
REQUEST FOR PROPOSALS
RFP# CCPP272-01



საქართველოს ნავთობისა და გაზის კორპორაცია
GEORGIAN OIL & GAS CORPORATION

**EPC/Turn Key Project for Construction of 272 MW Combined
Cycle Thermal Power Plant - Gardabani 3**

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SECTION 1. LETTER OF INVITATION

August 24, 2020

1. Georgian Oil and Gas Corporation JSC (GOGC) invites proposals to select a contractor for Engineering-Procurement and Construction (EPC)/Turn Key project of the “Gardabani 3” 272 MW Combined Cycle Thermal Power Plant in Gardabani Site, Georgia.
2. More details on the Project is provided in the Terms of Reference that is included in Section 4 of this Request for Proposals (RFP).
3. The rules and procedures for this selection are set out in Section 2 of the RFP - Instructions. This invitation is for a lump-sum fixed price based financial proposal payable in U.S. Dollars or in Georgian currency only.
4. This RFP is open to eligible companies only. A firm will be selected under the procedures described in this RFP. Firms are advised to review these instructions carefully.
5. The RFP Documentation includes the following documents:
 - Section 1 - Letter of Invitation;
 - Section 2 - Instructions;
 - Section 3 - Proposal – Form;
 - Section 4 - Terms of Reference;
 - Section 5 - Form of Contract.

The RFP Documentation can be downloaded from GOGC website: <https://www.gogc.ge/en/tenders>. RFP Documentation will not be issued in person or sent by post. Participants shall not have to pay cost of RFP documentation.

6. Proposals must be submitted in electronic form only, between September 19, 2020 and September 25, 2020 18:00 (local time) at the following email address: gardabani3@gogc.ge. During this period the access to the e-mail address will be restricted and the submitted Proposals shall only be available to the evaluation panel after defined deadline is expired.

SECTION 2. INSTRUCTIONS

Definitions

Unless otherwise provided in this Request for Proposals, capitalized terms shall have the following meanings. The submission of a proposal in response to this Request for Proposals indicates acceptance of the following terminology:

- (a) “EPC/Turn Key Project” means the work to be performed by the Contractor in accordance with the Terms of Reference attached hereto as Section 4 and the Contract attached hereto as Section 5.
- (b) “Contractor” means any entity that may implement the Project under the Contract for which this RFP is issued.
- (c) “Contract” (Section 5 of this RFP) means the EPC Contract signed by the Parties and all the attachments.
- (d) “Commencement Date” as defined in the Contract.
- (e) “Company” or the “Participant” means any private or public entity including an association of several companies (either joint venture, partnership or consortium), which responds to this Request for Proposal and submits a formal Proposal in response to this Request for Proposals and which may or may not be selected to participate in the procurement.
- (f) “Employer” means Georgian Oil and Gas Corporation JSC (GOGC) or GOGC’s subsidiary Company.
- (g) “RFP” means this Request for Proposal prepared for the selection of the Contractor.
- (h) “RFP Documentation” means the package of the following documents: Section 1 - Letter of Invitation; Section 2 - Instructions; Section 3 - Proposal – Form; Section 4 - Terms of Reference; Section 5 - Form of Contract.
- (i) “LOI” (Section 1 of this RFP) means the Letter of Invitation from GOGC addressed to companies for submitting Proposals.
- (j) “Instructions” (Section 2 of this RFP) means this document which provides companies with information needed to prepare their Proposal.
- (k) “Terms of Reference” means Section 4 of this RFP which explains the objectives, scope of work, activities, tasks to

be performed, respective responsibilities of Employer and the Contractor, and expected results and deliverables.

- (l) "Proposal" means the Financial Proposal (with all requested attachments) submitted by the Companies.
- (m) "Day" means calendar day.
- (n) "Time for Completion" means 28 (twenty-eight) months, calculated from the Commencement Date.

1. Introduction

- 1.1 GOGC will select a Contractor from the eligible Companies who have submitted Proposals for implementation of EPC/Turn Key Project. The selection will be in accordance with the selection rules described in this RFP.
- 1.2 Eligible Companies are invited to submit a Proposal as specified in this RFP for the EPC/Turn Key Project to be procured. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Contractor.
- 1.3 Participants shall bear all costs associated with the preparation and submission of their Proposals and Contract negotiations. GOGC is not bound to accept any Proposal, and reserves the right to annul the selection process at any time prior the Contract award, without thereby incurring any liability to any Company.
- 1.4 Participants' Proposals must remain valid for 120 days after the submission deadline (proposals shall be valid till January 23, 2021). GOGC will make its best effort to complete contract negotiations within this period. However, should the need arise, GOGC may request that Participants extend the validity of their Proposals. Participants are not obligated to extend the validity of their Proposals.

1.1 Conflict of Interest

GOGC requires that Participants provide professional, objective, and impartial advice and at all times hold the GOGC's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests. Without limitation on the generality of the foregoing, Participants,

and any of their affiliates, shall be considered to have a conflict of interest and shall not be engaged under any of the circumstances set forth below:

1.1.1 Conflicting Assignments

Participants (including its personnel and subcontractors) that has a business or family relationship with a member of GOGC's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to GOGC throughout the selection process and the execution of the Contract.

1.1.2 Conflicting Relationships

Participants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of GOGC, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Participant or the termination of its Contract.

1.1.3 GOGC Employees

No current employees of GOGC shall work as Company's and/or Contractor's consultants. Recruiting former GOGC employees is acceptable provided no conflict of interest exists.

1.2 Fraud and Corruption

Participants shall adhere to the highest ethical standard, both during the selection process and throughout the execution of a Contract. In pursuance of this requirement, GOGC will reject a Proposal for award if it determines that the Participant recommended for award has, directly or through an agent, engaged in any activities prohibited under Georgian Legislation.

1.3 Eligibility

1.3.1 Neither Participants, nor their subcontractors or associates may be a person or entity that has been blacklisted from participation in State procurements according to the Law of Georgia on State Procurement;

1.3.2 A Participant shall not be:

- (i) listed on any Sanctions List;
- (ii) located or organized in any country or territory subject to country or territory-wide Sanctions;
- (iii) a person with whom GOGC is prohibited from engaging with by reason of any Sanctions; or
- (iv) otherwise a subject of Sanctions.

For the purpose of this clause:

“Sanctions” means any economic or financial sanctions laws, regulations or trade embargoes or similar restrictive measures imposed, administered or enforced from time to time by any Sanctioning Authority.

“Sanctions List” means any list of persons or entities being the subject of any Sanctions published by any Sanctioning Authority from time to time.

"Sanctioning Authority" means the Georgian parliament or Government, the US government or any US agency (including the Office of Foreign Assets Control of the United States Department of the Treasury (or any successor thereto) "OFAC", the US State Department, the US Department of Commerce or the US Department of the Treasury), the Security Council of the United Nations, UK or the European Union.

1.3.3 In case a Participant intends to subcontract other firm(s) and/or individual expert(s), such other firm(s) and/or individual expert(s) shall be subject to the eligibility criteria set forth in this RFP.

1.3.4 Participant submitting his Proposal shall not be under liquidation or similar proceedings.

1.4 Only One Proposal

Participants may only submit one Proposal. If a Participant submits or participates in more than one Proposal, such Proposals shall be disqualified. However, the forgoing does not limit the participation of same subcontractor, including individual experts, in more than one Proposal.

2. Clarification and Amendment of RFP Documents

2.1 Participants may request a clarification of any of the RFP documents at any time, but no later than 7 Days before the starting date of submission of the Proposals. Any request for clarification must be sent in writing by electronic mail

to GOGC at the following email address:
gardabani3@gogc.ge.

2.2 GOGC will respond to such requests within 7 Days by issuing a clarification circular on the GOGC's website defined in paragraph 5 of the LOI. Should GOGC deem it necessary to amend the RFP as a result of a clarification, it shall do so in accordance with the procedure described below.

2.3 At any time before the deadline for the submission of Proposals, GOGC may, for any reason, whether at its own initiative or in response to a clarification requested by a Company, amend the RFP. Any amendment shall be issued in writing through addenda. Addenda shall be issued on the GOGC's website defined in paragraph 5 of the LOI and it will be binding to all Companies. GOGC may at its discretion extend the deadline for the submission of the Proposals.

3. Preparation of Proposals

3.1 Each Proposal, as well as, all related correspondence exchanged by the Companies and GOGC shall be written in English.

Economic and Financial Capacity

3.2 The Contractor's financial and economic capability to mobilize and implement EPC/Turn Key Project is imperative. In its Proposal the Company is required to provide Audited Financial Statements: the information required is for annual financial statements for the preceding three years to include statement of assets and liabilities (balance sheet); statement of revenue and expenses (income statement) and statement of cash position. In addition to the audit report the Company shall submit forecast for the current year including total revenue and revenue derived from the proposed scope of work and total assets and liabilities. GOGC reserves the right to request additional information about the economic and financial capacity of the company.

3.3 In case, a Proposal is submitted by a joint venture, partnership or consortium, the documents required by the clause 3.2 shall be submitted for all members of the joint

venture, partnership or consortium.

- 3.4 A company that fails to demonstrate through its financial records that it has the economic and financial ability to perform the required work as described in the respective Terms of Reference shall be disqualified. In this circumstance its Proposal will not be evaluated further.
- 3.5 In preparing their Proposal Companies are expected to examine in detail the documents constituting the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.

3.5.1 Competence of company

The Proposal must include:

- (a) A brief description of the Company's organization.
- (b) An outline of Company's experience that is recent (only projects completed from the year of 2010 are accepted) and similar (means at least 150 MW, CCGT TPP - combined cycle gas turban thermal power plant) to the Terms of Reference described in this RFP. Information should be provided only for completed projects. For each project, the outline should indicate the name of the employer, duration of the assignment, contract amount, and Participant's involvement. Information should be provided only for those assignments for which the Participant was legally contracted by its client as a single contractor or as the major firm within a Consortium or other association. Participants should be prepared to substantiate the claimed experience if so requested by GOGC.
- (c) Company's references for at least two (2) completed projects, which are similar (means at least 150 MW, CCGT TPP - combined cycle gas turban thermal power plant) to the Terms of Reference described in this RFP (only projects

completed from the year of 2010 are accepted).

**Financial
Proposal**

3.5.2 A Company that fails to demonstrate the capacity to implement the Project as described in this RFP shall be disqualified from further participation in the selection procedure.

3.6 The Financial Proposal shall be prepared using the form in Section 3 of this RFP. The Financial Proposal shall indicate the fixed lump sum price. The Proposal shall also indicate, separately from the fixed lump sum price the total price of the construction of optional Fire Station (Depot) defined in clause 4 (Split Of Obligations) of the Terms of Reference. The fixed lump sum price indicated in the Proposal shall include the total price of the construction of optional Fire Station (Depot) defined in clause 4 (Split Of Obligations) of the Terms of Reference. The terms and conditions of the taxes related to the EPC/Turn Key Project are defined in the Contract attached hereto as Section 5.

3.7 Companies being non-resident of Georgia may express the price only in U.S. Dollars, whereas Companies being resident of Georgia may express the price only in Georgian Lari. For evaluation purposes, the Proposals submitted in Georgian Lari will be converted based on the official exchange rate of National Bank of Georgia on the starting date of submission of Proposals (September 19, 2020). The currency of the Contract signed with the awarded Company shall be U.S. Dollars only.

3.8 Companies who provide price escalation in their Financial Proposals shall be disqualified.

3.9 The Schedule of Payments is defined in the Contract attached hereto as Section 5.

**4. Submission
and Receipt of
Proposals**

4.1 Companies must submit their Proposals in electronic form only. The Proposal shall contain no interlineations or overwriting.

4.2 An authorized representative of the company shall initial all pages of the Proposal. The authorization may be in the form of a written power of attorney accompanying the Proposal.

4.3 The Proposal must be sent to the email address indicated in paragraph 6 of the LOI and received by GOGC no later than the time and the date indicated in paragraph 6 of the

LOI.

4.4 Participants are advised to submit Proposals strictly based on the terms and conditions and specifications contained in the RFP Documentation. This is a “Zero Deviation” RFP process. Proposals with any deviation to the RFP Documentation conditions shall be liable for rejection, except for terms and conditions defined in the clause 6.2.

5. Evaluation of Proposals

5.1 The selection/evaluation of the Proposals shall be performed by the evaluation panel constituted by GOGC.

5.2 During the selection/evaluation process of the Proposals, to assist in the examination, evaluation and comparison of Proposals, GOGC may, at its discretion, ask the Participant for a clarification on its Proposal. The request for such clarification and the response shall be in writing through email only.

5.3 The evaluation panel shall examine the Proposal with the lowest fixed lump sum price first. The selection/evaluation of the Proposal will be done on the basis of documents furnished by the Participant and completeness and conformity of the Proposals with respect to the RFP Documentation requirements. First, GOGC shall determine whether the Proposal is responsive to the requirements of the RFP Documentation. A Proposal shall be considered responsive only if:

- a) It is received as per the formats specified;
- b) It is received by the Proposal submission Due Date including any extension thereof;
- c) It is accompanied by the power(s) of attorney as specified;
- d) It contains all the information (complete in all respects) as requested in this RFP Documentation (in formats same as those specified);
- e) It does not contain any deviation.

5.4 GOGC reserves the right to reject any Proposal, which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained in respect of such Proposal.

5.5 GOGC may waive any minor informality, non-conformity or irregularity in a Proposal, which does not constitute a

material deviation, provided such waiver does not prejudice or affect the relative ranking of any Participant.

- 5.6 After determining the responsiveness of the Proposal with the lowest fixed lump sum price, the evaluation panel will determine the substantial responsiveness of the Proposal to the RFP Documentation. A substantially responsive Proposal is one, which conforms to all the terms and conditions of the RFP Documentation without deviations.
- 5.7 The determination of a Proposal's responsiveness is to be based on the contents of the Proposal itself without recourse to extrinsic evidence.
- 5.8 If the Proposal is not substantially responsive, it will be rejected and may not subsequently be made responsive by the Participant by correction of the nonconformity. The evaluation panel shall examine the Proposal of the next lowest fixed lump sum price or choose to terminate the RFP process.
- 5.9 After determining the substantial responsiveness of the Proposal with the lowest fixed lump sum price, the evaluation panel will invite the selected Company for negotiations for Contract.
- 5.10 In case, same amount of fixed lump sum price is quoted in two or more substantially responsive Proposals, these Participants shall be asked to submit discount bid in terms of onetime percentage discount over previous quoted fixed lump sum price. As result, the evaluation panel will invite the Company with the lowest fixed lump sum price for negotiations for Contract.

6. Negotiations for Contract

- 6.1 Negotiations for Contract will be held at the date and address indicated in the invitation to be addressed to the selected Company. Representatives conducting negotiations on behalf of the Company must have written authority to negotiate and conclude a Contract.
- 6.2 Negotiations for Contract will include a discussion of the Proposal, the proposed technical approach and methodology, work plan, and organization and staffing, and any suggestions made by the company to improve the Terms of Reference. GOGC and the Contractor will

finalize the Terms of Reference, time schedule, work schedule, logistics, deliverables and reporting.

6.3 The draft Contract is provided in Section 5 of this RFP. The terms of the Contract are based on Conditions of Contract for EPC/Turn Key Projects issued by International Federation of Consulting Engineers (FIDIC), Silver Book 1999 edition. If there is discrepancy between Silver Book 1999 edition and Georgian Law, Georgian Law governs. Employer and the selected Participant shall sign the Contract within 30 days after invitation to negotiate is sent to the selected Participant. For the avoidance of any doubts, each Participant acknowledges and agrees that the agreed Contract has to be essentially in the form of the Form of Contract included in Section 5 of this RFP and Participants are not entitled to request substantial modifications of the draft Contract. If selected Participant refuses to sign the Contract, GOGC will invite the Participant, whose Proposal conforms with the requirements of the RFP Documentation and has the next lowest fixed lump sum price to negotiate a Contract or choose to terminate the RFP process and not enter into the Contract with any of the Participants.

7. Confidentiality 7.1 Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Companies, who submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Company of confidential information related to the process may result in the rejection of its Proposal.

8. Disputes and Governing Law 8.1 This RFP shall be governed by and construed in accordance with Georgian law.
8.2 Any dispute arising out of or in connection with this RFP shall be decided by Georgian Courts.

SECTION 3. PROPOSAL – FORM

Note: *Comments in brackets provide guidance only for the preparation of Financial Proposal; therefore they should not appear on the Financial Proposal to be submitted.*

[Location, Date]

To: JSC Georgian Oil and Gas Corporation

Dear Sir:

We, the undersigned, offer to implement construction of 272 MW Combined Cycle Thermal Power Plant – Gardabani 3 EPC/Turn Key Project in accordance with your Request for Proposal dated [Insert date]. Our attached Financial Proposal is for the fixed lump sum price of [Insert amount(s) in words and figures]. This amount is inclusive of the local taxes, which, are applicable to the Contractor save for VAT and import duties.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., before the date indicated in paragraph reference 1.4 of the Instructions.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Attachments:

- Documents verifying the Economic and Financial Capacity of the Participant (clause 3.2 of the Instructions);
- A brief description of the Participant’s organization (sub-clause 3.5.1 (a) of the Instructions);
- Documents verifying the Participant’s experience (sub-clauses 3.5.1 (b) and (c) of the Instructions);
- The total price of the construction of optional Fire Station (Depot) (clause 3.6 of Instructions);
- The document verifying authorization of the company’s representative (clause 4.2 of the Instructions).

Authorized Signature [*In full and initials*]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

SECTION 4. TERMS OF REFERENCE

("Employer's Requirements" Annex 3 of the Contract)

1. BACKGROUND

The Georgian Government has set its strategic objectives for the country's security, one of which is the energy efficiency and independence. Georgia is well-known for its enormous resources of water supply that has led to many initiatives for the development of the hydro power. Despite the clear advantage country has through hydro power, this type of energy production has one important disadvantage – the production is seasonal. Georgia is self-efficient during summer session but in winter the country is in the need of the electricity import. In order to eliminate this problem, the Government of Georgia (GoG) ordered JSC "Georgian Oil and Gas Corporation" (GOGC) to invest in the traditional ways of energy production – Thermal Power Plants.

In 2015, the state owned investment fund JSC "Partnership Fund" (PF), and the state owned JSC "Georgian Oil and Gas Corporation" (GOGC), have completed one of the biggest projects in the history of independent Georgia – the construction of the Combined Cycle Thermal Power Plant in Gardabani (Gardabani 1). The partnership of the two, has established LLC "Gardabani TPP" (GTPP), with 49% shares of PF, and 51% shares of GOGC. The Power Plant has 230 MW installed capacity, which has 56% efficiency ratio, equaling double compared to existing simple cycle Power Plants. The Gardabani 1 mainly serves to increase winter generation and reserve capacity for improved stability of the Georgian electricity system.

In September 2016 "Gardabani TPP2" LLC was established, with 100% ownership of GOGC, with the aim to construct Gardabani 2 Combined Cycle Thermal Power Plant. The Project was covering the construction of a 230 MW Combined Cycle Power Plant in Gardabani, eastern Georgia. The Project responds to the increasing needs of Georgia for electricity, addressing a growing concern for energy independence of the country. In late 2019 Construction of Power Plant completed successfully and currently it is under operation.

In September 2019 Government of Georgia issued decree №2047 "with the aim to construct Gardabani 3 Combined Cycle Thermal Power Plant (hereafter Project) by the "Georgian Oil and Gas Corporation" JSC. The Project envisages the construction of a 272 MW Combined Cycle Power Plant in Gardabani, eastern Georgia. The main objectives of the project are:

- Improve Georgia's energy security;
- Increase winter generation and reserve capacity for improved stability of electricity system.

The Project calls for the construction of a combined cycle power plant (CCPP) with installed capacity of 272 MW. The project is located in the Gardabani region, near the capital city of Tbilisi and adjacent area of CCPP Gardabani 1/ Gardabani 2. The Capital of Georgia - Tbilisi is 40 km from the project site.

The design, construction and commissioning of the project shall be implemented within scope of EPC/Turn Key Contract (Engineering, Procurement, Construction).

The construction period shall be 28 months from the Commencement Date.

The power plant shall consist of one (1) combined cycle block in a 2-2-1 configuration having two (2) Gas Turbine Generators (GTG) + two (2) Heat Recovery Steam Generators (HRSG) + one (1) Steam Turbine Generator (STG). Gas Turbine Generators and HRSG installations shall be located externally; Steam Turbine Generator installation shall be internal. The designed Plant life shall be at least 25 years. The fuel for the power plant shall be natural gas and no HRSG supplementary

firing. A DN500 pipeline will supply the plant with natural gas. The gas temperature in the territory of Gardabani varies from 0 °C to +30 °C and the gas pressure ranges from 9 bar (a) to 18.5 bar (a).

The Project also shall comprise closed loop cooling water system using an Induced Draught Cooling Tower. The cold circulation water from the circulating water pump house shall lead to the steam turbine condenser (for the condensation of the exhaust steam and thus acting as the heat sink for the power cycle) and the secondary side of the unit auxiliary plate heat exchanger (for cooling the passivated demineralized water in the primary side of the heat exchanger). The Power generated by GTGs and STG will be transmitted at a level of 500 kV. For this purpose, all generators shall be connected to the 500 kV switchyard via dedicated Generator step-up transformers and an overhead conductor. The 500 kV switchyard will be connected to the existing 500 kV switchyard through aerial transmission lines which shall be installed by the Contractor.

2. TECHNICAL DESCRIPTION OF PLANT

The proposal shall be relevant to “Engineering-Procurement and Construction (EPC)” of the Gardabani 3 Combined Cycle Thermal Power Plant Project in Gardabani Site, Georgia.

2.1 PROJECT DESCRIPTION

Fuel: Natural Gas

2 Gas Turbines: OM General Electric, Type 6F.03, Axial Exhaust,

2 Gas Turbine Generators: Brushless, 50 Hz,

Gas Turbine Starting Means: Electrical Motor with Black Start Generators,

1 Gas Turbine By-Pass Stack,

Heat Recovery Steam Generator: 2 Pressure system, Non-Reheat, Unfired, Natural Circulation,

Steam Turbine: Condensing, Double Flow

Steam Turbine Exhaust: Axial Exhaust,

Steam Turbine Generator: Static or Brushless, 50 Hz,

Main Cooling System: Closed loop cooling water system using an Induced Draught Cooling Tower,

Demineralized Water System: Demineralized Water System shall be constructed,

Emergency Diesel Generator

500 kV Switchyard

Firefighting System

Gas Turbine Compressor Cleaning: Off-line Compressor Water Wash

Plant Control Philosophy: Automatic Start-up & Shutdown, Auto/Manual Control Remote Dispatching

Gas Turbine-Generator Enclosure: Outdoor with Acoustic Enclosure

Steam Turbine-Generator Enclosure: Indoor

HRSG: Outdoor

2.2 ESTIMATED PERFORMANCE

<i>Measurement</i>	<i>Unit</i>	<i>Value</i>
Performance of GT		
Gross Electrical Output at Generator Terminal of GTs	[kW]	175 200
Performance of ST		
Gross Electrical Output at Generator terminal of ST	[kW]	100 900
Performance of Combined Cycle		
Gross Power	[kW]	276 100
Auxiliary Consumption not more than	[kW]	4 100
Net Power	[kW]	272 000

- Plant Net Output of 272.000 kW @ ISO Conditions.
- Plant Net Efficiency is 57,4 % @ ISO Conditions.

3. DESIGN CRITERIA

SITE DESCRIPTION

The area of the Gardabani 3 Combined Cycle Thermal Power Plant is located adjacent area to the Northside boundary of CCPP Gardabani 1 and 2 km West from the town Gardabani and approximately 40 km South-East from Tbilisi. The absolute mark of the surface is 292-294 meters above sea level the final elevation shall be confirmed after Contractor finishes the leveling of the site. The Employer will provide the mobilization area with free of charge to the Contractor and there will be no limitation for the working hours of the Contractor for site. The Employer is responsible to obtain necessary permits for the plant construction according to Georgian Legislation. Contractor shall prepare and provide necessary documentation for construction permit in Georgian language to Employer according to №257 Ordinance (Consolidated Version) of the Government of Georgia (Date of issuing 31.05.2019) see ToR Annex III (Extract from №257 Ordinance). no later than 3 months from **Contract sign date**.

In addition, the Contractor shall provide no later than 2 months from **Contract sign date** to GOGC necessary information to prepare ESIA:

- Preparing reports on types and volume of anticipated **emissions** (technical report on stationary sources of the pollution and inventory of hazardous substances exhausted by them and marginal allowable norms of exhaustion/discharge of hazardous substances) for Implementation Phase, cumulative impact assessment with conjunction of existing facilities and preparation of mitigation measures(Stack design should be based on environmental studies.).
- Preparing reports on types and volume of anticipated **noise and vibration**, cumulative impact assessment with conjunction of existing facilities and preparation of mitigation measures.
- Preparing reports on types and volume of anticipated **water quality**, water use and discharged modelling, cumulative impact assessment with conjunction of existing facilities and preparation of mitigation measures.

Also, the contractor is obliged to fulfill the conditions set by the environmental decision and Construction permit terms. Contractor shall utilize his own health and safety plan. The process waste water (blow down of the HRSGs and cooling towers, waste water from water pre-treatment unit and surface waters from GT wash skids) shall be discharged to the existing Waste Water Treatment Plant (X 504011.766 ; Y 4589494.926) west of the plant boundary. The sanitary waste water shall be discharged into the same location. Storm water shall be discharged into the canal nearby the plant.

The Plant will use natural gas as fuel. The natural gas shall be supplied from Gas Main line at regulated pressure of 12.0 bar (a) to 54.0 bar (a) from the gas pipeline. Detailed gas analysis shall be performed by the Contractor.

GEOLOGICAL FEATURES

According to tectonic regionalization of Georgia (E. Gamkrelidze, 2000) the investigation territory is located in subzone of Marneuli, Bolnisi zone, Artvini-Bolnisi block. Neogene and Quaternary deposits take part in the region geological structure. Quaternary deposits are widely distributed in the investigation area. Genetically they are represented by alluvial and lacustrine-alluvial varieties.

Recent alluvial deposits are distributed along Mtkvari riverbed and floodplain as well as at Iveri highland territory. They are lithologically represented by boulders and cobbles, sands and gravels and sands and lean clays. Their thicknesses are from 5m to 20m, and more at some places. Within Gardabani plain boundaries which covers important area and I and II over-floodplain terraces, thickness of alluvial deposits reaches 20-50m. Neogene deposits are widely distributed and represented by upper Pliocene Apsheron stage, upper Pliocene Sarmatian stage deposits; middle Miocene deposit complex and lower Miocene Kotsakhuri horizon. Basic deposits are covered with Quaternary deposits thickness of which is to 50m. Apsheron stage is represented by continental deposits: thick packs of conglomerates, sands, lean clays and variegated color clays. Their thickness is 200-250m. These deposits are open by boreholes at Gardabani plain. Upper Miocene Sarmatian stage – is lithologically represented by variegated clays, sandstones and conglomerates. Thickness of these deposits vary within 100-600m areas (these deposits coincidentally continue middle Miocene rocks). Middle Miocene deposit complex – is lithologically represented by clays, sandstones, conglomerates and mark interbeds. These deposits are open by boreholes below upper Pliocene and Quaternary deposits on the left bank of the river Mtkvari. Their thickness is 400-900m. Lower Miocene deposits – Kotsakhuri horizon is lithological represented by thin bedded carbonated clays. Whitish sandstone and sand interbeds with small thickness are locally observed in clay section. This horizon thickness is 400-900m within the region areas. The construction site and its adjacent territory is represented by technogenic genesis gravelly and clayey soils to 1.5-2.5m depth; and below them to 30.0m surveyed depth – by alluvial garvels and cobbles. According to literature and fund material data thickness of gravels and cobbles of old alluvial terrace of the river Mtkvari is quite big. It is confirmed by data of boreholes drilled now within the construction site areas. Gravelly layer bed (bottom) was not crossed in none of boreholes drilled to 30m depth; so thickness of these deposits exceeds the surveyed depth. Rock varieties of upper Pliocene (Apsheron) continental molasse deposits do not come out on the surface; they are entirely located below Quaternary cover and are represented by alternation of lean clays, sandstones and 5-10m thick conglomerate beds. The older – marine Aghchagil deposits are located in 150m depth. The investigation is located in Artvini-Somkhiti block, Bolnisi zone which is, by its side, significantly complicated by intersecting tectonic faults. The zone is located in medium seismic risk area. According to macro seismic regionalization scheme of Georgia, earthquake with 7-8 scale intensity threats to areas populated in this territory (Gardabani, Akhali Samgori, Gamarjveba, Kesalo and etc). According to existing statical data, earthquakes with high magnitude that can make significant harm to modern constructions and impact on relief morpho dynamics often took part in hystorical and the recent past as well. Below we give existing statical data for the closest populated areas (Marneuli, Gardabani) of the investigation site and unidimensional coefficient of seismic waves for the existing populated territories:

1. Gardabani (3390) – 0.11 m/sec²; 7 scale;
2. Aghtakla (3400) – 0.14 m/sec²; 8 scale;
3. Akhalsheni (3415) – 0.11 m/sec²; 7 scale.

According to the seismic regionalization map of Georgia the investigation territory is located between 7 and 8 scale seismic active zones (Order #1-1/2284 given by Minister of Economic Development of Georgia, dated October 07, 2009, Tbilisi, (Construction Norms and Rules “Seismic Resistance Construction” pn 01.01-09)). Contractor is obliged to prepare all necessary geotechnical studies for plant design.

Below mentioned Environmental Conditions are Regional.

PRECIPITATION

The average amount of annual atmospheric precipitation is 540mm; from November to March - 136mm, and from April to October – 404mm. The maximum daily atmospheric precipitation is

147 mm. The region of the area belongs to the snowy region 2. The area of the snow covers per 1 m² of the horizontal surface for the snowy region 2 is 1,2 kPa H.

Air filter selection for plant shall be done considering nearby Infrastructure, also humidity and dust.

WIND

An average annual wind speed is 2.1 m/s, the highest monthly average – 2.7 m/s in March, the lowest – 1.6 m/s in November and December; the normative value of wind pressure is 0.48 kPa, and on the circular 10 mm diameter cross section on elements, the regulatory wall thickness of the ice at 10m from the ground surface is 10mm

AMBIENT TEMPERATURE

The climate of the plant area is continental, subtropical with hot dry summer and mild winters with unstable weather - an abrupt change in air temperature and rainfall. The average annual temperature is 12.8°C, the absolute maximum +42°C; and the absolute minimum -20 °C; design ambient temp. +15°C.

Plant Design Conditions

The following shall be used as the basis for plant design:

<i>Measurement</i>	<i>Unit</i>	<i>Value</i>
Site Altitude	m	292-294
Site pressure	mbar	1013
Ambient dry-bulb temperature	°C	15
Ambient relative humidity	%	68
Grid Voltage	kV	500
Grid Frequency	Hz	50

FUEL SPECIFICATIONS

The design fuel will be Natural Gas. The combined cycle power plant shall be designed to operate satisfactorily when firing Natural Gas. The Contractor shall undertake any analysis required to determine composition and LHV of fuel gas to ensure proper design of the plant.

RAW WATER REQUIREMENT

The raw water shall be collected from the settling ponds (shall be constructed by contractor) and nearby canal at the north-west side of the plant area.

Contractor is Obligated to analyze the water quality in canal and select plant equipment's accordingly.

PLANT ARRANGEMENT

The equipment shall generally be arranged in coordination with the Employer. The equipment arrangement and access shall minimize personnel exposure to physical harm during the operation, testing, or maintenance of the equipment. Consideration shall be given to avoiding low clearance passageways and tripping obstacles.

EMISSIONS

Air emissions and noise emissions shall be as per the Georgian Legislation requirements.

CODES AND STANDARDS

The power plant shall be built to USA and EU codes and standards. A detailed listing of applicable standards shall be submitted within the Proposal in the RFP by the participant and approved by the Employer. Any deviations from above standards shall be approved by the Employer.

TESTING

The Performance Test shall be conducted in accordance with ASME PTC 46 to demonstrate that the facility can meet the Guaranteed Gross Electrical Output and the Guaranteed Emissions Limits. All electrical testing shall be done according to Georgian Transmission Grid Code.

