and of the Price Bid, including alternative Bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "TECHNICAL BID – ORIGINAL," "PRICE BID – ORIGINAL," "TECHNICAL BID – COPY," "PRICE BID – COPY," and "ALTERNATIVE," as appropriate. These envelopes containing the original, the copies and the alternative(s), if any, shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB 23.2 through 23.5.

23.2 The inner and outer envelopes shall:

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Employer in accordance with ITB 24.1; and
- (c) bear the specific identification of this bidding process specified in BDS 1.1.

23.3 The outer envelopes and the inner envelopes containing the Technical Bid shall bear a warning not to open before the time and date for the opening of Technical Bids, in accordance with ITB 27.1.

23.4 The inner envelopes containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 27.7.

23.5 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

### **24. Deadline for Submission of Bids**

24.1 Bids must be received by the Employer at the address and no later than the date and time **specified in the BDS**.

24.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to

the deadline shall thereafter be subject to the deadline as extended.

## **25. Late Bids**

- 25.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 24. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

## **26. Withdrawal, Substitution, and Modification of Bids**

- 26.1 A Bidder may withdraw, substitute, or modify its Bid – Technical or Price – after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 22.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 22 and ITB 23 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION;” and
- (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 24.

- 26.2 Bids requested to be withdrawn in accordance with ITB 26.1 shall be returned unopened to the Bidders.

- 26.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Technical Bid and on the Letter of Price Bid or any extension thereof.

## **27. Bid Opening**

- 27.1 Except in the cases specified in ITB 25 and ITB 26, the Employer shall publicly open and read out in accordance with ITB 27.5 all Technical Bids received by the deadline, at the date, time and place **specified in the BDS**, in the presence of Bidders’ designated representatives and anyone who choose to attend. The Price Bids will remain unopened and will be held in custody of the Employer until the time of their opening to be specified in accordance with ITB 27.7.
- 27.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No Bid withdrawal

shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at opening of the Technical Bids.

27.3 Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Bid, if any, shall be opened and read out. Substitution Price Bid will remain unopened in accordance with ITB 27.1. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at opening of the Technical Bids.

27.4 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened and read out at the opening. Price Bids, both Original as well as Modification, will remain unopened in accordance with ITB 27.1.

27.5 All other envelopes holding the Technical Bids shall be opened one at a time, reading out:

- (a) the name of the Bidder;
- (b) whether there is a modification;
- (c) the presence or absence of the Bid Security; and
- (d) any other details as the Employer may consider appropriate.

Only Technical Bids and alternative Technical Bids read out at Bid opening shall be considered for evaluation. The Employer shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 25.1).

27.6 The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; alternative proposals; and the presence or absence of a Bid Security. The Bidders' representatives who are present shall be requested to sign the record. The omission

of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

- 27.7 At the end of the evaluation of Technical Bids, the Employer will invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. The opening date should allow Bidders sufficient time to make arrangements for attending the opening.
- 27.8 The Employer will notify, in writing, Bidders who have been rejected on the grounds of their Technical Bids being substantially non-responsive to the requirements of the Bidding Documents and return their Price Bids unopened.
- 27.9 The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, date and time specified by the Employer. The Bidder's' representatives who are present shall be requested to sign a register evidencing their attendance.
- 27.10 All envelopes containing Price Bids shall be opened one at a time, reading out:
- (a) the name of the Bidder;
  - (b) whether there is a modification;
  - (c) the Bid Price(s), including any discounts and alternative Bids; and
  - (d) any other details as the Employer may consider appropriate.

Only Price Bids discounts, and alternative Bids read out and recorded during the opening of Price Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Price Bids.

- 27.11 The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price, (per lot if applicable), including any discounts, and alternative Bids. The Bidders' representatives who are present shall be requested to sign the record. The omission of

a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

## **E. Evaluation and Comparison of Bids**

- 28. Confidentiality**
- 28.1 Information relating to the evaluation of Bids and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders in accordance with ITB 42.
- 28.2 Any attempt by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- 28.3 Notwithstanding ITB 28.2, from the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.
- 29. Clarification of Bids**
- 29.1 To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid, giving a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid, including any voluntary increase or decrease in the prices, shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 36.
- 29.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
- 30. Deviations, Reservations, and Omissions**
- 30.1 During the evaluation of Bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the Bidding Documents;
  - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and

- (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Documents.

**31. Preliminary Examination of Technical Bids**

- 31.1 The Employer shall examine Technical Bids to confirm that all documents and technical documentation requested in ITB 11.2 have been provided, and to determine the completeness of each document submitted.
- 31.2 The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the Bid shall be rejected.
  - (a) Letter of Technical Bid;
  - (b) written confirmation of authorization to commit the Bidder;
  - (c) Bid Security; and
  - (d) Technical Proposal.

**32. Qualification of the Bidders**

- 32.1 The Employer shall determine to its satisfaction whether Bidders meet the qualification criteria specified in Section III, Evaluation and Qualification Criteria, during the evaluation of Technical Bids. However, if prequalification was carried out prior to the bidding process, the Employer may carry out the assessment of the qualification criteria specified in Section III, Evaluation and Qualification Criteria, for the Bidder who submitted the lowest evaluated and substantially responsive Bid only.
- 32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 15.
- 32.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.

If the assessment of the Bidder's qualification is conducted for the lowest evaluated Bidder only, in accordance with ITB 32.1, and the result of such assessment is negative, the Employer shall proceed to the next lowest evaluated Bid to make a similar determination.
- 32.4 The capabilities of the manufacturers and Subcontractors



proposed in its Bid to be used by the Bidder will also be evaluated for acceptability in accordance with Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or Subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or Subcontractor without any change to the Bid Price. Prior to signing the Contract, the corresponding Appendix to the Contract Agreement shall be completed, listing the approved manufacturers or Subcontractors for each item concerned.

**33. Determination of Responsiveness of Technical Bids**

33.1 The Employer's determination of a Technical Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.2.

33.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Plant and Installation Services specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

33.3 The Employer shall examine the technical aspects of the Technical Bid submitted in accordance with ITB 17, in particular, to confirm that all requirements of Section VI, Employer's Requirements have been met without any material deviation, reservation, or omission.

33.4 If a Technical Bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

**34. Nonmaterial**

34.1 Provided that a Technical Bid is substantially responsive, the

**Nonconformities**

Employer may waive any nonconformity in the Technical Bid that does not constitute a material deviation, reservation or omission.

34.2 Provided that a Technical Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

34.3 Provided that a Technical Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.

**35. Detailed  
Evaluation of  
Technical Bids**

35.1 The Employer will carry out a detailed technical evaluation of the Bids not previously rejected as being substantially non-responsive, in order to determine whether the technical aspects are in compliance with the Bidding Documents. The Bid that does not meet minimum acceptable standards of completeness, consistency and detail, and the specified minimum (or maximum, as the case may be) requirements for specified functional guarantees, will be rejected for non-responsiveness. In order to reach such a determination, the Employer will examine and compare the technical aspects of the Bids on the basis of the information supplied by the Bidders, taking into account the following:

- (a) overall completeness and compliance with the Employer's Requirements; conformity of the Plant and Installation Services offered with specified performance criteria, including conformity with the specified minimum (or maximum, as the case may be) requirement corresponding to each functional guarantee, as indicated in the Specification and in Section III, Evaluation and Qualification Criteria; suitability of the Plant and Installation Services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the Bid;

- (b) type, quantity and long-term availability of mandatory and recommended spare parts and maintenance services; and
- (c) other relevant factors, if any, listed in Section III, Evaluation and Qualification Criteria.

35.2 Where alternative technical solutions have been allowed in accordance with ITB 13.4, and offered by the Bidder, the Employer will make a similar evaluation of the alternatives. Where alternatives have not been allowed but have been offered, they shall be ignored.

### **36. Correction of Arithmetical Errors**

36.1 During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:

- (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the former shall prevail and the latter will be corrected accordingly;
- (b) where there are errors between the total of the amounts of Schedule Nos. 1 to 5 and the amount given in Schedule No. 6 (Grand Summary), the former shall prevail and the latter will be corrected accordingly; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

36.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction, in accordance with ITB 36.1, shall result in the rejection of the Bid.

### **37. Conversion to Single Currency**

37.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as **specified in the BDS.**

### **38. Evaluation of Price Bids**

38.1 The Employer shall use the criteria and methodologies indicated in this Clause. No other evaluation criteria or methodologies shall be permitted.

38.2 To evaluate a Price Bid, the Employer shall consider the following:

- (a) the Bid Price, excluding Provisional Sums and the provision, if any, for contingencies in the Price Schedules;

- (b) price adjustment for correction of arithmetic errors in accordance with ITB 36.1;
- (c) price adjustment due to discounts offered in accordance with ITB 18.8 or ITB18.9;
- (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 34.3;
- (e) converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 37; and
- (f) the evaluation factors indicated in Section III, Evaluation and Qualification Criteria.

38.3 If price adjustment is allowed in accordance with ITB 18.7, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

38.4 If these Bidding Documents allow Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Price Bid, is specified in Section III, Evaluation and Qualification Criteria.

38.5 If the Bid, which results in the lowest evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those prices with the methods and time schedule proposed. After evaluation of the price analyses, taking into consideration the terms of payments, the Employer may require that the amount of the Performance Security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

**39. Comparison of Bids**

39.1 The Employer shall compare the evaluated prices of all substantially responsive Bids in accordance with ITB 38.2 to determine the lowest evaluated Bid.

**40. Employer's Right to Accept Any Bid, and to**

40.1 The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability

**Reject Any or  
All Bids**

to Bidders. In case of annulment, all Bids submitted and specifically, Bid Securities, shall be promptly returned to the Bidders.

**F. Award of Contract**

- |                                  |   |
|----------------------------------|---|
| <b>41. Award Criteria</b>        | 41.1 Subject to ITB 40.1, the Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.  |
| <b>42. Notification of Award</b> | <p>42.1 Prior to the expiration of the period of Bid validity, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Plant and Installation Services (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").</p> <p>42.2 At the same time, the Employer shall also notify all other Bidders of the results of the bidding.</p> <p>42.3 After a Contract has been determined to be eligible for financing under Japanese ODA Loans, the following information may be made public by JICA:</p> <ul style="list-style-type: none"> <li>(a) name of each Bidder who has submitted a Bid;</li> <li>(b) Bid Prices as read out at Bid opening;</li> <li>(c) name and address of the successful Bidder; and</li> <li>(d) award date and amount of the Contract.</li> </ul> <p>42.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.</p> <p>42.5 After notification of award, unsuccessful Bidders may request, in writing, to the Employer a debriefing seeking explanations on the grounds on which their Bids were not selected. The Employer shall promptly respond, in writing, to any unsuccessful Bidders who, after the notification of award in accordance with ITB 42.1, request a debriefing.</p> |
| <b>43. Signing of</b>            | 43.1 Promptly upon notification, the Employer shall send the  |

**Contract**

successful Bidder the Contract Agreement.

- 43.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

**44. Performance  
Security**

- 44.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.5, using for that purpose the Performance Security Form included in Section IX, Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
- 44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose Bid is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

## **Section II. Bid Data Sheet**

## Bid Data Sheet

ITB Clause Reference	A. General		
<b>ITB 1.1</b>	The number of the Invitation for Bids is : 02/PGCB/Sec(SSD&QC) /2017/6159, dated 04 October, 2017		
<b>ITB 1.1</b>	The Employer is: Power Grid Company of Bangladesh Limited (PGCB)		
<b>ITB 1.1</b>	The name, identification and number of the lot(s) (contract(s)) comprising this ICB is:		
	<b>Bid Identification No.</b>	<b>Package No.</b>	<b>Particulars</b>
	<b>PGCB/JICA/BD -P81/SS/02</b>	Package SS-2	Design, Supply, Erection, Testing & Commissioning of 400/230kV Madunaghat GIS Substation on Turnkey Basis
<b>ITB 2.1</b>	The Borrower is: The Government of the People's Republic of Bangladesh		
<b>ITB 2.1</b>	The number of the Loan Agreement is: BD-P81		
	The amount of a Japanese ODA Loan is: JPY 43,769,000,000		
	The signed date of the Loan Agreement is: December 13, 2015		
<b>ITB 2.1</b>	The name of the Project is: Dhaka-Chittagong Main Power Grid Strengthening Project		
<b>ITB 2.2</b>	The applicable Guidelines for Procurement under Japanese ODA Loans are those published in: April 2012		
<b>ITB 3.1 (c)</b>	A list of debarred firms and individuals is available at the World Bank's website: <a href="http://www.worldbank.org/debarr">www.worldbank.org/debarr</a>		



<b>ITB 3.3 (N)</b>	<p>Contract information on Fraud and Corruption Hotline are as follows:  For JICA  In Japanese: <a href="https://www2.jica.go.jp/ja/odainfo/index.php">https://www2.jica.go.jp/ja/odainfo/index.php</a>  In English: <a href="https://www2.jica.go.jp/en/opinion/index.php">https://www2.jica.go.jp/en/opinion/index.php</a>  For GOB  Central Procurement Technical Unit  Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning  Block-12 (2nd Floor), Sher-e-Bangla Nagar, Dhaka 1207  Phone: 880-2-9144252, 53  Fax: 880-2-9144250  E-mail; <a href="mailto:info@cptu.gov.bd">info@cptu.gov.bd</a></p>
<b>ITB 4.5</b>	This bidding is not subject to prequalification.
<b>B. Bidding Documents</b>	
<b>ITB 7.1</b>	<p>For <b><u>clarification purposes</u></b> only, the Employer's address is:  Attention: Company Secretary  Street Address: Power Grid Company of Bangladesh Ltd., Institution of Engineers Bangladesh (IEB) Bhaban, 8/A Ramna  Floor/Room number: 4<sup>th</sup> Floor  City: Dhaka  ZIP Code: 1000  Country: The People's Republic of Bangladesh  Telephone: +880-2-9550514, +880-2-9558054, +880-2-9553663  Facsimile number: +880-2-9582382  Electronic mail address: <a href="mailto:se-design@pgcb.org.bd">se-design@pgcb.org.bd</a> / <a href="mailto:dc-project16010@tepsco-bd.com">dc-project16010@tepsco-bd.com</a></p>
<b>ITB 7.1</b>	Responses to any request for clarification, if any, will be published on the Employer's web page, <a href="http://www.pgcb.org.bd/PGCB/">http://www.pgcb.org.bd/PGCB/</a> .
<b>ITB 7.4</b>	<p>A Pre-Bid meeting will take place at the following date, time and place.  Date: 24 October 2017  Time: 11:00 a.m. Bangladesh Standard Time  Place: Conference Room, Power Grid Company of Bangladesh Limited, Institution of Engineers Bangladesh (IEB) Bhaban (4th Floor), Ramna, Dhaka-1000</p> <p>Bidders are advised to conduct site visit at their own responsibility. The Employer may arrange necessary permissions if requested by the Bidders.</p>
<b>ITB 8.2</b>	Addenda, if any, will be published on the Employer's web page.

<b>C. Preparation of Bids</b>	
<b>ITB 10.1</b>	<p>The language of the bid is: English</p> <p>Any Translation shall be certified by a Notary Public or any Government Authorized Agency of the Bidder's country.</p>
<b>ITB 11.2 (l)</b>	<p>The Bidder shall submit with its Technical Bid the following additional documents:</p> <p>1) A Bidder who is not doing business in Bangladesh may submit the name and address of a local agent who is able to liaise with the Employer.</p> <p>The Bidder may be rejected if the information/documents/forms/drawings specified in the Bidding Documents are not submitted or the submitted information/documents/forms/drawings are found to be unsatisfactory and incomplete.</p>
<b>ITB 11.3 (d)</b>	None
<b>ITB 13.1</b>	Alternative Bids are not permitted.
<b>ITB 16.1 (b)</b>	The period following completion of Plant and Installation Services during which spare parts, special tools etc. shall be available is five (5) years.
<b>ITB 18.1</b>	Bidders shall quote for the entire Plant and Installation Services on a single responsibility basis.
<b>ITB 18.5</b>	Custom duty and any other taxes on Installation and Other Services in the Employer's Country shall be as per provision of GC14/PC14, Section 7, Volume 1 of the Bid Document.
<b>ITB18.5 (a)</b>	Named place of destination is: Project Site in Madunaghat.
<b>ITB 18.5(d)</b>	Named place of final destination is: Project Site in Madunaghat.
<b>ITB 18.7</b>	The prices quoted by the Bidder shall be: adjustable as per Appendix 2 of the form of Contract Agreement in Section IX.
<b>ITB 19.1</b>	<p>The currency(ies) of the Bid shall be as follows:</p> <p>(a) Plant and equipment to be supplied from abroad shall be quoted entirely in: Japanese Yen and/or US Dollar, and/or Euro.</p> <p>(b) Plant and equipment to be supplied within the Employer's country shall be quoted in the currency of the Employer's country: Bangladesh Taka and/or the above mentioned currency.</p> <p>(c) Design and installation services shall be quoted in either foreign and/or local currency as mentioned above, depending upon the</p>

	currency in which the costs are to be incurred.
<b>ITB 20.1</b>	The Bid validity period shall be one hundred eighty (180) days.
<b>ITB 20.3 (a)</b>	Not Applicable
<b>ITB 20.3(b)</b>	<p>The fixed portion of the Bid Price shall be adjusted by the following factor:</p> <p>The local currency portion of the fixed portion of the Contract Price shall be adjusted by a factor reflecting local inflation during the period of extension and the foreign currency portion of the fixed portion of the Contract Price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension.</p>
<b>ITB 21.1</b>	The amount and currency of the bid security shall be USD 2,000,000 (US Dollar two million) only for Package SS-2.
<b>ITB 21.2 (d)</b>	Other types of acceptable securities: None
<b>ITB 21.7</b>	<p>The following paragraph is added at the end of this Sub-Clause:</p> <p>In case a JV does not comply with the requirements mentioned in ITB 21.7, such a Bid shall be rejected as non-responsive.</p>
<b>ITB 21.8(N)</b>	<p>New sub-clause is added as below:</p> <ul style="list-style-type: none"> <li>(i) If a bidder submitted Bid Security/ Bank Guarantee which is issued by any foreign bank located outside employer's country, such bid security shall be confirmed by a correspondent bank registered in the Employer's country.</li> <li>(ii) The authenticity of the Bid Security/Bank Guarantee submitted by a bidder shall be examined and verified by the Employer in writing from the Bank issuing the Security, prior to finalization of the Evaluation Report.</li> <li>(iii) If a Bid Security/Bank Guarantee is not found authentic, the bid proposal shall be rejected.</li> </ul>
<b>ITB 22.1</b>	<p>In addition to the original of the Bid, the number of copies is: Three (3) hard copies and two (2) electronic copies on two (2) DVDs.</p> <p>In case of discrepancies, the hard copy will prevail.</p> <ul style="list-style-type: none"> <li>• The electronic copy of the technical bid shall be included in the envelope with the original technical bid.</li> <li>• The electronic copy of the price bid shall be included in the envelope</li> </ul>

	<p>with the original price bid.</p> <ul style="list-style-type: none"> <li>The electronic copy of the price bid shall additionally include the price schedules in editable format (MS Excel). The price schedules shall, however, also be included as hard copy, duly signed.</li> </ul> <p><b>Packing:</b></p> <p><b>Technical Bids:</b></p> <ul style="list-style-type: none"> <li>Each technical bid (original, copy 1, copy 2 and copy 3) shall be packed in a separate “inner” envelope.</li> <li>These four “inner” envelopes containing the technical bids shall be packed together in one “outer” envelope.</li> </ul> <p><b>Price Bids:</b></p> <ul style="list-style-type: none"> <li>Each price bid (original, copy 1, copy 2 and copy 3) shall be packed in a separate “inner” envelope.</li> <li>These four “inner” envelopes containing the price bids shall be packed together in one “outer” envelope.</li> </ul> <p>Finally, Technical and Price Bids shall be packed together in one envelope.</p>
<b>ITB 22.2</b>	<p>The written confirmation of authorization to sign on behalf of the Bidder shall consist of: a written Power of Attorney with name and designation of the person authorizing the signatory; or authenticated Board resolution to be signed by a person having the power of attorney of the Company.</p>
	<p><b>D. Submission and Opening of Bids</b></p>
<b>ITB 24.1</b>	<p>For <b><u>bid submission purposes</u></b> only, the Employer’s address is:</p> <p>Attention : Company Secretary, PGCB</p> <p>Street Address: Power Grid Company of Bangladesh Ltd., Institution of Engineers Bangladesh (IEB ) Bulding, Ramna</p> <p>Floor/Room number: 4<sup>th</sup> Floor</p> <p>City: Dhaka</p> <p>ZIP Code: 1000</p> <p>Country: The People’s Republic of Bangladesh</p> <p><b>The deadline for Bid submission is:</b></p> <p>Date: 07 January , 2018</p> <p>Time: 11:00 a.m.</p>