THE PLANT MAJOR EQUIPMENT

This paragraph describes the proposed plant's major equipment selection, equipment description, reference list of major equipment suppliers. Equipment and materials described herein shall be factory tested in accordance with manufacturer's standard procedures:

EQUIPMENT	VENDOR
GAS TURBINES	GENERAL ELECTRIC
STEAM TURBINE	GENERAL ELECTRIC
	SIEMENS
	ANSALDO ENERGIA
GENERATORS	GENERAL ELECTRIC
HRSG	AALBORG
	NEM
	NOOTER ERIKSEN
	FOSTER WHEELER
	DOOSAN
	CMI
	RAFAKO
BOILER FEED WATER PUMPS	FLOWSERVE
	SULZER
	KSB ITUR
	KIRLOSKAR
	TORISHIMA
	HYUNDAI
	HYOSUNG/EBARA
STEP UP TRANSFORMERS	ABB
	HYUNDAI
	SIEMENS
HV AUXILIARY TRANSFORMER	ABB
	HYUNDAI
	SIEMENS
LV AUXILIARY TRANSFORMER	ABB
	HYUNDAI
	SIEMENS

GENERATOR CIRCUIT BREAKER	ABB
	GENERAL ELECTRIC
	SIEMENS
MV/LV SWITCHGEARS	SIEMENS
	ABB
	SCHNEIDER
GAS COMPRESSORS	ATLAS COPCO
STEAM BYPASS VALVES	CCI
	FLOWSERVE
	TYCO
	TLV
	SIEMENS
	ABB
	WONIL
FIRE PUMPS	PETTERSON
	AURORA
	ITT
	PEERLESS
AIR COMPRESSOR	ATLAS COPCO
	INGRESSOL
CRANE AND HOIST	KONE
	IŞIK
	BVS
ISOLATED PHASE BUS	SIMELECTRO
	GENERAL ELECTRIC
	ALFA STANDARD
DISTRIBUTED CONTROL SYSTEM	HONEYWELL
	SIEMENS
	ABB
	EMERSON
MV/LV CABLES	SUD KABEL
	NEXANS
	PRYSMIAN
	SURTERI

In case of AUTHORIZED LICENSED manufacturer, final product & design package shall be approved by the above-mentioned vendors.

General Description of the Plant

The designed plant shall have the capability to operate on both full condensing modes. The plant shall have Main Condenser cooled by the Cooling water from the Cooling Tower. In the full condensing mode, the Steam Turbine exhaust steam directed to the Main Condenser shall be cooled by the cooling water circulating between the Main Condenser & the Cooling Tower. The steam condensed in the Main Condenser shall then forwarded to the HRSG by the Condensate Forwarding Pumps.

The plant is intended to be operated on Combined Cycle operation mode. However, By-Pass Stack shall enable power plant to operate in Simple Cycle operation mode.

WATER DRAINAGE SYSTEM

A surface drainage system shall be provided by appropriate grading and sloping to direct surface run-off, not at risk of contamination from potential spills of fuel, oils and coolants, away from equipment and structures. Unlined swales and ditches collect, concentrate and discharge the run-off flow to the water channel at west side of the plant area.

ASPHALT PAVING/SURFACING/SIDE WALKS

Asphalt concrete roads and sidewalks with curbstones shall be provided within the plant boundary by the Contractor and shall be marked and painted. Roads shall be 6 m (for main roads) and 4 m (for maintenance areas) wide.

BOUNDARY WALL/FENCE/GATES

It is considered to construct a site boundary wall from all sides around the new plant area. Plant boundary wall shall be reinforced concrete columns, with concrete slabs. The height of the boundary wall shall be 2.4 m and additionally 600mm high 'Y' shaped MS Angle frame for concertina wire loop and column width of 300mm. Chain Link Fence shall be provided around transformers and switchyard. Security System (CCTV; Infrared indicators & etc.) shall be installed by the Contractor.

LIGHTING SYSTEMS

Outdoor lighting shall be high pressure sodium vapour type and shall provide illumination in areas of normal personnel traffic, such as: Building exteriors, Equipment areas, Walkways and stairs, Roadways. Aviation obstruction lighting shall be provided in accordance with International Standards.

GROUNDING

The grounding system consists of bare copper cables and ground rods and provides a metallic ground connection for all electrical apparatus installed in the power plant in order to bond building steel, exposed metal structures and other non-current carrying metallic parts. Grid calculation shall be made according to IEEE Std 80.

PLANT CABLING

XLPE insulated fire resistant, copper conductor, Medium Voltage cables shall be utilized for the MV cable systems.

PVC insulated, copper conductor, Low Voltage cables shall be utilized for the LV cable systems.

All cable for 6.3 kV class service shall have solid dielectric insulation and 90degC maximum continuous conductor temperature. Cable for 6.3 kV class services shall be shielded. All cables for 380/220V service shall have conductors with solid dielectric insulation and 90degC conductor temperature.

Cables shall be installed in duct banks in the outdoor areas.

It should be considered a backup power supply (for own consumption) of the 6,3 kV bus bar from the existing 6,3kv switchgear of Gardabani TPP 2.

It will be necessary to install two new 6,3 kV feeders in Gardabani TPP 2 switchgear, as there are no spare feeders available. 8-8,2 MW feeder is required from 6,3 kV bus bar 02BBA and 4-4,5 MW from 6,3 kV bus bar 02BBB

Transmission lines (Cables) will be required to be installed between Gardabani TPP 2 and Gardabani TPP 3, that will capable of carrying requested power.

There are the following requirements for additional feeders:

- Bus bar A

Model: UniGear ZS1

Breaker type	VD4/P
rated voltage	6.3 kv
rated current	1250 A
frequency	50 Hz
CT	1250/1

- Bus bar B

Model: UniGear ZS1

Breaker type	VD4/P
rated voltage	6.3 kv
rated current	630 A
frequency	50 Hz
CT	500/1

Also 24 core Optical network cable should be installed between abovementioned TPP's

LIGHTNING PROTECTION

The power plant facility shall be protected by a lightning protection system designed in accordance with international standards.

Lightning protection for Plant structures such as buildings, towers and stacks shall be provided. Ground rods or ground mats connected to the grounding system are located at the base of each structure. The lightning protection shall be in accordance with IEC and local practice, Lightning Protection Code.

FIRE DETECTION & ALARM SYSTEMS

A fire detection & alarm system shall be provided to all areas within the Plant and Site. The system shall include: a main fire control panel located in the central control room that monitors the status of various detectors and pull boxes and drives sound alarm equipment in case of fire condition; fixed water protection systems, with Gas protection to enclosure; fire alarms and portable appliances.

The design of these systems shall comply with the current requirements of the National Fire Prevention Authority (NFPA Codes and standards).

- Certified engineer shall be presented at design stage
- Contractor is obliged to inform and agree with Emergency Management Service of Georgia fire system, including fire station (Depot).

CATHODIC PROTECTION SYSTEM

Buried pipes shall be protected by factory coating and wrapped by suitable corrosion-resistant materials on pipe welds.

A cathodic protection system (*impressed current cathodic protection ICCP*) shall be installed for corrosion protection of underground metal pipes. For the protection of other underground structures and equipment, sacrificial galvanic anodes of magnesium, zinc, aluminum or ICCP system shall be installed.

For the protection of underground structures, extensive piping systems, and in locations where soil resistivity is high, an ICCP system shall be used.

500 kV SWITCHYARD UGL & OHL

500 kV Switchyard needs to be installed which shall be connected to the Georgian State Electro System 500 kV switchyard (GSE Switchyard) via Over Head Lines or Underground lines (In case of Underground line construction is chosen, technical specifications and superiority of the selected option should be agreed with GSE by EPC Contractor). The new 500 kV Switchyard shall have VT bay furnished single bus with arrangement with three (3) incoming bays for GT-GSUT -1, GT-GSUT -2 & STG-GSUT & one outgoing bay to GSE Switchyard. The new switchyard shall also have RTU (Remote terminal unit) along with control cables for operation through plant DCS which will be located in Main Control building. The cable connection in the GSE Switchyard shall be performed by the GSE with assistance of the Contractor.

The 500 kV Switchyard shall be equipped with SF6 circuit breakers, CTs, VTs, Metering units, Lightning arrester, wave trap and other required components for measurement and recording of necessary electrical parameters and appropriate electrical protection systems. For additional details see ToR Annex I.

DM WATER

Contractor shall build according to International Standards a new water treatment system including reserve tanks, dedicated for Gardabani 3.

POTABLE WATER SYSTEM

Potable Water shall be sourced (pipeline shall be constructed) from existing potable water main line (X 503512.961 ; Y 4589518.387) and distributed as required. One 15m³ potable water storage tank shall be installed with 2x100% potable water pressurization / distribution pumps.

FIRE PUMP STATION

The Power Plant shall have its dedicated indoor Fire pump station. The Fire Water Pump shall be installed near cooling water pump house and Cooling Tower Basin shall be used as fire water reservoir.

Water based firefighting system shall be installed as follows:

- a) Firefighting installation for buildings and equipment.
- b) Site fire hydrant ring system.
- c) Firefighting pumping installation (one electric and one diesel driven fire pumps).
- d) Fire alarm system.

The installation shall include electric and diesel driven fire pumps, electrically driven jockey pump (to maintain pressure in the ring main system), pump starting and control equipment, strainers, lifting equipment, pipework, valves, supports, instrumentation and all equipment necessary for the satisfactory operation of the system.

A control panel shall be provided in the fire pump house to facilitate maintenance and to allow the pumps to be started and stopped both manually and automatically.

Automatic starting of the pumps shall be arranged in sequence by means of diaphragm operated switches which, on pre-determined drops in pressure in the fire protection system shall start the pumps. The control equipment shall include a logic circuit, which will initiate starting of the standby electric fire pump or the engine driven pump if the motor driven pumps fail to start in a pre-determined time or if the pressure is not restored after operation of the motor driven pumps.

ELECTRICAL CONTROL BUILDING

Electrical Control Building shall be built by the Contractor. Relevant HVAC system (with possibility of individual temperature modes in different areas) shall be available in the building.

GAS SUPPLY SYSTEM

The Gas supply to the new plant shall be done by contractor from the GPRMS (Gas Pressure Reducing and Metering Station) at the south-east part of the new plant area. Contractor shall realize connection to the GPRMS. Contractor shall install DN 500 factory Coated pipeline (Std: API 5L PSL 2; Steel Grade X52) and connect to GPRMS. The Contractor shall construct Regulatory Metering Station (the valve station together with necessary filtering and metering equipment, hereafter RMS) within the plant boundary. Electrical power connection and I&C signaling to the RMS shall be under Contractor Scope. All the Land Acquisition works related to the natural gas pipeline is in Employer Scope.

ESD Valve shall be installed by contractor at outlet of GPRMS and shall be integrated in DCS system

RMS shall include filtration system and chromatograph

Plant should have ability to operate without compressor station at maximum of 54 bar and all sufficient infrastructure (heater and etc...) shall be installed.

4. SPLIT OF OBLIGATIONS

Contractor's and Employer's general scope of services & supply and responsibilities are defined in the following matrix. The list of power plant supporting systems is not exhaustive.

No.	Task	Responsible		Remarks
		Contractor	Employer	
1	SCOPE OF SERVICES			
1.1	PROJECT MANAGEMENT	√		
	Periodic Scheduling Reports	√		
	Engineering and Design	√		
	Procurement	√		
	Manufacture & Fabrication	√		
	Marine Transportation, Unloading, Storage	√		Port of Poti or Batumi
	Inland Transportation	√		
	Customs Clearance	√	√	The contractor shall provide all necessary documents.
	O&M Manuals	√		Including the equipment specification from manufacturer.
	As Built Drawings	√		
	Training	√		Shall be conducted by Vendor Representative
	Warranty	√		24 (twenty-four) months from the Taking-Over Date.
1.2	FINANCIAL SERVICES			
	Performance Bond	√		10% of the total Contract price
	Advance Payment Bond	√		15% of the total Contract price
	Warranty Bond	√		5% of the total Contract price
	Financing		√	
1.3	TAXES	√	√	
1.4	INSURANCE			
	Marine & Transport Insurance	√		
	Erection All Risk Insurance	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
	Third Party Liability Insurance	√		
	Workmanship Compensation Insurance for the Contractor's personnel	√		
1.5	SITE SERVICES			
	Site Management	√		
	Supporting the Contractor in Interfacing and Coordination with Permit Authorities		√	
	Temporary Land for Mobilization, Lay Down, Storage and Camp Area	√	√	Employer will provide sufficient area nearby the territory of the Power Plant Area at no cost to the Contractor. Contractor, also shall obtain the permit for camp construction.
	Temporary Works and Facilities	√		
	Services and Facilities for the Employer and the Employer's Representative for temporary use during construction (office space approx. 150 sq.m (10 rooms), including meeting room). Also, utilities, internet, restroom & portable water shall be provided.	√		
	Studies and Calculations Required to Integrate the Power Plant into the Transmission System.		√	Including but not limited to load flow, insulation and protective device coordination studies outside the plant boundary
1.6	CONSTRUCTION, ERECTION, AND PRE-COMMISSIONING.			
	Construction & Erection of the Equipment within the Contractor's Scope of Supply	√		
	Construction Management	√		
	Construction Labor	√		
	Vendor Technical supervisory Support	√		
	Construction Potable Water	√		
	Construction Water	√		
	Construction Power	√		
	Construction Standard Tools & Equipment	√		
	Construction Special Tools & Equipment	√		
	Testing and Pre-commissioning	√		
	Work Permit for Expatriate Labor/Technician	√	√	The Employer will assist in obtaining necessary permits and visas. The cost of work permits and visas will be borne by the Contractor.

No.	Task	Responsible		Remarks
		Contractor	Employer	
1.7	CONSTRUCTION QUALITY CONTROL			
	Statutory Third-Party Authority Inspections	√		As required by standard and codes.
	Quality Assurance Plans, Procedures, Programs, Audits, and Reports	√		
1.8	TESTING, COMMISSIONING AND START-UP			
	Management	√		
	Fuel		√	The Employer is responsible for NG cost.
	Water	√		RAW, DM and etc.
	Electrical Power for Start-up and Commissioning	√		
	Electrical Load for Start-up and Commissioning	√		
	Start-up and Commissioning Consumables	√		
	Procedures	√		
	Vendor Technical Advisory Support	√		
	Standard and Special Test Instruments, Tools and Equipment	√		
	System Walk down and Turnover	√		
	Equipment Commissioning	√		
	Start-up and Commissioning Spares	√		
	Punch List Administration	√		
	Care and Custody of the Plant up to the Provisional Acceptance Date	√		
	Equipment Function Test and Pre-commissioning	√		
	Operation & Maintenance of the Plant up to the contractually agreed Provisional Acceptance Date	√		
1.9	PERFORMANCE TESTING			
	Leadership	√		
	Fuel, Raw Water, Electricity	√		The Employer is responsible for NG cost.
	Operators	√	√	
	Data Collection	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
1.10	RELIABILITY RUN TEST			According to Georgian Transmission Grid Code
	Leadership	√		
	Fuel, Raw Water, Electricity	√		The Employer is responsible for NG cost.
	Operators	√	√	
	Data Collection	√		
1.11	SITE Environmental Health and Safety Management	√		According to Legislation and International best practice.
2	SCOPE OF SUPPLY - CIVIL			
2.1	TOPOGRAPHIC SURVEYS, DETAIL SOIL INVESTIGATIONS AND REPORTS	√		Employer provides Preliminary Topographic Survey, only for informational purposes, see ToR Annex IV
2.2	SITE WORK			
	Clearing/Grubbing	√		
	Earthwork for General Site Levelling	√		
	Earthwork	√		
	In site roads and surfacing	√		
	Access Roads Out of the Power Plant	√		
	Landscaping	√		
	Rain Water Drainage	√		Discharge to the canal.
	Storm Drainage Facilities beyond the Site Capable of Preventing Flooding of the Site	√		Discharge to the canal.
	Dewatering	√		
	Demolition and/or Relocation of Existing above and Underground Facilities	√		
	Disposal of construction waste materials and excess excavated material	√		
	A datum line with three (3) permanent site bench marks providing data covering elevation, longitude and latitude.		√	
2.3	PILING	√		As and if required.
2.4	FOUNDATIONS	√		
2.5	PIPE RACKS	√		
2.6	BUILDINGS			

No.	Task	Responsible		Remarks
		Contractor	Employer	
	Steam Turbine Hall	√		
	Electrical Control Building	√		The electrical equipment (UPS, batteries, panels, dry transformers), control room, and office for tech & shift staff will be located inside the building. The Electrical Control building shall be 3 story and additionally underground cable facility.
	Boiler Feed Water Pump Building	√		
	Fire Pump Building	√		
	Furniture for the Buildings	√	√	The special furniture for control rooms shall be supplied by the Contractor.
	Administrative Building	√		See ToR Annex II
	Fire Station (Depot)	√		Design shall be prepared according to №119 Resolution; Construction of depot is optional and will be decided by Employer
	Hazardous waste storage building	√		
	Chemicals Warehouse	√		See ToR Annex II
	Main warehouse	√		See ToR Annex II
	Shelter warehouse	√		See ToR Annex II
	Workshop	√		See ToR Annex II
	Guard House	√		
	Laboratory (Incl. Tools and Equipment's)	√		See ToR Annex II
	STG Hall	√		
	Water Treatment System Building	√		
2.7	OTHER STRUCTURES	√		
	Security Towers	√		
	Firewalls for Transformers	√		
	Effluent pit	√		
	Fencing around the project site	√		
2.8	PAINTING AND INSULATION	√		
2.9	HVAC SYSTEMS	√		
2.10	CRANES AND HOISTS	√		Shall be installed in Workshops, Warehouses, STH and Etc.
3.	GAS TURBINE & GENERATOR			Outdoor type

No.	Task	Responsible		Remarks
		Contractor	Employer	
3.1	TWO (2) GAS TURBINE & GENERATOR PACKAGES	√		
3.2	GAS TURBINE AIR INLET SYSTEM			
	Air inlet filter and accessories	√		As per ambient conditions
3.3	GAS TURBINE AUXILIARY SYSTEM			
	Fuel Gas System	√		
	Lube Oil System	√		
	Hydraulic Oil System	√		
	Compressor Washing System	√		
3.4	GENERATOR & AUXILIARIES			
	Generator	√		
	Generator circuit breaker	√		
	Generator isolated phase bus duct	√		
	Generator neutral grounding cubicle	√		
3.5	ELECTRICAL SYSTEMS AND EQUIPMENT			
	Excitation system	√		
	Turbine Starting System	√		
	AC Motor Control Centers	√		
	PCC	√		
	DC Panel Board	√		
3.6	GAS DETECTION AND FIRE PROTECTION SYSTEM			
	Gas Detection System	√		
	Fire Detection System	√		
	Fire Extinguishing System	√		
3.7	NOISE ENCLOSURE FOR GAS TURBINE	√		
3.8	VENTILATION SYSTEM FOR ENCLOSURE	√		
3.9	CONTROL AND INSTRUMENTATION			
	Turbine control system	√		
	Generator control system	√		
	Turbine and generator protection system	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
4	HEAT RECOVERY STEAM GENERATOR			
4.1	TWO (2) SET OF HORIZONTAL TYPE HRSG AND AUXILIARIES			Outdoor type
	HRSG	√		
	Dearator	√		
	Insulation internal casing	√		
	Insulation external drum & piping	√		
	Ladders, stairs, walkways	√		
4.2	HRSG EXHAUST SYSTEM			
	Main stack	√		Design shall be in compliance with environmental studies.
	Blanketing plates	√		
	Aircraft warning lighting	√		
	Platform and stair lighting	√		
4.3	CONTINUOUS EMISSION MONITORING SYSTEM(CEMS)	√		
4.4	BYPASS STACK			
	Diverter damper	√		For one Gas Turbine only
	Guillotine damper	√		For one Gas Turbine only
	By pass stack	√		For one Gas Turbine only & Design shall be in compliance with environmental studies.
5	STEAM TURBINE PACKAGE			
5.1	ONE (1) STEAM TURBINE (FOR TWO SETS OF GAS TURBINE) AND AUXILIARIES			
	Steam Turbine	√		
	Acoustical enclosure	√		
	Stop and control valves	√		
	Admission valves	√		
	By pass valves	√		
	Exhaust hood system	√		
	Steam sealing system	√		
	Gland sealing system	√		
	Turning Gear	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
	Turbine drain system	√		
	Lube oil system	√		
	Hydraulic oil system	√		
	Insulation	√		
5.2	ELECTRICAL SYSTEMS AND EQUIPMENT			
	Excitation system	√		
	AC Motor Control Centre's	√		Incorporated in plant MCC
	DC Panel Board	√		
5.3	GENERATOR & AUXILIARIES			
	Generator	√		
	Generator circuit breaker	√		
	Generator isolated phase bus duct	√		
	Generator neutral grounding cubicle	√		
5.4	CONTROL AND INSTRUMENTATION	√		Controlled by DCS
	Turbine Control System	√		
	Generator Control System	√		
	Turbine & Generator Protection System	√		
6	SCOPE OF SUPPLY – ELECTRICAL			
6.1	TRANSMISSION LINE (OHL)	√		In case of Underground line construction is chosen, technical specifications and superiority of the selected option should be agreed with GSE by EPC Contractor
6.2	HV SWITCHGEAR/SUBSTATION	√		
6.3	HV OHL BETWEEN GRID AND CCPP	√		
6.4	TRANSFORMERS			
	Generator Step up Transformers for GTG	√		
	Generator Step up Transformer for STG	√		
	Unit Auxiliary Transformers	√		
	Station Auxiliary Transformers	√		
6.5	MEDIUM VOLTAGE SWITCHGEARS	√		
6.6	LOW VOLTAGE SWITCHGEARS	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
6.7	MCC PANELS	√		
6.8	AC DISTRIBUTION SYSTEMS	√		
6.9	DC SUPPLY AND UPS SYSTEM	√		
6.10	GENERATOR CONNECTIONS	√		
6.11	PROTECTION RELAYING SYSTEM	√		
6.12	ELECTRICAL MONITORING SYSTEM	√		
6.13	ELECTRICITY TARIFF METERING	√		
6.14	CABLES AND RACEWAY/DUCT BANK SYSTEM	√		
6.15	GROUNDING SYSTEM	√		
6.16	POWER PLANT LIGHTING			
	Road lighting	√		
	Building lighting	√		
	Equipment lighting	√		
6.17	COMMUNICATION SYSTEM	√		Within plant area telephone and internet system.
6.18	ALARM, ACCESS CONTROL, PUBLIC ADDRESS, CCTV AND SECURITY SYSTEMS	√		
6.19	EMERGENCY DIESEL GENERATOR	√		
6.20	BLACK START DIESEL GENERATOR	√		With a grid (national) rebuild complete function
6.21	CATHODIC PROTECTION AND HEAT TRACING (for all necessary pipe and vessel facilities)	√		
7	INSTRUMENTATION & CONTROL SYSTEM			
7.1	DCS	√		
	Mimic panel	√		
	Large screen display	√		
	Programmable Logic Computers	√		
	Relaying/metering/protection	√		
	RTU/SCADA system	√		
7.2	LOCAL INSTRUMENTS AND CABLES	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
7.3	PLC	√		Auxiliary system.
8	SCOPE OF SUPPLY - BALANCE OF PLANT "MECHANICAL"			
8.1	FUEL SYSTEM (NATURAL GAS)			
	Fuel Gas Pipe Line from Main line tie-in point to GPRMS		√	
	Gas Pressure Reducing, Regulation and Metering Station (GPRMS)		√	
	Gas Pipeline from GPRMS to plant	√		
	Natural Gas Compressor Station with Canopy	√		Gas compressor electrical engines should be equipped with soft starter unit
	Gas Regulatory Station (RMS)	√		Inside Plant. Shall have ability to work without regulation
	GT Fuel Auxiliary System	√		
	Fuel Gas Piping within the Site Boundary	√		
8.2	RAW WATER SUPPLY SYSTEM			
	Settling Pond construction	√		Capacity Should be defined by engineer based on plant water volume requirements.
	Raw Water piping and pump station (with canopy)	√		
	All other required equipment, Connection Piping, Valves, and Piping Fittings	√		
8.3	RAW WATER TREATMENT SYSTEM			Shall be built by the Contractor.
	Flocculator	√		Design should be done according sample analysis results, taken in accordance of standards and canal water turbidity level
	Service Water Pump	√		
	All required equipment/facilities Connection Piping, Valves, and Piping Fittings	√		
8.4	DEMINERALIZED WATER TREATMENT SYSTEM			
	Two demineralized water transfer pumps	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
	Demineralized water storage tank	√		As per relevant standards.
	Intermediate product tanks	√		As per relevant standards.
	Acid and Caustic Tanks	√		As per relevant standards.
	All required equipment/facility, connection Piping, piping fittings, valves, instruments, and controls	√		
8.5	COOLING WATER SYSTEM			
	Mechanical Induced Draft Cooling Tower	√		
	Circulating Water Pump	√		
	Circulating Water Chemical Dosing Skid	√		
	All required equipment/facilities, Connection Piping, Valves, and Piping Fittings	√		
8.6	CLOSED COOLING WATER SYSTEM			
	Auxiliary coolers & Auxiliary cooling water expansion tank	√		As per relevant standards.
	Heat Exchanger	√		
	CCW Circulation Pumps	√		
	All required equipment/facilities, Connection Piping, Valves, and Piping Fittings	√		
8.7	WASTE WATER TREATMENT			
	Sewage Treatment Plant	√		The Contractor's scope is to install sewage system within the site boundary and pipeline from the Site boundary to the existing waste water treatment plant (X 504011.766; Y 4589494.926)
	Sanitary Lift Station	√		
	Oily Wastewater Separator System	√		
	Waste Water Collection Pit	√		
	Waste Water Transfer Pump	√		
	Connection Piping, Valves, and Piping Fittings	√		
8.8	POTABLE WATER SYSTEM			
	Potable water pipeline	√		Tie-in (X 503512.961; Y 4589518.387)
	Potable Water Storage Tank	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
	Potable Water Supply Pump	√		
	Connection Piping, Valves, and Piping Fittings	√		
8.9	MAIN STEAM SYSTEM			
	HP steam system	√		
	LP steam system	√		
8.10	CONDENSATE SYSTEM	√		
8.11	CONDENSER AIR REMOVAL SYSTEM	√		
8.12	BOILER FEED WATER SYSTEM	√		
	Boiler feed water pumps	√		
	Piping, valves, and instrumentation	√		
8.13	CHEMICAL INJECTION & DOSING SYSTEM	√		
8.14	STEAM AND WATER SAMPLING AND ANALYSIS	√		
8.15	BOILER BLOW-DOWN SYSTEM	√		
8.16	STEAM BYPASS SYSTEM	√		
8.17	INSTRUMENT AIR SYSTEM	√		
8.18	SERVICE AIR SYSTEM	√		
8.19	Nitrogen Generation System	√		
8.20	FIRE PROTECTION SYSTEM	√		
	Fire Hydrant System	√		
	Carbon Dioxide System	√		For GT
	Water Spray System	√		
	Portable Fire Extinguishers	√		
	Firefighting Pumps	√		
	Fire Water Ring Main Piping	√		
	Fire Detection System	√		
8.21	PAINTING AND INSULATION	√		
8.22	HVAC SYSTEM	√		

No.	Task	Responsible		Remarks
		Contractor	Employer	
8.23	CRANES AND HOISTS	√		
8.24	LABORATORY TOOLS AND APPARATUS	√		
8.25	PIPING SYSTEM	√		
8.26	PLANT DRAIN SYSTEM	√		
9	OTHERS			
9.1	WORKSHOP EQUIPMENT		√	
9.2	I & C WORKSHOP EQUIPMENT		√	
9.3	FUEL SYSTEM (NATURAL GAS) ANALYSIS	√		Analysis required to determine composition and LHV of fuel gas to ensure proper design of the plant
9.4	ALL OTHER REQUIRED EQUIPMENT, CONNECTION PIPING, VALVES, AND PIPING FITTINGS, CABLING ETC.	√		
9.5	GENERAL SYSTEMS PROGRAMS AND SOFTWARE	√		Last Available Versions
9.6	FINAL VENDOR LIST AND CONTACT DETAILS for all installed equipment	√		Final vendor list is required in order to enable the Employer to purchase spares.
9.7	CONTINUOUS EMISSION MONITORING SYSTEM	√		

5. DOCUMENTS FOR APPROVAL OR REVIEW BY THE EMPLOYER

5.1 GENERAL

Drawings and documentation shall be detailed and complete to ensure that the Power Plant will conform to the Employer's requirements and also enable the design requirements to be fully implemented during the procurement and site construction phases. All drawings and documentation submitted shall:

- Reference and be compatible with all interface drawings
- be no larger than AO, however standard A2 size is preferred, in case A2 is not readable, original size will be submitted
- contain a project specific Title Block; and the specific format to be discussed and agreed by both Employer and Contractor show specific revision changes to facilitate effective tracking and review
- be provided in both AutoCAD.dwg and searchable PDF versions incl. "as built" drawings.

5.2 SUBMISSION DISTRIBUTION AND FORMAT

Design drawings, calculation reports and other document submissions shall be clearly legible and transmitted in both English and Georgian Language or bilingual Georgian-English. Submission shall be by electronic copy (in searchable PDF format and Auto CAD.dwg (2004 or higher version)

for drawings), with parallel hardcopy - from 2 to 5 hard copies as requested by Employer. Provided that for Employers review and approval submission will be only in electronic copy followed by hard copies after approval. All electronic submissions shall be printable without special software or required significant conversion. Scanned documents are not acceptable, except of the cases when it is unavoidable and necessary. In the event of conflict between the electronic and hard copy submission, the hard copy shall prevail.

Technical data lists for Equipment, Instruments, Cables, etc., and Bill of Materials, included in the documents should be in EXCEL format.

The CONTRACTOR shall arrange for the efficient distribution of contract documentation to enable the timely review of the project engineering design by the Employer and/or the Employer's Representative.

Documents (drawings, instructions and manuals) shall be of such quality and with such legibility that hardcopy reproductions may be prepared by the Employer with every line, character and letter clearly legible and usable for further reproduction.

Documents shall be searchable.

The preliminary 'Document Listing' is summarized below which gives the main categories of documentation.

Document List	Submittal Time from the Contract sign date. <i>(Mentioned submittal times are for 1st Version/Issue of the Document)</i>
Engineering Deliverable List (For Review)	30 days – Preliminary 90 days – Final
Project Level 2 Schedule (For Approval)	60 days
Project Level 3 Schedule (For Review)	2 months look ahead Level 3 Schedule to be submitted with monthly reports.
Design Drawings & Calculations (For Approval)	Progressively
General Layout – Plot Plan (For Approval)	15 days
Electrical Single Line Diagram (For Approval)	30 days
Flow Diagrams (For Approval)	75 days
P&IDs (For Approval)	90 days
Materials Specification's (For Approval)	Progressively
Plant Major Equipment Specifications (For Review)	20 days prior to order
Controls and DCS Architecture (For Approval)	Progressively
Building Architecture (For Approval)	Progressively
Building Standards and Codes to be used (For Approval)	Progressively
Detailed Layouts and Arrangement Drawings (For Approval)	Progressively
Wiring Diagrams (For Approval)	Progressively
Monthly Progress Report (For Review)	Progressively
Vendor List (Final vendor list is required in order to enable the Employer to purchase spares.) (For Review)	Progressively
Construction Procedures (For Approval)	Progressively

Project Management Plans (HS, ENV, Waste Management, QA/QC, Pre-commissioning & commissioning) (For Approval)	Prior to commencement of the construction.
Project Quality Plan (For Approval)	60 days
Detailed ITPs & Test Procedures (For Approval)	30 days prior draft procedures, 15 days prior final procedures prior to commencement of the related tests and activities
List of consumables and spare parts for operation purposes (For Review)	No later than 12 months before completion of construction
Commissioning and Testing Schedule incl. firm amounts of natural gas required (For Review)	6 months prior to commissioning
As Built Drawings (For Review)	Within 30 days after Take Over
O&M Manuals (For Approval) The final issue of the-Operation & Maintenance Manuals (specific to the as built Gardabani 3 power plant) reviewed by the Employer and the Employer's Representative in 5(five) printed copies and 1 (one) electronic file (CD).	No later than 42 days from submission of Taking-Over Certificate
O&M Manufacturers Manuals (For Review) For each Plant equipment delivered on site.	No later than 14 days from delivery on site

5.3 DOCUMENTATION REVIEW AND APPROVAL

The Employer's or Employer's Representative's review or approval on Contractor's Documents shall not relieve the CONTRACTOR of its obligation to meet the requirements of the Contract (whether this be the Technical Specification, Plant Functionality or Guarantees).

Response time for Document Review by the Employer shall be 14 working days from date of receipt of the document electronic copy. Electronic copies will be submitted by e-mail and/or by FTP server, the details of which will be discussed in the execution phase. The Employer shall make every effort to make the review in a shorter time than 14 working days and in particular in the event that the CONTRACTOR highlights where specific documents are critical for early review. Comments may be provided to the CONTRACTOR either by email and/or fax with comments listed or by marked up drawing with accompanying cover-note. The Cover-Note shall state that the Contractor's Documents complies with the Contract, or the extent to which it does not comply. If Contractor's Document fails to comply, it shall be rectified, resubmitted and reviewed in accordance with the turnaround time specified above. For each part of the works, execution of such part of the works shall not commence prior to the approval of Contractor's Documents by the Employer or Employer's Representative. If the Contractor wishes to modify any design document which has previously been approved, the Contractor shall immediately give notice to the Employer. Thereafter, the Contractor shall submit revised documents to the Employer in accordance with the above approval procedure.

Detailed Document review and approval procedure (including numbering and coding) will be discussed in the execution phase.

Specification of Requirements

For JSC Georgian Oil and Gas Corporation to Connect Gardabani Thermal Plant-3, a Combined Cycle Thermal Power Plant (CCTPP) in Gardabani Municipality, to the Power Grid

JSC Georgia Electrosystem is not against of connection by JSC Georgian Oil and Gas Corporation of Gardabani Thermal Plant-3, a 276.1 MW (Gross) Combined Cycle Thermal Power Plant (CCTPP) in Gardabani Municipality (X= 504593; Y=4589422), to the Power Grid subject to the following requirements:

1. The Applicant to select a site and build the relevant plant of the required capacity (276.1 MW) and a 500/11-kV substation, with all the necessary equipment and devices;
2. A designated space to be allocated in S/S Gardabani-500 to set up a 500-kV line bay with all the necessary modern equipment and devices
3. A 500-kV single-circuit power transmission line (OHL) to be built between the line bay to be set up in the 500-kV switchgear of S/S Gardabani-500 and the design S/S 500/11 kV to be built by the Applicant;
4. The route, length, wire type, grade and section of the to-be-built 500-kV OHL to be ascertained at the design phase;
5. The route of the to-be-built 500-kV OHL to be agreed with the relevant organization(s);
6. The scope of reconstruction-restoration works to be determined at the design phase;
7. The 500-kV line bay of S/S Gardabani-500 to be equipped with the digital protection, control and automation relays integrated into the digital protection and control relays present in S/S Gardabani-500; the digital protection terminals that entail a digital protection relay (at both ends of the line) shall have the following functional capabilities:

Protection Set I

- Differential protection (with optical communication);
- 5 remote protection zones;
- 4-step residual current protection;
- Maximum current protection;
- Emergency current protection (with two interphase steps and two zero steps);
- Breaker backup;
- 3-phase automatic changeover switch;
- 1-phase automatic changeover switch;
- Remote and local control of the bay;
- Fault site identification;
- Logging and storing emergency records and oscillograms;
- Synchronism detection;
- Communication facility;
- Time synchronization.

Protection Set II

- Differential protection (with optical communication);
- 5 remote protection zones;
- 4-step residual current protection;

- Maximum current protection;
 - Emergency current protection (with two interphase steps and two zero steps);
 - Breaker backup;
 - 3-phase automatic changeover switch;
 - 1-phase automatic changeover switch;
 - Remote and local control of the bay;
 - Fault site identification;
 - Logging and storing emergency records and oscillograms;
 - Synchronism detection;
 - Communication facility;
 - Time synchronization.
8. GSE to report the relay protection settings of the to-be-built 500-kV power transmission line (OHL) in S/S Gardabani-500;
 9. All connections to Gardabani Thermal Plant-3 to be equipped with modern digital protection and control devices, the relay protection settings of each element to be reported [to] and agreed with GSE;
 10. The Applicant to set up, for each Gardabani Thermal Plant-3 and the 500-kV power transmission line, a synchronized phasor measurement system (the technical details of which must be agreed at the design phase with GSE), and provide for the following:
 - The synchronized vector measuring system must transmit data to S/S Gardabani-500 subject to the requirements of IEEE C37.118 provided, however, the port(s) of the PMU(s) and communication device(s) is/are not used for other purposes and are physically isolated from other networks;
 - The time synchronization of the synchronized phasor measurement system must be carried out through GPS.
 - The current and voltage circuits of any PMU(s) used in the synchronized phasor measurement system must be connected to the protection precision class coils of the current and voltage transformers;
 - PMUs in the synchronized phasor measurement system must be capable of reporting messages in the performance classes P and M);
 - PMUs used in the synchronized phasor measurement system must be capable of reporting at the rate of 50 messages per second;
 - For each unit, the synchronized phasor measurement system must measure the following parameters:
 - Y-voltage and phase-lag angle of the all the generator status' three phases;
 - Phase current and phase-lag angle of the all the generator status' three phases;
 - Generator stator voltage frequency;
 - Generator stator voltage frequency variation rate;
 - Field voltage;
 - Field current;
 - Generator breaker state (discreet signals – breaker on / off);
 - Unit (transformer) breaker state (discreet signals – breaker on / off);
 - Turbine
 - Guide vane position (analogous signal equivalent to the guide vane opening/closing range of 0-100%).

- The synchronized phasor measurement system must measure the following parameters for the 500-kV Overhead power transmission line:
 - Y-voltage and phase-lag angle of the all the three phases;
 - Phase current and phase-lag angle of the all the three phases;
 - Voltage frequency;
 - Voltage frequency variation rate;
 - State of breaker(s) (discreet signals – breaker on / off).
11. Within no later than 10 (ten) business days prior to the examination by the commission, after the design has been agreed, the Applicant shall present:
- List of relay protection and automation equipment protocols;
 - Protocol of testing the relay protection and automation equipment under the agreed design;
 - Documents attested to by the company (according to the map of the settings of the EPP connections) stating that the settings agreed with GSE have been provided in the relay protection and automation equipment).
12. In Gardabani Thermal Plant-3, GSE will ensure the arrangement of Emergency Control Automatics (ECA), for which purpose the User shall ensure the following:
- To allocate, in the line of the control and protection cabinet(s) of each unit, space for an ECA cabinet, to which the following must be brought:
 - Respective cables to be connected to the protection precision class coils of the current and voltage transformers connected to the generator stator circuit (technical details to be agreed at the design phase);
 - Respective cables to be connected to the interlocks of the generator breaker and transformer unit breaker (technical details to be agreed at the design phase);
 - Respective cables to be connected to the shutdown circuit of the generator breaker or transformer unit breaker (technical details to be agreed at the design phase)
 - Cables to the DC and AC power supplies (technical details to be agreed at the design phase).
 - To allocate, in the line of the control and protection cabinet(s) of the 500-kV power transmission line (OHL), space for an ECA cabinet, to which the following must be brought:
 - Respective cables to be connected to the interlocks of the 500-kV power transmission line (OHL) breaker, bus switch and line isolating switch (technical details to be agreed at the design phase);
 - Cables to the DC and AC power supplies (technical details to be agreed at the design phase).
13. Automatic regulation of revolutions per minute (frequency) on the generators;
14. The frequency regulator must have the ability to adjust the statism coefficient droop within the range of 2%-8%;
15. The power plant must have ability to participate in Frequency Containment Reserves (FCR) and thus
- a. the power activation/deactivation speed must be $\geq 3\% P_{nom}/s$ [$180\%P_{nom}/min$];
 - b. the value of primary reserve shall be no more than $12\%P_{nom}$ In a limited period of time determined by Balancing Market;
16. The PP must be capable of taking part in Frequency Restoration Reserves (FRR):
- a. The plant turndown with minimum load of $21\%P_{nom}$ up to 6 hours per day;

- b. Stable working ability within 21-100%Pnom.
17. The PP must be capable of taking part in Replacement Reserves (RR):
 18. The generator drive governor must be capable of operating in a forced mode for at least 10 seconds.
 19. The generator drive system must be equipped with a Power System Stabilizer (PSS);
 20. The PP must be capable of:
 - a. generating reactive power
 - b. consuming reactive power
 21. The generator drive system must have the following operating modes:
 - a. Voltage control mode (V);
 - b. Reactive power control mode (Q);
 - c. Power factor control mode (cosf);
 22. The nominal power factor of the PP must be less than 0.85 (cosf<0.85);
 23. The PP must be capable of operating within the following frequencies in the relevant periods of time:

47.0 – 47.5 Hz 20 sec
47.5 – 48.5 Hz 30 min
48.5 – 49.0 Hz 60 min
49.0 – 51.0 indefinitely
51.0 – 51.5 Hz 30 min
51.5 – 52.5 Hz 30 sec
52.5 – 53.0 Hz 10 sec

24. The PP must be capable of operating to an allocated load in an autonomous mode. When the PP operates in an autonomous mode, the generator speed control system must also be capable of operating within the frequency range of 45.0 Hz – 55.0 Hz;
25. The PP must be capable of operating within the following voltage limits:

0.85 – 0.90 pu 60 min
0.90 – 1.12 pu indefinitely
1.12 – 1.15 pu 20 min

26. The PP must be capable of withstanding the frequency derivative, i.e., maintaining a parallel operation with the system:
 - if the frequency derivative value does not exceed 1.5 Hz/sec (measured in a 200 ms time interval by a 20 ms increment) and, in addition,
 - The network frequency does not exceed 50.75 Hz.
27. The PP must have a start black-start capability:
 - a. cold start – in maximum 2 hours;
 - b. warm start – in at least 1 hour;
 - c. hot start – in at least 35 minutes.
28. The PP gas turbine must have ability to operate autonomously;
29. Maximum power loss resulting from the deactivation of one unit of PP must be less than 50% of the total power generation (<50%);
30. The number of PP activations must not exceed 270 per year; in addition, it shall have the ability of 50 urgent switch off during a year and 3 urgent switches off a day using system automatic.
31. The design specifications for each of the PP generators, excitation systems, speed control

- systems, power system stabilizers (PSS) must be presented to be approved by GSE;
32. Must be integrated into the Emergency Control System and be capable of withstanding sudden (emergency) blackouts without being damaged;
 33. Frequency and voltage ramping settings must be agreed with GSE;
 34. The details of the functional capabilities of the relay protection and automation equipment to be agreed and specified with GSE on the design phase;
 35. In S/S Gardabani 500, the digital relay(s) of the newly added bay must be fully integrated into the Station Control and Monitoring System (SCMS), i.e. SCADA, Level 2 (this involves setting up digital relays, integrating them into the SS communication network, integrating them into the existing SIEMENS GW&HMI control and monitoring system, updating them and testing (including locking) them. Technical details to be agreed at the design phase;
 36. For reliability purposes, a circular (using two cables) optic-fiber communication system must be set up between the Gardabani CCTPP-3 and S/S Gardabani-500 control buildings under the following terms and conditions:
 - **On the one hand**, instead of the earthing cable, the following must be mounted from portal to portal of the 500-kV power transmission line (OHL) to be built between Gardabani CCTPP-3 and S/S Gardabani-500: OPGW optic-fiber cable with single mode (SM) optic cores. On the premises of both substations, the communication line from the portal joint box to the telecommunications cabinet must be set up using a ground dielectric SM optic-fiber cable with Rodent Protection, double protective layer, placed in a corrugated plastic pipe. The cables in the telecommunications cabinets in both substations must be terminated with an optic distribution frame (ODF).

Note: if the OPGW cable cannot be built along the entire route of the 500-kV overhead PTL to be erected because it would cross any other existing overhead PTLs, the need for arranging ground dielectric optic-fiber cable sections from pole to pole at such cross points must be provided for.
 - **On the other hand**, a ground dielectric SM optic-fiber cable with Rodent Protection, double protective layer, placed in a corrugated plastic pipe must be buried between the telecommunications cabinets in the Gardabani CCTPP-3 and S/S Gardabani-500 control buildings. At both ends, the cable in the telecommunications cabinets must be terminated with an optic distribution frame (ODF).
 37. The optic cores of the optic-fiber cable must comply with ITU-T G.652D Recommendation Link;
 38. The Joint Box, ODF, Pigtails, optic-fiber connectors, the ground dielectric optic-fiber cable the OPGW optic-fiber cable shall preferably be made by the same manufacturer;
 39. The quantity of the specific materials required for the construction of the OPGW optic-fiber cable, ground dielectric optic-fiber cable as well as the precise technical details of equipment to be agreed at the detailed design phase;
 40. A Station Control and Monitoring System (SCMS), i.e. SCADA, Level III, must be set up to provide remote control and monitoring (National Control Center) of the design PP/SS power equipment. The system must ensure exchange of telecommunications of the PP (all connections) with National Control Center using the communication elements of SCADA, Level I;

The SCADA, Level I communication elements may include:

- GW (GateWay), a data collection and transmission equipment between the PP and National Control Center to collect information, transmit it to SCADA, Level I for PP control;
 - ICON multiplexor. Tele protection and Automatic Emergency Control for OHL;
 - L3 switches – to connect the design PP to the communication network of the current SCADA, Level I.
41. The design PP must be provided with at least two telephones for personnel on duty to maintain direct communication with National Control Center;
 42. Support shall be provided (the participation of the relevant G3 engineer in preparing the configuration of SCADA, Level I communication element to ensure mutual compatibility on a protocol level) during the Remote Control and Monitoring configuration/testing;
 43. The SCADA, Level I communication elements in the design PP must be accommodated in secure space with micro climate.
 44. Uninterrupted power supply must be provided for the SCADA, Level I communication elements in the design PP;
 45. An electricity billing meter to be installed for the line bay to be set up in the 500-kV switchgear of S/S Gardabani-500;
 46. A control electricity meter to be installed for the line bay of the 500-kV OHL (connecting to S/S Gardabani-500) in Gardabani TPP-3;
 47. Technical meters to be installed on the PP generators, auxiliary power transformers and at the points defined by Article 66.6, Chapter 8 of the Network Rules
 48. The Applicant to prepare the design to set up the billing meter and connecting it to an upper Electric current control and metering system and dully agree it with GSE before commencing the works, provided the field works are performed according to this agreed design;
 49. The design to set up the control and technical meters and connecting them to an upper Electric current control and metering system to be prepared by GSE, provided the field works are performed according to this agreed design;
 50. The meters identified at paragraphs 45, 46 and 47 of these Requirements must be set up in compliance with the respective requirements of all the normative acts applicable in Georgia, including (but not limited to):
 - a) respective requirements of Chapter 8 (Metering Procedure) of the Network Rules approved by Resolution №10, 17.04.2014 of the Georgian National Energy and Water Supply Regulatory Commission as well as any other applicable industry requirements related to metering.
 - b) respective requirements of the Technical Regulation on Approval of the Rules of Operation of Electric Power Plants and Networks (Government of Resolution №434, 13 December 2013), including (but not limited to) Article 56;
 - c) respective requirements of the Rules of Operation of Electric Power Plants and Networks (approved by Order №52, 4 October 2010 of the Minister of Energy of Georgia), including (but not limited to) Article 56;
 51. In the course of designing and setting up the network and during the operation of the facility, the requirements of the Rules for Setting up Electric Installations, the Rules for Delivering and Consuming Electricity (Electric Power), the Safety Rules, the Network Rules, and other normative acts applicable in Georgia must be fully complied with;
 52. What with disturbances arising in the power grid for a variety of reasons, limitations may apply subject to the emergency control requirements of GSE;
 53. The Applicant's design documentation for connecting the TPP to the power grid to be developed subject to these the technical requirements, and submitted to GSE for approval;
 54. The Applicant may conduct the works under the design only after the design has been approved;

55. If these technical requirements are not complied with in full, GSE shall be released from responsibility for a reliable connection of the design SS, TPP and OHL to the power grid;
56. Before the facility is connected to the power transmission network, the Applicant shall submit all the primary and secondary electrical equipment measurement protocols issued by an accredited person for the Applicant's SS, TPP and OHL (the protocols to give an opinion on the serviceability of equipment). The Applicant must submit the required protocols at least 10 business days prior to the examination by the commission.
57. The facility to be connected to the electrical network after the Commission for Examination of Works for Compliance with Requirements has conducted an onsite inspection and issued a Commission Report.

Note:

1. EPC contractor is obliged to submit completed technical project within 3 (three) months after the signing of the contract to GSE. The project must be accompanied by all relevant documents required by the GSE including plans, diagrams and other drawings, also Project shall be expertised and conclusion must be provided. The project of connection to the transmission network and the attached documentation must be submitted to the GSE in Georgian language, both in material (printed) and in electronic versions.

2. In case of 500kv underground transmission line is chosen, EPC contractor is responsible to prepare a comprehensive study for connection of PP to the substation "Gardabani-500", which should include both technical issues related to the construction of the cable line and the issues of its reliability of substation. It is also advisable to study the planned inspections and the possibilities and conditions for emergency situations.

EPC Contractor must submit Above mentioned Study to GSE no later than 2 (two) months after the signing of the contract.

Within 1 (one) month from the submission of the Study, GSE will review the results of the Study and in case the underground cable is acceptable for operational, technical, dispatching and other topics, GSE confirms the suitability and written confirmation will be issued which shall include additional GSE requirements and conditions regarding the cable line arrangement.

Split of Obligations

No.	Task	Responsible	
		Contractor	GSE
1	The Applicant to select a site and build the relevant plant of the required capacity (276.1 MW Gross) and a 500/11-kV substation, with all the necessary equipment and devices;	√	
2	A designated space to be allocated in S/S Gardabani-500 to set up a 500-kW line bay with all the necessary modern equipment and devices		√
3	A 500-kW single-circuit power transmission line (OHL) to be built between the line bay to be set up in the 500-kV switchgear of S/S Gardabani-500 and the design S/S 500/11 kV to be built by the Applicant;	√	
4	The route, length, wire type, grade and section of the to-be-built 500-kV OHL to be ascertained at the design phase;	√	
5	The route of the to-be-built 500-kV OHL to be agreed with the relevant organization(s);	√	
6	The scope of reconstruction-restoration works to be determined at the design phase;	√	√
7	<p>The 500-kW line bay of S/S Gardabani-500 to be equipped with the digital protection, control and automation relays integrated into the digital protection and control relays present in S/S Gardabani-500; the digital protection terminals that entail a digital protection relay (at both ends of the line) shall have the following functional capabilities:</p> <p>Protection Set I</p> <ul style="list-style-type: none"> · Differential protection (with optical communication); · 5 remote protection zones; · 4-step residual current protection; · Maximum current protection; · Emergency current protection (with two interphase steps and two zero steps); · Breaker backup; · 3-phase automatic changeover switch; · 1-phase automatic changeover switch; · Remote and local control of the bay; · Fault site identification; · Logging and storing emergency records and oscillograms; · Synchronism detection; · Communication facility; · Time synchronization. <p>Protection Set II</p> <ul style="list-style-type: none"> · Differential protection (with optical communication); · 5 remote protection zones; · 4-step residual current protection; · Maximum current protection; · Emergency current protection (with two interphase steps and two zero steps); · Breaker backup; · 3-phase automatic changeover switch; · 1-phase automatic changeover switch; · Remote and local control of the bay; · Fault site identification; · Logging and storing emergency records and oscillograms; · Synchronism detection; · Communication facility; · Time synchronization. 		√
8	GSE to report the relay protection settings of the to-be-built 500-kV power transmission line (OHL) in S/S Gardabani-500;		√

9	All connections to Gardabani Thermal Plant-3 to be equipped with modern digital protection and control devices, the relay protection settings of each element to be reported [to] and agreed with GSE;	√	
10	<p>The Applicant to set up, for each Gardabani Thermal Plant-3 and the 500-kV power transmission line, a synchronized phasor measurement system (the technical details of which must be agreed at the design phase with GSE), and provide for the following:</p> <ul style="list-style-type: none"> · The synchronized vector measuring system must transmit data to S/S Gardabani-500 subject to the requirements of IEEE C37.118 provided, however, the port(s) of the PMU(s) and communication device(s) is/are not used for other purposes and are physically isolated from other networks; · The time synchronization of the synchronized phasor measurement system must be carried out through GPS. · The current and voltage circuits of any PMU(s) used in the synchronized phasor measurement system must be connected to the protection precision class coils of the current and voltage transformers; · PMUs in the synchronized phasor measurement system must be capable of reporting messages in the performance classes P and M); · PMUs used in the synchronized phasor measurement system must be capable of reporting at the rate of 50 messages per second; · For each unit, the synchronized phasor measurement system must measure the following parameters: <ul style="list-style-type: none"> o Y-voltage and phase-lag angle of the all the generator status' three phases; o Phase current and phase-lag angle of the all the generator status' three phases; o Generator stator voltage frequency; o Generator stator voltage frequency variation rate; o Field voltage; o Field current; o Generator breaker state (discreet signals – breaker on / off); o Unit (transformer) breaker state (discreet signals – breaker on / off); o Turbine o Guide vane position (analogous signal equivalent to the guide vane opening/closing range of 0-100%). · The synchronized phasor measurement system must measure the following parameters for the 500-kV Overhead power transmission line: <ul style="list-style-type: none"> o Y-voltage and phase-lag angle of the all the three phases; o Phase current and phase-lag angle of the all the three phases; o Voltage frequency; o Voltage frequency variation rate; o State of breaker(s) (discreet signals – breaker on / off). 	√	
11	<p>Within no later than 10 (ten) business days prior to the examination by the commission, after the design has been agreed, the Applicant shall present:</p> <ul style="list-style-type: none"> · List of relay protection and automation equipment protocols; · Protocol of testing the relay protection and automation equipment under the agreed design; · Documents attested to by the company (according to the map of the settings of the EPP connections) stating that the settings agreed with GSE have been provided in the relay protection and automation equipment). 	√	
12	<p>In Gardabani Thermal Plant-3, GSE will ensure the arrangement of Emergency Control Automatics (ECA), for which purpose the User shall ensure the following:</p> <ul style="list-style-type: none"> · To allocate, in the line of the control and protection cabinet(s) of each unit, space for an ECA cabinet, to which the following must be brought: <ul style="list-style-type: none"> o Respective cables to be connected to the protection precision class coils of the current and voltage transformers connected to the generator stator circuit (technical details to be agreed at the design phase); o Respective cables to be connected to the interlocks of the generator breaker and transformer unit breaker (technical details to be agreed at the design phase); o Respective cables to be connected to the shutdown circuit of the generator breaker or transformer unit breaker (technical details to be agreed at the design phase) o Cables to the DC and AC power supplies (technical details to be agreed at the design phase). · To allocate, in the line of the control and protection cabinet(s) of the 500-kV power transmission line (OHL), space for an ECA cabinet, to which the following must be brought: <ul style="list-style-type: none"> o Respective cables to be connected to the interlocks of the 500-kV power transmission line (OHL) breaker, bus switch and line isolating switch (technical details to be agreed at the design phase); o Cables to the DC and AC power supplies (technical details to be agreed at the design phase). 		√
13	Automatic regulation of revolutions per minute (frequency) on the generators;	√	
14	The frequency regulator must have the ability to adjust the statism coefficient droop within the range of 2%-8%;	√	
15	<p>The power plant must have ability to participate in Frequency Containment Reserves (FCR) and thus</p> <ol style="list-style-type: none"> a. the power activation/deactivation speed must be $\geq 3\% P_{nom}/s$ [180%P_{nom}/min]; b. the value of primary reserve shall be no more than 12%P_{nom} In a limited period of time determined by Balancing Market; 	√	
16	<p>The PP must be capable of taking part in Frequency Restoration Reserves (FRR):</p> <ol style="list-style-type: none"> a. The plant turndown with minimum load of 21%P_{nom} up to 6 hours per day; b. Stable working ability within 21-100%P_{nom}. 	√	

17	The PP must be capable of taking part in Replacement Reserves (RR);	✓	
18	The generator drive governor must be capable of operating in a forced mode for at least 10 seconds.	✓	
19	The generator drive system must be equipped with a Power System Stabilizer (PSS);	✓	
20	The PP must be capable of: a. generating reactive power b. consuming reactive power	✓	
21	The generator drive system must have the following operating modes: a. Voltage control mode (V); b. Reactive power control mode (Q); c. Power factor control mode (cosf);	✓	
22	The nominal power factor of the PP must be less than 0.85 (cosf<0.85);	✓	
23	The PP must be capable of operating within the following frequencies in the relevant periods of time: 47.0 – 47.5 Hz 20 sec 47.5 – 48.5 Hz 30 min 48.5 – 49.0 Hz 60 min 49.0 – 51.0 indefinitely 51.0 – 51.5 Hz 30 min 51.5 – 52.5 Hz 30 sec 52.5 – 53.0 Hz 10 sec	✓	
24	The PP must be capable of operating to an allocated load in an autonomous mode. When the PP operates in an autonomous mode, the generator speed control system must also be capable of operating within the frequency range of 45.0 Hz – 55.0 Hz;	✓	
25	The PP must be capable of operating within the following voltage limits: 0.85 – 0.90 pu 60 min 0.90 – 1.12 pu indefinitely 1.12 – 1.15 pu 20 min	✓	
26	The PP must be capable of withstanding the frequency derivative, i.e., maintaining a parallel operation with the system: · if the frequency derivative value does not exceed 1.5 Hz/sec (measured in a 200 ms time interval by a 20 ms increment) and, in addition, · The network frequency does not exceed 50.75 Hz.	✓	
27	The PP must have a start black-start capability: a. cold start – in maximum 2 hours; b. warm start – in at least 1 hour; c. hot start – in at least 35 minutes.	✓	
28	The PP gas turbine must have ability to operate autonomously;	✓	
29	Maximum power loss resulting from the deactivation of one unit of PP must be less than 50% of the total power generation (<50%);	✓	
30	The number of PP activations must not exceed 270 per year; in addition, it shall have the ability of 50 urgent switch off during a year and 3 urgent switches off a day using system automatic.	✓	
31	The design specifications for each of the PP generators, excitation systems, speed control systems, power system stabilizers (PSS) must be presented to be approved by GSE;	✓	
32	Must be integrated into the Emergency Control System and be capable of withstanding sudden (emergency) blackouts without being damaged;	✓	
33	Frequency and voltage ramping settings must be agreed with GSE;	✓	
34	The details of the functional capabilities of the relay protection and automation equipment to be agreed and specified with GSE on the design phase;	✓	
35	In S/S Gardabani 500, the digital relay(s) of the newly added bay must be fully integrated into the Station Control and Monitoring System (SCMS), i.e. SCADA, Level 2 (this involves setting up digital relays, integrating them into the SS communication network, integrating them into the existing SIEMENS GW&HMI control and monitoring system, updating them and testing (including locking) them. Technical details to be agreed at the design phase;		✓
36	For reliability purposes, a circular (using two cables) optic-fiber communication system must be set up between the Gardabani CCTPP-3 and S/S Gardabani-500 control buildings under the following terms and conditions: · On the one hand , instead of the earthing cable, the following must be mounted from portal to portal of the 500-kV power transmission line (OHL) to be built between Gardabani CCTPP-3 and S/S Gardabani-500: OPGW optic-fiber cable with single mode (SM) optic cores. On the premises of both substations, the communication line from the portal joint box to the telecommunications cabinet must be set up using a ground dielectric SM optic-fiber cable with Rodent Protection, double protective layer, placed in a corrugated plastic pipe. The cables in the telecommunications cabinets in both substations must be terminated with an optic distribution frame (ODF). · Note: if the OPGW cable cannot be built along the entire route of the 500-kV overhead PTL to be erected because it would cross any other existing overhead PTLs, the need for arranging ground dielectric optic-fiber cable sections from pole to pole at such cross points must be provided for. · On the other hand , a ground dielectric SM optic-fiber cable with Rodent Protection, double protective layer, placed in a corrugated plastic pipe must be buried between the telecommunications cabinets in the Gardabani CCTPP-3 and S/S Gardabani-500 control buildings. At both ends, the cable in the telecommunications cabinets must be terminated with an optic distribution frame (ODF).	✓	

37	The optic cores of the optic-fiber cable must comply with ITU-T G.652D Recommendation Link;	✓	
38	The Joint Box, ODF, Pigtails, optic-fiber connectors, the ground dielectric optic-fiber cable the OPGW optic-fiber cable shall preferably be made by the same manufacturer;	✓	
39	The quantity of the specific materials required for the construction of the OPGW optic-fiber cable, ground dielectric optic-fiber cable as well as the precise technical details of equipment to be agreed at the detailed design phase;	✓	
40	A Station Control and Monitoring System (SCMS), i.e. SCADA, Level III, must be set up to provide remote control and monitoring (National Control Center) of the design PP/SS power equipment. The system must ensure exchange of telecommunications of the PP (all connections) with National Control Center using the communication elements of SCADA, Level I; The SCADA, Level I communication elements may include: · GW (GateWay), a data collection and transmission equipment between the PP and National Control Center to collect information, transmit it to SCADA, Level I for PP control; · ICON multiplexor. Tele protection and Automatic Emergency Control for OHL; · L3 switches – to connect the design PP to the communication network of the current SCADA, Level I.	✓	
41	The design PP must be provided with at least two telephones for personnel on duty to maintain direct communication with National Control Center;	✓	
42	Support shall be provided (the participation of the relevant G3 engineer in preparing the configuration of SCADA, Level I communication element to ensure mutual compatibility on a protocol level) during the Remote Control and Monitoring configuration/testing;	✓	
43	The SCADA, Level I communication elements in the design PP must be accommodated in secure space with micro climate.	✓	
44	Uninterrupted power supply must be provided for the SCADA, Level I communication elements in the design PP;	✓	
45	An electricity billing meter to be installed for the line bay to be set up in the 500-kV switchgear of S/S Gardabani-500;		✓
46	A control electricity meter to be installed for the line bay of the 500-kV OHL (connecting to S/S Gardabani-500) in Gardabani TPP-3;	✓	
47	Technical meters to be installed on the PP generators, auxiliary power transformers and at the points defined by Article 66.6, Chapter 8 of the Network Rules	✓	
48	The Applicant to prepare the design to set up the billing meter and connecting it to an upper Electric current control and metering system and dully agree it with GSE before commencing the works, provided the field works are performed according to this agreed design;		✓
49	The design to set up the control and technical meters and connecting them to an upper Electric current control and metering system to be prepared by GSE, provided the field works are performed according to this agreed design;	✓	
50	The meters identified at paragraphs 45, 46 and 47 of these Requirements must be set up in compliance with the respective requirements of all the normative acts applicable in Georgia, including (but not limited to): a) respective requirements of Chapter 8 (Metering Procedure) of the Network Rules approved by Resolution №10, 17.04.2014 of the Georgian National Energy and Water Supply Regulatory Commission as well as any other applicable industry requirements related to metering. b) respective requirements of the Technical Regulation on Approval of the Rules of Operation of Electric Power Plants and Networks (Government of Resolution №434, 13 December 2013), including (but not limited to) Article 56; c) respective requirements of the Rules of Operation of Electric Power Plants and Networks (approved by Order №52, 4 October 2010 of the Minister of Energy of Georgia), including (but not limited to) Article 56;	✓	✓
51	In the course of designing and setting up the network and during the operation of the facility, the requirements of the Rules for Setting up Electric Installations, the Rules for Delivering and Consuming Electricity (Electric Power), the Safety Rules, the Network Rules, and other normative acts applicable in Georgia must be fully complied with;	✓	✓
52	What with disturbances arising in the power grid for a variety of reasons, limitations may apply subject to the emergency control requirements of GSE;	✓	✓
53	The Applicant's design documentation for connecting the TPP to the power grid to be developed subject to these the technical requirements, and submitted to GSE for approval;	✓	
54	The Applicant may conduct the works under the design only after the design has been approved;	✓	
55	If these technical requirements are not complied with in full, GSE shall be released from responsibility for a reliable connection of the design SS, TPP and OHL to the power grid;	✓	✓
56	Before the facility is connected to the power transmission network, the Applicant shall submit all the primary and secondary electrical equipment measurement protocols issued by an accredited person for the Applicant's SS, TPP and OHL (the protocols to given an opinion on the serviceability of equipment). The Applicant must submit the required protocols at least 10 business days prior to the examination by the commission.	✓	
57	The facility to be connected to the electrical network after the Commission for Examination of Works for Compliance with Requirements has conducted an onsite inspection and issued a Commission Report.	✓	✓

Facility Structures on the design territory of Gardabani CCTPP

Terms of Reference

Main parameters and key technical solutions of the facilities

1. Administrative Office Building and Security Buildings

Number of floors – two-floor building and basement;

Building dimensions: length 46 m, width 16 m;

The following must be located on the first floor of the building:

- Reception;
- Dining-room for 50 persons;
- Locker room with 30 lockers;
- Shower room – toilet;
- Two hotel type rooms with WC;
- Two rooms (one for server and IT staff);
- Relaxation room for staff;
- Storage and utility premises;
- Ventilation, fire and other equipment assembly room.

The following must be located on the second floor of the building:

- One office room for the manager, secretary room with the reception and communication with the meeting room;
- Meeting room;
- Three office rooms (large);
- Ten office rooms (small);
- Relaxation room for staff;
- Kitchen area;

- Archives;
- At least 2 WCs

The following must be located on the basement of the building:

- Various storage and utility rooms, in agreement with the Purchaser.

Security staff building:

- One floor;
- 2 rooms;
- WC;
- 4 (four) security guard towers with the minimum height of 5 m must be arranged on the territory;

Other parameters of the building to be designed shall be defined on the basis of the calculation, in agreement with the Purchaser.

General technical solutions

Building type

- Frame – reinforced concrete structure;
- Walls – small-size building blocks;
- Insulation of the structure should be considered;

The building must be equipped with:

- Power supply and water supply systems;
- Sewage system;
- HVAC (heating/ventilation/air conditioning) system;
- Fire protection system;
- Communication lines: telephone connection, Internet, security sensor and surveillance systems.

The design shall be developed on the basis of conducting of engineering-geodesic, engineering-geologic and engineering-hydrometeorological reconnaissance works.