<b>ITB 27.1</b>	<p>The Technical Bid opening shall take place at:</p> <p>Street Address: Power Grid Company of Bangladesh Ltd., Institution of Engineers Bangladesh (IEB ) Building, Ramna</p> <p>Floor/Room number: 4<sup>th</sup> Floor</p> <p>City: Dhaka</p> <p>Country: The People's Republic of Bangladesh</p> <p>Date: 07 January, 2018</p> <p>Time: 11:05 a.m.</p>
<b>E. Evaluation and Comparison of Bids</b>	
<b>ITB 37.1</b>	<p>The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid Prices expressed in various currencies into a single currency is: Bangladesh Taka.</p> <p>The source of exchange rate shall be: The BC selling rates of Sonali Bank (foreign exchange division) in Bangladesh.</p> <p>The date of exchange rate shall be: The date of opening of Technical Bid.</p>

# **Section III. Evaluation and Qualification Criteria (Without Prequalification)**



## Evaluation and Qualification Criteria (Without Prequalification)

### 1. Evaluation

#### 1.1 Technical Evaluation

In addition to the criteria listed in ITB 35.1 (a) – (b) the following factors shall apply:

##### 1.1.1 Key Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Experience (years)	Experience in Similar Works (years)
1	Contractor's Representative a. To be stationed either in the Contractor's head office or the Site office in Bangladesh through the contract period.. b. Minimum qualification: Bachelor's Degree in Electrical or Civil Engineering. c. Must assign from the leader company of bidder.	$\geq 25$	$\geq 15$
2	Project Manager at Site a. To be stationed in the Site office in Bangladesh dedicated to the project through the contract period. b. Minimum qualification: Bachelor's Degree in Electrical Engineering.	$\geq 20$	$\geq 15$
3	Construction Manager –GIS Substation a. To be stationed in the Site office in Bangladesh dedicated to the project. b. Minimum qualification: Bachelor's Degree in Electrical Engineering.	$\geq 15$	$\geq 10$
4	Construction Manager – Civil for Substation a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Bachelor's Degree in Civil/Architectural Engineering.	$\geq 15$	$\geq 10$



No.	Position	Total Work Experience (years)	Experience in Similar Works (years)
5	Control & Protection, SAS Engineer for GIS Substation a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Bachelor's Degree in Electrical/Communication Engineering.	$\geq 15$	$\geq 10$
6	Communication Engineer for Substation a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Bachelor's Degree in Electrical/Communication Engineering.	$\geq 15$	$\geq 10$
7	Building Facilities/Services Engineer a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Bachelor's Degree in Electrical/Mechanical /Civil Engineering.	$\geq 15$	$\geq 10$
8	Health & Safety (Accident Prevention) Officer a. To be stationed in the Site office in Bangladesh b. Minimum qualification: Diploma in any technical field with training in Safety, Health and Environment from recognized institution.	$\geq 12$	$\geq 7$
9	Architectural/Structural/Civil Engineer for Control Buildings a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Bachelor's Degree in Architectural/Civil Engineering.	$\geq 15$	$\geq 10$
10	Security Officer a. To be stationed in the Site office in Bangladesh. b. Minimum qualification: Diploma in any security field with training in security from recognized institution.	$\geq 12$	$\geq 7$

The Bidder shall provide details of the proposed personnel and their experience records in Forms PER-1 and PER-2 in Section IV, Bidding Forms.

### 1.1.2 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter, but not limited to:

No.	Equipment Type and Characteristics	Minimum Number Required
1	Primary Injection Tester	1
2	Secondary Injection Tester suitable for numerical type relays	1
3	High Voltage Circuit Breaker Tester (CB travel & timing)	1
4	Optical time-domain reflector (OTDR) or equiv.	1
5	Mobile Crane (not less than 15 ton)	1
6	Gas Analyzer, insulation tester, etc.	1
7	High Voltage Test set for GCB (to be carried to the site)	1
8	Voltage regulator (for CT excitation, Knee point voltage)	1

The Bidder shall provide further details of proposed items of equipment using Form EQU in Section IV, Bidding Forms. The Contractor must arrange the additional (in quantity and capacity) and/or special equipment which is not mentioned in the above list but technically requires for timely completion of the works.

Equipment of the sub-contractors can also be considered as the Contractor's equipment.

### 1.1.3 Method Statement (Work Plan)

The Bidder must furnish with the Bid, work plans (Method Statement) to demonstrate an adequate understanding of work procedures for whole major activities in the Site including the transition procedure from 230kV Switching station to 400kV Substation. The adequacy of Bidder's proposal will be evaluated during the technical evaluation on the following documents.

- (a) Statement of general work plan and the time schedule (bar chart) for whole major activities in the scope of works
- (b) Work procedures of land development, civil work, commission of 230kV switching station, and installation of 400kV Circuit breakers and 400kV structures, 400kV shunt reactor and power transformers. Bidder must propose transmission line switching work procedures for the upgrade of

230kV switching station to 400kV substation in consideration of safety clearance to 230kV transmission lines crossing the construction site.

#### **1.1.4 Safety Plan including Security Plan**

The Bidder shall furnish with the Bid, a safety plan including security plan to demonstrate that the Bidder will take an adequate safety and security measure in the Site during the whole construction phases. The adequacy of Bidder's proposal will be evaluated during the technical evaluation on the following documents.

- (a) Safety measures for prospective work items for civil and building construction
- (b) Safety measures for prospective work items for installation and site tests of substation equipment
- (c) Security measures during whole project execution period excluding Defects Liability Period as per Section 23 of Volume 2 of 3 of the Bidding Documents.

#### **1.2 Economic Evaluation**

Price bids of the bidders will be evaluated only if technical bid is substantially responsive. Any adjustment in price that result from the procedure outlined below shall be added for comparative evaluation only to arrive at an "Evaluated Bid Price" Bid prices quoted by bidders shall remain unaltered.

In addition to the criteria listed in ITB 38.2 (a) – (c) the following criteria shall apply.

##### **1.2.1 Quantifiable nonmaterial nonconformities**

- (a) Pursuant to ITB 34.3 and ITB 38.2 (d), the cost of all quantifiable nonmaterial nonconformities or omissions (minor omissions or missing items) shall be evaluated. The Employer will make its own assessment of the cost of any nonmaterial nonconformities and omissions for the purpose of ensuring fair comparison of Bids.
- (b) Scope of work of each bid will be examined for completeness and compliance with the contract requirements and if item(s) appear to be excluded, an amount representing the average amount for excluded items of all other responsive bids will be added to the bid price for evaluation purpose.

If any Bidder has not quoted price against any particular item or kept blank in price column, the price of that item will be deemed to be included in the total bid price.

- (c) If there is a discrepancy between the quantity of any item quoted by the bidder and quantity specified in the bidding document. The quantity specified in the bidding document shall prevail and the total cost will be corrected by multiplying the unit rate and quantity.
- (d) If any bidder quoted any additional item(s) which are not mentioned in the bidding document shall be excluded and the total quoted bid price shall be corrected accordingly.
- (e) In case of items quoted without indicating any quantity, the total price quoted against such items shall prevail and the unit price of that item(s) shall be obtained by dividing the total quoted price by the quantity specified in the bidding document.
- (f) In case no unit price is mentioned but total price is mentioned against an item, the total price will be divided by the total no. of unit of that item that is mentioned by the bidder to find the unit price and the total price shall be corrected by multiplying that unit price with the original no. of unit as mentioned in the bidding document of that item.
- (g) In case there is any ambiguity between unit price and total price then the unit price shall prevail and the total price shall be corrected by multiplying that unit price with the original no. of unit as mentioned in the bidding document of that item.
- (h)
  - (i) if the discount(s)/rebate(s) offered by the Bidder is a percentage discount and the price component(s) on which the said discount is not indicated in the bid, the same shall be considered on the total bid price [i.e. proportionately on each price component], in the event of award.
  - (ii) However, if lump-sum discount is offered, the foreign currency portion of the same shall be considered in full on the foreign currency price component of bid price and the Bangladesh Taka portion shall be considered in full on the Bangladesh Taka price component of bid price (by proportionately reducing foreign currency/Bangladesh Taka price of individual items), in case of award.

To obtain the unit price of each item, the discount mentioned in (i) and (ii) above shall be applied proportionately to each of the individual item(s) and the above unit price shall be applicable for whole of the contract period.

### **1.2.2 Other Factors**

The following factors and methods will apply under ITB 38.2 (f):

**(a) Time Schedule**

Time to complete the plant and services from the effective date specified in Article 3 of the Contract Agreement for determining time for commissioning is: thirty four (34) months. The bids, indicating longer time for completion, will be rejected. No credit will be given for earlier completion.

**(b) Operating and Maintenance Costs**

The price of recommended spare parts quoted in Price Schedule No. 7 shall not be considered for evaluation.

**(c) Functional Guarantees of the Plant and Installation Services**

For the purpose of bid price evaluation, bid price of transformers and shunt reactors will be adjusted according to the following functional guarantee of transformers and shunt reactors stated in 4.3.5 and 16.4 of Volume 2 of 3 “Losses and Evaluation of Losses”.

Functional Guarantee
1. 400/235/33kV, 3-Phase, 500/750MVA Auto Transformers a) No Load Loss (kW) (N): b) Load Loss at CMR (kW) (L): c) Auxiliary Loss at CMR (kW) (M): d) Total efficiency @ CMR (%)
2. 400kV, 3-Phase, 40 MVA <sub>r</sub> , Shunt Reactors a) No Load Loss (kW) (N): b) Load Loss at CMR (kW) (L): c) Auxiliary Loss at CMR (kW) (M):
3. 400kV, 3-Phase, 25 MVA <sub>r</sub> , Shunt Reactors a) No Load Loss (kW) (N): b) Load Loss at CMR (kW) (L): c) Auxiliary Loss at CMR (kW) (M):
4. 33/0.415 kV, 3-Phase, 500kVA Auxiliary Transformers a) No Load Loss (kW) (N): b) Load Loss at CMR (kW) (L):

Following values will be used to assess the guaranteed values.

Bangladesh Taka per kW of Guaranteed Loss (Taka/kW)			
	No Load Loss (a)	Load Loss at CMR (b)	Auxiliary Loss at CMR (c)
Auto/Auxiliary Transformers and Shunt Reactors	600,000	300,000	300,000

Evaluated unit price (CIP) of each transformer / shunt reactor shall become:

$$\begin{aligned}
 A &= \text{Evaluated Price of losses of each Transformer / Shunt Reactor} \\
 &= (N) \times (a) + (L) \times (b) + (M) \times (c) \\
 B &= \text{Unit Price (CIP) of Transformer / Shunt Reactor} \\
 C &= \text{Evaluated unit price of each Transformer / Shunt Reactor} \\
 &= A + B
 \end{aligned}$$

The acceptance of transformers/shunt reactors yielding component losses higher than the guaranteed values shall be governed by either of the following;

- i) Component losses in excess of guaranteed values but within the tolerance permitted under IEC60076 Part 1.

Transformers/shunt reactors shall be accepted subject to full compliance with all technical particulars including temperature rise at CMR and subject to the Contractor accepting deduction from the Contract Price of changes for each kW on part thereof component losses in excess of the guaranteed values at the above evaluation rate.

- ii) Component losses in excess of guaranteed values and exceeding the tolerance permitted under IEC 60076 Part 1.

The acceptance of transformers/shunt reactors shall be entirely at the discretion of the Employer including rejection of the transformers and subject to the Contractor accepting the deduction from the Contract Price of changes for each kW on part thereof component losses in excess of the guaranteed values, at the above loss evaluation rates.

In the event of transformer yielding, component and total losses, which are either equal to or below the guaranteed values, the bidder will not be entitled to any premium in respect of reduction in losses below the guaranteed values.

**(d) Work, services, facilities, etc., to be provided by the Employer**

Not Applicable.

**(e) Specific additional criteria**

Not Applicable.

**1.2.3 Award Criteria for Multiple Contracts (ITB 38.4)**

Not Applicable.

**1.3 Alternatives Technical Solutions**

Alternatives technical solutions, if invited in accordance with ITB 13.4, will be evaluated as follows: Not Applicable.

**2. Qualification**

**(i) Exchange Rate for Qualification Criteria**

Wherever a Form in Section IV, Bidding Forms, requires a Bidder to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- (a) For turnover or financial data required for each year – Indicative Exchange rate prevailing on the last day of the respective calendar year.
- (b) Value of single Contract – Indicative Exchange rate prevailing on the date of the Contract.

Exchange rates shall be taken from the publicly available source **identified in BDS 37.1** or, in case such rates are not available in the source identified above, any other publicly available source acceptable to the Employer. Any error in determining the exchange rates may be corrected by the Employer.

**(ii) Qualification Criteria for Multiple Contracts**

Not Applicable.

Eligibility and Qualification Criteria			Compliance Requirements				Documentatio
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.1 Eligibility							
2.1.1	Nationality	Nationality in accordance with ITB 4.3.	Must meet requirement	N/A	Must meet requirement	N/A	Form ELI-1.1 and 1.2 with attachments
2.1.2	Conflict of Interest	No conflicts of interest as described in ITB 4.2.	Must meet requirement	N/A	Must meet requirement	N/A	Letter of Bid
2.1.3	JICA Ineligibility	Not having been declared ineligible by JICA as described in ITB 4.4.	Must meet requirement	N/A	Must meet requirement	N/A	Letter of Bid Form ACK



Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>2.2 Historical Contract Non-Performance</b>							
2.2.1	<b>History of non-performing Contracts</b>	Non-performance of a Contract <sup>(i)</sup> did not occur as a result of Contractor's default since 1 <sup>st</sup> January 2015.	Must meet requirement <sup>(ii)</sup>	N/A	must meet requirement <sup>(ii)</sup>	N/A	Form CON
2.2.2	<b>Pending Litigation</b>	All pending litigation shall in total not represent more than fifty percent (50 %) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement <sup>(ii)</sup>	N/A	must meet requirement <sup>(ii)</sup>	N/A	Form CON
2.2.3	<b>Litigation History</b>	No consistent history of court/arbitral award decisions against the Bidder <sup>(iii)</sup> since 1 <sup>st</sup> January 2012	Must meet requirement <sup>(ii)</sup>	N/A	must meet requirement <sup>(ii)</sup>	N/A	Form CON
<u>Notes for the Bidder</u> (i) Non-performance, as decided by the Employer, shall include all Contracts: (a) where non performance was not challenged by the Contractor, including through referral to the dispute resolution mechanism under the respective Contract, and (b) that were so challenged but fully settled against the Contractor.  Non-performance shall not include Contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective Contract and where all appeal instances available to the Applicant have been exhausted.  (ii) This requirement also applies to Contracts executed by the Bidder as a JV member.  (iii) The Bidder shall provide accurate information on the related Bidding Form about any litigation or arbitration resulting from Contracts completed or ongoing							

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.2 Historical Contract Non-Performance							
under its execution over the last five (5) years. A consistent history of awards against the Bidder or any member of a joint venture may result in rejection of the Bid.							

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.3 Financial Situation							
2.3.1	Financial Performance	The audited balance sheets or, if not required by the law of the Bidder’s country, other financial statements acceptable to the Employer, for the last five (5) years shall be submitted and must demonstrate the current soundness of the Bidder’s financial position and its prospective long term profitability . As the minimum requirement, a Bidder’s net worth calculated as the difference between total assets and total liabilities should be positive.	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 1 with attachments
2.3.2	Average Annual Turnover	Minimum average annual construction work turnover of USD 82 million, calculated as total certified payments received for Contracts in progress and/or completed, within the last five (5) years divided by five (5) years.	Must meet requirement	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement	Form FIN – 2
2.3.3	Financial Resources	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements estimated as USD 10 million for the subject Contract(s) net of	Must meet requirement	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement	Form FIR - 1

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.3 Financial Situation							
		the Bidder’s other commitments.					
		(ii) The Bidder shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.	Must meet requirement	Must meet requirement	N/A	N/A	Form FIR – 1 and Form FIR - 2

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.4 Experience							
2.4.1	General Construction Experience	<p>Experience under contracts in the role of prime contractor (single entity or JV member)(i) for at least one (1) construction contract (of any nature) that have been satisfactorily completed with a value of at least USD 41 million within at least the last ten (10) years considering bid submission date.</p> <p>Evidence of above experience shall be submitted in the bid which will be in the user’s respective letterhead stationery indicating address, telephone and fax numbers of the user and shall include Name of the project, Name of the Employer, Description of the work, Commissioning date and Contract amount.</p>	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP-1.4.1
2.4.2 (a)	Specific Construction Experience	For the above or other contracts completed and under implementation as prime contractor (single entity of JV member) <sup>(i)</sup> , at least two (2) contracts within the last fifteen (15) years for the design, supply, delivery, installation, testing & commissioning and civil work of extension/renovation/ new 400kV or higher voltage level AIS/GIS substations with minimum four (4) bays including one transformer bay with 400kV or above,	Must meet requirement (can be specialist subcontractor)	Must meet requirement (can be specialist subcontractor)	N/A	N/A	Form EXP-1.4.2

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.4 Experience							
		<p>250MVA or higher capacity transformer on turnkey basis, having a total value of two contracts at least USD 105 million and that are similar to the proposed plant and services.</p> <p>The similarity<sup>(ii)</sup> shall be based on the physical size, complexity, methods, technology or other characteristics as described in Section 6 (Employer’s Requirements).</p> <p>At least one (1) contract of the above two (2) contracts shall be GIS (Gas Insulated Switchgear) including gas-insulated lines, and any of the above contracts shall be in successful operation for minimum of three (3) years as on the date of opening of the Technical Bids.</p> <p>At least one of the above contracts must be completed outside the bidders own country.</p> <p>All of the above experiences shall be supported by end user’s certificates in their letterhead indicating their address, telephone &amp; fax number and details of project (i.e. name, address &amp; nationality of customer; details of Contract, voltage &amp; equipment; completion period,</p>					

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.4 Experience							
		commissioning date/commercial operation date, Contract value).					

Notes for the Bidder

- (i) For contracts under which the Bidder participated as a JV member, only the Bidder's share, by value, shall be considered to meet this requirement.
- (ii) The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Employer's Requirements. Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Factor/ Sub-Factor	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
2.4 Experience							
2.4.3	Specific Experience in Key Activities	(not applicable)					

## 2.5 Subcontractors'/Manufacturers' Experience

Subcontractors/Manufacturers for the following major items of supply or services must meet the following minimum criteria, herein listed for that item. Failure to comply with this requirement may result in rejection of the subcontractor.