2. Main warehouse

- One-floor thermally insulated structure of rectangular shape;
- Dimensions not more than 40 x 50 m (to be defined more precisely during the design);
- Structure height – 12 m (to be defined more precisely during the design);
- The foundation type to be selected on the basis of the geological-engineering studies;
- Frame type – metal structure;
- The structure must be stainless steel factory-made sandwich panels;
- Stainless steel shelves in six rows along the length of the warehouse;
- The floor must be made of reinforced concrete, with smooth/shiny surface;
- The structure must have three large-size and four small-size doors (passages for trucks, personnel and emergency exits);
- Electricity and lighting network must be provided;
- The structure must be equipped with a ventilation system to keep the internal space dry;
- Fire hydrants must be provided in the vicinity of the structure and fire alarm system must be arranged in the internal space;
- Openable windows must be made on the walls of the structure and rain shutters shall be installed on the external façade;
- A lifting crane with lifting capacity of at least 10 tons must be installed in the internal space of the structure to ensure relocation of freight within the storage room (so-called overhead crane);

3. Chemicals Warehouse

- One-floor thermally insulated structure of rectangular shape;
- 500 m² (to be defined more precisely during the design);
- Structure height – 8 m (to be defined more precisely during the design);
- The foundation type to be selected on the basis of the geological-engineering studies;
- Frame type – metal structure;
- The structure must be stainless steel factory-made sandwich panels;
- The floor must be made of reinforced concrete, with smooth/shiny surface;
- The structure must have one large-size and three small-size doors (passages for trucks, personnel and emergency exits);
- Electricity and lighting network must be provided;
- The structure must be equipped with a ventilation system to keep the internal space dry;

- Fire hydrants must be provided in the vicinity of the structure and fire alarm system must be arranged in the internal space;
- Openable windows must be made on the walls of the structure and rain shutters shall be installed on the external façade;
- A lifting crane with lifting capacity of at least 5 tons must be installed in the internal space of the structure to ensure relocation of freight within the storage room (so-called overhead crane);
- Two separate, independent storage room must be arranged inside the internal perimeter of the Warehouse;

4. Shelter warehouse

- One-floor thermally insulated structure of rectangular shape;
- 500 m² (to be defined more precisely during the design);
- Structure height – 6 m (to be defined more precisely during the design);
- The foundation type to be selected on the basis of the geological-engineering studies;
- Frame type – metal structure;
- The structure must be covered by stainless steel factory-made sheet panels;
- The perimeter of the structure must be cladded by stainless-steel factory-made mesh panels;
- The floor must be made of reinforced concrete;
- The structure must have two large-size and two small-size doors made of stainless steel factory-made mesh panels (passages for trucks, personnel and emergency exits);
- Electricity and lighting network must be provided;
- Fire hydrants must be provided in the vicinity of the structure and fire alarm system must be arranged in the internal space;
- A lifting crane with lifting capacity of at least 3 tons must be installed in the internal space of the structure to ensure relocation of freight within the storage room (so-called overhead crane);

5. Workshop

- One-floor thermally insulated structure of rectangular shape;
- Dimensions not more than 20 x 35 m (to be defined more precisely during the design);
- Structure height – 12 m (to be defined more precisely during the design);
- The foundation type to be selected on the basis of the geological-engineering studies;
- Frame type – metal structure;
- The structure must be stainless steel factory-made sandwich panels;
- Stainless steel shelves shall be arranged in one row along the length of the workshop;
- The floor must be made of reinforced concrete with smooth/shiny surface;
- The structure must have one large-size and four small-size doors (passages for trucks, personnel and emergency exits);

- Electricity, lighting and Internet network must be provided;
- The structure must be equipped with HVAC (heating/ventilation/air conditioning) system;
- Fire hydrants must be provided in the vicinity of the structure and fire alarm system must be arranged in the internal space;
- The workshop must be provided with water and sewage system;
- Openable windows must be made on the walls of the structure and rain shutters shall be installed on the external façade;
- A lifting crane with lifting capacity of at least 10 tons must be installed in the internal space of the structure to ensure relocation of freight within the workshop (so-called overhead crane);
- Three independent office rooms, two shower room-toilets and locker-room with 10 lockers must be provided in the internal space of the workshop;
- The structure must be provided with electricity and lighting network;

6. Laboratory (Incl. Tools and Equipments)

- One-floor thermally insulated structure of rectangular shape;
- Dimensions not more than 15 x 155 m (to be defined more precisely during the design);
- Structure height – 5 m (to be defined more precisely during the design);
- The foundation type to be selected on the basis of the geological-engineering studies;
- Frame type – reinforced concrete;
- The structure must have two small-size doors (personnel and emergency exits);
- Electricity, lighting and Internet network must be provided;
- The structure must be equipped with heating/air conditioning system which must keep temperature within 18-28°C;
- The structure must be provided with water and sewage system;
- Openable windows must be made on the walls of the structure and rain shutters shall be installed on the external façade;
- Four independent office rooms must be provided in the internal space of the structure;
- The structure must be provided with electricity and lighting network;
- The structure must be provided with a ventilation system;
- The structure must be provided with a moisture absorption equipment (to be defined more precisely during the design);

Extract From
Resolution of the Government of Georgia
No. 257
May 31, 2019
Tbilisi

On the procedure of issuing a construction permit for facilities of special importance (except construction of radiation and nuclear facilities) and permit conditions

Article 31. Architectural design, structural and technological scheme

1. Pursuant to this Resolution, the second stage of issuing a construction permit is to approve the architectural design, structural and/or technological scheme.
For approval of the architectural-construction design, the permit seeker must submit the architectural design and/or if required, structural scheme and/or technological scheme.
2. In cases defined by the Resolution, as well as upon request of the Agency, the permit seeker shall submit the structural scheme and/or technological scheme at the second stage of issuing a construction permit.

Article 32. Content of the architectural design

1. Architectural design of a building (structure) includes:
 - a) Information about the facility subject to construction permit which includes:
 - a.a) title page, name and address of the facility;
 - a.b) list of sheets;
 - a.c) used conventional signs;
 - a.d) explanatory note containing description of the designing purposes:
 - a.d.a) basis and purposes of designing;
 - a.d.b) written description of the land parcel;
 - a.d.c) contextual description of the design;
 - a.d.d) description of the main structural system of the building (structure);
 - a.d.e) description of the legislation used for designing;
 - a.e) technical data of the building (structure):
 - a.e.a) area of the land parcel;
 - a.e.b) size of the used K1 and development area;
 - a.e.c) size of the used K2 and development density area, showing the development area of each floor;
 - a.e.d) size of the used K3 and the landscaping area;
 - a.e.e) area of the building (structure), including, if any, area of the residential house; apartment area(s); office premises; trade and household service area(s); production area; storehouse area; staircase and entrance areas; summer areas (balconies, terraces, verandas and loggias);

- b) analysis of compliance with "Building and Structure Safety Rules" for buildings and structures;
 - b.a) occupancy and description of each use;
 - b.b) structure type(s);
 - b.c) height limitations;
 - b.d) area limitations;
 - b.e) requirements to the external wall openings;
 - b.f) requirements to passages;
 - b.g) requirements to fire protection systems;
 - b.h) requirements to fixtures of the water supply system;
 - b.i) other requirements, if applicable.
- c) situational plan – scale 1:2000 or 1:1000;
- d) photo material reflecting the current situation (distant and close-up views, specifying the date)
- e) land parcel layout (specifying the coordinates) – scale 1:500 or 1:250:
 - e.a) land parcel layout shown on the land parcel topographical plan;
 - e.b) location and heights of buildings and structures;
 - e.c) land parcel access roads and domestic motor roads, parking lots, pathways, bicycle path, landscaping, improvement etc.;
 - e.d) if required, household waste container placement scheme;
 - e.e) in case of change of the ground surface, the ground surface change plan;
 - e.f) surface water removal scheme;
- f) floor layouts at all levels and the roof layout – scale 1:200, 1:100 and/or 1:50:
 - f.a) layout of all floors and roof of the building, showing the cadaster border projection, floor surface elevations, ground elevation of the building (structure) in respect to the absolute ground elevation;
 - f.b) the building floor layouts must provide information about the basic floor sizes, room and/or space areas and their basic sizes as well as the basic sizes of passages;
 - f.c) furniture and/or other location layouts – in accordance with the Resolution of Georgia No. 41 dated January 28, 2016 "On approval of the Technical Regulations – Building and Structure Safety Rules";
- g) lateral and/or longitudinal section(s) of buildings and structures – scale 1:200, 1:100 and/or 1:50:
 - g.a) sections of buildings and structures, must contain at least the ground surface elevations and the building and structure ground elevation in respect to the absolute ground elevation;
 - g.b) used materials, at the discretion of the permit seeker;
 - g.c) significant parts and/or details, at the discretion of the permit seeker – scale 1:20, 1:10 and/or 1:5;
- h) all facades of the building and structure – scale 1:200, 1:100 and/or 1:50:
 - h.a) materials and colors used on the façade;
 - h.b) in case of existence of adjacent buildings, layouts – scale 1:500 and/or 1:200;
 - h.c) significant parts and/or details of the façade – scale 1:20, 1:10 and/or 1:5;
- i) occupancy and passage layouts for buildings and structures – scale 1:200 and/or 1:100:
 - i.a) occupancy loads;
 - i.b) road-stair and other passage throughputs;
 - i.c) passages, access to passages, passways and exits from the building;
 - i.d) maximum distances to be covered to the passage;

- i.e) access route;
- i.f) if required, shelter areas;
- i.g) if required, other requirements;
- j) compliance of road-stairs, entrance ramps, banisters and door handles for buildings and structures with Building and Structure Safety Rules in the form of drawings – scale 1:50 and/or 1:20;
- k) fire protection plans for buildings and structures – scale 1:200
 - k.a) requested quality fire-resistance delimiters;
 - k.b) used fire protection systems;
 - k.c) other requirements, if required;
- l) building and structure facades in special construction regulation zones and historic protection zones where their basic dimensions, heights, including heights between floors must be specified, showing the ground crossing levels in respect to the absolute ground elevation, specifying the sizes of all openings and architectural details on the façade, façade (reference surface) drawings, showing schematic drawings of building facades (reference surfaces) located on the adjacent land parcels (for example, street layout); composite photographs and axonometric views defining architectural details, finishing-construction materials and colors (both in printed and digital form, showing all kinds of finishing materials, windows, stained-glass windows, banisters or other architectural elements used on facades in detail (including, showing the place of location of heating-air conditioning technical facilities), as well as the used paint color by RGB or RAL codes;
- m) if required, mockup and/or referenced view(s) and/or composite photographs;
- n) on the territory of Tbilisi, land parcel landscaping design as well, which together with other data must also contain the following information:
 - n.a) K-3 coefficient area;
 - n.b) types of green plantings to be planted (including, description – age, height);
 - n.c) landscaping design completion date;
 - n.d) person responsible for care of the planted green plantings;
 - n.e) length of care of the planted green plantings;
- o) on the territory of Tbilisi, road traffic organization scheme showing the transport/road infrastructure of the design territory, showing connection to the survey territory;
- p) additional material at the discretion of the permit seeker.

2. Parts of the architectural design defined by paragraph one of this Article may be submitted in a combined form.

3. In case of submission in a printed form - the architectural design must be submitted folded in A-4 format, stitched up in the binder /filer.

Article 33. Content of the structural scheme

1. In case of construction of structures (including, linear structures), the structural scheme includes:

- a) explanatory note;
- b) land parcel layout (where location of structures on land parcel(s) is shown in a physical context);

- c) ground surface change plan (if any) for the territory required for the structure(s);
- d) identification of ground elevation and reference to the absolute ground elevation;
- e) schematic drawings of views/facades;
- f) sections characterizing the structure(s);
- g) layouts of all floors (if any) of the building.

2. By decision of the Client, the structural scheme may additionally include:

- a) photos of the territory;
- b) digital visualization and/or mockup.

3. Parts of the structural scheme defined by paragraph one of this Article may be submitted in a combined form, folded in A-4 format, stitched up in the binder /filer.

Article 34. Content of the technological scheme

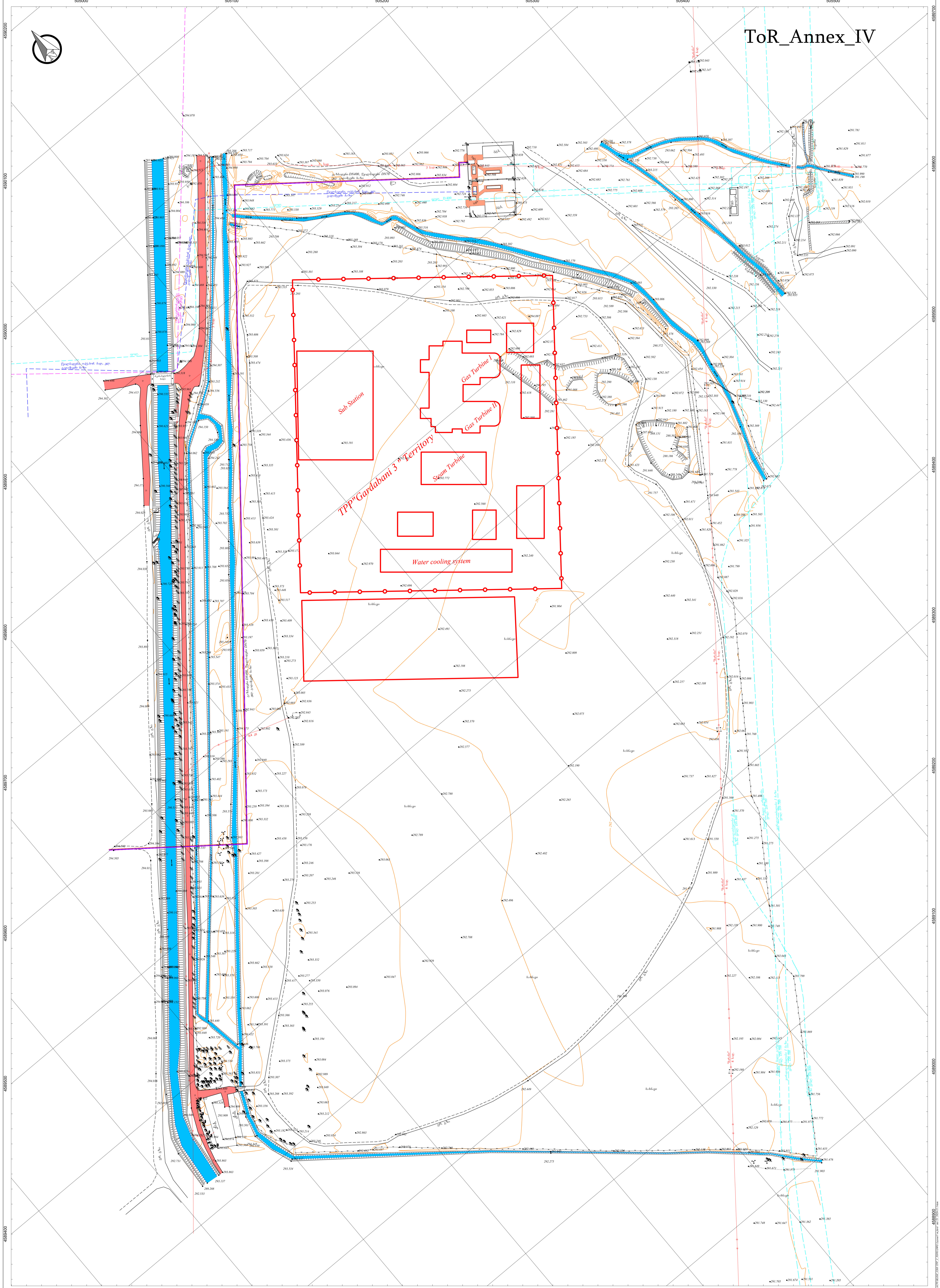
1. Technological scheme includes:


- a) explanatory note;
- b) land parcel layout (where location of structures on land parcel(s) is shown in a physical context);
- c) ground surface change plan (if any) for the territory required for the structure(s);
- d) identification of ground elevation and reference to the absolute ground elevation;
- e) schematic drawings of facades (reference surfaces);
- f) sections characterizing the structure(s);
- g) technological scheme of the respective production process(es);
- h) layouts of all floors (if any) of the building.

2. By decision of the Client, the technological scheme may additionally include:

- a) photos of the territory;
- b) digital visualization and/or mockup.

3. Parts of the technological scheme defined by paragraph one of this Article may be submitted folded in A-4 format, stitched up in the binder /filer.



 <p>საქართველოს ენერჯეტიკის მინისტრის სამსახურის საინჟინერო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>
	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>
<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>
<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>	<p>საპროექტო-კონსტრუქციო სამსახური</p>

სახელწოდება: GARDABANI-3-TOPO-00001
 შპს "საქენერჯეტიკი"
 შტაბ-ბინა / SCALE 1:1000

TURNKEY CONTRACT AGREEMENT

REGARDING ENGINEERING, PROCUREMENT AND CONSTRUCTION OF GARDABANI-III
COMBINED-CYCLE THERMAL POWER PLANT

BETWEEN

GOGC/GARDABANI TPP 3 LLC

AND

[*Contractor*]

This Turnkey Contract Agreement regarding engineering, procurement and construction of Gardabani-III 272 MW Combined-Cycle Thermal Power Plant is made on [●] by and among:

- (1) **GOGC/Gardabani TPP 3 LLC** (the “**Employer**”), a [●] company established and existing under the laws of Georgia and headquartered at [●], Georgia,
- (2) [●] (the “**Contractor**”), a company established and existing under the laws of [●],

WHEREAS, the Employer desires to acquire Gardabani-III 272 MW Combined Cycle Thermal Power Plant through the Contract based on the conditions for Turn-Key Engineering, Procurement and Construction Contracts issued by International Federation of Consulting Engineers (FIDIC) in the Silver Book of 1999;

WHEREAS, the Contractor has responded to the Reference for Proposals for EPC/Turn Key Project regarding the above-mentioned thermal power plant, which was issued by the Employer on [●], 2020;

WHEREAS, the Contractor has represented that it is experienced and qualified in providing technical assistance, licensing, engineering, procurement, supply, construction management, construction, commissioning, start-up and testing services, and that it possesses the requisite expertise and resources to complete the Works;

WHEREAS, the Contractor desires to deliver to the Employer in accordance with and subject to the terms and conditions set forth in the Contract the completed in all respects Gardabani-III 272 MW Combined Cycle Thermal Power Plant;

WHEREAS, the Contractor has agreed to guarantee the timely and proper completion of the Contract in strict accordance with the terms and conditions thereof;

WHEREAS, the Employer is acting based on and in accordance with Article 10¹.3(d) of the Law of Georgia on State Procurement for the purposes of the procurement under the Contract falling under the CPV Code 45251140,

NOW, THEREFORE, in consideration of the foregoing premises, the mutual promises and covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Employer and the Contractor hereby agree as follows:

1. Definitions

- 1.1 Unless otherwise expressly defined therein, capitalized words and expressions whenever used in this Contract including the Preamble, Recitals and signature page thereof have the meanings assigned to them in the General Condition of Contract as amended and/or modified by the Particular conditions of the Contract.

1.2 Unless the context otherwise requires, references in this Contract Agreement to Preamble, Recitals, Articles, Clauses and Annexes are to the Preamble, the Recitals, the Articles, the Clauses and the Annexes to this Contract Agreement.

2. Contract Documents

2.1 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:

2.1.1 This Turnkey Contract Agreement regarding engineering, procurement and construction of Gardabani-III 272 MW Combined-Cycle Thermal Power Plant;

2.1.2 Annexes

2.1.2.1 Annex 1:	Particular Conditions of the Contract;
2.1.2.2 Annex 2:	General Conditions of the Contract (FIDIC Silver Book 1999 edition);
2.1.2.3 Annex 3:	Employer's Requirements (Section 4 (Terms of Reference) of the Request for Proposals (RFP # [●]) for EPC/Turn Key Project for Construction of 272 MW Combined Cycle Thermal Power Plant - Gardabani 3, which was issued by JSC Georgian Oil and Gas Corporation on [●] 2020;
2.1.2.4 Annex 4:	Project Requirements (as agreed by the Parties during the negotiations of the Contract Agreement)
2.1.2.5 Annex 5:	Schedule of Payments;
2.1.2.6 Annex 6:	Financial and Technical Proposal dated [●] submitted by the Contractor in response to the Request for Proposals (RFP # [●]) for EPC/Turn Key Project for Construction of 272 MW Combined Cycle Thermal Power Plant – Gardabani-3;
2.1.2.7 Annex 7:	Advance Payment Guarantee Form related to the first installment of the Advance Payment;
2.1.2.8 Annex 8:	Advance Payment Guarantee Form related to the second installment of the Advance Payment
2.1.2.9 Annex 9:	Performance Security Form;
2.1.2.10 Annex 10:	Warranty Bond Form;
2.1.2.11 Annex 11:	General Conditions of Dispute Adjudication Agreement.

- 2.2** In the event of any error, omission, discrepancy, ambiguity, or conflict in the Contract Documents, the order of priority as between the Contract Documents shall be the order in which the Contract Documents are listed in this Article 2 (Contract Documents).
- 2.3** If there is discrepancy between FIDIC Silver Book (1999 edition) and the Governing Law the latter governs and prevails.

3. Miscellaneous

3.1 The Recitals to this Contract Agreement set forth above are and for all purposes shall be interpreted as being an integral part thereof, constituting acknowledgments and agreements by and between the parties hereto, and are incorporated in this Contract Agreement by this reference.

3.2 The Contract shall become effective and be valid and binding on both Parties:

3.2.1 Solely with respect to the Engineering Works and Temporary Works, which does not require issuance of the Gardabani-III CCTPP Construction Permit, as of the date the latest from the following events is occurred:

3.2.1.1 upon signing of the Contract Agreement by both Parties, and

3.2.1.2 Delivery to the Employer of the Performance Security and the Advance Payment Guarantee for the first installment of the advance payment. For the avoidance of any doubts and notwithstanding anything to the contrary in the Contract, the Parties acknowledge and agree that (i) this Clause 3.2.1 and the provisions of the Contract governing the issues related to the terms of delivery, substance and form of the above guarantees shall enter into force upon execution of the Contract Agreement by both Parties, and (ii) in case of failure by the Contractor to deliver the respective guarantees to the Employer within 21 (twenty one) days from the date of signing of this Contract Agreement by both Parties, the Employer shall have the right to unilaterally terminate and annul the Contract, exercise all rights and remedies available under the Contract and the Governing Law in connection with and arising out of such termination and annulment and negotiate the implementation/construction of the Gardabani-III 272 MW Combined Cycle Thermal Power Plant without any liability on the side of the Employer.

3.2.2 With respect to the Works other than Works referred to in Clause 3.2.1 of this Contract Agreement, as of the date the latest from the following events is occurred:

3.2.2.1 the events mentioned in Clauses 3.2.1.1 and 3.2.1.2 of this Contract Agreement;

3.2.2.2 A Construction Permit for the Gardabani-III CCTPP is granted.

- 3.2.2.3** Delivery to the Employer the Advance Payment Guarantee for the second installment of the advance payment. For the purposes of this Clause 3.2.2.3, the third paragraph of Sub-Clause 8.1 [*Commencement of Works*] and the provisions of the Contract governing the issues related to the terms of delivery, substance and form of the Advance Payment Guarantee for the second installment of the advance payment shall enter into force upon occurrence of all the events mentioned in Clauses 3.2.2.1 and 3.2.2.2 of the Contract Agreement.
- 3.3** Unless terminated earlier, the Contract remains in full force and effect 45 (forty-five) days after the issuance of the Performance Certificate.
- 3.4** No waiver by any Party of any defaults by the other in the performance of any of the provisions of the Contract shall operate or be construed as a waiver of any other or further default or defaults whether of a like or different character. No failure or delay by either Party in exercising any right, power or privilege under the Contract shall operate as a waiver thereof nor shall any single partial exercise by that Party of any right, power or privilege preclude any further exercise thereof or the exercise of any other right, power or privilege.
- 3.5** Save as otherwise expressly provided herein, no provision of this Contract may be amended, modified, waived, or discharged or terminated, otherwise than by the express written agreement of the Parties signed by their duly authorized representatives, nor may any breach of any provision of the Contract be waived or discharged except with the express written consent of the Party not in breach. If signature of the Contract by the Parties requires any preliminary agreement, consent, approval or other authorization, any amendment and/or modification of the Contract shall be performed only after obtaining of such agreement, consent, approval or other authorization and/or observance of other requirements of the Governing Law.
- 3.6** A holding of any court of competent jurisdiction or by an arbitral tribunal under Sub-Clause 20.9 [*Arbitration*] of the Particular Conditions of the Contract that any provision of the Contract is illegal, invalid or unenforceable shall not result in invalidation of the entire Contract. Instead, the Contract shall be construed, if possible, in such manner as to give effect to the intent of the Parties with regard to the particular provision or provisions held to be invalid, and, in any event, all other terms shall remain in full force and effect.
- 3.7** Nothing contained in the Contract shall be construed to create an association, trust, partnership, or joint venture or impose a trust or partnership duty, obligation, or liability on or with regard to the Parties, or to create any duty, standard of care or liability to any person or entity not a Party hereto.
- 3.8** The Contract constitutes the entire agreement between the Employer and the Contractor concerning the subject matter hereof. All previous documents,

representations, undertakings and agreements, whether verbal, written or otherwise, between the Parties concerning the subject matter hereof are hereby cancelled and shall not affect or modify any of the terms or obligations set forth in the Contract. The Annexes are hereby made an integral part of the Contract Agreement and shall be fully binding upon the Parties.

- 3.9 Each Party shall be liable for its own costs and expenses (including the fees and expenses of its agents, representatives, advisors, counsel and accountants) necessary for the negotiation, preparation, execution, delivery and performance of, compliance with and, subject to the provisions of the Contract, the enforcement of the Contract.
- 3.10 The Contract shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.
- 3.11 The Contract is signed in two (2) originals one (1) original to each of the Parties.

IN WITNESS THEREOF GOGC/Gardabani TPP 3 LLC and [*Contractor*] have executed this Turnkey Contract Agreement regarding engineering, procurement and construction of Gardabani-III 272 MW Combined-Cycle Thermal Power Plant on the date and year first above written,

ON BEHALF OF EMPLOYER

ON BEHALF OF CONTRACTOR

Name: [●]

Name: [●]

Title: [●]

Title: [●]

Annex 1

Particular Conditions of the Contract

PARTICULAR CONDITIONS

OF THE TURNKEY CONTRACT AGREEMENT REGARDING ENGINEERING, PROCUREMENT AND CONSTRUCTION OF GARDABANI-III COMBINED-CYCLE THERMAL POWER PLANT DATED [●], 2020 BETWEEN GARDABANI TPP 3 LLC AND [●]

- (1) GOGC/Gardabani TPP 3 LLC (the “**Employer**”), a limited liability company established and existing under the laws of Georgia and headquartered at [●], Georgia,
- (2) [●] (the “**Contractor**”), a company established and existing under the laws of [●] and headquartered at [●],

HEREBY AGREE AS FOLLOWS:

1. The followings shall replace/prevail the related provisions of General Conditions of the Contract:

1.1. Replace Sub-Clause 1.1.1.1 with the following:

“**Contract**” means the Contract Agreement and other Contract Documents to be read and construed in accordance with Article 2 (Contract Documents) of the Contract Agreement.

1.2. Replace Sub-Clause 1.1.1.2 with the following:

“**Contract Agreement**” means the Turnkey Contract Agreement between the Contractor and the Employer regarding engineering, procurement and construction of Gardabani-III 272 MW Combined-Cycle Thermal Power Plant.

1.3. Replace Sub-Clause 1.1.1.3 with the following:

“**Employer’s Requirements**” means the document entitled the Employer’s Requirements, as included in the Contract Agreement as Annex 3. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the Works.

1.4. Replace Sub-Clause 1.1.1.4 with the following:

“**Tender**” means the Financial (including technical) Proposal [●], 2020 submitted by the Contractor in response to the Request for Proposals (RFP # [●]) for EPC/Turn Key Project for Construction of 272 MW Combined Cycle Thermal Power Plant – Gardabani-3 as amended and revised by the Project Requirements agreed by the Parties, which is included in the Contract Agreement as Annex 4.

1.5. Replace Sub-Clause 1.1.1.5 with the following:

“**Project Requirements**”, “**Performance Security**”, “**Advance Payment Guarantee related to the first installment of the Advance Payment**”, “**Advance Payment Guarantee related to the second installment of the Advance Payment**” and “**Warranty Bond**” mean the documents so named (if any), as included and

described in the Contract and attached to the Contract Agreement as Annexes 4, 7, 8, 9 and 10, respectively.

- 1.6. The following Sub-Clause 1.1.1.6 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.1.5:

“Contract Documents” means all and each of the documents listed in Clause 2.1 of the Contract Agreement.

- 1.7. Replace Sub-Clause 1.1.2.9 with the following:

“DAB” means the person or three persons appointed under Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] or Sub-Clause 20.3 [*Failure to Agree Dispute Adjudication Board*].

- 1.8. The following Sub-Clause 1.1.2.11 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.2.10:

“Parties” means both the Employer and the Contractor.

- 1.9. Replace Sub-Clause 1.1.3.1 with the following:

“Base Date” means the Effective Date.

- 1.10. Replace Sub-Clause 1.1.3.2 with the following:

“Commencement Date” means the date when the notice under Paragraph 3 of Sub-Clause 8.1 [*Commencement of Works*] is served upon the Contractor.

- 1.11. Replace Sub-Clause 1.1.3.3 with the following:

“Time for Completion” means 28 (twenty eight) months, calculated from the Commencement Date.

- 1.12. Delete Sub-Clause 1.1.3.6.

- 1.13. Replace Sub-Clause 1.1.3.7 with the following:

“Defects Notification Period” means the 24 (twenty four) months period for notifying defects in the Works under Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] (with any exception or extension under Sub-Clause 11.3 [*Extension of Defects Notification Period*]), calculated from the date on which the Works is completed as certified under Sub-Clause 10.1 [*Taking Over of the Works*].

- 1.14. Replace Sub-Clause 1.1.3.9 with the following:

“Business Day” means any day other than a Saturday, Sunday or a legal holiday in Georgia.

- 1.15. The following Sub-Clause 1.1.3.10 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.3.9:

“Effective Date” means the date when the Contract becomes effective as set forth in Article 3.2.1 of the Contract Agreement.

- 1.16. The following Sub-Clause 1.1.3.11 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.3.10:

“Guaranteed Performance Parameters” means the guaranteed performance parameters set forth in Section 2.2 of the Employer’s Requirements that are required to be demonstrated during the Performance Test and Reliability Run and constitute pre-conditions for the Taking Over.

- 1.17. The following Sub-Clause 1.1.3.12 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.3.11:

“Commencement Date of Engineering Works” means the date when the Employers serves notice upon the Contractor under Paragraph 1 of Sub-Clause 8.1 [*Commencement of Works*].

- 1.18. Replace Sub-Clause 1.1.4.1 with the following:

“Contract Price” means [●] US Dollars ([●] US Dollars) including all taxes applicable in Georgia, out of which [●] US Dollars ([●] US Dollars) constitute service VAT and customs duties levied on imported Plant and Materials. Nevertheless, for the purposes of interpretation and application of other provisions of the Contract, whenever referred to herein, **“Contract Price”** shall mean [●] US Dollars ([●] US Dollars), which is all inclusive fixed lump-sum price for the successful in all respect performance and completion by the Contractor of the Works. However, this price excludes service VAT and custom duties levied on imported Plant and Materials (for the avoidance of any doubts, costs including levies, fees and service fee related to customs clearance shall be borne by the Contractor). For the avoidance of any doubts and notwithstanding anything to the contrary in this Contract, if the Contract does not become effective with respect to the Works other than Engineering Works in accordance with Article 3.2.2 of the Contract Agreement, (i) the Employer’s financial liability with respect to the Engineering Works shall be capped at the amount, which is the lesser of the first installment of the Advance Payment or values of the Engineering Works actually performed by the Contractor, as determined by LEPL Levan Samkharauli National Forensics Bureau, and (ii) respectively, the Contract Price shall be deemed to be equal to the values of the Engineering Works determined by LEPL Levan Samkharauli National Forensics Bureau. Valuation cost shall be borne by the Contractor.

- 1.19. Delete Sub-Clauses 1.1.4.6 and 1.1.4.7.

- 1.20. The following Sub-Clause 1.1.4.9 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.4.8:

“US Dollars” means the lawful currency of the United States of America from time to time.

1.21. Replace Sub-Clause 1.1.5.4 with the following:

“Permanent Works” means the permanent works to be designed and executed by the Contractor under the Contract for the purposes of delivery on a turn-key basis of the Gardabani-III CCTPP to the Employer.

1.22. Delete Sub-Clause 1.1.5.6.

1.23. The following Sub-Clause 1.1.5.9 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.5.8:

“Engineering Design” means an engineering design of the Gardabani-III CCTPP as required in accordance with the Governing Law for the purposes of obtaining of a construction permit for the Gardabani-III CCTPP.

1.24. The following Sub-Clause 1.1.5.10 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.5.9:

“Engineering Works” mean preparation and completion of the Engineering Design in accordance with the requirements of the Contract and the Governing Law, which constitutes a part of the Permanent Works.

1.25. The following Sub-Clause 1.1.5.11 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.5.10:

“Gardabani-III CCTPP” means Gardabani-III 272 MW Combined Cycle Thermal Power Plant including respective Plant, Materials and Works comprising and integrating the entire facility described in the Contract, which is approved for putting into operations (commissioning) in accordance with the Governing Law. For the avoidance of any doubts, this definition includes but is not limited to the natural gas pipeline connecting Gardabani-III 272 MW Combined Cycle Thermal Power Plant to the gas pressure reducing and metering station (GPRMS) operated by LLC Georgian Gas Transportation Company, and electricity transmission line from the switchyard to JSC Georgian State Electrosystem’s substation, as further described in the Employer’s Requirements.

1.26. The following Sub-Clause 1.1.6.9 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.6.8:

“Governing Law” means the Georgian Law.