<i>Item No.</i>	Description of Item	Minimum Criteria to be met
<i>I.</i> <i>Form EXP-1.4.3 (a)</i>	Auto/Power Transformer	<ul style="list-style-type: none"> <li>Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of proposed manufacturer's factory.</li> <li>Bidder shall furnish the proposed factory's supply record of the power transformers with the rating of 3-phase, 400kV or above, 750MVA or above for at least fifteen (15) years, including the supply requirement of at least six (6) numbers of transformers supplied outside the manufacturer's country within last fifteen (15) years or earlier.</li> <li>Bidder shall furnish evidences of 3-phase transformers with the rating of 400kV or above, 750MVA or above manufactured in the proposed factory for at least two (2) projects with a minimum of three (3) years in satisfactory service in any of OECD countries or humid tropical climates<sup>*1</sup> as on the date of bid opening. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone and fax numbers of the users: <ul style="list-style-type: none"> <li>a) the project/contract name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>b) station name where the transformer has been installed</li> <li>c) transformer's voltage level</li> <li>d) capacity</li> <li>e) type of transformer whether single phase or three phase</li> <li>f) date of commissioning</li> <li>g) end user's signature and issuing date in their letter</li> </ul> </li> <li>Bidder shall submit a satisfactory type test report on 3-phase power transformer with the rating of 400kV, 750MVA or above (with any cooling method) as per requirement mentioned in Schedule I of Volume 3 of 3 of</li> </ul>



		<p>the Bidding Documents.</p> <ul style="list-style-type: none"> <li>• Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> <li>• Bidder shall furnish evidence of On-load Tap Changer with Vacuum Interrupter, which successfully passed 300,000-time operation test. Bidder shall also submit the evidence, such as factory test report, of the transformer with the rating 400kV or above and equipped with On-load Tap Changer with Vacuum Interrupter for at least one (1) project.</li> </ul>
<p>2.</p> <p><i>Form EXP-1.4.3 (b)</i></p>	Shunt Reactor	<ul style="list-style-type: none"> <li>• Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of proposed manufacturer's factory.</li> <li>• Manufacturer's proposed factory shall have at least fifteen (15) years of manufacturing experience of 400kV or higher rating with the shunt reactor capacity of 40MVAR or above. Bidder shall furnish the factory's supply record of the shunt reactors with the rating of 3-phase, 400kV, 40MVAR or above in the last fifteen (15) years including the supply requirement of at least 6 (six) numbers of 3-phase, 400kV, 40MVAR or above shunt reactor over the last fifteen (15) years.</li> <li>• Bidder shall furnish evidences of 3-phase shunt reactors with the rating of 400kV, 40MVAR or above manufactured in the proposed factory for at least two (2) projects with a minimum of three (3) years for each project in satisfactory service in any of OECD countries or humid tropical climates<sup>*I</sup> as on the date of bid opening. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone and fax numbers of the users: <ul style="list-style-type: none"> <li>a) the project/contract name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>b) substation name where the shunt reactor has been installed</li> <li>c) Shunt reactor's voltage level</li> <li>d) capacity</li> <li>e) type of shunt reactors whether single phase or three phase</li> <li>f) date of commissioning</li> </ul> </li> </ul>

		<p>g) end user's signature and issuing date in their letter</p> <ul style="list-style-type: none"> <li>• Bidder shall submit a factory test reports including the type test items that shall be stipulated in accordance with IEC 60076, on 3-phase shunt reactors with the rating of 400kV,40MVAR (with any cooling method) or above manufactured by proposed manufacturer's factory as per requirement mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> <li>• Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> </ul>
<p>3.</p> <p><i>Form EXP-1.4.3 (c)</i></p>	GIS Equipment	<ul style="list-style-type: none"> <li>• Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of each of proposed manufacturer's factory.</li> <li>• Bidder shall furnish the proposed factory's supply record of at least fifty (50) numbers of GIS bays with the same specification or above for the last fifteen (15) years.</li> <li>• Bidder shall furnish evidences of GIS with the same specification or above (at least three (3) for 400kV*) with a minimum of three (3) years in satisfactory service outside manufacturer's country as on the date of bid opening. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone, contact email address and fax numbers of the users: <ul style="list-style-type: none"> <li>a) the project/contract name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>b) substation name where the circuit breaker has been installed</li> <li>c) circuit breaker's voltage level</li> <li>d) capacity (continuous current rating &amp; short circuit rating)</li> <li>e) date of commissioning</li> <li>f) end user's signature and issuing date in their letter</li> </ul> </li> </ul> <p>*: for 400kV or above voltage GIS the following two criteria must be satisfied:  1) at least one evidence shall be for 400kV or above CB with either Control Switching Device (CSD) or PIR (Pre Inserted Resistor) and 2) at least one evidence shall be for outdoor full GIS with the rating 400kV or above</p>

		<p>and 50kA or above</p> <ul style="list-style-type: none"> <li>• Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> <li>• Bidder shall submit satisfactory type test reports on a similar type GIS with the same specification or above, manufactured by proposed factory as per Schedule I of Volume 3 of 3.</li> <li>• Bidder shall submit the factory test report of GIS insulation spacers and the factory's supply record of insulation parts for GIS over fifteen (15) years to prove the capability of 400kV GIS manufacturer or its subsidiary for producing insulation spacers to be used in 400kV GIS, and bushings with the rating 400kV or above.</li> <li>• Bidder shall submit the type test report for 400kV and 230kV Air-Gas bushings and the factory's supply record of 400kV and 230kV Air-Gas bushings for the last fifteen (15) years.</li> <li>• 400kV GIS gas leakage rate shall be less than 0.1% / year.</li> </ul>
<p>4. <i>Form EXP-1.4.3 (d)</i></p>	<p>AIS Equipment Circuit Breaker</p>	<ul style="list-style-type: none"> <li>• Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of proposed manufacturer's factory.</li> <li>• Bidder shall furnish supply record of at least fifty (50) numbers of circuit breakers with the same specification or above for the last fifteen (15) years.</li> <li>• Bidder shall furnish evidences of circuit breaker with the same specification or above (at least three for 400kV*) with a minimum of three (3) years in satisfactory service outside manufacturer's country as on the date of bid opening, Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone, contact email address and fax numbers of the users: <ul style="list-style-type: none"> <li>(a) the project/contract name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>(b) substation name where the circuit breaker has been installed</li> <li>(c) circuit breaker's voltage level</li> </ul> </li> </ul>

		<p>(d) capacity (continuous current rating &amp; short circuit rating)</p> <p>(e) date of commissioning</p> <p>(f) end user's signature and issuing date in their letter</p> <p>*: for 400kV or above voltage circuit breaker (CB), at least one evidence shall be for 400kV or above CB with Control Switching Device (CSD) and at least one evidence shall be for 400kV or above CB with Pre Inserted Resistor (PIR)</p> <ul style="list-style-type: none"> <li>Bidder shall submit satisfactory type test reports on a similar type circuit breaker with the same specification or above, manufactured by proposed factory as per Schedule I of Volume 3 of 3.</li> <li>Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> </ul>
<p>5.</p> <p><i>Form EXP-1.4.3 (e)</i></p>	<p>i. Disconnect Switch</p> <p>ii. Instrument Transformers</p> <p>iii. Insulator (Post &amp; Disc)</p> <p>iv. Surge Arrester</p> <p>v. Wave trap</p>	<ul style="list-style-type: none"> <li>Bidder shall furnish copies of ISO 9001:2008 or equivalent certificates issued by an authorized agency of proposed manufacturer's factory for the respective equipment.</li> <li>At least last fifteen (15) years' experience (at least 50 reference against each item for supply record) in manufacturing minimum same specification or above equipment in manufacturer's proposed factory with satisfactory service record (outside manufacturer's own country) for a minimum of three (3) years as on the date of bid opening. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationery indicating address, telephone and fax numbers of the users: <ul style="list-style-type: none"> <li>a) the project/contract name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>b) substation name where these equipment has been installed</li> <li>c) the equipment's voltage level</li> <li>d) capacity (continuous current rating &amp; short circuit rating)</li> <li>e) date of commissioning</li> <li>f) end user's signature and issuing date</li> </ul> </li> <li>The bidder is required to submit the type test reports as</li> </ul>

		per requirement mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.
<p>6. <i>Form EXP-1.4.3 (f)</i></p>	<p>i. Substation Automation System<sup>*2</sup></p> <p>ii. Protection Relay<sup>*2</sup></p>	<ul style="list-style-type: none"> <li>The manufacturer of protection relays and substation control (automation) system shall be any of ABB (Switzerland/Sweden), Siemens (Germany), Toshiba (Japan), Mitsubishi (Japan), Hitachi (Japan), GE (USA/UK/France) or SEL (USA/UK/Canada). The Bidder shall offer all the protective relays from any one of the above mentioned manufacturers.</li> <li>Main 1 relay, multi-phase auto-reclosing system, and substation automation system shall be from the same manufacturer. Main 2 relay shall be from different manufacturer than Main 1 relay.</li> <li>Bidder shall submit a confirmation &amp; declaration certificate from relay manufacturer that his relay shall be compatible (as IEC 61850) and he shall cooperate for integrating with the qualified other substation automation system.</li> <li>Bidder shall furnish evidence of at least last fifteen (15) years' experience in manufacturing minimum same or higher rating equipment in satisfactory service for a minimum of three (3) years as on the date of bid opening. However, only authorization letter is acceptable if equipment is from ABB (Switzerland/Sweden), Siemens (Germany), GE (USA/UK/France) or SEL (USA/UK/Canada).</li> <li>Bidder shall furnish evidences of multi-phase auto-reclosing system manufacturing with a minimum of three (3) years in satisfactory services as on the date of bid opening. Evidence of satisfactory service mentioning the following information shall be issued by the end user on respective letterhead stationary indicating address, telephone, contact email address and fax numbers of the users: <ul style="list-style-type: none"> <li>a) the project/contact name &amp; number (with date of contract &amp; project duration) against which these equipment has been supplied &amp; installed</li> <li>b) substation name where these equipment has been installed</li> <li>c) the equipment's voltage level</li> <li>d) capacity (continuous current rating &amp; short circuit rating)</li> <li>e) date of commissioning</li> </ul> </li> </ul>

		<p>f) end user's signature and issuing date</p> <ul style="list-style-type: none"> <li>Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> <li>Materials to be supplied from a manufacturer which has valid ISO 9001:2008 certificate.</li> </ul>
<p>7.</p> <p><i>Form EXP-1.4.3 (g)</i></p>	Digital Fault & Disturbance Recorder <sup>*2</sup>	<ul style="list-style-type: none"> <li>The manufacturer of Digital Fault &amp; Disturbance Recorder shall be of any of Qualitrol (UK) or Siemens (Germany). For other than these manufacturers, bidder may propose any manufacturer from Japan comprising the following documents: <ul style="list-style-type: none"> <li>At least last fifteen (15) years' experience in manufacturing the same or higher rating equipment with satisfactory service record (outside manufacturer's own country) for a minimum of three (3) years as on the date of bid opening.</li> <li>The bidder is required to submit the type test reports as per requirements in Schedule I of Volume 3 of 3 of the Bidding Document.</li> <li>Materials to be supplied from a manufacturer which has valid ISO 9001:2008 certificate.</li> </ul> </li> </ul>
<p>8.</p> <p><i>Form EXP-1.4.3 (h)</i></p>	Fibre Optic Multiplexer Equipment <sup>*2</sup>	<ul style="list-style-type: none"> <li>The manufacturer of Fibre Optic Multiplexer shall be of GE (France/India) or ABB (Switzerland) in integration with National Load Dispatch Center (NLDC) by GE (France).</li> <li>Bidder shall submit the drawings and documents as per requirements mentioned in Schedule I of Volume 3 of 3 of the Bidding Documents.</li> </ul>
<p>9.</p> <p><i>Form EXP-1.4.3 (i)</i></p>	DC System	<ul style="list-style-type: none"> <li>The complete DC system including battery &amp; charger shall be from any manufacturer from USA/Canada/Europe/Japan. But the manufacturer shall have at least last fifteen (15) years' experience (outside manufacturer's own country) in manufacturing minimum same specification or above equipment in Manufacturer's proposed factory with satisfactory service record for a minimum of three (3) years as on the date of bid opening.</li> </ul>
<p>10.</p> <p><i>Form EXP-1.4.3 (i)</i></p>	AC System	<ul style="list-style-type: none"> <li>The complete AC system including auto changeover facility shall be from any manufacturer from USA/Canada/Europe/Japan. But the manufacturer shall have at least last fifteen (15) years' experience (outside manufacturer's own country) in manufacturing minimum same specification or above equipment in Manufacturer's proposed factory with satisfactory service record for a</li> </ul>

		minimum of three (3) years as on the date of bid opening.
<b>II.</b> <i>Form EXP-1.4.3 (j)</i>	Subcontractor for executing the field works	<p>The proposed Subcontractor for executing the field works shall have experience of construction &amp; installation of at least one (1) HV (including 400 kV or higher rating) GIS substation. Such experience of subcontractor shall be evaluated during execution of the Contract.</p> <p>Experience of Subcontractor for executing the field works shall be verified during the execution stage before engaging the Subcontractor.</p>

**Note:**

- Humid tropical climate shall be the climate classified as type Af, Am, and Aw in Koppen climate classification as per the below URL.  
<http://koeppen-geiger.vu-wien.ac.at/present.htm>*
- The manufacturers of the Protection Relay, Substation Control (automation) System, Digital Fault & Disturbance Recorder and Fiber Optic Multiplexer listed in the above table will not be considered as the conflict of interest (ITB Sub-Clause 4.2 (c)) as for the nominated equipment. “*
- Supply Record of respective equipment shall be issued by the manufacturer in manufacturer's letterhead stationary indicating:*
  - Project/contract name & number against which the equipment has been supplied & installed,*
  - Technical details (i.e, kV, MVA, Current & Short circuit rating, as applicable) of the equipment (indicated in the table below),*
  - Year of supply,*
  - User name to whom the equipment has been supplied.*
- The Post Insulator (PI) of disconnector (DS) shall preferably be from DS main part (Contact blade) manufacturer. However, if the PI manufacturer is different from DS main part manufacturer, the supply record of DS must include the name of PI manufacturer and the type test of the DS to be submitted must be with the same type PI to be supplied along with the DS under this project; that is, the complete DS assembly, including PI, to be supplied under this project must be type tested.*
- 400kV & 230kV GIS shall have to be supplied from same manufacturer. Similarly 400kV & 230kV Insulators (DI & PI) and 400kV & 230kV Surge Arresters shall have to be supplied from same manufacturer.*

In the case of a Bidder who offers to supply and install major items of supply under the contract that the Bidder did not manufacture or otherwise produce, the Bidder shall provide the manufacturer's authorization, using the form provided in Section 4 (Bidding Forms), showing that the Bidder has been duly authorized by the manufacturer of the related plant and equipment or component to supply and install that item in the Employer's country. The Bidder is responsible for ensuring that the manufacturer complies with the requirements of ITB 4 and 5 and meets the minimum criteria listed above for that item. In the Authorization Letter of Manufacturer in case of GIS and Substation Automation System / Protection

Relays, the manufacturer shall declare to dispatch his Engineer as per requirement of clause 3.1 of Section 3 and clause 5.1 of Section 5 of Volume 2 of 3 of the Bidding Documents.

Failure to comply with the above requirements may lead to the rejection of relevant manufacturer (or, subcontractor).



## **Section IV. Bidding Forms**

Refer to Volume 3 in the Bidding Documents.

## **Section V. Eligible Source Countries of Japanese ODA Loans**

The Eligible Source Country(ies) for procurement of all the goods and services to be financed out of proceeds of the Loan are all countries and areas.

## **PART 2 - Employer's Requirements**

## **Section VI. Employer's Requirements**

## Table of Contents

<b>Scope of Supply of Plant and Installation Services by the Contractor .....</b>	<b>2</b>
<b>Technical Specifications .....</b>	<b>3</b>
<b>Drawings.....</b>	<b>4</b>
Form of Completion Certificate.....	5
Form of Operational Acceptance Certificate .....	6
Change Order Procedure and Forms.....	7
Change Order Procedure.....	8
Annex 1. Request for Change Proposal .....	9
Annex 2. Estimate for Change Proposal .....	11
Annex 3. Acceptance of Estimate.....	13
Annex 4. Change Proposal.....	14
Annex 5. Change Order .....	16
Annex 6. Pending Agreement Change Order .....	17
Annex 7. Application for Change Proposal .....	18
Annex 8. Change Order log .....	19
<b>Supplementary Information .....</b>	<b>20</b>

**Scope of Supply of Plant and Installation Services by the Contractor**

Refer to the Section 1 of Volume 2 of 3 of the Bidding Documents.

# Technical Specifications

Refer to Volume 2 of 3 in the Bidding Documents

# Drawings

Refer to Section 20 of Volume 2 of 3 in the Bidding Documents.



**Forms and Procedures**  
**Form of Completion Certificate**

Date: *[insert date]*  
Loan Agreement N<sup>o</sup>: *[insert number]*  
IFB N<sup>o</sup>: *[insert number]*

*[Name of Contract]*

To: *[Name and address of Contractor]*

Dear Sirs,

Pursuant to GC Clause 24 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[insert date]*, relating to the *[brief description of the Facilities]*, 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.

1. Description of the Facilities or part thereof: *[insert description]*
2. Date of Commissioning: *[insert date]*

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,

---

Title  
(Project Manager)

**Form of Operational Acceptance Certificate**Date: *[insert date]*Loan Agreement N°: *[insert number]*IFB N°: *[insert number]**[Name of Contract]*To: *[Name and address of Contractor]*

Dear Sirs,

Pursuant to GC Sub-Clause 25.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated *[insert date]*, relating to the *[brief description of the Facilities]*, 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: *[insert description]*
2. Date of Operational Acceptance: *[insert date]*

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract.

Very truly yours,

---

Title  
(Project Manager)

## Change Order Procedure and Forms

Date: *[insert date]*  
Loan Agreement N°: *[insert number]*  
IFB N°: *[insert number]*

### CONTENTS

1. General
2. Change Order Log
3. References for Changes

### ANNEXES

- |         |                                  |
|---------|----------------------------------|
| Annex 1 | Request for Change Proposal      |
| Annex 2 | Estimates for Change Proposal    |
| Annex 3 | Acceptance of Estimate           |
| Annex 4 | Change Proposal                  |
| Annex 5 | Change Order                     |
| Annex 6 | Pending Agreement Change Order   |
| Annex 7 | Applications for Change Proposal |
| Annex 8 | Change Order log                 |

## **Change Order Procedure**

### **1. General**

This section provides samples of procedures and forms for implementing changes in the Facilities during the performance of the Contract in accordance with GC Clause 39 (Change in the Facilities) of the General Conditions of the Contract.

### **2. Change Order Log**

The Contractor shall keep an up-to-date Change Order log to show the current status of Requests for Change and Changes authorized or pending, as Annex 8. Entries of the Changes in the Change Order log shall be made to ensure that the log is up-to-date. The Contractor shall attach a copy of the current Change Order Log in the monthly progress report to be submitted to the Employer.

### **3. References for Changes**

- (1) Request for Change as referred to in GC Clause 39 shall be serially numbered CR-X-nnn.
- (2) Estimate for Change Proposal as referred to in GC Clause 39 shall be serially numbered CN-X-nnn.
- (3) Acceptance of Estimate as referred to in GC Clause 39 shall be serially numbered CA-X-nnn.
- (4) Change Proposal as referred to in GC Clause 39 shall be serially numbered CP-X-nnn.
- (5) Change Order as referred to in GC Clause 39 shall be serially numbered CO-X-nnn.

Note: (a) Requests for Change issued from the Employer's Home Office and the Site representatives of the Employer shall have the following respective references:

Home Office	CR-H-nnn
Site	CR-S-nnn

- (b) The above number "nnn" is the same for Request for Change, Estimate for Change Proposal, Acceptance of Estimate, Change Proposal and Change Order.

**Annex 1. Request for Change Proposal**

(Employer's Letterhead)

To: *[insert Contractor's name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

With reference to the captioned Contract, you are requested to prepare and submit a Change Proposal for the Change noted below in accordance with the following instructions within *[insert number of days]* days of the date of this letter *[or on or before (date)]*.

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Change Request No.: *[insert number]* \_\_\_\_\_
3. Originator of Change: Employer: *[insert name of Employer]* \_\_\_\_\_  
Contractor (by Application for Change Proposal No. *[insert number]*) \_\_\_\_\_
4. Brief Description of Change: *[insert description]* \_\_\_\_\_
5. Facilities and/or Item No. of equipment related to the requested Change: *[insert description]*  
\_\_\_\_\_
6. Reference drawings and/or technical documents for the request of Change:  

<u>Drawing No./Document No.</u>	<u>Description</u>
7. Detailed conditions or special requirements on the requested Change: \_\_\_\_\_
8. General Terms and Conditions:
  - (a) Please submit your estimate to us showing what effect the requested Change will have on the Contract Price.
  - (b) Your estimate shall include your claim for the additional time, if any, for completion of the requested Change.
  - (c) If you have any opinion negative to the adoption of the requested Change in connection with the conformability to the other provisions of the Contract or the safety of the Plant or Facilities, please inform us of your opinion in your proposal of revised provisions.
  - (d) Any increase or decrease in the work of the Contractor relating to the services of its personnel shall be calculated.

- (e) You shall not proceed with the execution of the work for the requested Change until we have accepted and confirmed the amount and nature in writing.

---

(Employer's Name)

---

(Signature)

---

(Name of signatory)

---

(Title of signatory)

**Annex 2. Estimate for Change Proposal**

(Contractor's Letterhead)

To: *[insert Employer's Name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

With reference to your Request for Change Proposal, we are pleased to notify you of the approximate cost of preparing the below-referenced Change Proposal in accordance with GC Sub-Clause 39.2.1 of the General Conditions of the Contract. We acknowledge that your agreement to the cost of preparing the Change Proposal, in accordance with GC Sub-Clause 39.2.2 of the General Conditions of the Contract, is required before estimating the cost for change work.