1.27. The following Sub-Clause 1.1.6.10 shall be inserted in the text of the General Condition immediately following Sub-Clause 1.1.6.9:

“Prudent Industry Practices” means those sound and prudent practices, acts, methods, specifications, codes and standards generally followed by electric utility industry in the countries of the European

Union and the United States of America or other international prudent industry practices as may be approved by the Employer with respect to design, construction, operation, and maintenance of first class gas-fired combined cycle electric generation facilities (including but not limited to, the engineering, operating and safety practices generally followed by the electric utility industry) that, in the exercise of good judgment, would have been expected to accomplish the desired result in a manner consistent with the Contract, applicable permits, reliability, safety, environmental protection, local conditions, economy and efficiency.

- 1.28. The following sub-paragraphs (e) – (h) shall be inserted in the text of the General Condition immediately following sub-paragraph (d) of the first paragraph of Sub-Clause 1.2 [*Interpretation*]:

- “(e) references in this Contract to any person shall include its successors and permitted assigns.
- (f) the words “includes” or “including” mean “including, without limitation”.
- (g) a reference in this Contract to a "year" or a "month" or a “day” shall be construed as a reference to a calendar year, month or a day, respectively.
- (h) a reference in this Contract to any agreement, statute or law, code or standard shall be construed as a reference to such agreement, statute or law, code or standard as the same may have been modified, extended, amended, supplemented or replaced from time to time.”

- 1.29. Replace sub-paragraph (a) of the first paragraph of Sub-Clause 1.3 [*Communications*] with the following:

“(a) in writing and delivered by hand (against receipt), send by mail or courier, or transmitted by email; and”

- 1.30. The following third paragraph shall be inserted in the text of the General Condition immediately following the second paragraph of Sub-Clause 1.3 [*Communications*]:

“All approvals, certificates, consents, determinations, notices and requests given to any Party in accordance with the provisions hereof shall be deemed to have been given on the date of receipt if delivered by hand or overnight courier service or sent by email, in each case delivered or sent to such Party as provided in this Sub-Clause 1.3 [*Communications*]. In the event that any notice hereunder is required to be made on or as of a Day which is not a Business Day, then such notice shall not be required to be made until the next following Business Day.”

- 1.31. Replace Sub-Clause 1.4 [*Law and Language*] with the following:

“The Contract (including the matters related to its formation, interpretation, existence, validity, breach and/or termination) shall be governed by the Governing Law but excluding (to the fullest extent allowed under the Governing Law) any rules or principles of the Governing Law that would require the application of the laws of any other jurisdiction to govern this Contract or any matter arising hereunder.

The English language governs the interpretation and administration of this Contract. If there are versions of any part of the Contract which are written in more than one language, the version which is in the English language shall prevail.

All notices required or permitted to be given by either Party and all other communications and documentation which are in any way relevant to or required by this Contract or the performance or termination hereof, including any dispute resolution proceedings, shall be in the English language. However, without prejudice to the immediately preceding sentence, design drawings, calculation reports and all engineering documents/submissions including *inter alia* relevant textual wordings thereof shall be clearly legible and transmitted in both English and Georgian language or bilingual Georgian-English. In the event that any translation of this Contract is prepared in any language other than English, such translation shall be for information only and shall not be binding upon the Parties in any respect.”

1.32. Replace Sub-Clause 1.5 [*Priority of Documents*] with the following:

“The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the Contract Agreement.”

1.33. In the second sentence of Sub-Clause 1.6 [*Contract Agreement*] substitute “law” with “the Governing Law”.

1.34. In the first sentence of the first paragraph of Sub-Clause 1.8 [*Care and Supply of Documents*] add the word “by” immediately after the words “taken over”.

1.35. In the second sentence of the first paragraph of Sub-Clause 1.8 [*Care and Supply of Documents*] substitute “six copies” with “five hard copies and one electronic copy” and add the words “as further described in the Contract” at the end of the same sentence.

1.36. In the first sentence of Sub-Clause 1.9 [*Confidentiality*] substitute “Both Parties” with “The Contractor”.

1.37. Replace the second paragraph of Sub-Clause 1.10 [*Employer’s Use of Contractor’s Documents*] with the following:

“Notwithstanding the above, the Parties agree that the Contractor’s Documents and other design documents may be used, copied or communicated by the Contractor to a third party without written consent of the Employer only if:

- (a) It is necessary for the execution of Works or is required for obtaining any permits, licenses, consents or any other authorizations required for the purposes of engineering, procurement, construction and operation of Gardabani-III CCTPP Project;
- (b) that is required by any court of competent jurisdiction or governmental or regulatory authority or where there is a legal duty or requirement to disclose set forth by Governing law.”

1.38. Delete the third paragraph of Sub-Clause 1.10 [*Employer’s Use of Contractor’s Documents*].

1.39. Replace Sub-Clause 1.13 [*Compliance with Laws*] with the following:

“The Contractor shall, in performing the Contract, comply with the Governing Laws, terms and requirements of all the permits, licenses and/or other authorizations required for the performance of the Works, technical codes, standards and regulations and Prudent Industry Practices.

The Employer shall obtain construction permit, environmental decision and the decision on putting the Gardabani-III CCTPP into operations, provided however, that the Contractor fully complies with the Contract including respective provisions of Sub-Clause 5.1 [*General Design Obligations*].

The Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals (except for the permits and approvals referred to in the immediately preceding paragraph of this Sub-Clause), as required by the Governing Laws in relation to the design, execution and completion of the Works (including *inter alia* any Temporary Works to be executed by the Contractor) and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.”

- 1.40. Replace the first and second sentences of the first paragraph of Sub-Clause 2.1 [*Right of Access to the Site*] with the following:

“The Employer shall give the Contractor right of access to, and possession of, all parts of the Site starting from the date of the signature of the Contract by both Parties through the issuance of the Performance Certificate. The right and possession is not exclusive to the Contractor.”

- 1.41. Delete the second paragraph of Sub-Clause 2.1 [*Right of Access to the Site*].

- 1.42. Delete the words “plus reasonable profit, which shall be added to the Contract Price” in sub-paragraph (b) of paragraph three of Sub-Clause 2.1 [*Right of Access to the Site*].

- 1.43. Delete the words “or profit” in the fifth paragraph of Sub-Clause 2.1 [*Right of Access to the Site*].

- 1.44. Replace Sub-Clause 2.2 [*Permits, Licenses or Approvals*] with the following:

“The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor (without incurring any additional costs to the Employer) for the Contractor’s applications for any permits, licenses or approvals required by the Governing Law:

- (a) which the Contractor is required to obtain under Sub-Clause 1.13 [*Compliance with Laws*],
- (b) for the delivery of Goods, including clearance through customs, and
- (c) for the export of Contractor’s Equipment when it is removed from the Site.
- (d) for Contractor’s Personnel to enter into, depart from and work in the territory of Georgia.

For the avoidance of any doubts, where the Governing Law requires an application and/or any other procedure for a permit, license or approval to be executed and/or performed by the Employer, the Employer shall, at the request of the Contractor, issue the respective power of attorney.”

- 1.45. Delete Sub-Clause 2.4 [*Employer’s Financial Arrangements*].

1.46. Delete the words “under Sub-Clause 4.20 [*Employer’s Equipment and Free-Issue Material*]” in the second sentence of the first paragraph of Sub-Clause 2.5 [*Employer’s Claims*].

1.47. Replace the second sentence of the fourth paragraph of Sub-Clause 2.5 [*Employer’s Claims*] with the following:

“The Employer shall only be entitled to set off against or make any deduction from an amount due to the Contractor, or to otherwise claim against the Contractor, in accordance with this Sub-Clause and/or with sub-paragraph (a) and/or (b) of Sub-Clause 14.6 [*Interim Payments*] and/or Sub-Clause 14.9 [*Suspension of Payments and Right to set off*] and/or Sub-clause 15.4 [*Payment after Termination*].”

1.48. Replace Sub-Clause 3.5 [*Determinations*] with the following:

“Whenever these Conditions provide that the Employer shall proceed in accordance with this Sub-Clause 3.5 [*Determinations*] to agree or determine any matter, the Employer shall consult with the Contractor in an endeavor to reach agreement. If agreement is not achieved, the Employer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Employer shall give notice to the Contractor of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination, unless the Contractor gives notice, to the Employer, of his dissatisfaction with a determination within 14 days of receiving it.

If agreement is not achieved, the Employer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.”

1.49. Replace the first sentence in the first paragraph of Sub-Clause 4.1 [*Contractor’s General Obligations*] with the following:

“The Contractor shall deliver to the Employer the Gardabani-III CCTPP and design, execute and complete for these purposes the Works in accordance with the Contract, and shall remedy any defects in the Works.”

1.50. Add the words “of Gardabani-III CCTPP” after the word “completion” in the first sentence of the second paragraph of Sub-Clause 4.1 [*Contractor’s General Obligations*].

1.51. Add the following second sentence immediately after the first sentence of the second paragraph of Sub-Clause 4.1 [*Contractor’s General Obligations*]:

“Nevertheless, consumables required for the commissioning of the Gardabani-III CCTPP shall be provided by the Contractor until the issuance of the Taking-Over Certificate.”

1.52. Replace Sub-Clause 4.2 [*Performance Security*] with the following:

“The Contractor shall within 21 days after the signature of the Contract Agreement by the Parties obtain (at his cost) and deliver to the Employer a Performance Security in a form of a bank guarantee, which shall be in the amount of 10% of the Contract Price for proper performance, in the amount and currencies on which the Contract Price is based as stated in the Particular Conditions. If an amount is not stated in the Particular Conditions, this Sub-Clause shall not apply. The Contractor shall cause an issuer bank to maintain the full amount of the Performance Security irrespective of any payment in accordance with sub-paragraphs (a) through (d) of paragraph 6 of this Sub-Clause 4.2 [*Performance Security*].

The Employer shall be indicated as beneficiary. The Performance Security shall consider bank’s unconditional and irrevocable liability to pay, without protest or notification, complete amount of the bank guarantee or part thereof upon the Employer’s first request, provided that such payment(s) shall be made (i) without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and (ii) without the Employer requested to prove or to show grounds or reasons for the respective request, and notwithstanding any objection by the Contractor.

The Performance Security shall be issued by a bank qualified B+ or higher Fitch international rating or other equivalent international rating and shall be notified by JSC “Bank of Georgia” or JSC “TBC Bank”. The Performance Security shall be issued by an entity approved by the Employer, and shall be substantially in the form set forth in Annex 8 to the Contract Agreement.

The Contractor shall ensure that the Performance Security is valid and enforceable until (i) the completion of the Works and remedy of any defects by the Contractor and issuance of the Taking-Over Certificate, (ii) reimbursement of all outstanding amounts due to the Employer in accordance with sub-paragraphs (a) through (d) of paragraph 6 of this Sub-Clause 4.2 [*Performance Security*], and (iii) delivery to and approval by the Employer of the Warranty Bond.

If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Taking-Over Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied to meet the requirements of immediately preceding paragraph of this Sub-Clause 4.2 [*Performance Security*].

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount the Performance Security.
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Sub-Clause 2.5 [*Employer’s Claims*] or Clause 20 [*Claims, Disputes and Arbitration*], within 28 days after this agreement or determination in which event the Employer may claim the respective amount to be paid from the Performance Security,
- (c) failure by the Contractor to remedy a default within 42 days after receiving the Employer’s notice requiring the default to be remedied, or

- (d) circumstances which entitle the Employer to termination under Sub-Clause 15.2 [*Termination by Employer*], irrespective of whether notice of termination has been given. In such cases, the Employer is entitled to claim the full amount of the Performance Security.

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.

All expenses related to the Performance Security, including the certification costs, are a part of the Contract Price and shall be borne by the Contractor.

The Employer shall return the Performance Security to the Contractor within 21 days after (i) the issuance of Taking-Over Certificate, or (ii) reimbursement of all outstanding amounts due to the Employer in accordance with sub-paragraphs (a) through (d) of paragraph 6 of this Sub-Clause 4.2 [*Performance Security*], or (iii) delivery to and approval by the Employer of the Warranty Bond, whichever is later.”

- 1.53. Add the words “of Engineering Works” after the words “the Commencement Date” in the first sentence of the second paragraph of Sub-Clause 4.3 [*Contractor’s Representative*].
- 1.54. In the sixth paragraph of Sub-Clause 4.3 [*Contractor’s Representative*] substitute “the language for communications defined in Sub-Clause 1.4 [*Law and Language*]” with “English”.
- 1.55. Delete the words “Where specified in the Particular Conditions” in in the beginning of the second sentence of the second paragraph in Sub-Clause 4.4 [*Subcontractors*].
- 1.56. Add the words “in the specific field of its engagement” immediately after the word “experience” in sub-paragraph (a) of the second paragraph of Sub-Clause 4.4 [*Subcontractors*].
- 1.57. Add the following third and fourth paragraphs immediately after the second paragraph in Sub-Clause 4.4 [*Subcontractors*]:
- “Upon receiving respective notification from the Contractor, the Employer shall respond with the approval or disapproval of the Subcontractor within 14 days. The Employer shall not unreasonably or subjectively withhold or reject the approval of the Subcontractor unless it can be justified based on rational grounds, including the lack of relevant experience of the Subcontractor in the specific field of its engagement.
- The Subcontractor shall not proceed with the execution of any part of the Works until the Employer has given a preliminary approval.”
- 1.58. Delete Sub-Clause 4.5 [*Nominated Sub-Contractors*].
- 1.59. Delete the first sentence of the second paragraph of Sub-Clause 4.6 [*Co-operation*].

- 1.60. Replace the second sentence of the first paragraph of Sub-Clause 4.9 [*Quality Assurance*] with the following:

“The system shall be prepared by the Contractor and approved by the Employer.”

- 1.61. In the first sentence of the second paragraph of Sub-Clause 4.9 [*Quality Assurance*] substitute “information” with “approval”.

- 1.62. Replace the first paragraph of Sub-Clause 4.10 [*Site Data*] with the following:

“The Employer shall provide the Contractor, for informational purposes only, with respective preliminary topographic Surveys. Detail soil investigation reports shall be done by the Contractor.”

- 1.63. In the first sentence of the second paragraph of Sub-Clause 4.10 [*Site Data*] substitute “all such data” with “any data provided by the Employer.”

- 1.64. In the first sentence of the first paragraph of Sub-Clause 4.13 [*Right of Way and Facilities*] substitute “including those for access to” with “within”.

- 1.65. The following second paragraph shall be inserted in the text of the General Condition immediately following the first paragraph of Sub-Clause 4.13 [*Right of Way and Facilities*]:

“The Employer shall bear all costs and charges for procuring access roads to the Site, as necessary.”

- 1.66. In the second paragraph of Sub-Clause 4.18 [*Protection of the Environment*] substitute “applicable Laws” with “the Governing Law”.

- 1.67. Replace Sub-Clause 4.19 [*Electricity, Water and Gas*] with the following:

“The Contractor shall, except as stated below, be responsible for securing supply and provision of all power, natural gas, water and other services he may require.

The Contractor shall pay the price of power and potable or construction water supplied directly to the utility providers or supplier(s) (as the case may be applicable).

Cost of natural gas for the commissioning and testing purposes shall be borne by the Employer.

The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services.”

- 1.68. Delete Sub-Clause 4.20 [*Employer’s Equipment and Free Issue Material*].

- 1.69. Delete the words “in six copies” after the word “Employer” at the end of the first sentence of the first paragraph of Sub-Clause 4.21 [*Progress Reports*].

1.70. Add the words “of the Engineering Works” after the words “the Commencement Date” in the second sentence of the first paragraph of Sub-Clause 4.21 [*Progress Reports*].

1.71. Replace the second paragraph of Sub-Clause 4.24 [*Fossils*] with the following:

“The Contractor shall, upon discovery of any such finding, promptly give notice to the Employer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor’s Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost.”

1.72. Insert the following sentence after the first sentence of the first paragraph of Sub-Clause 5.1 [*General Design Obligations*]:

“The design of the Works shall be fit for the purposes for which they are intended according to the Contract.”

1.73. Replace the third paragraph of Sub-Clause 5.1 [*General Design Obligations*] with the following:

“For the avoidance of any doubts, the Parties hereto acknowledge and agree that the Contractor within the scope of its design obligations is required *inter alia* to prepare and deliver to the Employer the Engineering Design and all other documents (including drawings, maps, conclusion of the respective examinations/analyses, calculation reports and etc., but excluding (i) the documents evidencing the Employer’s ownership of the respective land plot(s) and/or right to use such land plot(s) for the purposes of this Contract, and (ii) environmental decision, which is required in accordance with the Governing Law for the purposes of applying for and obtaining of construction permit, as well as remove and correct at its own costs any deficiencies, mistakes and/or errors upon request of the Employer and/or respective permitting authority and provide the Employer with the amended, improved and/or corrected versions of the respective documents. The Engineering Design and other documents required in accordance with the Governing Law for the purposes of applying for and obtaining of the construction permit of Gardabani-III CCTPP shall be delivered to the Employer no later than 3 (three) months after the Contract signature date, while documents required in accordance with the Governing Law for the purposes of applying for and obtaining of the environmental decision shall be delivered to the Employer no later than 2 (two) months after the Contract signature date. The deficiencies, mistakes and/or errors shall be removed and corrected by the Contractor and the amended, improved and/or corrected versions of the respective documents shall be delivered to the Employer within the term defined by the permitting authority or by the Employer (but not later than 28 days from receipt by the Contractor of a notice of deficiency, mistake and/or error), if permitting authority does not set forth such term.”

1.74. In the second sentence of the first paragraph of Sub-Clause 5.2 [*Contractor’s Documents*] substitute “for communications defined in” with “required by”.

- 1.75. In the first sentence of the third paragraph of Sub-Clause 5.2 [*Contractor's Documents*] substitute "21 days" with "14 Business Days".
- 1.76. In sub-paragraph (a) of Sub-Clause 5.3 [*Contractor's Undertaking*] substitute "the Laws in the Country" with "the Governing Law".
- 1.77. Add the words "amendments including" after the words "modified by" in sub-paragraph (b) of Sub-Clause 5.3 [*Contractor's Undertaking*].
- 1.78. Replace the first paragraph of Sub-Clause 5.4 [*Technical Standards and Regulations*] with the following:

"The design, the Contractor's Documents, the execution and the completed Works shall comply with the Governing Law including building, construction and environmental Laws as well as with the USA and/or the EU codes and standards and/or other international Prudent Industry Practices as may be approved by the Employer. Detailed listing of applicable codes and standards shall be provided by the Contractor and approved by the Employer. Any deviations from above standards shall be approved by the Employer."

- 1.79. Delete the second paragraph of Sub-Clause 5.4 [*Technical Standards and Regulations*].
- 1.80. Replace Sub-Clause 5.5 [*Training*] with the following:

"The Contractor shall carry out the training of Employer's Personnel in the operation and maintenance of the Works.

At least 28 days prior to the commissioning of each particular equipment, Contractor shall provide, at its own expense, a training program in operation and maintenance of the respective equipment for the Employer's Personnel ("O&M Personnel"). The training program provided by Contractor shall:

- (a) Include classroom and field training;
- (b) Include all required manuals, drawings, and other educational materials necessary or desirable for the adequate training of O&M Personnel; and
- (c) Establish quality controls so that O&M Personnel is suitably trained and capable of operating and maintaining the Works after Employer's Taking-Over.

Training shall commence prior to and/or in parallel with commissioning.

Representatives of manufacturers of Plant and Materials shall be utilized to provide specialized training for such Plant and Materials. All training programs conducted in accordance with this Sub-Clause 5.5 [*Training*] shall be videotaped and made available to the Employer in electronic form.

The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works*] until this training has been completed."

- 1.81. Replace the third paragraph of Sub-Clause 5.6 [*As-Built Documents*] with the following:

“Prior to but in no case later than 30 days after the issuance of Taking-Over Certificate by the Employer, the Contractor shall supply to the Employer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer’s Requirements. Contractor may submit as-built drawings progressively.”

- 1.82. In the second paragraph of Sub-Clause 5.7 [*Operation and Maintenance Manuals*] substitute “Taking Over of the Works and Sections” with “Taking Over of the Works” and add the words “and approved” immediately after the word “received”.

- 1.83. Add the following second paragraph to Sub-Clause 6.1 [*Engagement of Staff and Labor*]:

“A minimum percentage of 50% of all staff and labor to be engaged by the Contractor shall be Georgian citizens.”

- 1.84. Delete Sub-Clause 6.5 [*Working Hours*].

- 1.85. Add the following fourth paragraph to Sub-Clause 6.7 [*Health and Safety*]:

“The Contractor shall provide to the Employer a written health, safety, accident prevention program and environmental management plan, which shall meet the requirements of this Contract, the Governing Law and implement and maintain those during the execution of the Works.”

- 1.86. Delete the words “if appropriate” in the second paragraph of Sub-Clause 6.9 [*Contractor’s Personnel*].

- 1.87. In sub-paragraph (b) of the first paragraph of Sub-Clause 7.1 [*Manner of Execution*] substitute the words “recognized good practice, and” with “the Prudent Industry Practices, and”.

- 1.88. Add the following second and third paragraphs to Sub-Clause 7.1 [*Manner of Execution*]:

“The Plant and Materials, shall be entirely new (except may be used for testing purposes only), advanced in technology, completed, designed as per the Contract and in compliance with the applicable codes and standards as stipulated in this Contract and shall include necessary equipment, materials, civil construction, erection, commissioning, inspection, testing as well as the documentation for operation and maintenance in English.

The Plant provided by the Contractor shall be safe, reliable, efficient, smooth and stable in operation.”

- 1.89. Replace Sub-Clause 7.2 [*Samples*] with the following:

“The Contractor shall submit and at the Contractor’s cost samples to the Employer, for review in accordance with the procedures for Contractor’s Documents described in Sub-Clause 5.2 [*Contractor’s Documents*], as specified in the Contract and/or required by the Governing Law. Each sample shall be labeled as to its origin and intended use in the Works.”

1.90. Delete the words “other than the Tests after Completion (if any)” in the first paragraph of Sub-Clause 7.4 [*Testing*].

1.91. Add the following second sentence to the first paragraph of Sub-Clause 7.4 [*Testing*]:

“The Contractors shall perform all the tests required under the Governing Law, Prudent Industry Practices and the Contract including *inter alia* tests expressly mentioned in Employer’s Requirements, Factory Acceptance Tests and cold and hot tests during erection and commissioning of the Works. Detailed list and specifications for testing procedures shall be provided by the Contractor and approved by the Employer.”

1.92. Replace the fifth paragraph of Sub-Clause 7.4 [*Testing*] with the following:

“If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor’s Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost.”

1.93. Replace Sub-Clause 7.5 [*Rejection*] with the following:

“If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design and/or workmanship and/or other Works is found to be defective or otherwise not in accordance with the Contract, the Employer may reject the Plant, Materials, design and/or workmanship and/or other Works by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Employer requires this Plant, Materials, design and/or workmanship and/or other Works to be re-inspected and retested, the inspection and tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [*Employer’s Claims*] pay these costs to the Employer.”

1.94. Replace the second sentence of the second paragraph of Sub-Clause 7.6 [*Remedial Work*] with the following:

“Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [*Employer’s Claims*] pay to the Employer all costs (including losses and damages) arising from this failure or alternatively, the Employer is entitled to deduct such costs from the Contract Price and to set-off the respective amount against any amount payable by it to the Contractor under this Contract.”

1.95. Replace Sub-Clause 7.7 [*Ownership of Plant and Materials*] with the following:

“Each item of Plant and Materials (including any Materials imported in the name of the Employer and remaining after the issuance of Taking-Over Certificate) shall become the property of the Employer upon issue of Taking-Over Certificate”.

- 1.96. Replace Sub-Clause 8.1 [*Commencement of Works*] with the following:

“The Employer shall give a notice to the Contractor to commence Engineering Works within 7 days after the Contract is signed by the Parties. The Contractor shall commence the Engineering Works upon receipt of such notice and the first installment of the Advance Payment. This notice also entitles the Contractor to commence any Temporary Works (as referred to in Article 3.2.1 of the Contract Agreement) subject to compliance with the provisions of Sub-Clause 1.13 [*Compliance with Laws*].

In case the Contractor does not receive the second installment of Advance Payment according to Sub-Clause 14.7 [*Time of Payments*], the Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to an extension of time for such delay and the Commencement Date shall be adjusted accordingly.

Within 42 days after the occurrence of the events described in Clauses 3.2.2.1 and 3.2.2.2 of the Contract Agreement, the Employer shall give a notice to the Contractor to commence Works (other than the Works mentioned in paragraph 1 of this Sub-Clause 8.1 [*Commencement of Works*]).”

- 1.97. Replace Sub-Clause 8.2 [*Time for Completion*] with the following:

“The Contractor shall complete the whole of the Work before or upon the expiry of the Time for Completion including:

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work which is stated in the Contract as being required for the Works to be considered to be completed and issuance of Taking-Over Certificate as required for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works*].

If the Contract does not become effective with respect to the Works other than Engineering Works in accordance with Article 3.2.2 of the Contract Agreement (i) the Contract shall be deemed to be completed upon completion of the Engineering Works, and (ii) the Engineering Works shall be deemed to be completed upon receipt by the Employer of the construction permit for the Gardabani-III CCTPP.”

- 1.98. Replace the first paragraph of Sub-Clause 8.4 [*Extension of Time for Completion*] with the following:

“The Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [*Taking Over of the Works*] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [*Variation Procedure*]), or
- (b) a cause of delay giving an express entitlement to extension of time under the Contract.”

- 1.99. Substitute the heading of Sub-Clause 8.7 “Delay Damages” with “Delay Penalties” throughout the text of the Contract and replace Sub-Clause 8.7 [*Delay Penalties*] with the following:

“If the Contractor fails to comply with Sub-Clause 8.2 [*Time for Completion*], the Contractor shall subject to Sub-Clause 2.5 [*Employer’s Claims*] pay delay damages to the Employer for this default, unless the reason for such delay is attributable to the reasons set forth in Sub-Clause 8.4 [*Extension of Time for Completion*]. The rate of the delay penalties equals to 0.02% (zero point zero two percent) of the Contract Price compounded daily following the expiry of the Time for Completion. However, the total amount due under this Sub-Clause shall not exceed [●] % ([●] percent) of the Contract Price.

If the Contractor fails to comply with paragraph 3 of Sub-Clause 5.1 [*General Design Obligations*] the Contractor shall subject to Sub-Clause 2.5 [*Employer’s Claims*] pay delay penalties to the Employer for this default at the rate of 0.02% (zero point zero two percent) of the amount of the first installment of the Advance Payment compounded daily following the expiry of the respective period.

The delay penalties shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under Contract.”

- 1.100. Add the words “including if the Contractor fails to comply with the requirements of Sub-Clause 18.1 [*General Requirements for Insurance*]” at the end of the first sentence of the first paragraph of Sub-Clause 8.8 [*Suspension of Work*].

- 1.101. Replace the first paragraph of Sub-Clause 8.9 [*Consequences of Suspension*] with the following:

“If the Contractor suffers delay and/or incurs Cost from complying with the Employer’s instructions under Sub-Clause 8.8 [*Suspension of Work*] and/or from resuming the work, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor’s Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost.”

- 1.102. Add the words “and/or Plant and/or Materials and/or other Works and” after the word “workmanship” in the third paragraph of Sub-Clause 8.9 [*Consequences of Suspension*] and delete the word “or” immediately following the inserted language.

- 1.103. Add the following second sentence to the first paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*]:

“The procedures and final correction curves to be used for the Test including evaluation of the Test results should be given to the Employer 3 (three) months before such Tests are carried out. 2 (two) copies of each norms and standards to be applied during the Tests and 6 (six) copies of Test procedures shall be submitted to the Employer.”

- 1.104. Add the following second sentence after the first sentence of the Second paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*]:

“The Contractor shall provide the Employer with a detailed Test program not later than 28 days before the commencement of the respective Test.”

- 1.105. Delete the words “Unless otherwise stated in the Particular Conditions” at the beginning of the third paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*].
- 1.106. Add the following wording at the end of sub-paragraph (c) of the third paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*]:

“Trial operations tests includes:

- (i) Performance Test: Performance Test is carried out to compare actual performance with the Guaranteed Performance Parameters. Performance test shall be deemed to be satisfactory completed, when the Gardabani-III CCTPP in the combined cycle mode operates in accordance with Guaranteed Performance Parameters and the Governing Law including applicable standards.
- (ii) Reliability Run: Following the successful completion of Performance Test, in addition to loading up, the Contractor shall recheck all adjustments, remote control, control and safety systems, which are necessary to start the Reliability Run. Reliability Run shall last for a period of 7 (seven) consecutive days. During the Reliability Run, the Employer may request to the Contractor to operate the Gardabani-III CCTPP under different operation conditions and different loads including shut down and restart.”

- 1.107. Delete the fourth paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*].
- 1.108. Delete the words “Unless otherwise stated in the Particular Conditions” at the beginning of the second sentence of fifth paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*].
- 1.109. Delete the first sentence of paragraph sixth paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*].
- 1.110. Unless otherwise stated in this Particular Conditions, delete the words “or a Section”, “or Section”, “or a Section (as the case may be)” and any other reference to the Section in sixth paragraph of Sub-Clause 9.1 [*Contractor’s Obligations*], Sub-Clause 9.3 [*Retesting*], the first paragraph of Sub-Clause 9.4 [*Failure to Pass Tests on Completion*], respectively, as well as throughout of the text of this Particular conditions and the Contract.
- 1.111. In the second paragraph of Sub-Clause 9.4 [*Failure to Pass Tests on Completion*] substitute the words “by such amount as shall be appropriate to cover the reduced value to the Employer value to the Employer as a result of this failure. Unless the relevant for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [*Employer’s Claims*] and Sub-Clause 3.5 [*Determinations*]” with the words “by an amount calculated as follows: the amount stated in paragraph (i) of the definition of the Contract Price divided by Gross Power output in combined cycle mode multiplied by the difference between the estimated and actual Gross Power output in combined cycle mode”.

- 1.112. Substitute the heading of Sub-Clause 10.1 “Taking Over of the Works and Sections” with “Taking Over of the Works” throughout the text of the Contract.
- 1.113. Add the words “and without prejudice to paragraph 4 of this Sub-Clause 10.1 [*Taking Over of the Works*]” after the words “Sub-Clause 9.4 [*Failure to Pass Test on Completion*]” in the first paragraph of Sub-Clause 10.1 [*Taking Over of the Works*].
- 1.114. Add the words “based on the Contractor’s application” after the words “by the Employer” in the first paragraph of Sub-Clause 10.1 [*Taking Over of the Works*].
- 1.115. Add the words “the latest of the following events is occurred” after the word “when” in the first paragraph of Sub-Clause 10.1 [*Taking Over of the Works*].
- 1.116. Replace the words “or is deemed to have been issued in accordance with this Sub-Clause” at the end of point (ii) in the first paragraph of Sub-Clause 10.1 [*Taking Over of the Works*] with the word “and”.
- 1.117. Add the following point (iii) to the first paragraph of Sub-Clause 10.1 [*Taking Over of the Works*] immediately after point (ii):
- “ (iii) the Contractor deliver to the Employer the Warranty Bond.”
- 1.118. Delete the second sentence of the second paragraph of Sub-Clause 10.1 [*Taking Over of the Works*].
- 1.119. In the third paragraph of Sub-Clause 10.1 [*Taking Over of the Works*] substitute “28” with “42”.
- 1.120. Replace the fourth paragraph of Sub-Clause 10.1 [*Taking Over of the Works*] with the following:
- “For the avoidance of any doubts and notwithstanding anything to the contrary in the Contract, the Works shall not be deemed to be completed and the Employer shall not be deemed to be under obligation to issue a Taking-Over Certificate until the Contractor delivers a Warranty Bond in accordance with the Contract.”
- 1.121. Add the following fifth paragraph to Sub-Clause 10.1 [*Taking Over of the Works*]:
- “If the Contract does not become effective in accordance with Article 3.2.2 of the Contract Agreement with respect to the Works other than Works referred to in Article 3.2.1 of this Contract Agreement, the Engineering Works shall be deemed to be completed and taken over by the Employer upon receipt of the construction permit for the Gardabani-III CCTPP.”
- 1.122. Delete Sub-Clause 10.2 [*Taking Over of Parts of the Works*].
- 1.123. Delete the word “and” at the end of sup-paragraph (a) of the second paragraph of Sub-Clause 10.3 [*Interference with Tests on Completion*] and delete sup-paragraph (b) of the same paragraph of Sub-Clause 10.3 [*Interference with Tests on Completion*].

- 1.124. Delete the words “Section or a major item of Plant (as the case may be, and after taking over)” in the first sentence of the first paragraph of Sub-Clause 11.3 [*Extension of Defect Notification Period*].
- 1.125. At the beginning of the second sentence of the first paragraph of Sub-Clause 11.3 [*Extension of Defect Notification Period*] substitute the word “However” with the words “Save as set forth in immediately preceding paragraph”.
- 1.126. Add the following language immediately after the second sentence of the first paragraph of Sub-Clause 11.3 [*Extension of Defect Notification Period*]:

“The Defects Notification Period for any repaired or replaced part of the Works shall last two (2) years calculated from the day after the completion of the replacement or repair thereof. The Defects Notification Period for the pressure parts (heating surfaces and drum bodies) of HRSG Major Equipment item shall last (be extended to) total 60 (sixty) months since the completion of Works is certified under Sub-Clause 10.1 [*Taking Over of the Works*] of the Conditions of Contract. However, without prejudice to the cases described in this paragraph granting the extension of Defects Notification Period and notwithstanding anything to the contrary in the Contract:

- (a) the extended Defects Notification Period for the pressure parts of HRSG Major Equipment item shall have no influence on the date of issuance of the Performance Certificate under Sub-Clause 11.9 [*Performance Certificate*] of the Conditions of Contract;
- (b) the Contractor shall not be liable to hold a valid Warranty Bond after the issuance of the Performance Certificate;
- (c) any liability and obligation of the Contractor under the extended Defects Notification Period for the pressure parts of HRSG Major Equipment item shall survive after the issuance of Performance Certificate.”