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Change Request No./Rev.: *[insert number]* \_\_\_\_\_
3. Brief Description of Change: *[insert description]* \_\_\_\_\_
4. Scheduled Impact of Change: *[insert description]* \_\_\_\_\_
5. Cost for Preparation of Change Proposal: *[insert cost]* \_\_\_\_\_<sup>1</sup>
  - (a) Engineering (Amount)

(i)	Engineer	_____ hrs	x	_____ rate/hr	=	_____
(ii)	Draftsperson	_____ hrs	x	_____ rate/hr	=	_____
	Sub-total	_____ hrs				_____
	Total Engineering Cost					_____
  - (b) Other Cost \_\_\_\_\_
  - Total Cost (a) + (b) \_\_\_\_\_

---

 (Contractor's Name)

---

<sup>1</sup> Cost shall be in the currencies of the Contract.

---

(Signature)

---

(Name of signatory)

---

(Title of signatory)



**Annex 3. Acceptance of Estimate**

(Employer's Letterhead)

To: *[insert Contractor's name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

We hereby accept your Estimate for Change Proposal and agree that you should proceed with the preparation of the Change Proposal.

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Change Request No./Rev.: *[insert number]* \_\_\_\_\_
3. Estimate for Change Proposal No./Rev.: *[insert number]* \_\_\_\_\_
4. Acceptance of Estimate No./Rev.: *[insert number]* \_\_\_\_\_
5. Brief Description of Change: *[insert description]* \_\_\_\_\_
6. Other Terms and Conditions: In the event that we decide not to order the Change accepted, you shall be entitled to compensation for the cost of preparation of Change Proposal described in your Estimate for Change Proposal mentioned in 3 above, in accordance with GC Clause 39 of the General Conditions of the Contract.

\_\_\_\_\_  
(Employer's Name)\_\_\_\_\_  
(Signature)\_\_\_\_\_  
(Name and Title of signatory)

**Annex 4. Change Proposal**

(Contractor's Letterhead)

To: *[insert Employer's Name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

In response to your Request for Change Proposal No. *[insert number]*, we hereby submit our proposal as follows:

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Change Proposal No./Rev.: *[insert number]* \_\_\_\_\_
3. Originator of Change: Employer: *[insert name of Employer]* \_\_\_\_\_  
Contractor: *[insert name of Contractor]* \_\_\_\_\_
4. Brief Description of Change: *[insert description]* \_\_\_\_\_
5. Reasons for Change: *[insert reason]* \_\_\_\_\_
6. Facilities and/or Item No. of Equipment related to the requested Change: *[insert description]* \_\_\_\_\_
7. Reference drawings and/or technical documents for the requested Change:  

<u>Drawing/Document No.</u>	<u>Description</u>
8. Estimate of increase/decrease to the Contract Price resulting from Change Proposal:<sup>1</sup>  

	<u>(Amount)</u>
(a) Direct material	_____
(b) Major construction equipment	_____
(c) Direct field labor (Total _____ hrs)	_____
(d) Subcontracts	_____
(e) Indirect material and labor	_____
(f) Site supervision	_____

---

<sup>1</sup> Increase and/or decrease to the Contract Price shall be in the currencies of the Contract.

## (g) Head office technical staff salaries

Process engineer	_____ hrs @ _____ rate/hr	_____
Project engineer	_____ hrs @ _____ rate/hr	_____
Equipment engineer	_____ hrs @ _____ rate/hr	_____
Procurement	_____ hrs @ _____ rate/hr	_____
Draftsperson	_____ hrs @ _____ rate/hr	_____
Total	_____ hrs	_____

(h) Extraordinary costs (computer, travel, etc.) \_\_\_\_\_

(i) Fee for general administration, \_\_\_\_\_ % of Items \_\_\_\_\_

(j) Taxes and customs duties \_\_\_\_\_

Total lump sum cost of Change Proposal \_\_\_\_\_  
*(Sum of items (a) to (j))*

Cost to prepare Estimate for Change Proposal \_\_\_\_\_  
*(Amount payable if Change is not accepted)*

9. Additional time for Completion required due to Change Proposal

10. Effect on the Functional Guarantees

11. Effect on the other terms and conditions of the Contract

12. Validity of this Proposal: within [number] days after receipt of this Proposal by the Employer

13. Other terms and conditions of this Change Proposal:

(a) You are requested to notify us of your acceptance, comments or rejection of this detailed Change Proposal within [number] days from your receipt of this Proposal.

(b) The amount of any increase and/or decrease shall be taken into account in the adjustment of the Contract Price.

(c) Contractor's cost for preparation of this Change Proposal:

*[Note: This cost shall be reimbursed by the Employer in case of Employer's withdrawal or rejection of this Change Proposal without default of the Contractor in accordance with GC 39 of the General Conditions of the Contract.]*

\_\_\_\_\_  
(Contractor's Name)\_\_\_\_\_  
(Signature)\_\_\_\_\_  
(Name of signatory)\_\_\_\_\_  
(Title of signatory)

## Annex 5. Change Order

(Employer's Letterhead)

To: *[insert Contractor's name and address]*

Date: *[insert date]*

Attention: [*insert name and title*]

Contract Name: *[insert Contract name]*

Contract Number: *[insert Contract number]*

Dear Sirs,

We approve the Change Order for the Facilities specified in the Change Proposal (No. *[insert number]*), and agree to adjust the Contract Price, Time for Completion and/or other conditions of the Contract in accordance with GC Clause 39 of the General Conditions of the Contract.

1. Title of Change: *[insert title]* \_\_\_\_\_
  2. Change Request No./Rev.: *[insert number]* \_\_\_\_\_
  3. Change Order No./Rev.: *[insert number]* \_\_\_\_\_
  4. Originator of Change:      Employer:              *[insert              name              of              Employer]*  
\_\_\_\_\_  
Contractor: *[insert name of Contractor]* \_\_\_\_\_
  5. Authorized Price:  
  
Ref. No.: *[insert number]* \_\_\_\_\_ Date:                              *[insert date]* \_\_\_\_\_  
Foreign currency portion: *[insert amount]* \_\_\_\_\_ plus Local currency portion: *[insert amount]* \_\_\_\_\_
  6. Adjustment of Time for Completion  
  
None                      Increase *[insert number]* days                      Decrease *[insert number]* days
  7. Other effects, if any
- Authorized by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Employer)
- Accepted by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Contractor)

**Annex 6. Pending Agreement Change Order**

(Employer's Letterhead)

To: *[insert Contractor's name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

We instruct you to carry out the work in the Change Order detailed below in accordance with Clause 39 of the General Conditions.

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Employer's Request for Change Proposal No./Rev.: *[insert number]* \_\_\_\_\_  
dated: *[insert date]* \_\_\_\_\_
3. Contractor's Change Proposal No./Rev.: *[insert number]* \_\_\_\_\_  
dated: *[insert date]* \_\_\_\_\_
4. Brief Description of Change: *[insert description]* \_\_\_\_\_
5. Facilities and/or Item No. of equipment related to the requested Change: *[insert description]*  
\_\_\_\_\_
6. Reference Drawings and/or technical documents for the requested Change:  

<u>Drawing/Document No.</u>	<u>Description</u>
7. Adjustment of Time for Completion:
8. Other change in the Contract terms:
9. Other terms and conditions:

\_\_\_\_\_  
(Employer's Name)\_\_\_\_\_  
(Signature)\_\_\_\_\_  
(Name of signatory)\_\_\_\_\_  
(Title of signatory)

**Annex 7. Application for Change Proposal**

(Contractor's Letterhead)

To: *[insert Employer's Name and address]*Date: *[insert date]*Attention: *[insert name and title]*Contract Name: *[insert Contract name]*Contract Number: *[insert Contract number]*

Dear Sirs,

We hereby propose that the below-mentioned work be treated as a Change in the Facilities.

1. Title of Change: *[insert title]* \_\_\_\_\_
2. Application for Change Proposal No./Rev.: *[insert number]* \_\_\_\_\_ dated: *[insert date]* \_\_\_\_\_
3. Brief Description of Change: *[insert description]* \_\_\_\_\_
4. Reasons for Change: *[insert reason]* \_\_\_\_\_
5. Order of Magnitude Estimation (in the currencies of the Contract): *[insert amount]* \_\_\_\_
6. Scheduled Impact of Change: *[insert scheduled impact]* \_\_\_\_\_
7. Effect on Functional Guarantees, if any: *[insert effect, if any]* \_\_\_\_\_
8. Appendix:

\_\_\_\_\_  
(Contractor's Name)\_\_\_\_\_  
(Signature)\_\_\_\_\_  
(Name of signatory)\_\_\_\_\_  
(Title of signatory)

**Annex 8. Change Order log**

*[The Contractor shall prepare an up-to-date Change Order log, in accordance with Clause 2 of the Change Order Procedure, and attach a copy of it to the monthly progress report to be submitted to the Employer.]*

**Supplementary Information**

Refer to the Section 21 of Volume 2 of 3 of the Bidding Documents.



## **PART 3 - Conditions of Contract and Contract Forms**

## **Section VII. General Conditions (GC)**

The General Conditions governing this Contract are the Standard General Conditions of Contract set forth in Part 3, Section VII of the Standard Bidding Documents for Procurement of Plant Design, Supply and Installation (version 1.1)) published by JICA in February, 2013. Those General Conditions of Contract are available on the JICA's web site shown below:

[http://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/oda\\_loans/oda\\_op\\_info/guide/tender/index.html](http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tender/index.html)

A copy of these General Conditions is also attached to these Bidding Documents/this Contract.



## Table of Contents

<b>A. Contract and Interpretation .....</b>	<b>3</b>
1. Definitions .....	3
2. Contract Documents .....	6
3. Interpretation .....	7
4. Communications.....	9
5. Law and Language .....	9
6. Corrupt or Fraudulent Practices .....	9
<b>B. Subject Matter of Contract .....</b>	<b>9</b>
7. Scope of Facilities .....	9
8. Time for Commencement and Completion .....	11
9. Contractor's Responsibilities .....	11
10. Employer's Responsibilities.....	12
<b>C. Payment.....</b>	<b>13</b>
11. Contract Price .....	13
12. Terms of Payment .....	14
13. Securities .....	14
14. Taxes and Duties .....	16
<b>D. Intellectual Property .....</b>	<b>16</b>
15. License/Use of Technical Information .....	16
16. Confidential Information .....	17
<b>E. Execution of the Facilities.....</b>	<b>18</b>
17. Representatives.....	18
18. Work Program .....	20
19. Subcontracting.....	22
20. Design and Engineering .....	23
21. Procurement.....	25
22. Installation .....	27
23. Test and Inspection.....	36
24. Completion of the Facilities .....	38
25. Commissioning and Operational Acceptance .....	40

<b>F. Guarantees and Liabilities.....</b>	<b>42</b>
26. Completion Time Guarantee .....	42
27. Defect Liability.....	43
28. Functional Guarantees .....	45
29. Patent Indemnity.....	46
30. Limitation of Liability .....	47
<b>G. Risk Distribution.....</b>	<b>47</b>
31. Transfer of Ownership.....	47
32. Care of Facilities .....	48
33. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification ..	49
34. Insurance .....	50
35. Unforeseen Conditions .....	53
36. Change in Laws and Regulations .....	54
37. Force Majeure.....	55
38. War Risks .....	56
<b>H. Change in Contract Elements.....</b>	<b>58</b>
39. Change in the Facilities .....	58
40. Extension of Time for Completion.....	62
41. Suspension.....	63
42. Termination .....	65
43. Assignment.....	72
<b>I. Claims, Disputes and Arbitration .....</b>	<b>72</b>
44. Contractor's Claims.....	72
45. Disputes and Arbitration .....	74

## **A. Contract and Interpretation**

### **1. Definitions**

1.1 The following words and expressions shall have the meanings hereby assigned to them:

“Base Date” means the date 28 days prior to the latest date for submission of the Bid, when Single-Stage Bidding procedure is used.

“Base Date” means the date 28 days prior to the latest date for submission of the Second Stage Bid, when Two-Stage Bidding procedure is used.

“Commissioning” means operation of the Facilities or any part thereof by the Contractor following Completion, as provided in GC Sub-Clause 25.1 (Commissioning) hereof, for the purpose of carrying out Guarantee Test(s).

“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 Precommissioning of the Facilities or such specific part thereof has been completed, and that the Facilities or specific part thereof are ready for Commissioning as provided in GC Clause 24 (Completion) hereof.

“Construction Manager” means the person appointed by the Contractor’s Representative in the manner provided in GC Sub-Clause 17.2.4.

“Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments thereto).

“Contract Price” means the sum specified in Article 2.1 (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

“Contractor” means the person(s) whose Bid to perform the Contract has been accepted by the Employer and is named as

Contractor in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.

“Contractor’s 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.

“Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer in the manner provided in GC Sub-Clause 17.2 (Contractor’s Representative and Construction Manager) hereof to perform the duties delegated by the Contractor.

“day” means calendar day .

“Defect Liability Period” means the period of validity of the warranties given by the Contractor commencing at Operational Acceptance 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 GC Clause 27 (Defect Liability) hereof.

“Dispute Board” (DB) means the person or persons appointed by agreement between the Employer and the Contractor to make a decision with respect to any dispute or difference between the Employer and the Contractor referred to him or her by the Parties pursuant to GC Sub-Clause 45.1 (Dispute Board) hereof.

“Effective Date” means the date of fulfillment of all conditions stated in Article 3 (Effective Date) of the Contract Agreement, from which the Time for Completion shall be counted.

“Employer” means the person **named as such in the PC** and includes the legal successors or permitted assigns of the Employer.

“Employer’s Requirements” means the document entitled employer’s requirements, as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document includes Drawings, Specifications, and any other documents specifying the purpose, scope, and/or design and/or other technical criteria, for the Facilities.

“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.

“GC” means the General Conditions hereof.

“Guarantee Test(s)” means the test(s) specified in the Contract 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 GC Sub-Clause 25.2 (Guarantee Test) hereof.

“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, precommissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require.

JICA” means Japan International Cooperation Agency.

“Letter of Acceptance” means the letter of formal acceptance, signed by the Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is not such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.

“Mandatory Spare Parts” means spare parts required up to Operational Acceptance of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts).

“month” means calendar month.

“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 GC Clause 28 (Functional Guarantees) hereof and shall include deemed acceptance in accordance with GC Clause 25 (Commissioning and Operational Acceptance) hereof.



“Party” means the Employer or the Contractor, as the context requires, and “Parties” means both of them.

“PC” means the Particular Conditions.

“Performance Security” means the security (or securities, if any) under GC Sub-Clause 13.3 (Performance Security).

“Plant” means permanent plant, equipment, machinery, apparatus, materials, articles 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 under GC Sub-Clause 7.3 hereof), but does not include Contractor’s Equipment.

“Precommissioning” means the testing, checking and other requirements specified in the Contract that are to be carried out by the Contractor in preparation for Commissioning as provided in GC Clause 24 (Completion) hereof.

“Project Manager” means the person appointed by the Employer in the manner provided in GC Sub-Clause 17.1 (Project Manager) hereof and **named as such in the PC** to perform the duties delegated by the Employer.

“Provisional Sum” means a sum which is specified in the Contract as a provisional sum, for the supply of any Plant and Installations Services or other services, included and so designated in the Price Schedules (Schedule No.5).

“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 Contract as forming part of the Site.

“Subcontractor,” including manufacturers, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.

“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, as referred to in GC Clause 8 (Time for Commencement and Completion) and in accordance with the relevant provisions of the Contract.

“year” means 365 days.

## 2. Contract

### 2.1 Subject to Article 1.2 (Order of Precedence) of the Contract

**Documents**

Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

**3. Interpretation**

3.1 In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word “agree,” “agreed,” or “agreement” require the agreement to be recorded in writing;
- (d) the word “Tender” is synonymous with “Bid,” “Tenderer,” with “Bidder,” and “Tender Documents” with “Bidding Documents;” and
- (e) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

3.2 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of Parties thereunder shall be as prescribed by *Incoterms*.

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition as of the Base Date), 38 Cours Albert 1<sup>er</sup>, 75008 Paris, France.

3.3 Entire Agreement

Subject to GC Sub-Clause 16.4 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of Parties with respect thereto made prior to the date of Contract.

3.4 Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of

each Party hereto.

### 3.5 Independent Contractor

The Contractor shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture or other joint relationship between the Parties hereto. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or Subcontractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives or Subcontractors and the Employer.

### 3.6 Non-Waiver

3.6.1 Subject to GC Sub-Clause 3.6.2 below, 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, nor shall any waiver by either Party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.6.2 Any waiver of a Party's rights, powers or remedies under the Contract must be in writing, must be 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.

### 3.7 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.

### 3.8 Country of Origin

"Origin" means the place where the Plant and 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.

**4. Communica-  
tions**

4.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- (a) in writing and delivered against receipt; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Agreement.

When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.

**5. Law and  
Language**

5.1 The Contract shall be governed by and interpreted in accordance with laws of the country **specified in the PC**.

5.2 The ruling language of the Contract shall be that **stated in the PC**.

5.3 The language for communications shall be the ruling language unless otherwise **stated in the PC**.

**6. Corrupt or  
Fraudulent  
Practices**

6.1 If the Employer determines, based on reasonable evidence, that the Contractor has engaged in corrupt, fraudulent, collusive or coercive practices, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of GC Clause 42 shall apply as if such expulsion had been made under GC Sub-Clause 42.2.1 (c).

6.2 Should any employee of the Contractor be determined, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice during the execution of the Contract, then that employee shall be removed in accordance with GC Sub-Clauses 17.2.5.

**B. Subject Matter of Contract**

**7. Scope of  
Facilities**

7.1 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, Precommissioning 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 Section VI, Employer's Requirements. Such specifications include the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts (as specified in GC Sub-Clause 7.3 below) 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, or any other requirements specified in the Contract.

- 7.2 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.
- 7.3 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 PC** and the provisions, if any, **specified in the PC**. 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. 7, 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.

**8. Time for Commencement and Completion**

- 8.1 The Contractor shall commence work on the Facilities within the period **specified in the PC**, and without prejudice to GC Sub-Clause 26.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in the Appendix to the Contract Agreement titled Time Schedule.
- 8.2 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 PC** or within such extended time to which the Contractor shall be entitled under GC Clause 40 hereof.

**9. Contractor's Responsibilities**

- 9.1 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.
- 9.2 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 Base Date. 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.
- 9.3 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 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 GC Sub-Clause 10.3 hereof and that are necessary for the performance of the Contract.
- 9.4 The Contractor shall comply with all laws in force in the country where the Facilities are to be implemented. The laws will include all local, state, national or other laws that affect the performance of the Contract and bind upon the Contractor. The

Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel, but without prejudice to GC Sub-Clause 10.1 hereof.

- 9.5 Any Plant and Installation Services that will be incorporated in or be required for the Facilities and other supplies shall have their origin as specified under GC Clause 3.8 (Country of Origin). Any Subcontractors retained by the Contractor shall be from a country as specified in GC Clause 3.8 (Country of Origin).
- 9.6 If the Contractor is a joint venture (JV) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract, and shall designate one of such persons to act as a leader with authority to bind the JV. The composition or the constitution of the JV shall not be altered without the prior consent of the Employer.

**10. Employer's  
Responsibilities**

- 10.1 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, and the Contractor shall not be liable for the consequences of any discrepancies, errors, omissions or inaccuracies in such information and/or data.
- 10.2 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.
- 10.3 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).

- 10.4 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.
- 10.5 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 Precommissioning, 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 GC Sub-Clause 18.2 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.
- 10.6 All costs and expenses involved in the performance of the obligations under this GC Clause 10 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 GC Sub-Clause 25.2.
- 10.7 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.

### **C. Payment**

- 11. Contract Price**
  - 11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
  - 11.2 Unless an adjustment clause is **provided for in the PC**, 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.



11.3 Subject to GC Sub-Clauses 9.2, 10.1 and 35 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.

## **12. Terms of Payment**

12.1 The Contract Price shall be paid as specified in Article 2 (Contract Price and Terms of Payment) of 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.

12.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.

12.3 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 Appendix 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.

12.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendix 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 Bid.

## **13. Securities**

### **13.1 Issuance of Securities**

The Contractor shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

### **13.2 Advance Payment Security**

13.2.1 The Contractor shall, within twenty-eight (28) days of the receipt of the Letter of Acceptance, 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.

13.2.2 The security shall be in the form provided in the

Bidding 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.

### 13.3 Performance Security

13.3.1 The Contractor shall, within twenty-eight (28) days of the receipt of the Letter of Acceptance, provide a security for the due performance of the Contract in the amount **specified in the PC**.

13.3.2 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 IX, Contract Forms, corresponding to the type of bank guarantee **stipulated by the Employer in the PC**, or in another form acceptable to the Employer.

13.3.3 **Unless otherwise specified in the PC**, 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 three hundred and sixty five (365) days after Operational Acceptance of the Facilities; provided, however, that if the Defects Liability Period has been extended on any part of the Facilities pursuant to GC Sub-Clause 27.8 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.

13.3.4 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.

**14. Taxes and Duties**

- 14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and 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.
- 14.2 Notwithstanding GC Sub-Clause 14.1 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.
- 14.3 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.
- 14.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies and charges prevailing at the Base Date in the country where the Site is located (hereinafter called "Tax" in this GC Sub-Clause 14.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GC Clause 36 hereof.

**D. Intellectual Property**

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

- 15.1 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 intellectual property rights owned by the Contractor or by a third Party from whom the Contractor has received the right to grant sub-licenses, 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.

15.2 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.

## **16. Confidential Information**

16.1 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 termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GC Clause 16.

16.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant, construction or such other work and services as are required for the performance of the Contract.

16.3 The obligation of a Party under GC Sub-Clauses 16.1 and 16.2 above, however, shall not apply to that information which:

(a) now or hereafter enters the public domain through no

fault of that Party;

- (b) 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 hereto; and
- (c) otherwise lawfully becomes available to that Party from a third Party that has no obligation of confidentiality.

16.4 The above provisions of this GC Clause 16 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 Facilities or any part thereof.

16.5 The provisions of this GC Clause 16 shall survive termination, for whatever reason, of the Contract.

## **E. Execution of the Facilities**

### **17. Representatives    17.1 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.

### **17.2 Contractor's Representative & Construction Manager**

17.2.1 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 GC Sub-Clause 17.2.1 shall apply thereto.

- 17.2.2 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.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.

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 GC Sub-Clause 17.2.1.

- 17.2.3 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 GC Sub-Clause 17.2.3 shall be deemed to be an act or exercise by the Contractor's Representative.

17.2.4 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.

17.2.5 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 GC Sub-Clause 22.4. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.

17.2.6 If any representative or person employed by the Contractor is removed in accordance with GC Sub-Clause 17.2.5, the Contractor shall, where required, promptly appoint a replacement.

## **18. Work Program**

### **18.1 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.

### 18.2 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 precommission 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 PC pursuant to Sub-Clause 8.2 and any extension granted in accordance with GC Clause 40, and shall submit all such revisions to the Project Manager.

### 18.3 Progress Report

The Contractor shall monitor progress of all the activities specified in the program referred to in GC Sub-Clause 18.2 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.

### 18.4 Progress of Performance

If at any time the Contractor's actual progress falls behind the program referred to in GC Sub-Clause 18.2, 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 GC Sub-Clause 8.2, any extension thereof entitled under GC Sub-Clause 40.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

#### 18.5 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.

### **19. Subcontracting**

- 19.1 The Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved Subcontractors, specifies major items of supply or services and a list of approved Subcontractors against each item, including manufacturers. Insofar as no Subcontractors are listed against any such item, the Contractor shall prepare a list of Subcontractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.
- 19.2 The Contractor shall select and employ its Subcontractors for such major items from those listed in the lists referred to in GC Sub-Clause 19.1.
- 19.3 For items or parts of the Facilities not specified in the Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved Subcontractors, the Contractor may employ such Subcontractors as it may select, at its discretion.
- 19.4 Each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under GC Sub-Clause 19.5 (if and when applicable), or in event of termination by the Employer under GC Sub-Clause 42.2.

- 19.5 If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Liability Period and the Project Manager, prior to that date, instructs the Contractor to assign the benefits of such obligations to the Employer, then the Contractor shall do so.

## **20. Design and Engineering**

### **20.1 Specifications and Drawings**

- 20.1.1 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.

Subject always to GC 10.1, 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.

- 20.1.2 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.

### **20.2 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 Base Date 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 GC Clause 39.

### **20.3 Approval/Review of Technical Documents by Project Manager**

- 20.3.1 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 GC Sub-Clause 18.2 (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.

GC Sub-Clauses 20.3.2 through 20.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

- 20.3.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GC Sub-Clause 20.3.1, 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.

- 20.3.3 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.

- 20.3.4 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 GC Sub-Clause 20.3.2. 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.

- 20.3.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the Parties within a reasonable period, then such dispute or difference may be referred to a Dispute Board for determination in accordance with GC Sub-Clause 45.3 hereof. If such dispute or difference is referred to a Dispute Board, the Project Manager shall give instructions as to whether and if so, how, performance of the

Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Dispute Board upholds the Contractor's view on the dispute and if the Employer has not given notice under GC Sub-Clause 45.3 hereof, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Dispute Board shall decide, and the Time for Completion shall be extended accordingly.

20.3.6 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.

20.3.7 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 GC Sub-Clause 20.3.

If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GC Clause 39 shall apply to such request.

## **21. Procurement**

### **21.1 Plant**

Subject to GC Sub-Clause 14.2, the Contractor shall procure and transport all Plant in an expeditious and orderly manner to the Site.

### **21.2 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:

21.2.1 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 GC Sub-Clause 18.2, unless otherwise mutually agreed.

21.2.2 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 GC Sub-Clause 21.2.2 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.

21.2.3 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 GC Clause 27 or under any other provision of Contract.

### 21.3 Transportation

21.3.1 The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site.

21.3.2 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.

21.3.3 Upon dispatch of each shipment of materials and the Contractor's Equipment, the Contractor shall notify the Employer by facsimile or email, 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.

- 21.3.4 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.

21.4 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 GC Sub-Clause 14.2, 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 GC Clause 40.

**22. Installation**

22.1 Setting Out/Supervision

- 22.1.1 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.

- 22.1.2 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.

## 22.2 Labor

### 22.2.1 Engagement of Staff and Labor

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.

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.

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.

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.

#### 22.2.2 Persons in the Service of Employer

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

#### 22.2.3 Labor Laws

The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.

The Contractor shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

#### 22.2.4 Rates of Wages and Conditions of Labor

The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the



Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

#### 22.2.5 Working Hours

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours **stated in the PC**, unless:

- (a) otherwise stated in the Contract;
- (b) the Project Manager gives consent; or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Facilities, in which case the Contractor shall immediately advise the Project Manager.

If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager's consent thereto, the Project Manager shall not unreasonably withhold such consent.

This Sub-Clause shall not apply to any work which is customarily carried out by rotary or double-shifts.

#### 22.2.6 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 Plant.

#### 22.2.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site

and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

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 protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require.

The Contractor shall throughout the Contract (including the Defects Liability Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Subcontractors and Employer's and Project Manager's employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labor as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor.

The Contractor shall include in the program to be submitted for the execution of the Facilities under GC Sub-Clause 18.2 an alleviation program for Site staff and labor and their families in respect of STI and STD, including HIV/AIDS. The STI, STD and HIV/AIDS

alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this GC Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related subcontracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation of this program shall not exceed the Provisional Sum dedicated for this purpose.

#### 22.2.8 Funeral Arrangements

In the event of the death of any of the Contractor's Personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise **specified in the PC**.

#### 22.2.9 Records of Contractor's Personnel

The Contractor shall keep accurate records of the Contractor's Personnel, including the number of each class of Contractor's Personnel on the Site and the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis in a form approved by the Project Manager and shall be available for inspection by the Project Manager until the Contractor has completed all work.

#### 22.2.10 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

#### 22.2.11 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

#### 22.2.12 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary

precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

#### 22.2.13 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal by Contractor's Personnel.

#### 22.2.14 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

#### 22.2.15 Prohibition of All Forms of Forced or Compulsory Labor

The Contractor shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

#### 22.2.16 Prohibition of Harmful Child Labor

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.

### 22.3 Contractor's Equipment

22.3.1 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.

22.3.2 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.

- 22.3.3 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.

#### 22.4 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.

#### 22.5 Opportunities for Other Contractors

- 22.5.1 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.

- 22.5.2 If the Contractor, upon written request from the Employer or the Project Manager, makes available to other contractors any roads or ways for the maintenance of 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.

22.5.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other contractors and the workers of the Employer in regard to their work.

22.5.4 The Contractor shall notify the Project Manager promptly of any defects in the other contractors' work that come to its notice, and that could affect the Contractor's work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor.

## 22.6 Emergency Work

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, the 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.

## 22.7 Site Clearance

22.7.1 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.

22.7.2 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.

22.8 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.

**23. Test and Inspection**

23.1 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.

23.2 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.

23.3 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.

23.4 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.

- 23.5 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.
- 23.6 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 GC Sub-Clause 23.3.
- 23.7 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 a Dispute Board for determination in accordance with GC Sub-Clause 45.3.
- 23.8 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.
- 23.9 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 GC Sub-Clause 23.4, shall release the Contractor from any other responsibilities under the Contract.
- 23.10 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.



- 23.11 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.

If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GC Sub-Clause 23.10 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.

**24. Completion of the Facilities**

- 24.1 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.

- 24.2 Within seven (7) days after receipt of the notice from the Contractor under GC Sub-Clause 24.1, 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 Precommissioning 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 Precommissioning of the Facilities or any part thereof.

- 24.3 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 GC Sub-Clause 24.2, the Contractor shall commence Precommissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GC Sub-Clause 25.
- 24.4 As soon as all works in respect of Precommissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof is ready for Commissioning, the

Contractor shall so notify the Project Manager in writing.

- 24.5 The Project Manager shall, within fourteen (14) days after receipt of the Contractor's notice under GC Sub-Clause 24.4, 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 GC Sub-Clause 24.4, 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 GC Sub-Clause 24.4.

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.

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.

- 24.6 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 GC Sub-Clause 24.4 or within seven (7) days after receipt of the Contractor's repeated notice under GC Sub-Clause 24.5, 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.
- 24.7 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.

**25. Commissioning and Operational Acceptance****25.1 Commissioning**

25.1.1 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 GC Sub-Clause 24.5, or immediately after the date of the deemed Completion, under GC Sub-Clause 24.6.

25.1.2 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.

25.1.3 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.

**25.2 Guarantee Test**

25.2.1 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.

25.2.2 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 PC** 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 GC Sub-Clauses 28.2 and 28.3 shall not apply.

**25.3 Operational Acceptance**

25.3.1 Subject to GC Sub-Clause 25.4 below, Operational Acceptance shall occur in respect of the Facilities or any part thereof when:

- (a) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or
- (b) the Guarantee Test has not been successfully completed or has not been carried out for reasons not attributable to the Contractor within the period from the date of Completion specified in the PC pursuant to GC Sub-Clause 25.2.2 above or any other period agreed upon by the Employer and the Contractor; or
- (c) the Contractor has paid the liquidated damages specified in GC Sub-Clause 28.3 hereof; and
- (d) any minor items mentioned in GC Sub-Clause 24.7 hereof relevant to the Facilities or that part thereof have been completed.

25.3.2 At any time after any of the events set out in GC Sub-Clause 25.3.1 has 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.

25.3.3 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.

25.3.4 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.

#### 25.4 Partial Acceptance

25.4.1 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.

25.4.2 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.

## **F. Guarantees and Liabilities**

### **26. Completion Time Guarantee**

26.1 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 PC pursuant to GC Sub-Clause 8.2, or within such extended time to which the Contractor shall be entitled under GC Clause 40 hereof.

26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount **specified in the PC** 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 PC** as a percentage rate of the Contract Price. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GC Sub-Clause 42.2.2.

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 GC Clause 40. 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 GC Sub-Clause 26.2, 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 GC Sub-Clause 18.2 shall

not render the Contractor liable for any loss or damage thereby suffered by the Employer.

- 26.3 If the Contractor attains Completion of the Facilities or any part thereof before the Time for Completion or any extension thereof under GC Clause 40, the Employer shall pay to the Contractor a bonus in the amount **specified in the PC**. The aggregate amount of such bonus shall in no event exceed the amount **specified as “Maximum” in the PC**.

## **27. Defect Liability**

- 27.1 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.

- 27.2 The Defect Liability Period in respect of the Facilities (or, where Operational Acceptance of any part of the Facilities occurs, of such part) shall commence upon the date of Operational Acceptance and expire twelve (12) months thereafter.

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.

- 27.3 The Contractor's obligations under this GC Clause 27 shall not apply to:

- (a) any materials that are supplied by the Employer under GC Sub-Clause 21.2, 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 GC Sub-Clause 27.7.

27.4 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.

27.5 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 GC Clause 27.

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.

27.6 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.

27.7 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 fourteen (14) 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.

27.8 If a defect is made good under this GC 27, the Defect Liability

Period for the item which has been made good shall extend for a period of twelve (12) months from such making good. However, in no event shall the Defect Liability Period extend beyond twenty-four (24) months after the date of Operational Acceptance of the Plant or the relevant part thereof.

27.9 Except as provided in GC Clauses 27 and 33, 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 fraud, or criminal or willful action of the Contractor.

**28. Functional  
Guarantees**

28.1 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.

28.2 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 GC Sub-Clause 42.2.2.

28.3 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.

28.4 The payment of liquidated damages under GC Sub-Clause 28.3 shall completely satisfy the Contractor's guarantees under GC Sub-Clause 28.3, 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.

## **29. Patent Indemnity**

29.1 The Contractor shall, subject to the Employer's compliance with GC Sub-Clause 29.2, 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.

29.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GC 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.

- 29.3 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.

**30. Limitation of Liability**

- 30.1 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 PC**, 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.

**G. Risk Distribution**

**31. Transfer of Ownership**

- 31.1 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.

- 31.2 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.
- 31.3 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.
- 31.4 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Operational Acceptance or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.
- 31.5 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 GC Clause 32 (Care of Facilities) hereof until Operational Acceptance of the Facilities or the part thereof in which such Plant are incorporated.

### **32. Care of Facilities**

- 32.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Operational Acceptance of the Facilities pursuant to GC Clause 25 or, where the Contract provides for Operational Acceptance of the Facilities in parts, until the date of Operational Acceptance 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 GC Clause 27. 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 GC Sub-Clauses 32.2 and 38.1.
- 32.2 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 GC 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,

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 GC Clause 39. 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 GC Clause 39, 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 GC Sub-Clause 42.1 hereof.

32.3 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 GC Sub-Clause 32.2 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 GC Sub-Clauses 32.2 (b) and (c) and 38.1.

32.4 With respect to any loss or damage caused to the Facilities or any part thereof or to the Contractor's Equipment by reason of any of the matters specified in GC Sub-Clause 38.1, the provisions of GC Sub-Clause 38.3 shall apply.

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

33.1 Subject to GC Sub-Clause 33.3, 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

**Indemnification**

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.

- 33.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GC Sub-Clause 33.1, 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.

- 33.3 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 GC Clause 34.
- 33.4 The Party entitled to the benefit of an indemnity under this GC Clause 33 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.

**34. Insurance**

- 34.1 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 Operational Acceptance 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.

(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.

- 34.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Sub-Clause 34.1, except for the 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 GC Sub-Clause 34.1 except for the Cargo Insurance During Transport, 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.
- 34.3 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.
- 34.4 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.
- 34.5 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-insureds under all such policies. All insurers' 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. 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 GC Sub-Clause 34.5.
- 34.6 If the Contractor fails to take out and/or maintain in effect the

insurances referred to in GC Sub-Clause 34.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due 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 GC 34.5, 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.

34.7 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GC Clause 34, 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.

### **35. Unforeseen Conditions**

35.1 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 of:

- (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 GC Sub-Clause 35.1, the Project Manager shall promptly consult with the Employer and Contractor to 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.

- 35.2 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 GC Sub-Clause 35.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price.

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 GC Sub-Clause 35.1, the Time for Completion shall be extended in accordance with GC Clause 40.

### **36. Change in Laws and Regulations**

- 36.1 If, after the date twenty-eight (28) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract.

Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the PC pursuant to GC Sub-Clause 11.2.

**37. Force  
Majeure**

37.1 “Force Majeure” shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the Party affected, and shall include, without limitation, the following:

- (a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war;
- (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts;
- (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority;
- (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague;
- (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster; and
- (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.

37.2 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the Party became or should have become aware of the occurrence of such event.

37.3 The Party who has given such notice shall be excused from the performance or punctual performance of its obligations under

the Contract for so long as the relevant event of Force Majeure continues and to the extent that such Party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GC Clause 40.

37.4 The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either Party's right to terminate the Contract under GC Sub-Clauses 37.6 and 38.5.

37.5 No delay or nonperformance by either Party hereto caused by the occurrence of any event of Force Majeure shall:

- (a) constitute a default or breach of the Contract, or
- (b) give rise to any claim for damages or additional cost or expense occasioned thereby, subject to GC Sub-Clauses 32.2, 38.3 and 38.4.

37.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other, but without prejudice to either Party's right to terminate the Contract under GC Sub-Clause 38.5.

37.7 In the event of termination pursuant to GC Sub-Clause 37.6, the rights and obligations of the Employer and the Contractor shall be as specified in GC Sub-Clauses 42.1.2 and 42.1.3.

37.8 Notwithstanding GC Sub-Clause 37.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.

### **38. War Risks**

38.1 "War Risks" shall mean any event specified in paragraphs (a) and (b) of GC Sub-Clause 37.1 and any explosion or impact of any mine, bomb, shell, grenade or other projectile, missile, munitions or explosive of war, occurring or existing in or near the country (or countries) where the Site is located.

38.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to:

- (a) destruction of or damage to Facilities, Plant, or any part

thereof;

- (b) destruction of or damage to property of the Employer or any third Party; or
- (c) injury or loss of life,

if such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.

38.3 If the Facilities or any Plant or Contractor's Equipment or any other property of the Contractor used or intended to be used for the purposes of the Facilities shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for:

- (a) any part of the Facilities or the Plant so destroyed or damaged to the extent not already paid for by the Employer;
- (b) replacing or making good any Contractor's Equipment or other property of the Contractor so destroyed or damaged;
- (c) replacing or making good any such destruction or damage to the Facilities or the Plant or any part thereof;

and so far as may be required by the Employer, and as may be necessary for completion of the Facilities.

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GC Clause 39, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GC Sub-Clause 42.1.

If the Employer requires the Contractor to replace or make good on any such destruction or damage to the Facilities, the Time for Completion shall be extended in accordance with GC Clause 40.

38.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any

such increased cost.

- 38.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its Subcontractors' personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of any War Risks, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other.
- 38.6 In the event of termination pursuant to GC Sub-Clauses 38.3 or 38.5, the rights and obligations of the Employer and the Contractor shall be specified in GC Sub-Clauses 42.1.2 and 42.1.3.

## **H. Change in Contract Elements**

### **39. Change in the Facilities**

#### **39.1 Introducing a Change**

- 39.1.1 Subject to GC Sub-Clauses 39.2.5 and 39.2.7, 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.
- 39.1.2 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 or which is necessitated by reason of any act, omission or breach of the Contract by the Employer or its contractors of any tier. The Employer may at its

discretion approve or reject any Change proposed by the Contractor, provided that the Employer shall approve any Change necessitated by reason of any act, omission or breach of the Contract by the Employer or its contractors of any tier or proposed by the Contractor to ensure the safety of the Facilities.

39.1.3 Notwithstanding GC Sub-Clauses 39.1.1 and 39.1.2, 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.

39.1.4 The procedure on how to proceed with and execute Changes is specified in GC Sub-Clauses 39.2 and 39.3, and further details and forms are provided in the Employer's Requirements (Forms and Procedures).

## 39.2 Changes Originating from the Employer

39.2.1 If the Employer proposes a Change pursuant to GC Sub-Clause 39.1.1, 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; and
- (f) effect on any other provisions of the Contract.

39.2.2 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; or
- (c) advise the Contractor that the Employer does not intend to proceed with the Change.

39.2.3 Upon receipt of the Employer's instruction to proceed under GC Sub-Clause 39.2.2 (a), the Contractor shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GC Sub-Clause 39.2.1.

39.2.4 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.

39.2.5 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 GC Clause 39 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.

39.2.6 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 GC Sub-Clause 39.2.2.

39.2.7 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.

If the Parties cannot reach agreement within sixty (60) days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to the Dispute Board in accordance with the provisions of GC Sub-Clause 45.3.

### 39.3 Changes Originating from Contractor

If the Contractor proposes a Change pursuant to GC Sub-Clause 39.1.2, 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 GC Sub-Clause 39.2.1.