- 1.127. In the second sentence of Sub-Clause 11.5 [*Removal of Defective Works*] substitute the words “may require” with the word “requires” and delete the words “or to provide other appropriate security” at the end of the same sentence of Sub-Clause 11.5 [*Removal of Defective Works*].
- 1.128. In the first sentence of the first paragraph of Sub-Clause 11.6 [*Further Tests*] delete the words “and/or Tests after Completion”.
- 1.129. In the second paragraph of Sub-Clause 11.6 [*Further Tests*] substitute the words “Party liable” with the word “Contractor”.
- 1.130. Replace the second sentence of Sub-Clause 11.8 [*Contractor to Search*] with the following:

“If following such search defect(s) are revealed, the cost of the search shall be borne by the Contractor, otherwise the Employer shall reimburse the Contractor for the direct loss, which equals to the costs of the search. The Contractor shall record and provide the proof of the costs incurred for the search.”
- 1.131. Add the following words at the end of the first sentence of the second paragraph of Sub-Clause 11.9 [*Performance Certificate*]:

“or authorized permitting authority decided in accordance with the Governing Law on putting the Gardabani-III CCTPP into operations (commissioning of the Gardabani-III CCTPP)”

1.132. Delete the word “and” at the end of sub-paragraph (a) of the second paragraph of Sub-Clause 11.9 [*Performance Certificate*] and delete sub-paragraph (b) of the same paragraph of Sub-Clause 11.9 [*Performance Certificate*].

1.133. Add the following fourth paragraph to Sub-Clause 11.9 [*Performance Certificate*]:

“For the avoidance of any doubts, the Parties hereto acknowledge and agree that the Contractor is required inter alia to prepare and deliver to the Employer all documents (including drawings, maps, conclusion of the respective examinations/analyses etc., but excluding the documents evidencing the Employer’s ownership of the respective land plot(s) and/or right to use such land plot(s) for the purposes of this Contract), which are required in accordance with the Governing Law for the purposes of applying for and obtaining of decision of appropriate permitting authority on putting the Gardabani-III CCTPP into operations, as well as amend, improve and/or correct deficiency(ies), mistakes and/or errors upon request of the respective permitting authority at its own cost.”

1.134. Delete Clause 12 [*Tests after Completion*] in its entirety and replace it with the following new Clause 12 [*Warranty Bond*]:

“12. Warranty Bond

12.1 Warranty Bond

The Contractor shall obtain (at his cost) a Warranty Bond in a form of bank guarantee, which shall be in the amount of 5% of the Contract Price in the amount and currencies on which the Contract Price is based. The Contractor shall cause an issuer bank to maintain the full amount of the Warranty Bond irrespective of any payment in accordance with sub-paragraphs (a) through (d) of Paragraph 6 of this Sub-Clause 12.1 [*Warranty Bond*].

The Employer shall be indicated as beneficiary. The Warranty Bond shall consider bank’s unconditional and irrevocable liability to pay, without protest or notification, complete amount of the bank guarantee or part thereof upon the Employer’s first request, provided that such payment(s) shall be made (i) without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and (ii) without the Employer requested to prove or to show grounds or reasons for the respective request, and notwithstanding any objection by the Contractor. The Warranty shall be issued by a bank qualified B+ or higher Fitch international rating or other equivalent international rating and shall be notified by JSC “Bank of Georgia” or JSC “TBC Bank”.

The Contractor shall deliver the Warranty Bond to the Employer before it applies for a Taking-Over Certificate in accordance with Sub-Clause 10.1 [*Taking Over of the Works*]. For the purposes of the Contract the date of application shall be considered as a due date for the delivery of the Warranty Bond. The Warranty Bond shall be in the form annexed to the Particular Conditions.

The Contractor shall ensure that the Warranty Bond is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects and issuance of the Performance Certificate.

If the terms of the Warranty Bond specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate, the Contractor shall extend the validity of the Warranty Bond until the expiry of the Defect Notification Period (as may be extended) or fulfillment of unfulfilled obligations in accordance with Sub-Clause 11.10 [*Unfulfilled Obligations*] of the Contract or issuance of the Performance Certificate, whichever is later.

The Employer shall not make a claim under the Warranty Bond, except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) failure by the Contractor to extend the validity of the Warranty Bond as described in the preceding paragraph, in which event the Employer may claim the full amount the Warranty Bond.
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Sub-Clause 2.5 [*Employer's Claims*] or Clause 20 [*Claims, Disputes and Arbitration*], within 28 days after this agreement or determination, in which event the Employer may claim the respective amount to be paid from the Warranty Bond,
- (c) failure by the Contractor to remedy a default within 42 days after receiving the Employer's notice requiring the default to be remedied, in which event the Employer may claim the full amount due to the Employer under the Clause 11 [*Defects Liability*] from the Warranty Bond, or
- (d) circumstances which entitle the Employer to termination under Sub-Clause 15.2 [*Termination by Employer*], irrespective of whether notice of termination has been given. In such cases, the Employer is entitled to claim the full amount of the Warranty Bond.

All expenses related to the Warranty Bond, including the certification costs, are a part of the Contract Price and shall be borne by the Contractor.

The Employer shall return the Warranty Bond to the Contractor within 21 days after the issuance of the Performance Certificate.”

- 1.135. Replace the second sentence of the first paragraph of Sub-Clause 13.1 [*Right to Vary*] with the following:

“Unless otherwise expressly permitted under the Contract and/or the Governing Law, a Variation shall not be intended to assign any part of the Work to be performed by the Contractor to other entity(ies).”

- 1.136. Add the words “unless otherwise provided in the Contract and/or” before the words “unless the Contractor” in the first sentence of the second paragraph of Sub-Clause 13.1 [*Right to Vary*].

- 1.137. Replace the third and the fourth paragraphs of Sub-Clause 13.3 [*Variation Procedure*] with the following:

“Variation, which causes or may cause any increase of the Time for Completion and/or the Contract Price, shall be exercised only by the respective amendments to the Contract to be executed in accordance with the provisions of Article 3.5 of the Contract Agreement.”

1.138. Delete Sub-Clauses 13.4 [*Payment in Applicable Currencies*], 13.5 [*Provisional Sums*] and 13.6 [*Daywork*].

1.139. Delete the first paragraph of Sub-Clause 13.7 [*Adjustments for Changes in Legislation*].

1.140. Replace the second paragraph of Sub-Clause 13.7 [*Adjustments for Changes in Legislation*] with the following:

“If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of changes in the Governing Laws (including the introduction of new Laws and the repeal or modification of existing Laws), made after the Base Date, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor’s Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost.”

1.141. Delete Sub-Clause 13.8 [*Adjustment for Changes in Costs*].

1.142. Replace Sub-Clause 14.1 [*The Contract Price*] in its entirety and replace it with the following new Sub-Clause 14.1 [*Taxes*]:

“The Employer shall, at its own expense, declare and handle all formalities for customs clearance (for the avoidance of any doubts, costs including levies, fees and service fees related to customs clearance shall be borne by the Contractor) of all imported Plant and Materials at the point(s) of import in Georgia. Any and all import duties applicable to the import of the Plant and the Materials in accordance with the Governing Law shall be paid by the Employer (for the avoidance of any doubts, costs including levies, fees and service fee related to customs clearance shall be borne by the Contractor). All Plant and Materials shall be delivered in the name of Employer and therefore, Employer shall be the consignee of the Plant and Materials. Nevertheless, without prejudice to this Sub-Clause 14.1 [*Taxes*] and notwithstanding anything to the contrary in the Contract, the Contractor shall bear all costs and expenses related to customs clearance of all imported Plant and Materials (at the point(s) of import in Georgia) that are in excess of the total value of Goods (as originally determined by the Contract), including but not limited to cases when additional Plant and Materials are imported to substitute the already imported ones due to their damage, malfunction, loss or for other reasons hindering the proper installation or operation of such Plants and Materials, however, excluding the cases when additional Plant and Materials are imported at the request of the Employer and substitute the already imported ones due to their damage, malfunction, loss, and any other reason hindering the proper installation or operation which are caused by the Employer’s personnel. In the cases described by the immediately preceding sentence but excluding those which are caused by the Employer’s personnel, all Plant and Materials shall be delivered in the name of Employer; however, all import duties applicable to the import of the Plant and the Materials in accordance with the Governing Law shall be paid by the Contractor. For the avoidance of any doubts and notwithstanding anything contrary to the Contract, all Materials shipped after the issuance of Taking-Over Certificate, shall be delivered in the name of the

Contractor and the latter shall be in charge to manage all necessary customs formalities, pay customs duties and/or other applicable fees/expenses that are required for the delivery of these Materials to the Site.

The Contractor undertakes to use all best efforts to schedule/optimize the deliveries of the Plant and the Materials so as to minimize the amount of VAT, Excise Tax and Import Tax to be actually paid by the Employer in relation to the import thereof.

The Contractor shall be responsible for the accuracy of volumes, quantities and other characteristics of the Plant and the Materials and documents required for the purposes of customs procedures including customs clearance. For the purposes of such responsibility the Contractor shall indemnify, defend and hold harmless the Employer (including its respective directors, officers, employees, Affiliates, representatives, agents and advisors) from and against any and all claims, losses, actions, liabilities, costs, damages or expenses, including reasonable attorneys' fees and expenses, regardless of the form of action and whether or not any such damages were foreseeable or contemplated) (collectively, the "Losses") arising from or in connection with the negligence, bad faith, willful or intentional misconduct of the Contractor (including its personnel), except if and to the extent that any such Losses are attributable to the gross negligence or the willful misconduct of the Employer.

The Contractor shall issue VAT invoice for the performed services in accordance with the provisions of the Tax Code of Georgia. The Employer shall reimburse to the Contractor the amount of VAT stated in such VAT invoice. Nevertheless, without prejudice to the first sentence of the fourth paragraph of this Sub-Clause 14.1 [*Taxes*] and notwithstanding anything to the contrary in the Contract, for interim payments attributable to services (as indicated in the Schedule of Payments attached to the Contract Agreement as Annex 5), the Employer shall transfer the amount including (grossed-up by) VAT per each case of such payments in accordance with the provisions of the Tax Code of Georgia, and the Contractor shall issue the respective VAT invoices for such interim payments no later than 10th day of the following calendar month in which the payment was executed. For the purposes of this Sub-Clause 14.1 [*Taxes*] the execution date of the payment shall be deemed to be the day on which the bank transfer order has become effective by the Employer. The amount of VAT shall be paid to the local branch of the Contractor in Georgian Lari as per the provisions of Sub-Clause 14.15 [*Currencies of Payment*] of the Conditions of Contract. Such gross-up shall have no effect on the application of Contract Price for the purposes of this Contract.

The Contractor shall pay all taxes, duties, levies and fees (other than the taxes expressly imposed on the Employer in accordance with the first and the fourth paragraphs of this Sub-Clause 14.1 [*Taxes*]) required to be paid by it in connection with the performance of the Contract including performance of the Work, and the Contract Price shall not be adjusted for any of these costs."

1.143. Replace Sub-Clause 14.2 [*Advance Payment*] with the following:

"The Employer shall make an advance payment in the aggregate amount of [●] US Dollars ([●] US Dollars), which constitutes 15% (fifteen percent) of the Contract Price in two installments – the first installment of the advance payment amounts to [●] US Dollars ([●] US Dollars) and the second installment of the advance payment – to [●] US Dollars ([●] US Dollars).

The advance payment installments shall be transferred to the Contractor by the Employer to the account designated by the Contractor against the presentation of the following documents by the Contractor:

- (a) Proforma invoice indicating the amount of the respective advance payment installment.
- (b) Advance Payment Guarantee as specified below in this Sub-Clause 14.2 [*Advance payments*] covering the amount of the respective advance payment installment, and
- (c) The Performance Security as specified in Sub-Clause 4.2 [*Performance Security*].

The Contractor shall submit to the Employer an unconditional and irrevocable Advance Payment Guarantee in a form of a bank guarantee on the amount of each advance payment installment. The Advance Payment Guarantee for the first advance payment installment shall be delivered to the Employer within 21 days after the signing of the Contract Agreement by the Parties and the Advance Payment Guarantee for the second advance payment installment shall be delivered to the Employer by the Contractor– within 14 days after the Commencement Date.

The Employer shall be indicated as a beneficiary in the Advance Payment Guarantee. The Advance Payment Guarantee shall be in USD and consider bank's unconditional and irrevocable liability to pay, without protest or notification, complete amount of the bank guarantee or part thereof upon the Employer's first request, provided that such payment(s) shall be made (i) without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and (ii) without the Employer required to prove the grounds or reasons for the respective request, and notwithstanding any objection by the Contractor. Advance Payment Guarantee shall be issued by a bank qualified B+ or higher Fitch international rating or other equivalent international rating and shall be notified by JSC "Bank of Georgia" or JSC "TBC Bank".

All expenses related to the Advance Payment Guarantee, including the certification costs, are a part of the Contract Price and shall be borne by the Contractor.

The Contractor shall ensure that each Advance Payment Guarantee is valid and enforceable:

- (a) The Advance Payment Bank Guarantee for the first installment of the advance payment – until the issuance of a construction permit for the Gardabani-III CCTPP. The Advance Payment Bank Guarantee for the first installment of the advance payment shall be released within 14 (fourteen) days after the issuance of such construction permit.
- (b) The Advance Payment Bank Guarantee for the second installment of the advance payment – until the issuance of the Taking-Over Certificate. The Advance Payment Bank Guarantee for the second installment of the advance payment shall be released within 14 (fourteen) days after the issuance of the Taking-Over Certificate.

The respective Advance Payment Bank Guarantee shall immediately become due and payable in full by the Contractor to the Employer upon notice of termination under Clause 15 [*Termination by Employer*], Clause 16 [*Suspension and Termination by Contractor*] or Clause 19 [*Force Majeure*] (as the case may be)."

- 1.144. In the first paragraph of Sub-Clause 14.3 [*Application for Interim Payments*] substitute the words "Contract (if not stated, after the end of each month)" with the words "Schedule of Payments".

- 1.145. Delete the second paragraph of Sub-Clause 14.3 [*Application for Interim Payments*].
- 1.146. Replace the first paragraph of Sub-Clause 14.4 [*Schedule of Payments*] with the following:
- “Schedule of Payments specifying the installments in which the Contract Price will be paid is provided in the Schedule of Payments attached to the Contract Agreement as Annex 5.”
- 1.147. Delete the second paragraph of Sub-Clause 14.4 [*Schedule of Payments*].
- 1.148. Delete Sub-Clause 14.5 [*Plant and Materials Intended for the Works*].
- 1.149. Add the word “duly” after the word “has”, words “in accordance with the Contract” after the words “and approved” and the words “the Advance Payment Guarantees and the Warranty Bond, respectively” after the words “the Performance Security” in the first sentence of the first paragraph of Sub-Clause 14.6 [*Interim Payments*].
- 1.150. In the second sentence of the first paragraph of Sub-Clause 14.6 [*Interim Payments*] of the Conditions of Contract substitute the words “28 days after receiving a Statement and supporting documents” with the words “5 days from delivery of a final Statement and supporting documents or 19 days from the delivery of a draft Statement and supporting documents, whichever is later”.
- 1.151. In the first sentence of the first paragraph of Sub-Clause 14.7 [*Timing of Payments*] add the words “14.6 [*Interim Payments*] and Sub-Clause 14.9 [*Suspension of Payments and Right to Set Off*]” after the words “Sub-Clause 2.5 [*Employer’s Claims*]”.
- 1.152. In sub-paragraph (a) of the first paragraph of Sub-Clause 14.7 [*Timing of Payments*] add the words “and the second installment of the advance payment, as applicable” after the words “advance payment”, substitute “42” with “14”, delete the words “the date on which the Contract came into full force and effect or within 21 days after” and add the word “respective” after the words “the Employer receives the”.
- 1.153. Replace sub-paragraph (b) of the first paragraph of Sub-Clause 14.7 [*Timing of Payments*] with the following:
- “(b) the amount which is due in respect of each Statement, other than the final Statement, within 5 Business Days after approval of the Statement and supporting documents by the Employer. The Contractor shall submit to the Employer the draft Statement and supporting documents prior to at least 14 days before submitting the final Statement and supporting documents for the Employer’s approval as aforementioned. The Employer shall approve or provide the respective objections to the final Statement and supporting documents before expiry of 5 days from delivery thereof or before 19 days from the delivery of the draft Statement and supporting documents, whichever is later. Each Statement shall indicate the sums the Contractor considers due and the respective calculations.”

1.154. Delete the words “Sub-Clause 14.11 [*Application for Final Payment*] and” in sub-paragraph (c) of the first paragraph of Sub-Clause 14.7 [*Timing of Payments*].

1.155. Add the following third paragraph after the second paragraph of Sub-Clause 14.7 [*Timing of Payments*]:

“Notwithstanding anything to the contrary in the Contract or elsewhere, payment of any outstanding amounts after the issuance of the Taking-Over Certificate shall be made within the deadlines set forth in sub-paragraph (c) of the first paragraph of Sub-Clause 14.7 [*Timing of Payment*].”

1.156. In the first paragraph of Sub-Clause 14.8 [*Delayed Payments*] substitute the words “financing charges” with the words “an interest of 0,1%” and add the following sentences immediately after the first sentence in the same paragraph of Sub-Clause 14.8 [*Delayed Payments*]:

“However, the total amount due under this Sub-Clause shall not exceed 5% of the Contract Price. Notwithstanding anything to the contrary in the Contract, the Employer shall secure the project by making the payments to the Contractor according to Annex 5 [*Schedule of Payments*]. For the clarity purposes, the Employer shall make the Advance Payment for the second installment of the Advance Payment in accordance with paragraph (a) of Sub-Clause 14.7 [*Timing of Payments*] of the Conditions of Contract.”

1.157. Delete the second and the third paragraphs of Sub-Clause 14.8 [*Delayed Payments*].

1.158. Substitute the heading of Sub-Clause 14.9 “Payments of Retention Money” with “Suspension of Payments and Right to Set Off” and replace Sub-Clause 14.9 [*Suspension of Payments and Right to Set Off*] with the following:

“The Employer shall be entitled:

- (a) to suspend, by written notice of suspension to the Contractor, all payments to the Contractor in case if the latter fails to perform any obligation under this Contract, provided that such notice of suspension (i) specifies the nature of the failure, and (ii) requests the Contractor to remedy such failure within a reasonable time period after receipt of the notice of suspension.
- (b) to set-off against any amount payable by it to the Contractor any amount due to the Employer under this Contract including remedies as well as fines, penalties and/or other sanctions imposed on the Employer as a result of non-performance, improper performance and/or breach by the Contractor of any of its obligation.”

1.159. Delete Sub-Clause 14.10 [*Statement at Completion*].

1.160. In the first paragraph of Sub-Clause 14.11 [*Application for Final Payment*] substitute the word “Performance” with the word “Taking-Over” and replace sub-paragraphs (a) and (b) of the same paragraph of Sub-Clause 14.11 [*Application for Final Payment*] with the following:

- “(a) any outstanding sums which the Contractor considers to be due to him under the Contract, and
- (b) VAT invoice and/or any other documents required for the tax purposes in accordance with the Contract and/or the Governing Law.”

- 1.161. In the third paragraph of Sub-Clause 14.11 [*Application for Final Payment*] substitute the words “Sub-Clause 20.5 [*Amicable Settlement*]” with the words “Sub-Clause 20.1 *bis* [*Amicable Settlement*]”.
- 1.162. In the first sentence of Sub-Clause 14.12 [*Discharge*] substitute the words “the total of the Final” with the words “upon payment of the amount indicated in such”, the word “represents full and final settlement of all moneys due to” with the words “the Employer will fully and finally settle all payment obligations towards”.
- 1.163. In the second sentence of Sub-Clause 14.12 [*Discharge*] add the word “back” after the words “has received” and delete the words “and the out-standing balance of this total, in which event the discharge shall be effective on such date” at the end of the same sentence of Sub-Clause 14.12 [*Discharge*].
- 1.164. Substitute the heading of Sub-Clause 14.13 “Final Payment” with “Costs of Payments” and replace Sub-Clause 14.13 [*Costs of Payments*] with the following:
- “Any costs and expenses associated with payments, including SWIFT costs, shall be borne by the Contractor.”
- 1.165. Substitute the heading of Sub-Clause 14.14 “Cessation of Employer’s Liability” with “Limitations” and replace Sub-Clause 14.14 [*Limitations*] with the following:
- “Notwithstanding anything to the contrary in the Contract, the Parties acknowledge and agree that:
- (a) the Governing Law prohibit any amendment, variation and/or modification of the provisions of the Contract, which increases the Contract Price or adversely affects the conditions of the agreement referring to the purchaser, except for the case envisaged by the Article 398 of the Civil Code of Georgia; and
 - (b) upon occurrence of circumstances referred to in the abovementioned Article of the Civil Code of Georgia the Contract Price cannot be increased above 10% thereof.”
- 1.166. Replace Sub-Clause 14.15 [*Currencies of Payment*] with the following:
- “The Contract Price shall be paid in the US Dollars. The Parties acknowledge and agree that if any payment is required in accordance with the Governing Law to be paid in Georgian Lari, such payment shall be discharged by converting the relevant US Dollar amount due and owing hereunder to Georgian Lari in accordance with the official US Dollar/Georgian Lari exchange rate as quoted by the National Bank of Georgia, from time to time, effective on the payment date or the date such payment is due for payment, in any case whichever date is earlier.”
- 1.167. Add the words “upon occurrence of other circumstances provided in this Contract and/or the Governing Law including *inter alia*” after the words “to terminate the Contract” in the first paragraph of Sub-Clause 15.2 [*Termination by the Employer*].

- 1.168. Add the words “Sub-Clause 12.1 [*Warranty Bond*] and Sub-Clause 14.2 [*Advanced Payments*]” after the words “Sub-Clause 4.2 [*Performance Security*]” in sub-paragraph (a) of the first paragraph of Sub-Clause 15.2 [*Termination by the Employer*].
- 1.169. Add the words “or in other cases contemplated by the Governing Law” after the words “sub-paragraph (e) or (f)” in the second sentence of the second paragraph of Sub-Clause 15.2 [*Termination by the Employer*].
- 1.170. In the third sentence of the sixth paragraph of Sub-Clause 15.2 [*Termination by the Employer*] add the words “and/or the Employer claims loss/damages caused by termination of the Contract under circumstances provided in Sub-Clause 15.2 [*Termination by the Employer*] or due to any other reasons attributable to the Contractor provided in this Contract and/or the Governing Law” after the words “a payment due to the Employer” and the words “and/or losses/damages” after the words “to recover this payment”.
- 1.171. Add the following seventh and eighth paragraphs to Sub-Clause 15.2 [*Termination by the Employer*]:
- “Notwithstanding anything to the contrary in the Contract, if the Employer after giving the Contract termination notice decides not to proceed with the construction of the Gardabani-III CCTPP, the Employer is entitled to retain and dispose all Goods (whether located on the Site or elsewhere) and Contractor’s Documents immediately upon and after issuance of the notice of termination in order to recover any outstanding payments owing by the Contractor to the Employer and/or any loss/damages caused by termination of the Contract under circumstances provided in Sub-Clause 15.2 [*Termination by the Employer*] or due to any other reasons attributable to the Contractor provided in this Contract and/or the Governing Law.
- The Contractor shall upon Employer’s request promptly exercise all actions and/or assistance to the Employer to attach respective lien or an encumbrance to the Goods, Contractor’s Documents and other design documents. All expenses related to such liens and/or encumbrances shall be borne by the Contractor.”
- 1.172. Add the words “except under the circumstances expressly described in Sub-Clause 15.2 [*Termination by Employer*] or elsewhere in the Contract” at the end of the third sentence of the first paragraph of Sub-Clause 15.5 [*Employer’s Entitlement to Termination*].
- 1.173. Delete the words “Sub-Clause 2.4 [*Employer’s Financial Arrangements*] or” in the first sentence of the first paragraph of Sub-Clause 16.1 [*Contractor’s Entitlement to Suspend Work*].
- 1.174. In the first paragraph of Sub-Clause 16.1 [*Contractor’s Entitlement to Suspend Work*] substitute “21” with “7”.
- 1.175. Replace sub-paragraphs (a) and (b) of the fourth paragraph of Sub-Clause 16.1 [*Contractor’s Entitlement to Suspend Work*] with the following:

- “(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (c) payment of such Cost.”

1.176. Add the words “(except as otherwise stated in the second paragraph of this Sub-Clause 16.2 [*Termination by the Contractor*])” in the first paragraph of Sub-Clause 16.2 [*Termination by the Contractor*].

1.177. Delete sub-paragraph (a) of the first paragraph of Sub-Clause 16.2 [*Termination by Contractor*].

1.178. In sub-paragraph (b) of the first paragraph of Sub-Clause 16.2 [*Termination by Contractor*] substitute the words “Sub-Clause 2.5 [*Employer’s Claims*]” with the words “this Contract”.

1.179. Replace the second paragraph of Sub-Clause 16.2 [*Termination by Contractor*] with the following:

“In any of this events or circumstances, the Contractor may terminate the Contract (by giving 14 days’ notice to the Employer or immediate notice in case of subparagraph (e) or (f)), except if the respective events or circumstances referred to in the first paragraph of this Sub-Clause 16.2 [*termination by the Contractor*] is caused by the reasons described in the third sentence of the first paragraph of Sub-Clause 14.8 [*delayed payments*] in which case the Parties shall meet and negotiate in good faith for the purpose of arriving at solution which would allow the continuation of the implementation of the Gardabani-III CCTPP project.”

1.180. Replace sub-paragraph (c) of Sub-Clause 16.4 [*Payment on Termination*] with the following:

- “(c) pay to the Contractor the amount of losses or damage sustained by the Contractor as a result of this termination.”

1.181. In the first paragraph of Sub-Clause 17.1 [*Indemnities*] substitute the words “indemnify and hold harmless” with the words “indemnify, hold harmless and reimburse”.

1.182. Add the following sub-paragraph (c) to the first paragraph of Sub-Clause 17.1 [*Indemnities*]:

- “(c) any and all damages or losses incurred by the Employer including fines, penalties and/or other sanctions imposed on the Employer as a result of non-performance, improper performance and/or breach by the Contractor of any of its obligations under the Contract and/or the Governing Law.”

1.183. In the first sentence of the first paragraph of Sub-Clause 17.2 [*Contractor’s Care of the Works*] add the words “and all associated risks” after the words “Works and Goods”, the words “of the Engineering Works” after the words “the Commencement Date” and delete the words “(or is deemed to be issued under Sub-Clause 10.1 [*Taking Over of the Works and Sections*])”

1.184. Delete the second sentence of the first paragraph of Sub-Clause 17.2 [*Contractor’s Care of the Works*].

- 1.185. Delete the words “from any cause not listed in Sub-Clause 17.3 [*Employer’s Risks*]” in the third paragraph of Sub-Clause 17.2 [*Contractor’s Care of the Works*].
- 1.186. Delete Sub-Clause 17.3 [*Employer’s Risks*] and 17.4 [*Consequences of Employer’s Risks*].
- 1.187. In in the first paragraph of Sub-Clause 17.6 [*Limitation of Liability*] add the words “Sub-Clause 15.4 [*Payment after Termination*]” after the words “Sub-Clause 16.4 [*Payment on Termination*]”.
- 1.188. Delete the second paragraph of Sub-Clause 17.6 [*Limitation of Liability*].
- 1.189. In the first sentence of the first paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*] substitute words “for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause” with the words “the Contractor”.
- 1.190. Add the following second sentence to the first paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*]:
- “The Contractor shall promptly procure and maintain in force at its own costs until the issuance of the Taking-Over Certificate: (i) an all-risk insurance policy or policies which shall include without limitation loss or damage to Works (including Plant and Materials) and Contractor’s Equipment for their full replacement value, (ii) insurance in respect of personal injury and/or death of Contractor’s and/or Employer’s personnel and/or any third persons as well as employer’s liability and workers compensation insurance, and (iii) third party liability insurance.”
- 1.191. Delete the words “with insurers and” in the first sentence of the second paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.192. Delete the second and the third sentences of the second paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.193. Delete the third and fourth paragraphs of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.194. In the fifth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*] substitute the words “the relevant issuing Party” with the words “The Contractor” and the words “respective periods in the Particular Conditions (calculated from the Commencement Date)” with “28 days after the Effective Date but in any case, not later than the Commencement Date” as well as substitute the words “Sub-Clause 18.2 [*Insurance of Works and Contractor’s Equipment*] and Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*]” in sub-paragraph (b) of the same Sub-Clause with the words “this Clause”.
- 1.195. In the first sentence of the seventh paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*] substitute the words “Each Party” with the words “The Contractor”.

- 1.196. In first sentence of the eighth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*] substitute the words “Neither Party” with the words “The Contractor” and insert the word “not” after the word “shall”.
- 1.197. Delete the second sentence of the eighth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.198. Delete the ninth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.199. Delete the words “or the Employer” in the first sentence of the tenth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.200. Delete the words “and/or the Employer” in the second sentence of the tenth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.201. Replace the third sentence of the tenth paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*] with the following:

“Failure by the Contractor to comply with the requirements set forth by this Clause shall constitute substantial breach of the Contract.”
- 1.202. Delete the eleventh paragraph of Sub-Clause 18.1 [*General Requirements for Insurance*].
- 1.203. Delete the words “and Clause 12 [*Tests after Completion*]” in the second paragraph of Sub-Clause 18.2 [*Insurance for Works and Contractor’s Equipment*].
- 1.204. In the fourth paragraph of Sub-Clause 18.2 [*Insurance for Works and Contractor’s Equipment*] substitute the words “Unless otherwise stated in the Particular Conditions, insurances” with the word “Insurances” and delete sub-paragraphs (c), (d) and (e).
- 1.205. Delete the fifth paragraph of Sub-Clause 18.2 [*Insurance for Works and Contractor’s Equipment*].
- 1.206. In the first sentence of the second paragraph of Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*] substitute the words “the amount stated in the Particular Conditions” with “5 (five) million US Dollars”.
- 1.207. Delete the second sentence of the second paragraph of Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*].
- 1.208. Delete the words “Unless otherwise stated in the Particular Conditions” in the third paragraph of Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*].
- 1.209. Add the words “and unavoidable damages for an experienced Contractor” at the end of sub-paragraph (d.i) of the third paragraph of Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*].

- 1.210. Delete sub-paragraphs (d.ii) and (d.iii) of the third paragraph of Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*].
- 1.211. Add the words “causes or results in a failure by such Party to perform its obligations under this Contract and” after the word “which” in sub-paragraph (a) of the first paragraph of Sub-Clause 19.1 [*Definition of Force Majeure*].
- 1.212. Add the words “and shall be certified by the Georgian Chamber of Commerce” at the end of the second sentence of the first paragraph of Sub-Clause 19.2 [*Notice of Force Majeure*].
- 1.213. Delete the third paragraph of Sub-Clause 19.2 [*Notice of Force Majeure*].
- 1.214. Delete the word “and” at the end of sub-paragraph (a) of the first paragraph of Sub-Clause 19.4 [*Consequences of Force Majeure*] and delete sub-paragraph (b) of the same paragraph of Sub-Clause 19.4 [*Consequences of Force Majeure*].
- 1.215. In sub-paragraph (b) of the second paragraph of Sub-Clause 19.6 [*Optional Termination, Payment and Release*] substitute the words “Contractor, or of which the Contractor is liable to accept delivery: this” with the words “Site: these”.
- 1.216. Delete the words “or liability” in sub-paragraph (c) of the second paragraph of Sub-Clause 19.6 [*Optional Termination, Payment and Release*].
- 1.217. In sub-paragraph (d) of the second paragraph of Sub-Clause 19.6 [*Optional Termination, Payment and Release*] add the words “to the extent such termination is requested by the Employer” after the words “(or to any other destination at no greater cost)” and delete the word “and” at the end of the same sub-paragraph.
- 1.218. Delete sub-paragraph (e) of the second paragraph of Sub-Clause 19.6 [*Optional Termination, Payment and Release*].
- 1.219. Delete Sub-Clause 19.7 [*Release from the Performance under the Law*].
- 1.220. Delete the seventh paragraph of Sub-Clause 20.1 [*Contractor’s Claims*].
- 1.221. The following Sub-Clause 20.1 *bis* [*Amicable Settlement*] shall be inserted in the text of the General Condition immediately following Sub-Clause 20.1 [*Contractor’s Claims*]:

“20.1 *bis* [*Amicable Settlement*]

If a dispute (of any kind whatsoever) including any and all claims, demands, causes of action, disputes, controversies and other matters in question arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to formation, interpretation, existence, validity, breach and/or termination of the Contract and/or any certificate, determination, instruction, opinion or valuation of the Employer, both Parties shall attempt to settle the dispute

amicably. In case of failure by the Parties to agree upon an amicable settlement of the dispute within 28 days calculated from the respective notice of the dispute, before commencing arbitration under Sub-Clause 20.9 [*Arbitration*] and if so agreed by the Parties in writing the dispute may be referred to a DAB for its decision.”