Upon receipt of the Application for Change Proposal, the Parties shall follow the procedures outlined in GC Sub-Clauses 39.2.6 and 39.2.7. 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.

**40. Extension of Time for Completion**

40.1 The Time(s) for Completion specified in the PC pursuant to GC 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 GC Clause 39;
- (b) any occurrence of Force Majeure as provided in GC Clause 37, unforeseen conditions as provided in GC Clause 35, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GC Sub-Clause 32.2;
- (c) any suspension order given by the Employer under GC Clause 41 hereof or reduction in the rate of progress pursuant to GC Sub-Clause 41.2;
- (d) any changes in laws and regulations as provided in GC Clause 36;
- (e) any default or breach of the Contract by the Employer, or any activity, act or omission of the Employer, or the Project Manager, or any other contractors employed by the Employer;
- (f) any delay on the part of a Subcontractor, 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;
- (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.

In this respect the Parties hereby expressly agree that it shall be fair and reasonable to extend the Time for Completion irrespective of any delaying factors attributable to the Contractor which operate or operated concurrently with any of the factors mentioned in (a) to (h) of this GC 40.1.

40.2 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. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to a Dispute Board, pursuant to GC Sub-Clause 45.3.

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 this GC Sub-Clause 40.2, 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 GC Sub-Clause 40.1, the amount of such extra costs shall be added to the Contract Price.

#### **41. Suspension**

41.1 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 therefor. 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 GC Clause 39, 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 GC Clause 39 or, where it affects the whole of the Facilities, as termination of the Contract under GC Sub-Clause 42.1.

41.2 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 GC Sub-Clause 12.3, 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 GC Sub-Clause 10.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities,

then the Contractor may by notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

- 41.3 If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GC Clause 41, then the Time for Completion shall be extended in accordance with GC 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 or reduction in the rate of progress by reason of

the Contractor's default or breach of the Contract.

- 41.4 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.

## **42. Termination**

### **42.1 Termination for Employer's Convenience**

42.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GC Sub-Clause 42.1.

42.1.2 Upon receipt of the notice of termination under GC Sub-Clause 42.1.1, the Contractor shall either immediately or upon the date specified in the notice of termination:

- (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below;
- (c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its Subcontractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition; and
- (d) subject to the payment specified in GC Sub-Clause 42.1.3,
  - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination;
  - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the

Contractor and its Subcontractors; and

- (iii) deliver to the Employer all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.

42.1.3 In the event of termination of the Contract under GC Sub-Clause 42.1.1, the Employer shall pay to the Contractor the following amounts:

- (a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination;
- (b) the costs reasonably incurred by the Contractor in the removal of the Contractor's Equipment from the Site and in the repatriation of the Contractor's and its Subcontractors' personnel;
- (c) any amounts to be paid by the Contractor to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;
- (d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Sub-Clause 42.1.2; and
- (e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken with third Parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

#### 42.2 Termination for Contractor's Default

42.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GC Sub-Clause 42.2:

- (a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding

up, other than a voluntary liquidation for the purposes of amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt;

- (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GC Clause 43; or
- (c) if the Contractor, in the judgment of the Employer has engaged in corrupt, collusive, coercive, or fraudulent practices, as defined in GC Clause 6, in competing for or in executing the Contract.

42.2.2 If the Contractor:

- (a) has abandoned or repudiated the Contract;
- (b) has without valid reason failed to commence work on the Facilities promptly or has suspended, other than pursuant to GC Sub-Clause 41.2, the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed;
- (c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause; or
- (d) refuses or is unable to provide sufficient materials, services or labor to execute and complete the Facilities in the manner specified in the program furnished under GC Sub-Clause 18.2 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended;

then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the

Contractor that refers to this GC Sub-Clause 42.2.

42.2.3 Upon receipt of the notice of termination under GC Sub-Clauses 42.2.1 or 42.2.2, the Contractor shall, either immediately or upon such date as is specified in the notice of termination:

- (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below;
- (c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination;
- (d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and
- (e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities.

42.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third Party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer's use of such equipment, any Contractor's Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date

as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site.

42.2.5 Subject to GC Sub-Clause 42.2.6, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as of the date of termination, the value of any unused or partially used Plant on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GC Sub-Clause 42.2.3. Any sums due the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.

42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to GC Sub-Clause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due the Contractor under GC Sub-Clause 42.2.5, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due the Contractor under GC Sub-Clause 42.2.5, the Employer shall pay the balance to the Contractor.

The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

### 42.3 Termination by the Contractor

42.3.1 If:

- (a) the Employer has failed to sign the Contract Agreement within one-hundred and eighty (180) days after receipt of the Letter of Acceptance by the Contractor, has failed to fulfill any conditions listed



in Article 3 (Effective Date) of the Contract Agreement, if applicable, within the stated period, 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 GC Sub-Clause 12.3, 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, 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 or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities,

then the Contractor may give a notice to the Employer thereof, and if the Employer has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Contractor is still unable to carry out any of its obligations under the Contract for any reason attributable to the Employer within twenty-eight (28) days of the said notice, the Contractor may by a further notice to the Employer referring to this GC Sub-Clause 42.3.1, forthwith terminate the Contract.

- 42.3.2 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GC Sub-Clause 42.3.2, if the Employer becomes

bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.

42.3.3 If the Contract is terminated under GC Sub-Clauses 42.3.1 or 42.3.2, then the Contractor shall immediately:

- (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii);
- (c) remove all Contractor's Equipment from the Site and repatriate the Contractor's and its Subcontractors' personnel from the Site; and
- (d) subject to the payment specified in GC Sub-Clause 42.3.4:
  - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination;
  - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and
  - (iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities.

42.3.4 If the Contract is terminated under GC Sub-Clauses 42.3.1 or 42.3.2, the Employer shall pay to the

Contractor all payments specified in GC Sub-Clause 42.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.

42.3.5 Termination by the Contractor pursuant to this GC Sub-Clause 42.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GC Sub-Clause 42.3.

42.4 In this GC Clause 42, the expression “Facilities executed” shall include all work executed, Installation Services provided, and all Plant acquired, or subject to a legally binding obligation to purchase, by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

42.5 In this GC Clause 42, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment.

### **43. Assignment**

43.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other Party, which consent shall not be unreasonably withheld, assign to any third Party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.

## **I. Claims, Disputes and Arbitration**

### **44. Contractor's Claims**

44.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Project Manager, 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.

If the Contractor fails to give notice of a claim within such

period of twenty-eight (28) days, the Time for Completion 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. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

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 Project Manager, the Contractor shall send to the Project Manager 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. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
- (c) the Contractor shall send a final claim within twenty-eight (28) days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

Within forty-two (42) days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He

may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Project Manager shall agree with the Contractor or estimate: (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with GC Clause 40, and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

In the event that the Contractor and the Employer cannot agree on any matter relating to a claim, either Party may refer the matter to the Dispute Board pursuant to GC Clause 45 hereof.

#### **45. Disputes and Arbitration**

##### **45.1 Appointment of the Dispute Board**

Disputes shall be referred to a DB for decision in accordance with GC Sub-Clause 45.3. The Parties shall appoint a DB by the date **stated in the PC**.

The DB shall comprise, as **stated in the PC**, either one or three suitably qualified persons ("the members"), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of activities involved in the performance of the Contract and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree otherwise, the DB shall comprise three persons, one of whom shall serve as chairman.

If the Parties have not jointly appointed the DB twenty-one (21) days before the date stated in the PC and the DB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall

recommend and the Parties shall agree upon the third member, who shall act as chairman.

However, if a list of potential members is **included in the PC**, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the DB.

The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Board Agreement contained in the Appendix to these General Conditions, with such amendments as are agreed between them.

The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration.

If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DB (including each member) shall expire at the end of the Defect Liability Period, as specified in GC Clause 27.

#### 45.2 Failure to Agree on the Composition of the Dispute Board

If any of the following conditions apply, namely:

- (a) the Parties fail to agree upon the appointment of the sole member of the DB by the date stated in the first paragraph of GC Sub-Clause 45.1;
- (b) either Party fails to nominate a member (for approval by the other Party) of a DB of three persons by such date;
- (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DB by such date; or
- (d) the Parties fail to agree upon the appointment of a replacement person within forty-two (42) days after the

date on which the sole member or one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment;

then the appointing entity or official **named in the PC** shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DB. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.

#### 45.3 Obtaining Dispute Board's Decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with the performance of the Contract, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Project Manager, either Party may refer the dispute in writing to the DB for its decision, with copies to the other Party and the Project Manager. Such reference shall state that it is given under this Sub-Clause.

For a DB of three persons, the DB shall be deemed to have received such reference on the date when it is received by the chairman of the DB.

Both Parties shall promptly make available to the DB all such additional information, further access to the Site, and appropriate facilities, as the DB may require for the purposes of making a decision on such dispute. The DB shall be deemed to be not acting as arbitrator(s).

Within eighty-four (84) days after receiving such reference, or within such other period as may be proposed by the DB and approved by both Parties, the DB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue with the performance of the Facilities in accordance with the Contract.

If either Party is dissatisfied with the DB's decision, then either Party may, within twenty-eight (28) days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the DB fails to give its decision within the period of eighty-four (84) days (or as

otherwise approved) after receiving such reference, then either Party may, within twenty-eight (28) days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration.

In either event, this notice of dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in GC Sub-Clauses 45.6 and 45.7, neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Sub-Clause.

If the DB has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party within twenty-eight (28) days after it received the DB's decision, then the decision shall become final and binding upon both Parties.

#### 45.4 Amicable Settlement

Where notice of dissatisfaction has been given under GC Sub-Clause 45.3 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth (56<sup>th</sup>) day after the day on which notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.

#### 45.5 Arbitration

Any dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with GC Sub-Clause 45.4 above and in respect of which the DB's decision (if any) has not become final and binding shall be finally settled by arbitration. Arbitration shall be conducted as follows:

- (a) if the Contract is with foreign Contractors (or if the lead partner is a foreign Contractor, in case of a JV), international arbitration with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration, by one or more arbitrators appointed in accordance with said arbitration rules.
- (b) if the Contract is with domestic Contractors, arbitration with proceedings conducted in accordance with the laws



of the Employer's country.

The place of arbitration shall be a neutral location determined in accordance with the applicable rules of arbitration; and the arbitration shall be conducted in the language for communications defined in GC Sub-Clause 5.3 (Law and Language).

The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, and any decision of the DB, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the DB to obtain its(their) decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Facilities. The obligations of the Parties, the Project Manager and the DB shall not be altered by reason of any arbitration being conducted during the execution of the Facilities.

#### 45.6 Failure to Comply with Dispute Board's Decision

In the event that a Party fails to comply with a DB decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under GC Sub-Clause 45.5. GC Sub-Clauses 45.3 and 45.4 shall not apply to this reference.

#### 45.7 Expiry of Dispute Board's Appointment

If a dispute arises between the Parties in connection with the performance of the Contract, and there is no DB in place, whether by reason of the expiry of the DB's appointment or otherwise:

- (a) GC Sub-Clauses 45.3 and 45.4 shall not apply; and
- (b) the dispute may be referred directly to arbitration under GC Sub-Clause 45.5

## APPENDIX

### A General Conditions of Dispute Board Agreement

#### 1. Definitions

Each “Dispute Board Agreement” is a tripartite agreement by and between:

- (a) the “Employer”;
- (b) the “Contractor”; and
- (c) the “Member” who is defined in the Dispute Board Agreement as being:
  - (i) the sole member of the Dispute Board (“DB”) and, where this is the case, all references to the “Other Members” do not apply, or
  - (ii) one of the three persons who are jointly called the DB and, where this is the case, the other two persons are called the “Other Members”.

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the “Contract” and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

#### 2. General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract,
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than seventy (70) days’ notice of resignation to the Employer and to the Contractor, and the Dispute Board Agreement shall terminate upon the expiry of this period.

#### 3. Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Project Manager. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member’s representations that he/she is:

- (a) experienced in the work which the Contractor is to carry out under the Contract,
- (b) experienced in the interpretation of contract documentation, and

- (c) fluent in the language for communications defined in the Contract.

#### 4. General Obligations of the Member

The Member shall:

- (a) have no interest financial or otherwise in the Employer, the Contractor or the Project Manager, nor any financial interest in the Contract except for payment under the Dispute Board Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Project Manager, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Project Manager, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed procedural rules and with GC Sub-Clause 45.3;
- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Project Manager regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;
- (h) ensure his/her availability for all site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Facilities (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
- (j) treat the details of the Contract and all the DB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and
- (k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

#### 5. General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB's activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for

compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under GC Sub-Clause 45.3, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

## 6. Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for:
  - (i) being available on twenty-eight (28) days' notice for all site visits and hearings;
  - (ii) becoming and remaining conversant with all project developments and maintaining relevant files;
  - (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and
  - (iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Operational Acceptance Certificate is issued for the whole of the Facilities.

With effect from the first day of the calendar month following the month in which Operational Acceptance Certificate is issued for the whole of the Facilities, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

- (b) a daily fee which shall be considered as payment in full for:

- (i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
  - (ii) each working day on site visits, hearings or preparing decisions; and
  - (iii) each day spent reading submissions in preparation for a hearing.
- (c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;
- (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first twenty-four (24) calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the Parties fail to agree on the retainer fee or the daily fee the appointing entity or official named in the PC shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within fifty-six (56) calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer's rights or remedies. In addition to alpackageher rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in accordance with GC Sub-Clause 12.3.

If the Member does not receive payment of the amount due within seventy (70) days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

## 7. Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving forty-two (42) days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8. Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 concerning his impartiality or independence in relation to the Employer or the Contractor, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

9. Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. The arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

**Annex****DISPUTE BOARD GUIDELINES**

1. Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the site at intervals of not more than one hundred forty (140) days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than seventy (70) days, except as required to convene a hearing as described below.
2. The timing of and agenda for each site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of site visits is to enable the DB to become and remain acquainted with the progress of the Contract and of any actual or potential problems or claims, and, as far as reasonable, to prevent potential problems or claims from becoming disputes.
3. Site visits shall be attended by the Employer, the Contractor and the Project Manager and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.
4. The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
5. If any dispute is referred to the DB in accordance with GC Sub-Clause 45.3, the DB shall proceed in accordance with GC Sub-Clause 45.3 and these Guidelines. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:
  - (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case, and
  - (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.
6. The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.
7. Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Project Manager, and to proceed in the absence of any Party who received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
8. The Employer and the Contractor empower the DB, among other things, to:
  - (a) establish the procedure to be applied in deciding a dispute,

- (b) decide upon the DB's own jurisdiction, and as to the scope of any dispute referred to it,
  - (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Guidelines,
  - (d) take the initiative in ascertaining the facts and matters required for a decision,
  - (e) make use of its own specialist knowledge, if any,
  - (f) decide upon the payment of financing charges in accordance with the Contract,
  - (g) decide upon any provisional relief such as interim or conservatory measures,
  - (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute, and
  - (i) appoint, should the DB so consider necessary and the Parties agree, a suitable expert at the cost of the Parties to give advice on a specific matter relevant to the dispute.
9. The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DB shall make and give its decision in accordance with GC Sub-Clause 45.3, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:
- (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;
  - (b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
  - (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:
    - (i) either the Employer or the Contractor does not agree that they do so, or
    - (ii) the absent Member is the chairman and he/she instructs the other Members to not make a decision.



## **Section VIII. Particular Conditions**

## Particular Conditions

### Table of Clauses

PC 1.	Definitions .....	3
PC 2.	Contract Documents .....	3
PC 5.	Law and Language .....	4
PC 7.	Scope of Facilities .....	4
PC 8.	Time for Commencement and Completion .....	4
PC 9.	Contractor's Responsibilities .....	4
PC 10.	Employer's Responsibilities .....	4
PC 11.	Contract Price .....	5
PC 13.	Securities .....	5
PC 14.	Taxes and Duties .....	6
PC 15.	License/Use of Technical Information .....	8
PC 19.	Subcontracting .....	8
PC 20.	Design and Engineering .....	8
PC 21.	Procurement .....	9
PC 22.	Installation .....	9
PC 23.	Test and Inspection .....	9
PC 24.	Completion of the Facilities .....	10
PC 25.	Commissioning and Operational Acceptance .....	10
PC 26.	Completion Time Guarantee .....	10
PC 27.	Defect Liability .....	10
PC 40.	Extension of Time for Completion .....	10
PC 41.	Suspension .....	10
PC 42.	Termination .....	11
PC 45.	Disputes and Arbitration .....	11

## Particular Conditions

<b>PC 1. Definitions</b>	
PC 1.1	<p>Following definitions are being supplemented as below:</p> <p><b>“The Employer</b> “is: Power Grid Company of Bangladesh Limited (PGCB)</p> <p>Registered Office:</p> <p>Red Crescent Concord Tower, 17, Mohakhali Commercial Area (6th floor), Dhaka-1212, Bangladesh</p> <p>Head Office:</p> <p>Institution of Engineers Bangladesh (IEB) Bhaban (4th floor), 8/A, Ramna, Dhaka-1000, Bangladesh</p> <p>Telephone: +880-2-9555475, 9550514, 9558054 Fax No.: +880-2-7171833</p>
PC 1.1	<p><b>“Completion”</b> in the definition, change as follows:</p> <p><b>“Completion”</b> 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 (meaning that all wastes and equipment have been removed from construction sites and camp areas, all areas which have been temporarily used by the project have been restored to the original conditions, all payments for compensation of all damages have been completed, all potential soil and water contaminations have been cleaned to the satisfaction of the authorities, generally potential environmental liabilities have to be transferred to the operator), that all work in respect of Pre-Commissioning of the Facilities or specific part thereof are ready for Commissioning as provided in GC Clause 24 (Completion) hereof.</p> <p><b>“Guarantee Test(s)”</b> in the definition, change as follow:</p> <p><b>“Guarantee Test(s)”</b> means the Factory Acceptance Tests of Power/Auto Transformers and Shunt Reactors.</p> <p>Add the following new definitions:</p> <p><b>“The Engineer”</b> is Tokyo Electric Power Services Co., Ltd. (TEPSCO) in Joint Venture with Nippon Koei Co., Ltd. (NK).</p>
<b>PC 2. Contract Documents</b>	
PC 2.2	<p>Addition of New Sub-Clause 2.2</p> <p>The Contract will be signed in three originals and the Contractor shall be provided with one signed original and the rest will be retained by the Employer.</p>
PC 2.3	<p>Addition of New Sub-Clause 2.3</p> <p>The Contractor shall provide free of cost to the Employer all the engineering data, drawing and descriptive materials submitted with the bid, in at least eight (8) copies to form a part of the Contract immediately after Notification of Award.</p>

PC 2.4	<p>Addition of New Sub-Clause 2.4</p> <p>Subsequent to signing of the Contract, the Contractor at his own cost shall provide the Employer with at least ten (10) true copies of Contract Document within thirty (30) days after signing of the Contract.</p>
<b>PC 5. Law and Language</b>	
PC 5.1	The Contract shall be interpreted in accordance with the laws of: The Peoples' Republic of Bangladesh
PC 5.2	The ruling language is: English
<b>PC 7. Scope of Facilities</b>	
PC 7.3	<p>The Contractor agrees to supply spare parts for a period of years: 5 Years</p> <p>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.</p>
<b>PC 8. Time for Commencement and Completion</b>	
PC.8.1	The Contractor shall commence work on the Facilities within <b>seven (7) days</b> from the Effective Date for determining Time for Completion as specified in the Contract Agreement.
PC 8.2	The time for commissioning of the whole of the Facilities shall be <b>thirty four (34) months</b> from the Effective Date as described in the Contract Agreement.
<b>PC 9. Contractor's Responsibilities</b>	
Following Sub-Clause is added after Sub-Clause 9.6	
PC 9.7	The Contractor shall supply any raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters in an amount sufficient to carry out the pre-commissioning, commissioning and guarantee tests as prescribed and required in the Scope of Works under the Contract.
<b>PC 10. Employer's Responsibilities</b>	
PC 10.2	<p>Replacing Clause 10.2 with the following:</p> <p>Employer shall give administrative support to accord all rights of access for transmission line thereto on or before the date(s) specified in that Appendix at the cost of the Contractor. Such cost shall deem to be included in the Contract Price. Employer shall also give all necessary support for providing legal and physical possession of the transmission Sites and access thereto during the construction period, 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 (Scope of Works and Supply by the Employer) to the Contract Agreement.</p>
PC 10.3	<p>Replacing Clause 10.3 with the following:</p> <p>Employer shall give administrative support to accord permits, approvals and/or licenses</p>

	from local, state or national government authorities or public service undertaking in the country where the Site is located. Employer shall also give all necessary support to the Contractor to pay for all permits, approvals and/or licenses from local, state or national government authorities or public service undertaking in the country where the Site is located which (a) such authorities or undertakings require to obtain the Employer's name, (b) are necessary for 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) to the Contract Agreement. The cost of acquiring such permits, approvals and/or licenses shall be deemed to be included in the Contract Price.
PC 10.5	Replacing Sub-Clause 10.5 with the following:  The Employer shall provide sufficient, properly qualified operating and maintenance personnel for Pre-commissioning, Commissioning and Guarantee Tests. The Employer shall not supply any raw materials, utilities, lubricants, chemicals, catalysts, facilities, services and other matters for Pre-commissioning, Commissioning and Guarantee Tests. The Contractor shall perform Pre commissioning, Commissioning and Guarantee Tests in accordance with the terms and conditions of the Contract, the Project Manager will witness the tests and certify accordingly.
Following Sub-Clause is added after Sub-Clause 10.7	
PC 10.8	The Employer shall be responsible for ensuring security outside the site perimeter against potential employer's risks of external attack such as the act of rebellion and terrorism to the extent required under the Security Plan agreed by the Employer and the Contractor.
<b>PC 11. Contract Price</b>	
PC 11.2	Replacing Sub-Clause 11.2 with the following:  The Contract Price shall be adjusted in accordance with the provisions of Appendix 2 (Price Adjustment) to the Contract Agreement and on the actual quantity of Plant and Installation Services completed by the Contractor during the Contract Execution Stage. Payment will be made on the actual quantity of Plant and Installation Services that will be completed by the Contractor during the Contract Execution Stage.
<b>PC 13. Securities</b>	
PC 13.3.1	The amount of Performance Security, as a percentage of the Contract Price for the Facility or for the part of the Facility for which a separate Time for Completion is provided, shall be: <b>10% of the Contract Price.</b>
PC 13.3.2	The Performance Security amount shall be in the form of an unconditional bank guarantee as per the form included in Section IX, Contract Forms, denominated in the types and proportions of the currencies in which the Contract Price is payable, or in a freely convertible currency acceptable to the Employer. In case the institution issuing the security is located outside the country of Bangladesh, it shall have a correspondent financial institution located in the territory of Bangladesh to make it enforceable.
PC 13.3.3	The performance security shall not be reduced on the date of the Operational Acceptance.  However, if the Defects Liability Period has been extended on any part of the Facilities pursuant to Sub-Clause 27.8 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 is liable for an extended warranty obligation,

	the performance security shall be extended for the period and up to the amount specified in Clause 26.
<b>PC 14. Taxes and Duties</b>	
PC 14.1	<p>The following paragraphs are added at the end of the Sub-Clause 14.1:</p> <p>While making payment to the Contractor or instructing the respective bank to effect the payment to the Contractor, the Employer is entitled to deduct advance income tax (AIT) at source at applicable rate(s), which is required as per law of the Employer's country. In the event of withholding of AIT, the same shall be withheld and deposited to the govt. exchequer in the credit of Contractor by the Employer as per prevailing law of the Employer's country and evidence thereof shall be furnished to the Contractor.</p> <p>The Contractor shall be entirely responsible for payment of all taxes including sales tax or VAT, stamp duties, license fees and other such levies imposed inside the Employer's country, for purchasing any goods or services by them from any supplier(s), which may be required in the course of supply of all items and services mentioned in this contract.</p>
PC 14.2	<p>Replacing Sub-Clause 14.2 with the following:</p> <ol style="list-style-type: none"> <li>Notwithstanding GC Sub-Clauses 14.1 above or where ever, any material import from abroad under Price Schedule No.1 shall be considered as the direct import of the Employer and the Employer shall bear and promptly pay all relevant customs and import duties as well as other local taxes, e.g., a value added tax (VAT), advance income tax (AIT) and other charges, which imposed by the law of the country, that are to be incorporated into the facilities.</li> </ol> <p>The Bidder shall quote bid-prices of all items of the price schedules under this contract exclusive of VAT. The items under Price Schedule No.1 shall be quoted exclusive of custom duties, VAT, AIT and other relevant duties and taxes. If any VAT is applicable for any or all of the items under this contract, the Employer shall bear and deposit the same to the govt. exchequer as per prevailing law of the Employer's Country.</p> <p>The Contractor shall be entirely responsible for payment of all taxes including sales tax or VAT, stamp duties, licence fees and other such levies imposed outside the Employer's Country.</p> <ol style="list-style-type: none"> <li>The Employer shall not be responsible for the payment of customs duties and VAT for the items imported for civil works material specified in Price Schedule No.4. The Contractor shall be responsible for the payment of customs duties and VAT for the items imported for civil works material.</li> <li>The Contractor shall, at his cost and expense, secure any work permit, labour permit, tax clearance, tax exemption certificate and any other authorization, which may be required by the Government of Bangladesh to permit imported personnel of Contractor and his Subcontractors to perform their work at site.</li> <li>The Contractor shall be liable to the Employer for customs duties and taxes paid by the Employer, and for other lawful taxes which may be or may become payable on the Contractor's equipment, tools and supplies imported for the works and subsequently sold in Bangladesh. The Contractor has to obtain the permission of the Employer prior to any sale.</li> <li>To obtain the necessary import permits and satisfy the requirements of the customs authorities, the Employer requires the following documentation:</li> </ol>

	<p>Within 60 days of contract signature, the Contractor shall submit a detailed delivery schedule of plant he is to provide under the contract, indicating the type of equipment, name of the Manufacturer and country of origin. Six copies of the schedule have to be submitted to the Employer.</p> <p>On behalf of the Government of Bangladesh, the Ministry of Commerce annually issues a schedule of import-protected items. The Contractor shall be responsible for advising the Project Manager of any plant he intends to ship under the contract, which is import-protected. The Project Manager has to receive this advice at least four months before the plant reaches Bangladesh in order to permit the Employer to obtain the necessary import permits.</p> <p>For the shipment of plant, shipping documents need to be distributed as follows:</p> <p>(i) To the Company Secretary, Power Grid Company of Bangladesh Ltd., Institution of Engineers Bangladesh (IEB), Bhaban (4th floor), Ramna, Dhaka 1000:</p> <ul style="list-style-type: none"> <li>1 original plus 10 copies of the invoices endorsed by the Contractor</li> <li>1 negotiable plus 10 copies of the bill of lading endorsed by the Contractor</li> <li>1 original plus 10 copies of the insurance certificate</li> <li>10 copies of packing lists</li> <li>10 copies of the freight memo</li> <li>1 original plus 10 copies of the certificate of origin</li> <li>10 copies of the insurance invoice</li> <li>10 copies of the application for payment</li> <li>10 copies of the pre-shipment inspection certificate or waiver thereof</li> </ul> <p>(ii) To the Project Manager:</p> <ul style="list-style-type: none"> <li>2 copies of the above documentation.</li> </ul> <p>(iii) To the Representative of Project Manager:</p> <ul style="list-style-type: none"> <li>2 copies of the above documentation.</li> </ul> <p>f. Import licenses and permits for the plant shall be obtained by the Employer at no cost to the Contractor. No import and export customs duties levied on goods of any sort or personal effects imported for consumption by the Contractor's imported personnel shall be paid by the Employer.</p> <p>g. If, however, after payment of customs and import duties by the Employer, goods are discovered to have arrived in Bangladesh in such a badly damaged condition due to the Contractor's negligence that they have to be replaced by the contractor, the Contractor will be responsible for the payment of the customs and import duties levied on all of the replacement of the imported plant and machinery.</p> <p>h. The Contractor will be responsible for payment of all costs, with the exception of those costs that are specifically to the account of the Employer as described in SCC 14.2(a), related to clearances of plant and Contractor's equipment at the port of entry. The Contractor shall perform all necessary customs formalities for clearance of materials from the port in consultation with PGCB.</p> <p>i. It is the Contractor's responsibility to ensure that all negotiable shipping documentation and all necessary import information are forwarded to the Employer so the Employer receives them in Bangladesh at least 14 days prior to the arrival of the ship in the Bangladesh port. Demurrage and any other charges resulting from the lack of documents or incorrect documentation received in Bangladesh shall be to the Contractor's account.</p>
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<b>PC 15. License/Use of Technical Information</b>	
<b>PC 15.2</b>	<p>Replacing Sub-Clause 15.2 with the following:</p> <p>The copyright in all drawings, documents and other materials containing data and information regarding towers and poles furnished to the Employer by the Contractor herein shall remain vested in the Employer 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 also be vested in Employer.</p>
<b>PC 19. Subcontracting</b>	
Following Sub-clauses are added after Sub-clause 19.5	
PC 19.6	The Contractor shall not subcontract the whole of the Facilities.
<b>PC 20. Design and Engineering</b>	
Following Sub-clauses are added after Sub-clause 20.3.7	
PC 20.3.8	Drawings are to be submitted for approval on paper prints, folded to A4 size with the project title block and drawing numbers fully visible.
PC 20.3.9	<p>The Contractor shall mention Employer's drawing numbers to all drawings prior to submittal. Following award of the contract the Employer and Contractor will review the numbering system, familiarize each other with requirements, and agree on the numbering system to be applied.</p> <p>Comprehensive cross references are to be included on drawings and the Contractor shall include the Employer's drawing number in the cross references. At each and every issue of a drawing the revision shall be raised, and details given in revision boxes on the drawing. Comprehensive details of revisions are to be given and phrases such as "REVISED", "UPDATED", "MODIFIED" or similar are not acceptable. Reference to any drawing in communications shall include the Employer's drawing number.</p>
PC 20.3.10	<p>The Contractor shall submit four (4) copies of drawings of the plant and works for formal approval to the Employer. A Program of 'drawing submission' shall be agreed with the Contractor following contract award. Drawings issued in accordance with this Program shall take account of the time periods necessary for postage, and approval by the Employer, to ensure that approved drawings are available prior to manufacture. For site construction works, 4 copies of "Construction Issue" drawings are to be submitted and made available, on site, at least 21 days prior to the commencement of the works.</p> <p>Where appropriate, the drawings shall be accompanied by supporting calculations. The Contractor shall ensure that drawings of a specific aspect of the Works are fully coordinated and submitted together in a logical sequence.</p> <p>Should the Contractor revise a drawing for any reason following approval by the Employer the revised drawing is to be resubmitted for re Approval by the Employer, the original approval automatically being void.</p>
PC 20.3.11	<p>During construction of the Works on the site, the Contractor shall ensure that all departures, modifications and corrections to the approved drawings are recorded. All such changes to the drawings are to be marked in red to show the "as built" state and one set of "as built" drawings are to be available on the site at all times.</p> <p>On completion of construction and commissioning the Contractor shall provide four (4) copies of any drawing which has required amendment to show the "as built" state to the Project Manager. These drawings shall be issued by the Contractor prior to the issue of the Completion Certificate.</p>



	Following examination of the "as built" drawing the Project Manager shall return one copy to the Contractor indicating Approval of the construction modifications, or further modifications required to satisfy the requirements of the specifications.
<b>PC 21. Procurement</b>	
PC 21.1	The text "Sub-Clause 14.2" is replaced by "Clause 14".
PC 21.4	The text "Sub-Clause 14.2" is replaced by "Clause 14".
<b>PC 22. Installation</b>	
PC 22.2.4	<p>Rates of Wages and Conditions of Labor</p> <p>The following text is added at the end of Sub-clause 22.2.4:  "(c) The Contractor shall:</p> <ul style="list-style-type: none"> <li>(i) comply with all applicable labor laws and related international treaty obligations of the Employer and shall not employ child labor, as defined under Bangladesh law;</li> <li>(ii) provide safe working conditions for male and female workers;</li> <li>(iii) carry out HIV/AIDS and human trafficking prevention and awareness campaigns in the campsites and corridors of influence;</li> <li>(iv) engage women workers as wage laborers depending on their skill;</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>(v) provide equal wages for equal work between men and women." </li></ul>
PC 22.2.5	<p>Working Hours</p> <p>Normal working hours are from 9:00am to 5:00pm.</p>
Following Sub-Clause is added after Sub-Clause 22.8	
PC 22.9	<p>The Contractor shall:</p> <ul style="list-style-type: none"> <li>(a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP, the RP and any small ethnic community peoples plan (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;</li> <li>(b) make available a budget for all such environmental and social measures;</li> <li>(c) provide the Employer with a written notice of any unanticipated environmental, resettlement or small ethnic community peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, the RP or any small ethnic community peoples plan;</li> <li>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</li> <li>(e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</li> </ul>
<b>PC 23. Test and Inspection</b>	
PC 23.3	<p>The following paragraph is added at the end of this Sub-Clause:</p> <p>For notification of testing outside Employer's country, at the place of manufacture, four (4) weeks shall be deemed as reasonable advance notice.</p>

<b>PC 24. Completion of the Facilities</b>	
Following Sub-Clause is added after Sub-Clause 24.7	
PC 24.8	Upon the completion of construction, the Contractor shall fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition as recorded by the Contractor in consonance with its obligation in Clause 21.1.
<b>PC 25. Commissioning and Operational Acceptance</b>	
PC 25.1.1	<p>The following paragraph is added at the end of this Sub-Clause.</p> <p>Date of Completion shall be within 32 months from the Effective Date of the Contract Agreement.</p> <p>Commissioning shall be completed within 2 months from the Date of Completion.</p>
PC 25.3.1	<p>Addition of New Sub-Clause 25.3.1 (e) after Sub-Clause 25.3.1(d)</p> <p>(e) The Contractor shall complete his obligation to the Employer's satisfaction as specified in Clause- 27.</p>
<b>PC 26. Completion Time Guarantee</b>	
PC 26.2	<p>Applicable rate for liquidated damages: 0.5% of the Contract Price per week in the proportions of currencies in which the Contract Price is payable.</p> <p>Maximum deduction for liquidated damages: 10% of the Contract Price.</p>
PC 26.3	No bonus will be given for earlier Completion of the Facilities or part thereof.
<b>PC 27 Defect Liability</b>	
PC 27.6	<p>The following paragraph is added at the end of this sub clause.</p> <p>The tests in character for repaired equipment / facilities shall be in accordance with the provisions of the Technical Specifications / Employer's Requirements. However, for replaced equipment / facilities, the tests in character shall in any case be not less than what has already been agreed by the Employer and the Contractor for the original equipment/part of the Facilities.</p>
PC 27.9	Replace the "completion of facilities" with "commissioning" in line 5.
<b>PC 40 Extension of Time for Completion</b>	
PC 40.1	<p>Replacing of Sub-Clause 40.1 (g) and (h) with the following:</p> <p>(g) delays attributable to the Employer or caused by customs;</p> <p>(h) aggravation of security situation in the Country in such a manner that the Contractor cannot reasonably perform his obligations under the Contract; or</p> <p>(i) any other matter specifically mentioned in the Contract.</p>
<b>PC 41 Suspension</b>	
PC 41.2	<p>The following paragraph is added at the end of this Sub-Clause.</p> <p>(c) the Employer fails to comply with the Security Plan agreed by the Employer and the Contractor, the Contractor may, after giving 14 days' notice to the Employer and the Project Manager, suspend the work (or reduce the rate of the work) unless and until the Contractor receives reasonable evidences of compliance with the</p>

	Security Plan by the Employer.
<b>PC 42 Termination</b>	
PC 42.3.1	<p>The following paragraph is added after (b) of this Sub-Clause.</p> <p>(c) the Employer fails to comply with the Security Plan agreed by the Employer and the Contractor,</p>
<b>PC 45. Disputes and Arbitration</b>	
PC 45.1	<p>The DB shall be appointed within 28 days after the Effective Date.</p> <p>The DB shall be one sole member. The specific member shall be decided in consultation with the contractor after signing the contract.</p>
PC 45.2	In case of failure to agree on the composition of the Dispute Board, the ICC shall be requested to appoint the member of the Dispute Board for International Contracts.



## **Section IX. Contract Forms**



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**Table of Forms**

<b>Notification of Award - Letter of Acceptance .....</b>	<b>1</b>
<b>Contract Agreement .....</b>	<b>3</b>
Appendix 1. Terms and Procedures of Payment.....	6
Appendix 2. Price Adjustment.....	8
Appendix 3. Insurance Requirements .....	10
Appendix 4. Time Schedule.....	13
Appendix 5. List of Major Items of Plant and Installation Services and List of Approved Subcontractors .....	14
Appendix 6. Scope of Works and Supply by the Employer .....	15
Appendix 7. List of Documents for Approval or Review.....	16
Appendix 8. Functional Guarantees.....	17
<b>Performance Security Form - Bank Guarantee .....</b>	<b>20</b>
<b>Bank Guarantee Form for Advance Payment.....</b>	<b>20</b>





**Notification of Award - Letter of Acceptance**

*[on letterhead paper of the Employer]*

To,

(Name and Address of the Contractor)

Ref: (i) Invitation for Bids No. ....dated  
..... And Bid Proposal of the bidder dated.....

Dear Sirs,

With reference to the bidding document for the above Contract and your bid proposal submitted on (Date of Bid Submission) as well as the subsequent clarifications (if any), letter of discount on Price on the proposal (if any) submitted by you, Power Grid Company of Bangladesh Ltd. (PGCB) intends to award you the Contract No. ....for (Project Name) with the following terms and conditions:

1. Contract Price

The Contract Price shall be (amount in Foreign Currency plus Local Currency) (In words.....).

2. Completion Period

Time for completion of whole Facilities shall be .....months from the Effective Date as described in the Sub-clause 8.2 , Section 8 - Particular Conditions of Contract, Volume 1 of the Bidding Document.

3. Tax & VAT

Tax and VAT shall be payable as per Clause 14: Taxes and Duties, Section 7 – General Conditions of Contract and Section 8 – Particular Conditions of Contract, Volume 1 of the Bidding Document.

4. Performance Security

A performance security amounting ..... percent of the Contract Price has to be submitted by you within twenty eight (28) days of the receipt of this Notification of Award in accordance with Sub-clause ITB 44.1 and GCC 13.3, Volume 1 of the Bidding Documents.

5. Liquidated Damages

Applicable rate of liquidated damages shall be .....of the Contract price per week in the proportions of currencies in which the Contract Price is payable and maximum deduction for liquidated damages shall be .....of the Contract Price as per Sub-clause 26.2, Section 8 – Particular Conditions of Contract and item 4.1 & 4.4, Appendix 8 – Functional Guarantees, Contract Forms, Volume 1 of the Bidding Document.

6. The execution of the Contract Agreement shall be in accordance with the terms and conditions laid down in the biddings document and subsequent addendum & clarification.

You are, therefore, requested to convey your written and unconditional acceptance of this Notification of Award within .....(deadline) and submit ..... sets of Draft Contract Documents within (date). You are also requested to send your authorized representative(s) within (date) for finalization of Contract Documents.

A copy of the unsigned Contract Agreement is enclosed for your necessary actions as per ITB 43, Section 1 – Instructions to Bidders, Volume 1 of the Bidding Document.

Thanking you.

Encl. As stated (... pages).

Yours sincerely,

Company Secretary

Attachment: Contract Agreement

## Contract Agreement

THIS AGREEMENT is made the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,

BETWEEN

(1) M/S. POWER GRID COMPANY OF BANGLADESH LTD. (PGCB), an Enterprise of Bangladesh Power Development Board, duly incorporated under the Company's Act, 1994 of Bangladesh, having its Principal place of business at Institution of Engineers Bangladesh Bhaban 3rd and 4th Floor, Ramna, Dhaka-1000, Bangladesh represented by its \_\_\_\_\_, Mr. (hereinafter called "the Employer"), and (2) \_\_\_\_\_[*insert name of Contractor*], a corporation incorporated under the laws of \_\_\_\_\_[*insert country of Contractor*] and having its principal place of business at \_\_\_\_\_[*insert address of Contractor*] (hereinafter called "the Contractor").