- 1.222. Add the words “Subject to Sub-Clause 20.1 *bis* [*Amicable Settlement*]” at the beginning of the first sentence of the first paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*].
- 1.223. In the second sentence of the first paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] substitute the words “by the date” with the word “within” and the words “Party gives notice to the other Party of its intention to refer a dispute to a DAB in accordance with Sub-Clause 20.4” with the words “written agreement of the Parties to refer the dispute to a DAB”.
- 1.224. In the first sentence of the second paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] delete the words “as stated in the Particular Conditions” and add the words “as per Parties agreement” at the end of the sentence.
- 1.225. Delete the second sentence of the second paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*].
- 1.226. Delete the fourth paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*].
- 1.227. In the fifth paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] substitute the words “the Appendix to these General Conditions” with the words “Annex 11 (DAB Procedures) of the Contract Agreement”.
- 1.228. At the end of the second sentence of the eighth paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*] delete the words “referred to it under Sub-Clause 20.4, , in which event the relevant date shall be when the DAB has also given decisions on those disputes”.
- 1.229. Substitute “42” with “28” in sub-paragraph (d) of the first paragraph of Sub-Clause 20.3 [*Failure to Agree Dispute Adjudication Board*].
- 1.230. In sub-paragraph (a) of the first paragraph of Sub-Clause 20.3 [*Failure to Agree Dispute Adjudication Board*] substitute the words “the first paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*]” with the words “the President of FIDIC”.
- 1.231. In the beginning of the first sentence of the first paragraph of Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board’s Decision*] substitute the words “If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Employer, then after” with the word “After”.
- 1.232. Delete Sub-Clauses 20.5 [*Amicable Settlement*] and 20.6 [*Arbitration*].

- 1.233. Replace Sub-clause 20.7 [*Failure to Comply with Dispute Adjudication Board's Decision*] with the following:

“In the event that a Party fails to comply with any decision of the DAB, whether binding or final and binding, then the other Party may, without prejudice to any other rights it may have and without engaging in negotiations for reaching an amicable settlement under Sub-Clause 20.1 *bis* [*Amicable Settlement*], refer the failure itself directly to arbitration under Sub-Clause 20.9 [*Arbitration*]. The arbitrator(s) shall have full power to open up, review and revise any decision of the DAB, relevant to the dispute.”

- 1.234. Replace Sub-clause 20.8 [*Expiry of Dispute Adjudication Board's Appointment*] with the following:

“If a dispute arises between the Parties and:

- (a) there is no agreement on the referral of the dispute to DAB; or
- (b) there is no DAB in place, whether by reason of the expiry of the DAB's appointment or otherwise; or
- (c) a Party has given notice of dissatisfaction within the period stated in Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*],

the dispute may be referred directly to arbitration under Sub-Clause 20.9 [*Arbitration*].”

- 1.235. The following Sub-Clause 20.9 [*Arbitration*] shall be inserted in the text of the General Condition immediately following Sub-Clause 20.8 [*Expiry of Dispute Adjudication Board's Appointment*]:

“Subject to Sub-Clauses 20.1 *bis* [*Amicable Settlement*] and 20.7 [*Failure to Comply with Dispute Adjudication Board's Decision*], any and all claims, demands, causes of action, disputes, controversies and other matters in question arising out of or relating to this Agreement, including any question regarding its formation, interpretation, existence, validity, breach and/or termination, shall directly be resolved through final and binding arbitration, which shall be conducted under the arbitration Rules of the London Court of International Arbitration of 2014 (“LCIA”), which Rules are incorporated into this Agreement by reference. The number of arbitrators shall be 3 (three). The place of arbitration shall be London, UK. The proceedings shall be in the English language. The resulting arbitral award shall be final and binding, and judgment upon such award may be entered in any court having jurisdiction thereof. A dispute shall be deemed to have arisen when either Party notifies the other Party in writing to that effect. Any monetary award issued by the arbitral tribunal shall be payable in US Dollars. The Parties acknowledge that remedies at law may be inadequate to protect against breach of this Contract. The arbitral tribunal may therefore award both monetary and equitable relief, including injunctive relief and specific performance. The application for the enforcement of such measures ordered by the arbitral tribunal shall not be deemed an infringement or waiver of the agreement to arbitrate and shall not affect the powers of the arbitrator. By agreeing to dispute resolution pursuant to this Sub-Clause, the Parties irrevocably waive any rights to any other form of dispute resolution, appeal, review or recourse to any state court or other judicial authority, insofar as such waiver may validly be made.

Subject to the immediately following sentence, any Party that now or hereafter has a right to claim sovereign immunity for itself or any of its assets hereby waives any such immunity and the Parties agree

not to assert any such immunity of defenses in any proceedings with respect to this Contract or in the enforcement of any award. This waiver includes immunity from (i) any arbitration proceeding commenced pursuant to this Contract, (ii) any judicial, administrative or other proceedings to aid the arbitration commenced pursuant to this Contract; and (iii) any effort to confirm, enforce, or execute any decision, settlement, award, judgment, service of process or execution order etc. that results from an arbitration or any further judicial or administrative proceedings commenced pursuant to this Contract.”

2. This Particular Conditions constitutes an integral part of the Contract Agreement.

Annex 2

General Conditions of the Contract (FIDIC Silver Book 1999
edition)

General Conditions

General Provisions

1.1

Definitions

In the Conditions of Contract (“these Conditions”), which include Particular Conditions and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1

The Contract

- 1.1.1.1 “**Contract**” means the Contract Agreement, these Conditions, the Employer’s Requirements, the Tender, and the further documents (if any) which are listed in the Contract Agreement.
- 1.1.1.2 “**Contract Agreement**” means the contract agreement referred to in Sub-Clause 1.6 [*Contract Agreement*], including any annexed memoranda.
- 1.1.1.3 “**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 specifies the purpose, scope, and/or design and/or other technical criteria, for the Works.
- 1.1.1.4 “**Tender**” means the Contractor’s signed offer for the Works and all other documents which the Contractor submitted therewith (other than these Conditions and the Employer’s Requirements, if so submitted), as included in the Contract.
- 1.1.1.5 “**Performance Guarantees**” and “**Schedule of Payments**” mean the documents so named (if any), as included in the Contract.

1.1.2

Parties and Persons

- 1.1.2.1 “**Party**” means the Employer or the Contractor, as the context requires.

- 1.1.2.2 “**Employer**” means the person named as employer in the Contract Agreement and the legal successors in title to this person.
- 1.1.2.3 “**Contractor**” means the person(s) names as contractor in the Contract Agreement and the legal successors in title to this person(s).
- 1.1.2.4 “**Employer’s Representative**” means the person named by the Employer in the Contract or appointed from time to time by the Employer under Sub-Cause 3.1 [*The Employer’s Representative*], who acts on behalf of the Employer.
- 1.1.2.5 “**Contractor’s Representative**” means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [*Contractor’s Representative*], who acts on behalf of the Contractor.
- 1.1.2.6 “**Employer’s Personnel**” means the Employer’s Representative, the assistants referred to in Sub-Clause 3.2 [*Other Employer’s Personnel*] and all other staff, labor and other employees of the Employer and of the Employer’s Representative; and any other personnel notified to the Contractor, by the Employer or the Employer’s Representative, as Employer’s Personnel.
- 1.1.2.7 “**Contractor’s Personnel**” means the Contractor’s Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.2.8 “**Subcontractor**” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9. “**DAB**” means the person or three persons so named in the Contract, or other person(s) appointed under Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*], or Sub-Clause 20.3 [*Failure to Agree Dispute Adjudication Board*].
- 1.1.2.10 “**FIDIC**” means Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.

1.1.3

Dates, Tests, Periods and Completion

- 1.1.3.1 “**Base Date**” means the date 28 days prior to the latest date for submission of the Tender.
- 1.1.3.2 “**Commencement Date**” means the date notified under Sub-Clause 8.1 [*Commencement of Works*], unless otherwise defined in the Contract Agreement.
- 1.1.3.3 “**Time for Completion**” means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [*Time for*

Completion], as stated in the Particular Conditions (with any extension under Sub-Clause 8.4 [*Extension of Time for Completion*]), calculated from the Commencement Date.

- 1.1.3.4 “**Tests on Completion**” means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [*Tests on Completion*] before the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.5 “**Taking-over Certificate**” means a certificate issued under Clause 10 [*Employer’s Taking Over*].
- 1.1.3.6 “**Tests after Completion**” means the tests (if any) which are specified in the Contract and which are carried out under Clause 12 [*Tests after Completion*] after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 “**Defects Notification Period**” means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*], as stated in the Particular Conditions (with any extension under Sub-Clause 11.3 [*Extension of Defects Notification Period*]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [*Taking Over of the Works and Sections*]. If no such period is stated in the Particular Conditions, the period shall be one year.
- 1.1.3.8 “**Performance Certificate**” means the certificate issued under Sub-Clause 11.9 [*Performance Certificate*].
- 1.1.3.9 “**day**” means a calendar day and “**year**” means 365 days.

1.1.4

Money and Payments

- 1.1.4.1 “**Contact Price**” means the agreed amount stated in the Contract Agreement for the design, execution and completion of the Works and the remedying of any defects, and includes adjustments (if any) in accordance with the Contract.
- 1.1.4.2 “**Cost**” means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.3 “**Final Statement**” means the statement defined in Sub-Clause 14.11 [*Application for Final Payment*].
- 1.1.4.4 “**Foreign Currency**” means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
- 1.1.4.5 “**Local Currency**” means the currency of the Country.
- 1.1.4.6 “**Provisional Sum**” means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [*Provisional Sums*].

- 1.1.4.7 “**Retention Money**” means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [*Application for Interim Payments*] and pays under Sub-Clause 14.9 [*Payment of Retention Money*].
- 1.1.4.8 “**Statement**” means a statement submitted by the Contractor as part of an application for payment under Clause 14 [*Contract Price and Payment*].

1.1.5

Works and Goods

- 1.1.5.1 “**Contractor’s Equipment**” means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor’s Equipment excludes Temporary Works, Employer’s Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 “**Goods**” means Contractor’s Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 “**Materials**” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 “**Permanent Works**” means the permanent works to be designed and executed by the Contractor under the Contract.
- 1.1.5.5 “**Plant**” means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.
- 1.1.5.6 “**Section**” means a part of the Works specified in the Particular Conditions as a Section (if any).
- 1.1.5.7 “**Temporary Works**” means all temporary works of every kind (other than Contractor’s Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 “**Works**” mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.1.6

Other Definitions

- 1.1.6.1 “**Contractor’s Documents**” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature supplied by the Contractor under the Contract; as described in Sub-Clause 5.2 [*Contractor’s Documents*].
- 1.1.6.2 “**Country**” means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.
- 1.1.6.3 “**Employer’s Equipment**” means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the

Contractor in the execution of the Works, as stated in the Employer's Requirements; but does not include Plant which has not been taken over by the Employer.

- 1.1.6.4 "**Force Majeure**" is defined in Clause 19 [*Force Majeure*].
- 1.1.6.5 "**Laws**" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.6.6 "**Performance Security**" means the security (or securities, if any) under Sub-Clause 4.2 [*Performance Security*].
- 1.1.6.7 "**Site**" means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "**Variation**" means any change to the Employer's Requirements or the Works, which is instructed or approved as a variation under Clause 13 [*Variations and Adjustments*].

1.2

Interpretation

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, and
- (d) "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 considerations in the interpretation of these Conditions.

1.3

Communications

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

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Particular Conditions; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract. However:
 - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed.

1.4

Law and Language

The Contract shall be governed by the law of the country (or other jurisdiction) stated in the Particular Conditions.

If there are versions of any part of the Contract which are written in more than one language, the version which is in the ruling language stated in the Particular Conditions shall prevail.

The language for communications shall be that stated in the Particular Conditions. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.

1.5

Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement,
- (b) the Particular Conditions,
- (c) these General Conditions,
- (d) the Employer's Requirements,
- (e) the Tender and any other documents forming part of the Contract.

1.6

Contract Agreement

The Contract shall come into full force and effect on the date stated in the Contract Agreement. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

1.7

Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

- (a) may assign the whole or any part with the prior agreement of the other Party, as the sole discretion of such other Party; and
- (b) may, as security in favor of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

1.8

Care and Supply of Documents

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over the Employer. Unless otherwise stated

in the Contract, the Contractor shall supply to the Employer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Employer's Requirements, the Contractor's Documents, and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9

Confidentiality

Both Parties shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous agreement of the Employer.

1.10

Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing, and demolishing the Works, and
- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

1.11

Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract.

They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.12

Confidential Details

The Contractor shall not be required to disclose, to the Employer, any information which the Contractor described in the Tender as being confidential. The Contractor shall disclose any other information which the Employer may reasonably require in order to verify the Contractor's compliance with the Contract.

1.13

Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Employer's Requirements as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

1.14

Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
- (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

The Employer

2.1

Right of Access to the Site

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Particular Conditions. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer's Requirements. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Particular Conditions, the Employer shall give the Contractor right of access to, and possession of, the Site with effect from the Commencement Date.

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

2.2

Permits, Licenses or Approvals

The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and

- (b) for the Contractor's applications for any permits, licenses or approvals required by the Laws of the Country:
 - (i) which the Contractor is required to obtain under Sub-Clause 1.13 [*Compliance with Laws*],
 - (ii) for the delivery of Goods, including clearance through customs, and
 - (iii) for the export of Contractor's Equipment when it is removed from the Site.

2.3

Employer's Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [*Co-operation*], and
- (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [*Safety Procedures*] and under Sub-Clause 4.18 [*Protection of the Environment*].

2.4

Employer's Financial Arrangements

The Employer shall submit, within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price (as estimated at that time) in accordance with Clause 14 [*Contract Price and Payment*]. If the Employer intends to make any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

2.5

Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notifications Period, he shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [*Electricity, Water and Gas*], under Sub-Clause 4.20 [*Employer's Equipment and Free-Issue Material*], or for other services requested by the Contractor.

The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Employer shall then proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine (i) the amount (if any) which the Employer is entitled to be

paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [*Extension of Defects Notification Period*].

The Employer may deduct this amount from any moneys due, or to become due, to the Contractor. The Employer shall only be entitled to set off against or make any deduction from an amount due to the Contractor, or to otherwise claim against the Contractor, in accordance with this Sub-Clause or with subparagraph (a) and/or (b) of Sub-Clause 14.6 [*Interim Payments*].

The Employer's Administration

3.1

The Employer's Representative

The Employer may appoint an Employer's Representative to act on his behalf under the Contract. In this event, he shall give notice to the Contractor of the name, address, duties and authority of the Employer's Representative.

The Employer's Representative shall carry out the duties assigned to him, and shall exercise the authority delegated to him, by the Employer. Unless and until the Employer notifies the Contractor otherwise, the Employer's Representative shall be deemed to have the full authority of the Employer under the Contract, except in respect of Clause 15 [*Termination by Employer*].

If the Employer wishes to replace any person appointed as Employer's Representative, the Employer shall give the Contractor not less than 14 days' notice of the replacement's name, address, duties and authority, and of the date of appointment.

3.2

Other Employer's Personnel

The Employer or the Employer's Representative may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall not take effect until a copy of it has been received by the Contractor.

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in language for communications defined in Sub-Clause 1.4 [*Law and Language*].

3.3

Delegated Persons

All these persons, including the Employer's Representative and assistants, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by a delegated person, in accordance with the delegation, shall have the same effect as though the act had been an act of the Employer. However:

- (a) unless otherwise stated in the delegated person's communication relating to such act, it shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances;
- (b) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Employer to reject the work, Plant or Materials; and
- (c) if the Contractor questions any determination or instruction of a delegated person, the Contractor may refer the matter to the Employer, who shall promptly confirm, reverse or vary the determination or instruction.

3.4

Instructions

The Employer may issue to the Contractor instructions which may be necessary for the Contractor to perform his obligations under the Contract. Each instruction shall be given in writing and shall state the obligations to which it relates and the Sub-Clause (or other term of the Contract) in which the obligations are specified. If any such instruction constitutes a Variation, Clause 13 [*Variations and Adjustments*] shall apply.

The Contractor shall take instructions from the Employer, or from the Employer's Representative or an assistant to whom the appropriate authority has been delegated under this Clause.

3.5

Determinations

Whenever these Conditions provide that the Employer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Employer shall consult with the Contractor in an endeavor to reach agreement. If agreement is not achieved, the Employer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Employer shall give notice to the Contractor of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination, unless the Contractor gives notice, to the Employer, of his dissatisfaction with a determination within 14 days of receiving it. Either Party may then refer the dispute to the DAB in accordance with Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*].

The Contractor

4.1

Contractor's General Obligations

The Contractor shall design, execute and complete the Works in accordance with the Contract, and shall remedy any defects in the Works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract.

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other and services, whether of a temporary or permanent nature, required in and for this design execution, completion and remedying of defects.

The Works shall include any work which is necessary to satisfy the Employer's Requirements, or is implied by the Contract, and all works which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operations, of the Works.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations, of all methods of construction and of all the Works.

The Contractor shall, whenever required by the Employer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Employer.

4.2

Performance Security

The Contractor shall obtain (at his cost) a Performance security for proper performance, in the amount and currencies stated in the Particular Conditions. If an amount is not stated in the Particular Conditions, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security to the Employer within 28 days after both Parties have signed the Contract Agreement. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.

The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the

Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount the Performance Security.
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Sub-Clause 2.5 [*Employer's Claims*] or Clause 20 [*Claims, Disputes and Arbitration*], within 42 days after this agreement or determination.
- (c) failure by the Contractor to remedy a default within 42 days after receiving the Employer's notice requiring the default to be remedied, or
- (d) circumstances which entitle the Employer to termination under Sub-Clause 15.2 [*Termination by Employer*], irrespective of whether notice of termination has been given.

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.

The Employer shall return the Performance Security to the Contractor within 21 days after the Contractor has become entitled to receive the Performance Certificate.

4.3

Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Employer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Employer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.4 [*Instructions*].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Employer has received prior notice signed by the Contractor's Representative, naming the

person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [*Law and Language*].

4.4

Subcontractors

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Where specified in the Particular Conditions, the Contractor shall give the Employer not less than 28 days' notice of:

- (a) the intended appointment of the Subcontractor, with detailed particulars which shall include his relevant experience,
- (b) the intended commencement of the Subcontractor's work, and
- (c) the intended commencement of the Subcontractor's work on the Site.

4.5

Nominated Subcontractors

In this Sub-Clause, "nominated Subcontractor" means a Subcontractor whom the Employer, under Clause 13 [*Variations and Adjustments*], instructs the Contractor to employ as a Subcontractor. The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Employer as soon as practicable, with supporting particulars.

4.6

Co-operation

The Contractor shall, as specified in the Contract or as instructed by the Employer, allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and
- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur Cost in an amount which was not reasonably foreseeable by an experienced contractor by the date for submission of the Tender. Services for these personnel and other contractors may include the use of the Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

The Contractor shall be responsible for his construction activities on the Site, and shall co-ordinate his own activities with those of other contractors to the extent (if any) specified in the Employer's Requirements.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Employer in the time and manner stated in the Employer's Requirements.

4.7

Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

4.8

Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [*Employer's Taking Over*], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.9

Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Employer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Employer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Employer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10

Site Data

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on subsurface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the

Contractor all such data which come into the Employer's possession after the Base Date.

The Contractor shall be responsible for verifying and interpreting all such data. The Employer shall have no responsibility for the accuracy, sufficiency or completeness of such data, except as stated in Sub-Clause 5.1 [*General Design Responsibilities*].

4.11

Sufficiency of the Contract Price

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price.

Unless otherwise stated in the Contract, the Contract Price covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any defects.

4.12

Unforeseeable Difficulties

Except as otherwise stated in the Contract:

- (a) the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works;
- (b) by signing the Contract, the Contractor accepts total responsibility for having foreseen all difficulties and costs of successfully completing the Works; and
- (c) the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs.

4.13

Rights of Way and Facilities

The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which he may require, including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site which he may require for the purposes of the Works.

4.14

Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15

Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route.
- (d) the Employer does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.16

Transport of Goods

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall give the Employer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

4.17

Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works.

4.18

Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities not exceed the values indicated in the Employer's Requirements, and shall not exceed the values prescribed by applicable Laws.

4.19

Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Employer's Requirements. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined in accordance with Sub-Clause 2.5 [*Employer's Claims*] and Sub-Clause 3.5 [*Determinations*]. The Contractor shall pay these amounts to the Employer.

4.20

Employer's Equipment and Free-Issue Material

The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Employer's Requirements. Unless otherwise stated in the Employer's Requirements:

- (a) the Employer shall be responsible for the Employer's Equipment, except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined in accordance with Sub-Clause 2.5 [*Employer's Claims*] and Sub-Clause 3.5 [*Determinations*]. The Contractor pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Employer's Requirements. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Employer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of

liability for any shortage, defect or default not apparent from a visual inspection.

4.21

Progress Reports

Unless otherwise stated in the Particular Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Employer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - (i) commencement of manufacture,
 - (ii) Contractor's inspections,
 - (iii) tests, and
 - (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [*Records of Contractor's Personnel and Equipment*];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of Variations, notices given under Sub-Clause 2.5 [*Employer's Claims*] and notices given under Sub-Clause 20.1 [*Contractor's Claims*];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.22

Security of the Site

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall be responsible for keeping unauthorized persons off the Site, and
- (b) authorized persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the

Contractor, by (or on behalf of) the Employer, as authorized personnel of the Employer's other contractors on the Site.

4.23

Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Employer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issues of the Taking-Over Certificate for the Works, the Contractor shall clear away and remove all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary works. The Contractor shall have leave the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.24

Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Employer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this further notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

Design

5.1

General Design Obligations

The Contractor shall be deemed to have scrutinized, prior to the Base Date, the Employer's Requirements (including design criteria and calculations, if any). The Contractor shall be responsible for the design of the Works and for the accuracy of such Employer's Requirements (including design criteria and calculations), except as stated below.

The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements as originally included in the Contract and shall not be deemed to have given any representation of accuracy or completeness of any data or information, except as stated below. Any data or information received by the Contractor, from the Employer or otherwise, shall not relieve the Contractor from his responsibility for the design and execution of the Works.

However, the Employer shall be responsible for the correctness of the following portions of the Employer's Requirements and of the following data and information provided by (or on behalf of) the Employer:

- (a) portions, data and information which are stated in the Contract as being immutable or the responsibility of the Employer,
- (b) definitions of intended purposes of the Works or any parts thereof,
- (c) criteria for the testing and performance of the completed Works, and
- (d) portions, data and information which cannot be verified by the Contractor, except as otherwise stated in the Contract.

5.2

Contractor's Documents

The Contractor's Documents shall comprise the technical documents specified in the Employer's Requirements, documents required to satisfy all regulatory approvals, and the documents described in Sub-Clause 5.6 [*As-Built Documents*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*]. Unless otherwise stated in the Employer's Requirements, the Contractor's Documents shall be written in the language for communications defined in Sub-Clause 1.4 [*Law and Language*].

The Contractor shall prepare all Contractor's Documents, and shall also prepare any other documents necessary to instruct the Contractor's Personnel. If the Employer's Requirements describe the Contractor's Documents which are to be submitted to the Employer for review, they shall be submitted accordingly, together with a notice as described below. In the following provisions of this Sub-Clause, (i) "review period" means the period required by the Employer for review, and (ii) "Contractor's Documents" exclude any documents which are not specified as being required to be submitted for review.

Unless otherwise stated in the Employer's Requirements, each review period shall not exceed 21 days, calculated from the date on which the Employer receives a Contractor's Document and the Contractor's notice. This notice shall state that the Contractor's Document is considered ready, both for review in accordance with this Sub-Clause and for use. The notice shall also state that the Contractor's Document complies with the Contract, or the extent to which it does not comply.

The Employer may, within the review period, give notice to the Contractor that a Contractor's Document fails (to the extent stated) to comply with the Contract. If a Contractor's Document so fails to comply, it shall be rectified, resubmitted and reviewed in accordance with this Sub-Clause, at the Contractor's cost.

For each part of the Works, and except to the extent that the Parties otherwise agree:

- (a) execution of such part of the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution;
- (b) execution of such part of the Works shall be in accordance with these Contractor's Documents, as submitted for review; and
- (c) if the Contractor wishes to modify any design or document which has previously been submitted for review, the Contractor shall immediately give notice to the Employer. Thereafter, the Contractor shall submit revised documents to the Employer in accordance with the above procedure.

Any such agreement (under the preceding paragraph) or any review (under this Sub-Clause or otherwise) shall not relieve the Contractor from any obligation or responsibility.

5.3

Contractor's Undertaking

The Contractor undertakes that the design, the Contractor's Documents, the execution and the completed Works will be in accordance with:

- (a) the Laws in the Country, and
- (b) the documents forming the Contract, as altered or modified by Variations.

5.4

Technical Standards and Regulations

The design, the Contractor's Documents, the execution and the completed Works shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, applicable to the Works, or defined by the applicable Laws.

All these Laws shall, in respect of the Works and each Section, be those prevailing when the Works or Section are taken over by the Employer under Clause 10 [*Employer's Taking Over*]. References in the Contract to published standards shall be understood to be references to the edition applicable on the Base Date, unless stated otherwise.

If changed or new applicable standards come into force in the Country after the Base Date, the Contractor shall give notice to the Employer and (if appropriate) submit proposals for compliance. In the event that:

- (a) the Employer determines that compliance is required, and
- (b) the proposals for compliance constitute a variation.

then the Employer shall initiate a Variation in accordance with Clause 13 [*Variations and Adjustments*].

5.5

Training

The Contractor shall carry out the training of Employer's Personnel in the operation and maintenance of the Works to the extent specified in the Employer's Requirements. If the Contract specifies training which is to be carried out before taking-over, the Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until this training has been completed.

5.6

As-Built Documents

The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. Two copies shall be supplied to the Employer prior to the commencement of the Tests on Completion.

In addition, the Contractor shall supply to the Employer as-built drawings of the Works, showing all Works as executed, and submit them to the Employer for review under Sub-Clause 5.2 [*Contractor's Documents*]. The Contractor shall obtain the consent of the Employer as to their size, the referencing system, and other relevant details.

Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Employer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until the Employer has received these documents.

5.7

Operation and Maintenance

Prior to commencement of the Tests on Completion, the Contractor shall supply to the Employer provisional operation and maintenance manuals in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair the Plant.

The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until the Employer has received final operation and maintenance manuals in such detail, and any other manuals specified in the Employer's Requirements for these purposes.

5.8

Design Error

If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause.

Staff and Labor

6.1 Engagement of Staff and Labor

Except as otherwise stated in the Employer's Requirements, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.

6.2 Rates of Wages and Conditions for 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 wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

6.3 Persons in the Service of Others

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

6.4 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 require his employees to obey all applicable Laws, including those concerning safety at work.

6.5 Working Hours

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

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

**6.6
Facilities for Staff
and Labor**

Except as otherwise stated in the Employer's Requirements, 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 Employer's Requirements.

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

**6.7
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 execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Employer, 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 Employer may reasonably require.

**6.8
Contractor's
Superintendence**

Throughout the design and execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [*Laws and Language*]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9

Contractor's Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Employer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Employer details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Employer, until the Contractor has completed all work is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

Plant, Materials, and Workmanship

7.1 Manner of Execution

The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

7.2

Samples

The Contractor shall submit samples to the Employer, for review in accordance with the procedures for Contractor's Documents described in Sub-Clause 5.2 [*Contractor's Documents*], as specified in the Contract and at the Contractor's cost. Each sample shall be labelled as to origin and intended use in the Works.

7.3

Inspection

The Employer's Personnel shall at all reasonable times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site and, to the extent specified in the Contract, elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

In respect of the work which Employer's Personnel are entitled to examine, inspect, measure and/or test, the Contractor shall give notice to the Employer whenever any such work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Employer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Employer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Employer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

7.4

Testing

The Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Employer, the time and place for the specified testing of any Plant, Materials, and other parts of the Works.

The Employer may, under Clause 13 [*Variations and Adjustments*], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Employer shall give the Contractor not less than 24 hours' notice of the Employer's intention to attend the tests. If the Employer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless

otherwise instructed by the Employer, and the tests shall then be deemed to have been made in the Employer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

The Contractor shall promptly forward to the Employer duly certified reports of the tests. When the specified tests have been passed, the Employer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Employer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

7.5

Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Employer may reject the Plant, Materials, design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Employer requires this Plant, Materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay these costs to the Employer.

7.6

Remedial Work

Notwithstanding any previous test or certification, the Employer may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- (b) remove and re-execute any other work which is not in accordance with the Contract, and
- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

If the Contractor fails to comply with any such instruction, which complies with Sub-Clause 3.4 [*Instructions*], the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor

shall subject to Sub-Clause 2.5, [*Employer's Claims*] pay to the Employer all costs arising from this failure.

7.7 Ownership of Plant and Materials

Each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is delivered to the Site;
- (b) when the Contractor is entitled to payment of the value of the Plant and Materials under Sub-Clause 8.10 [*Payment for Plant and Materials in Event of Suspension*].

7.8 Royalties

Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site, and
- (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

Commencement, Delays and Suspension

8.1 Commencement of Works

Unless otherwise stated in the Contract Agreement:

- (a) the Employer shall give the Contractor not less than 7 days' notice of the Commencement Date; and
- (b) the Commencement Date shall be within 42 days after the date on which the Contract comes into full force and effect under Sub-Clause 1.6 [*Contract Agreement*].

The Contractor shall commence the design and execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.

8.2 Times for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*].

8.3 Program

The Contractor shall submit a time program to the Employer within 28 days after the Commencement Date. The Contractor shall also submit a revised program whenever the previous program is inconsistent with actual progress or with the Contractor's obligations. Unless otherwise stated in the Contract, each program shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each major stage of the Works,
- (b) the periods for reviews under Sub-Clause 5.2 [*Contractor's Documents*],
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
 - (i) a general description of the methods which the Contractor intends to adopt for the execution of each major stage of the Works, and
 - (ii) the approximate number of each class of Contractor's Personnel and of each type of Contractor's Equipment for each major stage.

Unless the Employer, within 21 days after receiving a program, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the program, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the program when planning their activities.

The Contractor shall promptly give notice to the Employer of specific probable future events or circumstances which may adversely affect or delay the execution of the Works. In this event, or if the Employer gives notice to the Contractor that a program fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised program to the Employer in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [*Taking Over of the Works and Sections*] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [*Variation Procedure*]).

- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions, or
- (c) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Employer in accordance with Sub-Clause 20.1 [*Contractor's Claims*]. When determining each extension of time under Sub-Clause 20.1, the Employer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

8.5 Delays Caused by Authorities

If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was not reasonably foreseeable by an experienced contractor by the date for submission of the Tender,

then this delay or disruption will be considered as a cause of delay under subparagraph (b) of Sub-Clause 8.4 [*Extension of Time for Completion*].

8.6 Rate of Progress

If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen (or will fail) behind the current program under Sub-Clause 8.3, [*Program*],

other than as a result of a cause listed in Sub-Clause 8.4 [*Extension of Time for Completion*], then the Employer may instruct the Contractor to submit, under Sub-Clause 8.3 [*Program*], a revised program and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Employer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 below.

8.7 Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 [*Time for Completion*], the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay delay

damages to the Employer for this default. These delay damages shall be the sum stated in the Particular Conditions, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Particular Conditions.

These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [*Termination by Employer*] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under Contract.

8.8

Suspension of Work

The Employer may at any time instruct the Contractor to suspend progress of part or all of the Works. During suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

The Employer may notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

8.9

Consequences of Suspension

If the Contractor suffers delay and/or incurs Cost from complying with the Employer's instructions under Sub-Clause 8.8 [*Suspension of Work*] and/or from resuming the work, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 201, [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [*Suspension of Work*].

8.10

Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if:

- (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days, and
- (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Employer's instructions.

8.11

Prolonged Suspension

If the suspension under Sub-Clause 8.8 [*Suspension of Work*] has continued for more than 84 days, the Contractor may request the Employer's permission to proceed. If the Employer does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Employer, treat the suspension as an omission under Clause 13 [*Variations and Adjustments*] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [*Termination by Contractor*].

8.12

Resumption of Work

After the permission or instruction to proceed is given, the Parties shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any determination or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension.

Tests on Completion

9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4, [*Testing*] after providing the documents in accordance with Sub-Clause 5.6 [*As-Built Documents*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*].

The Contractor shall give to the Employer not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Employer shall instruct.

Unless otherwise stated in the Particular Conditions, the Tests on Completion shall be carried out in the following sequence:

- (a) pre-commissioning tests, which shall include the appropriate inspections and ("dry" or "cold") functional tests to demonstrate that each item of Plant can safely under-take the next stage, (b);
- (b) commissioning tests, which shall include the specified operational tests to demonstrate that the Works or Section can be operated safely and as specified, under all available operating conditions; and
- (c) trial operation, which shall demonstrate that the Works or Section perform reliably and in accordance with the Contract.

During trial operation, when the Works are operating under stable conditions, the Contractor shall give notice to the Employer that the Works are ready for any other Tests on Completion, including performance tests to demonstrate whether the Works conform with criteria specified in the Employer's Requirements and with the Performance Guarantees.