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, complete and commission certain Facilities, viz. 400/230kV GIS Substation (hereinafter called "the Facilities"), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

### **Article 1. Contract Documents**

#### **1.1 Contract Documents** (Reference General Conditions ("GC") Clause 2)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement and the Appendices hereto
- (b) Power of Attorney issued by Contractor for signing the Contract
- (c) Letter of Technical Bid
- (d) Letter of Price Bid and Price Schedules submitted by the Contractor
- (e) Price Schedules including arithmetic correction and/or discount (if any)
- (f) Performance Security
- (g) Minutes of Contract Negotiation Meeting(s)
- (h) Letter of written and Unconditional Acceptance of the Notification of Award
- (i) Notification of Award
- (j) Signed Declaration of Undertaking
- (k) All Addenda and Clarifications
- (l) Particular Conditions of Contract
- (m) General Conditions of Contract
- (n) Specifications (Volume 2 of 3 of the Bidding Document)
- (o) Remaining portion of the Bidding Document

- (p) Replies against PGCB's Clarification (if any)
- (q) Clarification sought by the Employer (if any)
- (r) Technical Proposal of Bidder (Contractor)
- (s) Acknowledgment of Compliance with Guideline for Procurement under Japanese ODA Loan (Form ACK)

1.2 Order of Precedence (Reference GC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions.

**Article 2. Contract Price and Terms of Payment**

2.1 Contract Price (Reference GC Clause 11)

The Employer hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of: \_\_\_\_\_[insert amount(s) in foreign currency(ies) in words and figures] as specified in Price Schedule No. 6 (Grand Summary), and \_\_\_\_\_[insert amount in local currency in words and figures], or such other sums as may be determined in accordance with the terms and conditions of the Contract.

2.2 Terms of Payment (Reference GC Clause 12)

The Contract Price shall be paid by the Employer to the Contractor at the times, in the manner, and in accordance with the provisions of Appendix 1 (Terms and Procedures of Payment) hereto.

In the event that the amount payable under all the elements of the Contract Price shall be adjusted in accordance with GC 11.2.

**Article 3. Effective Date**

3.1 Effective Date (Reference GC Clause 1)

The Effective Date from which the Time for Completion of the Facilities shall be counted is the date when all of the following conditions have been fulfilled:

- (a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor;
- (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee;
- (c) The Employer has paid the Contractor the advance payment.

**Article 4. Communications**

4.1 The address of the Employer for notice purposes, pursuant to GC Clause 4.1 is: Project Director, Power Grid Company of Bangladesh Limited.

4.2 The address of the Contractor for notice purposes, pursuant to GC Clause 4.1 is: \_\_\_\_\_ [insert Contractor's address].

**Article 5.**

5.1 The Appendices listed in the attached List of Appendices shall be

**Appendices**

deemed to form an integral part of this Contract Agreement.

- 5.2 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 the day and year first above written.

Signed by, for and on behalf of the Employer

\_\_\_\_\_  
*[Signature]*

\_\_\_\_\_  
*[Title]*

in the presence of \_\_\_\_\_

Signed by, for and on behalf of the Contractor

\_\_\_\_\_  
*[Signature]*

\_\_\_\_\_  
*[Title]*

in the presence of \_\_\_\_\_

**APPENDICES**

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

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

In accordance with the provisions of GC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Breakdown given in the section on Price Schedules. Payments will be made in the currencies quoted by the Bidder. Applications for payment in respect of part deliveries may be made by the Contractor as work proceeds.

### **TERMS OF PAYMENT**

#### **Schedule No. 1. Plant and Equipment Supplied from Abroad**

In respect of plant and equipment supplied from abroad, the following payments shall be made:

Ten percent (10%) of the total CIP amount as an advance payment within twenty-one (21) days after receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and equipment delivered to the site, as evidenced by shipping and delivery documents.

Eighty percent (80%) of the total or pro rata CIP amount upon Incoterm "CIP", upon delivery to Site, as evidenced by Post Landing Inspection (PLI) Report and within forty-five (45) days after receipt of invoice

Five percent (5%) of the total or pro rata CIP amount upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata CIP amount upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

#### **Schedule No. 2. Plant and Equipment Supplied from within the Employer's Country**

In respect of plant and equipment supplied from within the Employer's country, the following payments shall be made:

Ten percent (10%) of the total EXW amount as an advance payment within twenty-one (21) days after receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and equipment delivered to the site, as evidenced by shipping and delivery documents.

Eighty percent (80%) of the total or pro rata EXW amount upon Incoterm "Ex-Works," upon delivery to the carrier within forty-five (45) days after receipt of invoice and documents, as evidenced by the Factory Acceptance Test Report and a Road Consignment Note.

Five percent (5%) of the total or pro rata EXW amount upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata EXW amount upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

#### **Schedule No. 3. Design Services**

In respect of design services for both the foreign currency and the local currency portions, the following payments shall be made:

Ten percent (10%) of the total design services amount as an advance payment within twenty-one (21) days after receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer.

Ninety percent (90%) of the total or pro rata design services amount upon approval of design in accordance with GC Clause 20 by the Project Manager within forty-five (45) days after receipt of invoice.

#### Schedule No. 4. Installation Services

In respect of installation services for both the foreign and local currency portions, the following payments shall be made:

Ten percent (10%) of the total installation services amount as an advance payment within twenty-one (21) days after receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of work performed by the Contractor as evidenced by the invoices for installation services.

Eighty percent (80%) of the measured value of work performed by the Contractor, as identified in the said Program of Performance, during the preceding month, as evidenced by the Employer's authorization of the Contractor's application, will be made monthly within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer's authorization of the Contractor's monthly applications, upon issue of the Completion Certificate, within forty-five (45) days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer's authorization of the Contractor's monthly applications, upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of invoice.

In the event that the Employer fails to make any payment on its respective due date, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate (to be calculated at the annual rate of one (1) percentage point above the discount rate of the Bangladesh Bank of the currency/(ies) of payment) for the period of delay until payment has been made in full.

### **PAYMENT PROCEDURES**

The procedures to be followed in applying for certification and making payments shall be as follows:

All payments shall be made through Commitment Procedure and Transfer Procedure for Japanese ODA Loans by JICA.

Detailed payment procedure shall be referred to the JICA's web site, Brochure on Transfer Procedure for Japanese ODA Loans, December 2015.

## Appendix 2. Price Adjustment

### Price Adjustment Formula

Prices payable to the Contractor, in accordance with the Contract, shall be subjected to adjustment during performance of the Contract to reflect changes in the cost of labor and material components, in accordance with the following formula. Each percentage of the formulae (except the fixed element) can be changed by the contractor.

#### (1) Transformer and Shunt Reactor

$$P_1 = P_0 \times \left( a + b \frac{L_1}{L_0} + c \frac{M_{11}}{M_{01}} + d \frac{M_{12}}{M_{02}} + e \frac{M_{13}}{M_{03}} + f \frac{M_{14}}{M_{04}} \right) - P_0$$

Where,

$P_1$  = Price Adjustment amount of power transformer and shunt reactor, payable to the Contractor

$P_0$  = Contract Price (base price)

$a$  = percentage of fixed element in Contract Price ( $a = 15\%$ )

$b$  = percentage of labour component in Contract Price ( $b = 20\%$ )

$c$  = percentage of material Core (Si steel) component in Contract Price ( $c = 22\%$ )

$d$  = percentage of material (Copper) component in Contract Price ( $d = 25\%$ )

$e$  = percentage of material (Steel) component in Contract Price ( $e = 15\%$ )

$f$  = percentage of material (Zinc) component in Contract Price ( $f = 3\%$ )

$L_0, L_1$  = labour indices applicable to the appropriate industry in the country of origin of the base date and the date for adjustment, respectively

$M_{01}, M_{11}$  = material (Core, Si steel) indices applicable to the appropriate industry in the country of origin of the base date and the date for adjustment, respectively

$M_{02}, M_{12}$  = material (Copper) indices applicable to the appropriate industry in the country of origin of the base date and the date for adjustment, respectively

$M_{03}, M_{13}$  = material (Steel) indices applicable to the appropriate industry in the country of origin of the base date and the date for adjustment, respectively

$M_{04}, M_{14}$  = material (Zinc) indices applicable to the appropriate industry in the country of origin of the base date and the date for adjustment, respectively

### Conditions Applicable To Price Adjustment

The Bidder shall indicate the source of labor and materials indices and the base date indices in its Bid.



Item	Country of Origin; Currency of index	Source of Indices Used Title / definition	Base Date Indices Value Date
L <sub>0</sub> , L <sub>1</sub> (Labour)			
M <sub>01</sub> , M <sub>11</sub> (Si Steel)			
M <sub>02</sub> , M <sub>12</sub> (Copper)			
M <sub>03</sub> , M <sub>13</sub> (Steel)			
M <sub>04</sub> , M <sub>14</sub> (Zinc)			

The Base Date shall be the date twenty eight (28) days prior to the Bid opening date.

The date of adjustment shall be the mid-point of the sequences shown in the Program of Performance submitted by the Bidder, pursuant to GC 18.2, from design until the end of manufacture of the transformer and shunt reactor.

The following conditions shall apply:

- (a) No price increase will be allowed beyond the original delivery date unless covered by an extension of time awarded by the Employer under the terms of the Contract. No price increase will be allowed for periods of delay for which the Contractor is responsible. The Employer will, however, be entitled to any price decrease occurring during such periods of delay.
- (b) If the currency in which the Contract price,  $P_o$ , is expressed is different from the currency of the country of origin of the labor and/or materials indices, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.
- (c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

### Appendix 3. Insurance Requirements

#### Insurances to be Taken Out by the Contractor

In accordance with the provisions of GC Clause 34, 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.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
110% of the Contract Price	-	Power Grid Company of Bangladesh Limited and Contractor	Supplier's or manufacturer's works or stores	Contractor's store in Bangladesh

(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.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
110% of the Contract Price		Power Grid Company of Bangladesh Limited and Contractor/Subcontractor	-	-

(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.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
-	-	Power Grid Company of Bangladesh Limited and Contractor	-	-

(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> [in currency(ies)]	<b>Deductible limits</b> [in currency(ies)]	<b>Parties insured</b> [names]	<b>From</b> [place]	<b>To</b> [place]
NIL	NIL	NIL	NIL	NIL

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GC Sub-Clause 34.1, except for the 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 GC Sub-Clause 34.1, except for the Cargo, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insured's 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**

*[If the Employer is proposing to take out any or all of the above insurances itself, or any other insurances in respect of the Facilities, either in its own name or in the joint names of itself and the Contractor, it shall give details below prior to issuing the Bidding Documents. Under the terms of the Contract, the Contractor and the Contractor's Subcontractors shall be named as co-insured under all such policies.]*

The Employer shall at its expense take out and maintain in effect during the performance of the Contract the following insurances.

Details:

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

**Appendix 4. Time Schedule**

Time for completion of successful commissioning of whole Facilities shall be **34 months** from the Effective Date as described in the Sub clause GC 1.1 & GC 8.2, Section 8 - Particular Conditions of Contract, Volume 1 of 3 of the Bidding Document and as per the Article 3 of this Contract Agreement.

### **Appendix 5. List of Major Items of Plant and Installation Services and List of Approved Subcontractors**

A list of major items of Plant and Installation Services is provided below.

The following Subcontractors and/or manufacturers are approved for carrying out the items of the Facilities indicated below. Where more than one Subcontractor are 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 GC Sub-Clause 19.1, 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 Installation Services</b>	<b>Manufacturers</b>	<b>Nationality</b>
<b>Power Transformer</b>		
<b>Shunt Reactor</b>		
<b>420kV &amp; 245kV GIS</b>		
<b>420kV Circuit Breaker (GCB)</b>		
<b>420kV Disconnecting Switch (AIS)</b>		
<b>400kV &amp; 230kV Gas Insulated Line (GIL)</b>		
<b>400kV Instrument Transformer(AIS)</b>		
<b>420kV &amp; 245kV Surge Arrester</b>		
<b>400kV Wave Trap</b>		
<b>Protection Relays</b>		
<b>Substation Automation System (SAS)</b>		
<b>SCADA System</b>		
<b>Fiber Optic Multiplexer Equipment</b>		
<b>110V &amp; 48V Battery</b>		
<b>Battery Charger</b>		

### Appendix 6. Scope of Works and Supply by the Employer

The following Personnel, Facilities, works and supplies will be provided/supplied by the Employer, and the provisions of GC Clauses 10, 21 and 24 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 GC Sub-Clause 18.2.

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

Personnel	Charge to Contractor (if any)
Employer's personnel will be engaged to supervise and certify the works and commissioning & guarantee test. Name of the personnel will be informed later on.	No charge to Contractor.

Facilities	Charge to Contractor (if any)
-	-

Works	Charge to Contractor (if any)
Employer will not do any works. If Contractor do not reinstate the Employer's existing facilities (Civil, fencing etc.) Employer will complete it.	Will be deducted from contractor's payment.

Supplies	Charge to Contractor (if any)
The Employer will not generally supply any machinery/Equipment and materials to the Contractor. In the event of any such requirement and subject to availability, the Employer may extend the facilities to use such machinery and materials by the Contractor on rental charge/cost under normal terms and conditions.	The Contractor will be required to pay the amount to be determined by the Employer for such facilities.

**Appendix 7. List of Documents for Approval or Review**

Pursuant to GC Sub-Clause 20.3.1, the Contractor shall prepare, or cause its Subcontractor to prepare, and present to the Project Manager in accordance with the requirements of GC Sub-Clause 18.2 (Program of Performance), the following documents for

Refer to the Schedule I of the Volume 3 of 3 of the Bidding Documents.



## Appendix 8. Functional Guarantees

### 1. General

This Appendix sets out for Functional Guarantees for the losses of Transformers and Shunt Reactors supplied by the Contractor. The following aspects are specified:

- (a) the functional guarantees proposed by the Contractor shall be referred to in GC Clause 28 (Functional Guarantees);
- (b) the preconditions to the validity of the functional guarantees
- (c) the minimum level of the functional guarantees; and
- (d) the formula for calculation of liquidated damages for failure to attain the functional guarantees.

### 2. Preconditions

The Contractor gives the functional guarantees proposed in his Technical Bid (losses of the transformers and shunt reactors) stated in 4.3.5 and 16.4 of Volume 2 of 3 “Losses and Evaluation of Losses”.

### Form FUNC-1 “Functional Guarantee”

Functional Guarantee
1. 400/235/33kV, 3-Phase, 500/750MVA Auto Transformers a) No Load Loss (kW) : b) Load Loss at CMR (kW) : c) Auxiliary Loss at CMR (kW) : d) Total efficiency @ CMR (%)
2. 400kV, 3-Phase, 40 MVar, Shunt Reactors a) No Load Loss (kW) : b) Load Loss at CMR (kW) : c) Auxiliary Loss at CMR (kW) :
3. 400kV, 3-Phase, 25 MVar, Shunt Reactors a) No Load Loss (kW) : b) Load Loss at CMR (kW) : c) Auxiliary Loss at CMR (kW) :
4. 33/0.415 kV, 3-Phase, 500kVA Auxiliary Transformers a) No Load Loss (kW) b) Load Loss at CMR (kW)

### 3. Functional Guarantees

Subject to compliance with the foregoing preconditions, the Contractor guarantees are assessed by the following tests at Manufacturer's factory:

### 3.1 Factory Acceptance Test

(Routine Tests for Power Transformers)

Item iv) Load loss at normal, maximum and minimum taps.

Item v) No load loss and no load current at normal voltage  $U_n$  and at +5%  $U_n$  and at +10%  $U_n$ .

(Routine Tests for Shunt Reactors)

Item C Measurement of losses

## 4. Failure in Guarantees and Liquidated Damages

### 4.1 Failure to Attain Guaranteed Losses

Following liquidated damages for the excess of guaranteed losses shall be applied.

Bangladesh Taka per kW of Guaranteed Loss (Taka/kW)			
	No Load Loss	Load Loss at CMR	Auxiliary Loss at CMR
Auto/Auxiliary Transformers and Shunt Reactors	600,000	300,000	300,000

The acceptance of transformers/shunt reactors yielding component losses higher than the guaranteed values shall be governed by either of the following;

- i) Component losses in excess of guaranteed values but within the tolerance permitted under IEC60076 Part 1.

Transformers shall be accepted subject to full compliance with all technical particulars including temperature rise at CMR and subject to the Contractor accepting deduction from the Contract Price of changes for each kW on part thereof component losses in excess of the guaranteed values at the above evaluation rate.

- ii) Component losses in excess of guaranteed values and exceeding the tolerance permitted under IEC 60076 Part 1.

The acceptance of transformers shall be entirely at the discretion of the Employer including rejection of the transformers and subject to the Contractor accepting the deduction from the Contract Price of changes for each kW on part thereof of components losses in excess of the guaranteed values, at the above loss evaluation rates.

In the event of transformer yielding, component and total losses, which are either equal to or below the guaranteed values, the bidder will not be entitled to any premium in respect of reduction in losses below the guaranteed values.

4.2 Raw Materials and Utilities Consumption in Excess of Guaranteed Level

Not used.

4.3 Minimum Levels

- (a) Any component losses in excess of guaranteed values but within the tolerance permitted under IEC 60076 Part 1.

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 ten percent (10%) of the Contract Price.

## Performance Security Form - Bank Guarantee

[*Guarantor letterhead or SWIFT identifier code*]

**Beneficiary:** [*insert name and address of Employer*]

**Date:** [*insert date of issue*]

**PERFORMANCE GUARANTEE No.:** [*insert guarantee reference number*]

**Guarantor:** [*insert name and address of place of issue, unless indicated in the letterhead*]

We have been informed that [*insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture*] (hereinafter called “the Applicant”) has entered into Contract No. [*insert reference number of the Contract*] dated [*insert date*] with the Beneficiary, for the execution of [*insert name of Contract and brief description of Facilities*] (hereinafter called “the Contract”).

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [*insert amount in words*] ([*insert amount in figures*])<sup>1</sup>, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary’s complying demand supported by the Beneficiary’s statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for its demand or the sum specified therein.

This guarantee shall expire no later than the earlier of:

(a) twelve (12) months after our receipt of either (1) or (2) below;

(1) a copy of the Operational Acceptance Certificate; or

(2) a registered letter from the Applicant (i) attaching a copy of its notice requesting issuance of the Operational Acceptance Certificate and (ii) stating that the Project Manager has failed to issue such Certificate

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<sup>1</sup> The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Letter of Acceptance and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

within the time required or provide in writing justifiable reasons why such Certificate has not been issued, so that Operational Acceptance is deemed to have occurred.

Or,

(b) the \_\_\_\_ day of \_\_\_\_, 2\_\_\_\_.<sup>1</sup>

Consequently, any demand for payment under this guarantee must be received by the Guarantor at its office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458<sup>2</sup>, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

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[signature(s)]

*[Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.]*

Note to Bidder:

If the institution issuing the performance security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.

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<sup>1</sup> Insert the date twenty-eight (28) days after the expected expiration date of the Defect Liability Period.

<sup>2</sup> As the case may be, ICC Publication No. 758 (or subsequent ICC Publications) may be used. In such cases, modify the Publication number.

## Bank Guarantee Form for Advance Payment

[Guarantor letterhead or SWIFT identifier code]

**Beneficiary:** [insert name and address of the Employer]

**Date:** [insert date of issue]\_\_\_\_\_

**ADVANCE PAYMENT GUARANTEE No.:** [insert guarantee reference number]

**Guarantor:** [insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called “the Applicant”) has entered into Contract No.[insert reference number of the Contract] dated [insert date] with the Beneficiary, for the execution of [insert name of Contract and brief description of Facilities] (hereinafter called “the Contract”).

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of [insert amount in words] ([insert amount in figures]) is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in words]([insert amount in figures]<sup>1</sup>) upon receipt by us of the Beneficiary’s first demand in writing accompanied by a written statement stating that the Applicant is in breach of its obligation under the Contract because the Applicant used the advance payment for purposes other than toward the execution of the Works.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary’s bank stating that the advance payment referred to above has been credited to the Applicant on its account number [insert number] at [insert name and address of Applicant’s bank].

The maximum amount of this guarantee shall be progressively reduced in proportion to the value of each part-shipment or part-delivery of plant and equipment to the site, as

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Insert the date twenty-eight (28) days after the expected expiration date of the Defect Liability Period. The Employer should note that from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: “The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [e.g. six months], in response to the Employer’s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.”

indicated in copies of the relevant shipping and delivery documents that shall be presented to the Guarantor. This guarantee shall expire, at the latest, upon the Guarantor's receipt of documentation indicating full repayment by the Applicant of the amount of the advance payment, or on the \_\_\_\_ day of \_\_\_\_\_, 2\_\_\_\_, whichever is earlier<sup>1</sup>. Consequently, any demand for payment under this guarantee must be received by the Guarantor at its office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458<sup>1</sup>.

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[signature(s)]

*[Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.]*

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- 1 As the case may be, ICC Publication No. 758 (or subsequent ICC Publications) may be used. In such cases, modify the Publication number.