Trial operation shall not constitute a taking-over under Clause 10 [*Employer's Taking Over*]. Unless otherwise stated in the Particular Conditions, any product produced by the Works during trial operation shall be the property of the Employer.

In considering the results of the Tests on Completion, appropriate allowances shall be made for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed each of the Tests on Completion described in subparagraph (a), (b) or (c), the Contractor shall submit a certified report of the results of these Tests to the Employer.

9.2

Delayed Tests

If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [*Testing*] (fifth paragraph) and/or Sub-Clause 10.3 [*Interference with Tests on Completion*] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Employer may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Employer.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. These Tests on Completion shall then be deemed to have carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

9.3

Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [*Rejection*] shall apply, and the Employer or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4

Failure to Pass Tests on Completion

If the works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [*Retesting*], the Employer shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 9.3;
- (b) if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in subparagraph (c) of Sub-Clause 11.4 [*Failure to Remedy Defects*]; or\
- (c) issue a Taking-Over Certificate.

In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer value to the Employer as a result of this failure. Unless the relevant for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [*Employer's Claims*] and Sub-Clause 3.5 [*Determinations*].

Employer's Taking Over

10.1

Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 [*Failure to Pass Tests on Completion*], the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [*Time for Completion*] and except as allowed in subparagraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Employer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

The Employer shall, within 28 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Employer fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2

Taking Over of Parts of the Works

Parts of the Works (other than Sections) shall not be taken over or used by the Employer, except as may be stated in the Contract or as may be agreed by both Parties.

10.3

Interference with Tests on Completion

If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Employer is responsible, the Contractor shall carry out the Tests on Completion as soon as practicable.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Employer and shall be entitled, subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

Defects Liability

11.1

Completion of Outstanding Work and Remedying Defects

In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Employer, and
- (b) execute all work required to remedy defects or damage, as may be notified by the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Employer shall notify the Contractor accordingly.

11.2

Cost of Remedying Defects

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall be executed at the risk and cost of the Contractor, if and to the extent that work is attributable to:

- (a) the design of the Works,
- (b) Plant, Materials or workmanship not being in accordance with the Contract,
- (c) improper operation or maintenance which was attributable to matters for which the Contractor is responsible (under Sub-Clauses 5.5 to 5.7 or otherwise), or
- (d) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Employer shall give notice to the Contractor accordingly, and Sub-Clause 13.3 [*Variation Procedure*] shall apply.

11.3

Extension of Defects Notification Period

The Employer shall be entitled subject to Sub-Clause 2.5 [*Employer's Claims*] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, a Defects Notification Period shall not be extended by more than two years.

If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [*Suspension of Work*] or Sub-Clause 16.1 [*Contractor's Entitlement to Suspend Work*], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

11.4

Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Employer may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;
- (b) agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [*Determinations*]; or
- (c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5

Removal of Defective Work

If the defect or damage cannot be remedied expeditiously on the Site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

11.6

Further Tests

If the work of remedying of any defect or damage may affect the performance of the Works, the Employer may require the repetition of any of the tests described in the Contract, including Tests on Completion and or Tests after

Completion. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [*Cost of Remedying Defects*], for the cost of the remedial work.

11.7

Right of Access

Until the Performance Certificate has been issued, the Contractor shall have the right of access to all the part of the Works and to records of the operation and performance of the Works, except as may be inconsistent with the Employer's reasonable security restrictions.

11.8

Contractor to Search

The Contractor shall, if required by the Employer, search for the cause of any defect, under the direction of the Employer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Cost of the search plus reasonable profit shall be agreed or determined in accordance with Sub-Clause 3.5 [*Determinations*] and shall be added to the Contract Price.

11.9

Performance Certificate

Performance of the Contractor's obligations shall not be considered to have been completed until the Employer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

The Employer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. If the Employer fails to issue the Performance Certificate accordingly:

- (a) the Performance Certificate shall be deemed to have been issued on the date 28 days after the date on which it should have been issued, as required by this Sub-Clause, and
- (b) Sub-Clause 11.14 [*Clearance of Site*] and sub-paragraph (a) of Sub-Clause 14.14 [*Cessation of Employer's Liability*] shall be inapplicable.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works.

11.10

Unfulfilled Obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation, which remains unperformed at that

time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

11.11

Clearance of Site

Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after the Employer issues the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

Tests after Completion

12.1

Procedure for Tests after Completion

If Tests after Completion are specified in the Contract, this clause shall apply, Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall provide all electricity, fuel and materials, and make the Employer's Personnel and Plant available;
- (b) the Contractor shall provide any other plant, equipment and suitably qualified and experienced staff, as are necessary to carry out the Tests after Completion efficiently; and
- (c) the Contractor shall carry out the Tests after Completion in the presence of such Employer's and/or Contractor's Personnel as either Party may reasonably request.

The Tests after Completion shall be carried out as soon as is reasonably practicable after the Works or Section have been taken over by the Employer. The Employer shall give to the Contractor 21 days' notice of the date after which the Tests after Completion will be carried out. Unless otherwise agreed, these Tests shall be carried out within 14 days after this date, on the day or days determined by the Employer.

The results of the Tests after Completion shall be compiled and evaluated by the Contractor, who shall prepare a detailed report. Appropriate account shall be taken of the effect of the Employer's prior use of the Works.

12.2

Delayed Tests

If the Contractor incurs Cost as a result of any unreasonable delay by the Employer to the Tests after Completion, the Contractor shall (i) give notice to the Employer and (ii) be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine this Cost and profit.

If, for reasons not attributable to the Contractor, a Test after Completion on the Works or any Section cannot be completed during the Defects Notification Period (or any other period agreed upon by both Parties), then the Works or Section shall be deemed to have passed this Test after Completion.

12.3

Retesting

If the Works, or a Section, fail to pass the Tests after Completion:

- (a) sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying of Defects*] shall apply, and
- (b) either Party may then require the failed Tests, and the Tests after Completion on any related work, to be repeated under the same terms and conditions.

If and to the extent that this failure and retesting are attributable to any of the matters listed in sub-paragraphs (a) to (d) of Sub-Clause 11.2 [*Cost of Remedying Defects*] and cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [*Employer's Claims*] pay these costs to the Employer.

12.4

Failure to Pass Tests after Completion

If the following conditions apply, namely:

- (a) the Works, or a Section, fail to pass any or all of the Tests after Completion,
- (b) the relevant sum payable as non-performance damages for this failure is stated (or its method of calculation is defined) in the Contract, and

(c) the Contractor pays this relevant sum to the Employer during the Defects Notification Period.

then the Works or Section shall be deemed to have passed these Tests after Completion.

If the Works, or a Section, fail to pass a Test after Completion and the Contractor proposes to make adjustments or modifications to the Works or such Section, the Contractor may be instructed by (or on behalf of) the Employer that right of access to the Works or Section cannot be given until a time that is convenient to the Employer. The Contractor shall then remain liable to carry out the adjustments or modifications and to satisfy this Test, within a reasonable period of receiving notice by (or on behalf of) the Employer of the time that is convenient to the Employer. However, if the Contractor does not receive this notice during Defects Notification Period, the Contractor shall be relieved of this obligation and the Works or Section (as the case may be) shall be deemed to have passed this Test after Completion.

If the Contractor incurs additional Cost as a result of any unreasonable delay by the Employer in permitting access to the Works or Plant by the Contractor, either to investigate the causes of a failure to pass a Test after Completion or to carry out any adjustments or modifications, the Contractor shall (i) give notice to the Employer and (ii) be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine this Cost and profit.

Variations and Adjustments

13.1

Right to Vary

Variations may be initiated by the Employer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a

request for the Contractor to submit a proposal. A Variation shall not comprise the omission of any work which is to be carried out by others.

The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Employer stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, (ii) it will reduce the safety or suitability of the Works, or (iii) it will have an adverse impact on the achievement of the Performance Guarantees. Upon receiving this notice, the Employer shall cancel, confirm or vary the instruction.

13.2

Value Engineering

The Contractor may, at any time, submit to the Employer a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [*Variation Procedure*].

13.3

Variation Procedure

If the Employer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed design and/or work to be performed and a program for its execution,
- (b) the Contractor's proposal for any necessary modifications to the program according to Sub-Clause 8.3 [*Program*] and to the Time for Completion, and
- (c) the Contractor's proposal for adjustment to the Contract Price.

The Employer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [*Value Engineering*] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Employer to the Contractor, who shall acknowledge receipt.

Upon instructing or approving a Variation, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine adjustments to the Contract Price and the Schedule of Payments. These adjustments shall include reasonable profit, and shall take account of the Contractor's submissions under Sub-Clause 13.2 [*Value Engineering*] if applicable.

13.4

Payment in Applicable

Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.5

Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Employer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Employer shall have instructed. For each Provisional Sum, the Employer may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [*Variation Procedure*]; and/or
- (b) Plant, Materials or services to be purchased by the Contractor, for which there shall be added to the Contract Price less the original Provisional Sums:
 - (i) the actual amounts paid (or due to be paid) by the Contractor, and
 - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the Contract.

The Contractor shall, when required by the Employer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.6

Daywork

For work of a minor or incidental nature, the Employer may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the daywork schedule included in the Contract, and the following procedure shall apply. If a daywork schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Employer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the daywork schedule specifies that payment is not due, the Contractor shall deliver each day to the Employer accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor's Personnel,
- (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Employer and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Employer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [*Application for Interim Payments*].

13.7

Adjustments for Changes in Legislation

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

13.8

Adjustments for Changes in Costs

If the Contract Price is to be adjusted for rises or falls in the cost labor, Goods and other inputs to the Works, the adjustments shall be calculated in accordance with the provisions in the Particular Conditions.

Contract Price and Payment

14.1

The Contract Price

Unless otherwise stated in the Particular Conditions:

- (a) payment for the Works shall be made on the basis of the lump sum Contract Price, subject to adjustments in accordance with the Contract; and
- (b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.7 [*Adjustments for Changes in Legislation*].

14.2

Advanced Payment

The Employer shall make an advance payment, as an interest-free loan for mobilization and design, when the Contractor submits a guarantee in accordance with this Sub-Clause including the details stated in the Particular Conditions. If the Particular Conditions does not state:

- (a) the amount of the advance payment, then this Sub-Clause shall not apply;
- (b) the number and timing of instalments, then there shall be only one;
- (c) the applicable currencies and proportions, then they shall be those in which the Contract Price is payable; and/or
- (d) the amortization rate for repayments, then it shall be calculated by dividing the total amount of the advance payment by the Contract Price stated in the Contract Agreement less Provisional Sums.

The Employer shall pay the first instalment after receiving (i) a Statement (under Sub-Clause 14.3 [*Application for Interim Payments*]), (ii) the Performance Security in accordance with Sub-Clause 4.2 [*Performance Security*], and (iii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer. Unless and until the Employer receives this guarantee, this Sub-Clause shall not apply.

The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

The advance payment shall be repaid through proportional deductions in interim payments. Deductions shall be made at the amortization rate stated in the Particular Conditions (or, if not so stated, as stated in sub-paragraph (d) above), which shall be applied to the amount otherwise due (excluding the advance payment and deductions and repayments of retention), until such time as the advance payment has been repaid.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [*Termination by Employer*], Clause 16 [*Suspension and Termination by*

Contractor] or Clause 19 [*Force Majeure*] (as the case may be), the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

14.3

Application for Interim Payments

The Contractor shall submit a Statement in six copies to the Employer after the end of the period of payment stated in the Contract (if not stated, after the end of each month), in a form approved by the Employer, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the relevant report on progress in accordance with Sub-Clause 4.21 [*Progress Reports*]

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (f) below);
- (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [*Adjustments for Changes in Legislation*] and Sub-Clause 13.8 [*Adjustments for Changes in Cost*];
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Particular Conditions to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Particular Conditions;
- (d) any amount to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [*Advance Payment*];
- (e) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [*Claims, Disputes and Arbitration*]; and
- (f) the deduction of amounts included in previous Statements.

14.4

Schedule of Payments

If the Contract includes a Schedule of Payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this Schedule:

- (a) the instalments quoted in the Schedule of Payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [*Application for Interim Payments*], subject to Sub-Clause 14.5 [*Plant and Materials intended for the Works*]; and
- (b) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which the Schedule of Payments was based, then the Employer may proceed in accordance with Sub-Clause 3.5

[*Determinations*] to agree or determine revised instalments, which shall take account of the extent to which progress is less than that on which instalments were previously based.

If the Contract does not include a Schedule of Payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5

Plant and Materials intended for the Works

If the Contractor is entitled, under the Contract, to an interim payment for Plant and Materials which are not yet on the Site, the Contractor shall nevertheless not be entitled to such payments unless:

- (a) the relevant Plant and Materials are in the Country and have been marked as the Employer's property in accordance with the Employer's instructions; or
- (b) the Contractor has delivered, to the Employer, evidence of insurance and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to such payment. This guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [*Advance Payment*] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration.

14.6

Interim Payments

No amount will be paid until the Employer has received and approved the Performance Security. Thereafter, the Employer shall within 28 days after receiving a Statement and supporting documents, give to the Contractor notice of any items in the Statement with which the Employer disagrees, with supporting particulars. Payments due shall not be withheld, except that:

- (a) if any thing supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Employer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Employer may, by any payment, make any correction or modification that should properly be made to any amount previously considered due. Payment shall not be deemed to indicate the Employer's acceptance, approval, consent or satisfaction.

14.7

Timing of Payments

Except as otherwise stated in Sub-Clause 2.5 [*Employer's Claims*], the Employer shall pay to the Contractor:

- (a) the first instalment of the advance payment within 42 days after the date on which the Contract came into full force and effect or within 21 days after the Employer receives the documents in accordance with Sub-Clause 4.2 [*Performance Security*] and Sub-Clause 14.2 [*Advance Payment*], whichever is later;
- (b) the amount which is due in respect of each Statement, other than the Final Statement, within 56 days after receiving the Statement and supporting documents; and
- (c) the final amount due, within 42 days after receiving the Final Statement and written discharge in accordance with Sub-Clause 14.11 [*Application for Final Payment*] and Sub-Clause 14.12 [*Discharge*].

Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.

14.8

Delayed Payments

If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [*Timing of Payments*], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay.

Unless otherwise stated in the Particular Conditions, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment, and shall be paid in such currency.

The Contractor shall be entitled to this payment without formal notice, and without prejudice to any other right or remedy.

14.9

Payments of Retention Money

When the Taking-Over Certificate has been issued for the Works, and the Works have passed all specified tests (including the Tests after Completion, if any), the first half of the Retention Money shall be paid to the Contractor. If a Taking-Over Certificate is issued for a Section, the relevant percentage of the first half of the Retention Money shall be paid when the Section passes all tests.

Promptly after the latest of the expiry dates of the Defects Notification Periods, the outstanding balance of the Retention Money shall be paid to the Contractor. If a Taking-Over Certificate was issued for a Section, the relevant percentage of the second half of the Retention Money shall be paid promptly after the expiry date of the Defects Notification Period for the Section.

However, if any work remains to be executed under Clause 11 [*Defects Liability*] or Clause 12 [*Tests after Completion*], the Employer shall be entitled to withhold the estimated cost of this work until it has been executed.

The relevant percentage for each Section shall be the percentage value of the Section as stated in the Contract. If the percentage value of a Section is not stated in the Contract, no percentage of either half of the Retention Money shall be released under this Sub-Clause in respect of such Section.

14.10

Statement at Completion

Within 84 days receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Employer six copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [*Application for Interim Payments*], showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in Taking-Over Certificate for the Works,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Employer shall then give notice to the Contractor in accordance with Sub-Clause 14.6 [*Interim Payments*] and make payment in accordance with Sub-Clause 14.7 [*Timing of Payments*].

14.11

Application for Final Payment

Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Employer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Employer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Employer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Employer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Employer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Parties and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Employer shall pay the agreed parts of the draft final statement in accordance with Sub-Clause 14.6 [*Interim Payments*] and Sub-Clause 14.7 [*Timing of Payments*]. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*] or Sub-Clause 20.5 [*Amicable Settlement*], the Contractor shall then prepare and submit to the Employer a Final Statement.

14.12

Discharge

When submitting the Final Statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the out-standing balance of this total, in which event the discharge shall be effective on such date.

14.13

Final Payment

In accordance with sub-paragraph (c) of Sub-Clause 14.7 [*Timing of Payments*], the Employer shall pay to the Contractor the amount which is finally due, less all amounts previously paid by the Employer and any deductions in accordance with Sub-Clause 2.5 [*Employer's Claims*].

14.14

Cessation of Employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [*Statement at Completion*].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.

14.15

Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Contract Agreement. Unless otherwise stated in the Particular Conditions, if more than one currency is so named, payments shall be made as follows:

- (a) if the Contract Price was expressed in Local Currency only:
 - (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Contract Agreement, except as otherwise agreed by both Parties;
 - (ii) payments and deductions under Sub-Clause 13.5 [*Provisional Sums*] and Sub-Clause 13.7 [*Adjustments for Changes in Legislation*] shall be made in the applicable currencies and proportions; and

- (iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [*Application for Interim Payments*] shall be made in the currencies and proportions specified in sub-paragraph (a)(i) above;
- (b) payment of the damages specified in the Particular Conditions shall be made in the currencies and proportions specified in the Particular Conditions;
- (c) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties;
- (d) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- (e) if no rates of exchange are stated in the Contract, they shall be those prevailing on the Base Date and determined by the central bank of the Country.

Termination by Employer

15.1

Notice to Correct

If the Contractor fails to carry out any obligation under the Contract, the Employer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

15.2

Termination by Employer

The Employer shall be entitled to terminate the Contract if the Contractor:

- (a) fails to comply with Sub-Clause 4.2 [*Performance Security*] or with a notice under Sub-Clause 15.1 [*Notice to Correct*].
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of this obligations under the Contract.

- (c) without reasonable excuse fails to proceed with the Works in accordance with Clause 8 [*Commencement, Delays and Suspension*].
- (d) subcontracts the whole of the Works or assigns the Contract without the required agreement.
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favor or disfavor to any person in relation to the Contract.

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.

The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Employer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any sub-contract, and (ii) for the protection of life or property or for safety of the Works.

After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.

The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

15.3

Valuation at Date of

Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 [*Termination by Employer*] has taken effect, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

15.4

Payment after Termination

After a notice of termination under Sub-Clause 15.2 [*Termination by Employer*] has taken effect, the Employer may:

- (a) proceed in accordance with Sub-Clause 2.5 [*Employer's Claims*],
- (b) with-hold further payments to the Contractor until the costs of design, execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or
- (c) recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [*Valuation at Date of Termination*]. After recovering any such losses, damages and extra costs, the Employer shall pay any balance to the Contractor.

15.5

Employer's Entitlement to Termination

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Cessation of Work and Removal of Contractor's Equipment*] and shall be paid in accordance with Sub-Clause 19.6 [*Optional Termination, Payment and Release*].

Suspension and Termination by Contractor

16.1

Contractor's Entitlement to Suspend Work

If the Employer fails to comply with Sub-Clause 2.4 [*Employer's Financial Arrangements*] or Sub-Clause 14.7 [*Timing of Payments*], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the reasonable evidence or payment, as the case may be and as described in the notice.

The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [*Delayed Payment*] and to termination under Sub-Clause 16.2 [*Termination by Contractor*].

If the Contractor subsequently receives such evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost plus reasonable profit, which shall be added to the Contract Price.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

16.2

Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [*Contractor's Entitlement to Suspend Work*] in respect of a failure to comply with Sub-Clause 2.4 [*Employer's Financial Arrangements*],
- (b) the Contractor does not receive the amount due within 42 days after the expiry of the time stated in Sub-Clause 14.7 [*Timing of Payments*] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [*Employer's Claims*]),
- (c) the Employer substantially fails to perform his obligations under the Contract,
- (d) the Employer fails to comply with Sub-Clause 1.7 [*Assignment*],
- (e) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [*Prolonged Suspension*], or
- (f) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

In any of these or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of subparagraph (e) or (f), the Contractor may by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

16.3

Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [*Employer's Entitlement to Termination*], Sub-Clause 16.2 [*Termination by Contractor*] or Sub-Clause 19.6 [*Operational Termination, Payment and Release*] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Employer for the protection of life or property or for the safety of the Works,
- (b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

16.4

Payment on Termination

After a notice of termination under Sub-Clause 16.2 [*Termination by Contractor*] has taken effect, the Employer shall promptly:

- (a) return the Performance Security to the Contractor,
- (b) pay the Contractor in accordance with Sub-Clause 19.6 [*Optional Termination, Payment and Release*], and
- (c) pay to the Contractor the amount of any loss of profit or other loss or damage sustained by the Contractor as a result of this termination.

Risk and Responsibility

17.1

Indemnities

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all

claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and
- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - (i) arises out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, and
 - (ii) is not attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in subparagraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [*Insurance Against Injury to Persons and Damage to Property*].

17.2

Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [*Taking Over of the Works and Sections*]) for Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section of the Works, responsibility for the care of the Section shall then pass to the Employer.

After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [*Employer's Risks*], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3

Employer's Risks

The risks referred to in Sub-Clause 17.4 below are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (d) monitions of war, explosive materials, ionizing radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

17.4

Consequences of Employer's Risks

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Employer and shall rectify this loss or damage to the extent required by the Employer.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Employer and shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this further notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

17.5

Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works: and

"claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Employer's Requirements, or
- (b) a result of any Works being used by the Employer:
 - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with any thing not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.

The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the Contractor's design, manufacture, construction or execution of the Works, (ii) the use of Contractor's Equipment, or (iii) the proper use of the Works.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (as its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

17.6

Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any conduct or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under Sub-Clause 16.4 [Payment on Termination] and Sub-Clause 17.1 [Indemnities].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum stated in the Particular Conditions or (if a sum is not so stated) the Contract Price stated in the Contract Agreement.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

Insurance

18.1

General Requirements for Insurances

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before they signed the Contract Agreement. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details annexed to the Particular Conditions.

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnified additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy. Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods in the Particular Conditions (calculated from the Commencement Date), submit to the other Party:

- (a) evidence that the insurance described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 18.2 [*Insurance of Works and Contractor's Equipment*] and Sub-Clause 18.3 [*Insurance against Injury to Persons and Damage to Property*].

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insures shall be borne by the Contractor and/or the Employer in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Employer's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.

18.2

Insurance for Works and Contractor's Equipment

The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [*General Requirements for Insurance*], until the date of issue of the Taking-Over Certificate for the Works.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor or Subcontractors in the course of any other operations (including those under Clause 11 [*Defects Liability*] and Clause 12 [*Tests after Completion*]).

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Particular Conditions, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party.
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage.
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [*Employer's Risks*].
- (d) shall also cover loss or damage from the risks listed in sub-paragraph (c) of Sub-Clause 17.3 [*Employer's Risks*], with deductibles per occurrence of not more than the amount stated in the Particular Conditions (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below).
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship.

- (iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
- (iv) Goods while they are not in the Country, subject to Sub-Clause 14.5 [*Plant and Materials intended for the Works*].

If, more than one year after the Base Date, the cover described in subparagraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 [*Employer's Claims*] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [*General Requirements for Insurances*].

18.3

Insurance against Injury to Persons and Damage to Property

The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [*Insurance for Works and Contractor's Equipment*]) or to any person (except persons insured under Sub-Clause 18.4 [*Insurance for Contractor's Personnel*]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Particular Conditions, with no limit on the number of occurrences. If an amount is not stated in the Contract, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
 - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
 - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy and defects, and
 - (iii) a cause listed in Sub-Clause 17.3 [*Employer's Risks*], except to the extent that cover is available at commercially reasonable terms.

18.4

Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

Force Majeure

19.1

Definition of Force Majeure

In this Clause, "Force Majeure" means an exceptional event or circumstance:

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering in to the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war.

- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (iv) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2

Notice of Force Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become, of the relevant event or circumstance constituting Force Majeure.'

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

19.3

Duty to Minimise Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

19.4

Consequences of Force Majeure

If the Contractor is prevented from performing any of his obligations, under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [*Notice of Force Majeure*], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) if the event or circumstance is of the kind described in sub-paragraph (i) to (iv) of Sub-Clause 19.1 [*Definition of Force Majeure*] and, in the case of subparagraph (ii) to (iv), occurs in the Country, payment of any such Cost.

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

19.5

Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

19.6

Optional Termination, Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [*Notice of Force Majeure*], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [*Cessation of Work and Removal of Contractor's Equipment*]

Upon such termination, the Employer shall pay to the Contractor:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- (e) the Cost of repatriation of the Contractor's staff and labor employed wholly in connection with the Works at the date of termination.

19.7

Release from Performance under the Law

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [*Optional Termination, Payment and Release*] if the Contract had been terminated under Sub-Clause 19.6.

Claim, Disputes and Arbitration

20.1

Contractor's Claims

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 give notice to the Employer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 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 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 Employer. Without admitting liability, the Employer 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 Employer to inspect all these conditions, and shall (if instructed) submit copies to the Employer.

Within 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 Employer, the Contractor shall send to the Employer 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 Employer may reasonably require; and
- (c) the Contractor shall send a final claim within 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 Employer.

Within 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 Employer and approved by the Contractor, the Employer 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 interim payment 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 Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [*Extension of Time for Completion*], 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 of 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.

20.2

Appointment of the Dispute Adjudication Board

Disputes shall be adjudicated by a DAB in accordance with Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*]. The Parties shall jointly appoint a DAB by the date 28 days after a Party gives notice to the other Party of its intention to refer a dispute to a DAB in accordance with Sub-Clause 20.4.

The DAB shall comprise, as stated in the Particular Conditions, either one or three suitably qualified persons ("the members"). If the number is not so

stated and the Parties do not agree otherwise, the DAB shall comprise three persons.

If the DAB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The Parties shall consult both these members and shall agree upon the third member, who shall be appointed to act as chairman.

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

The agreement between the Parties and either the sole member ("adjudicator") or each of the three members shall incorporate by reference the General Conditions of Dispute Adjudication 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, shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

If at any time the Parties so agree, they may appoint a suitably qualified person or persons to replace any one or more members of the DAB. Unless the Parties agree otherwise, the appointment will come into effect if a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment. The replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agree 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 DAB (including each member) shall expire when the DAB has given its decision on the dispute referred to it under Sub-Clause 20.4, in which event the relevant date shall be when the DAB has also given decisions on those disputes.

20.3

Failure to Agree Dispute Adjudication Board

If any of the following conditions apply, namely:

- (a) the Parties fail to agree upon the appointment of the sole member of the DAB by the date stated in the first paragraph of Sub-Clause 20.2 [*Appointment of the Dispute Adjudication Board*],
- (b) either Party fails to nominate a member (for approval by the other Party) of a DAB three persons by such date,
- (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DAB by such date, or
- (d) the Parties fail to agree upon the appointment of a replacement person within 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 Particular Conditions shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DAB. 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.

20.4

Obtaining Dispute Adjudication Board's Decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Employer, then after a DAB has been appointed pursuant to Sub-Clauses 20.2 [*Appointment of the DAB*] and 20.3 [*Failure to Agree DAB*], either Party may refer the dispute in writing to the DAB for its decision, with a copy to the other Party. Such reference shall state that it is given under this Sub-Clause.

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

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

Within 84 days after receiving such reference, or the advance payment referred to in Clause 6 of the Appendix – General Conditions of the Dispute Adjudication Agreement, whichever date is later, or within such other period as may be proposed by the DAB and approved by both Parties, the DAB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. However, if neither of the Parties has paid in full the invoices submitted by each Member pursuant to Clause 6 of the Appendix, the DAB shall not be obliged to give its decision until such invoices have been paid in full. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either Party is dissatisfied with the DAB's decision, then either Party may, within 28 days after receiving the decision, give notice to the other Party of its dissatisfaction. If the DAB fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference or such payment, then either Party may, within 28 days after this period has expired, give notice to the other Party of its dissatisfaction.

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 Sub-Clause 20.7 [*Failure to Comply with Dispute Adjudication Board's Decision*] and Sub-Clause 20.8 [*Expiry of Dispute Adjudication Board's Appointment*], 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 DAB 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 28 days after it received the DAB's decision, then the decision shall become final and binding upon both Parties.

20.5

Amicable Settlement

Where notice of dissatisfaction has been given under Sub-Clause 20.4 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 day after the day on which notice of dissatisfaction was given, even if no attempt at amicable settlement has been made.

20.6

Arbitration

Unless settled amicably, any dispute in respect of which the DAB's decision (if any) has not become final and binding shall be finally settled by international arbitration. Unless otherwise agreed by both Parties:

- (a) the dispute shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce,
- (b) the dispute shall be settled by three arbitrators appointed in accordance with these Rules, and
- (c) the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 [*Law and Language*].

The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of (or on behalf of) the Employer, and any decision of the DAB, 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 DAB to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the DAB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties and the DAB shall not be altered by reason of any arbitration being conducted during the progress of the Works.

20.7

Failure to Comply with Dispute Adjudication Board's Decision

In the event that:

- (a) neither Party has given notice of dissatisfaction within the period stated in Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*],

- (b) the DAB's related decision (if any) has become final and binding, and
- (c) a Party fails to comply with this decision,

then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub-Clause 20.6 [*Arbitration*], Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*] and Sub-Clause 20.5 [*Amicable Settlement*] shall not apply to this reference.

20.8

Expiry of Dispute Adjudication Board's Appointment

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

- (a) Sub-Clause 20.4 [*Obtaining Dispute Adjudication Board's Decision*] and Sub-Clause 20.5 [*Amicable Settlement*] shall not apply, and
- (b) the dispute may be referred directly to arbitration under Sub-Clause 20.6 [*Arbitration*].

Annex 4

Project Requirements (as agreed by the Parties during the negotiations of the Contract Agreement)

Annex 5

SCHEDULE OF PAYMENTS

I. Split of Contract Price

The contract Price is comprised of price for goods (Plant and Materials) and price for services. Price of goods (Plant and Materials) constitutes 79% of the Total Contract Price. Price of services constitutes 21% of the Total Contract Price.

II. Advance Payment (15%)

15% of the Contract Price in the amount of *[insert number as per the "Contract"]* USD (*[put the amount in words]*) shall be paid to the Contractor by the Employer in two installments (1% for services as a first installment and 14% for goods (Plant and Materials) as a second installment) by means of telegraphic transfer to the account designated by the Contractor against the presentation of the following documents by the Contractor:

- a) Proforma invoice indicating Advance Payment amount as respective installment;
- b) Advance Payment Guarantee as specified in Annex-7 and 8;
- c) Performance Security as specified in Annex-9.

III. Interim Payments (85%)

85% in the amount of *[insert number as per the "Contract"]* USD (*[put the amount in words]*) shall be paid as Interim Payments for goods and services respectively.

For goods (Plant and Materials) payments shall be made as follows:

No	Milestone	Payment Amount (percentage of total Contract Price)
1	PO (Purchasing Order) of the major equipment listed in the vendor list under the Request for Proposals (RFP # [●] the "RFP") for EPC/Turn Key Project for Construction of Gardabani-III 272 MW Combined Cycle Thermal Power Plant (the "Major Equipment")	10% - <i>[insert number as per the "Contract"]</i> USD (<i>[put the amount in words]</i>)
2	Shipment of of the Major Equipment	30% - <i>[insert number as per the "Contract"]</i> USD (<i>[put the amount in words]</i>)
3	Delivery of the Major Equipment on Site	20% - <i>[insert number as per the "Contract"]</i> USD (<i>[put the amount in words]</i>)
	Total	60% - <i>[insert number as per the "Contract"]</i> USD (<i>[put the amount in words]</i>)

For services payments shall be made as follows:

No	Milestone	Payment Amount (percentage of total Contract Price)
1	Starting of the Erection of 1 st GT	3% - [insert number as per the "Contract"] USD ([put the amount in words])
2	Starting of the Erection of 2 nd GT	3% - [insert number as per the "Contract"] USD ([put the amount in words])
3	Starting of the Erection of ST	3% - [insert number as per the "Contract"] USD ([put the amount in words])
4	Completion of Erection of 1 st HRSG	3% - [insert number as per the "Contract"] USD ([put the amount in words])
5	Completion of Erection of 2 nd HRSG	3% - [insert number as per the "Contract"] USD ([put the amount in words])
6	First Fire of 1 st GT	2% - [insert number as per the "Contract"] USD ([put the amount in words])
7	First Fire of 2 nd GT	2% - [insert number as per the "Contract"] USD ([put the amount in words])
8	First Loading of ST	1% - [insert number as per the "Contract"] USD ([put the amount in words])
	Total	20% - [insert number as per the "Contract"] USD ([put the amount in words])

Final Payment 5% - [insert number as per the "Contract"] USD ([put the amount in words]) shall be made upon issuance of Taking-Over Certificate.

Notes:

1. The interim payments schedule is a tentative one and will be specified during the Contract negotiation. Payment amounts payable upon occurrence of the respective milestones will be proportional/adequate to the scale/value of the ordered, shipped or delivered (as the case may be) Major Equipment.
2. All banking charges related to all payments to be effected shall be borne by the Employer.
3. All banking charges related to Contractor's Advance Payment Guarantee, Performance Security Letter and Warranty Bond shall be borne by the Contractor.
4. For the payment allocated to shipment of Goods (the Major Equipment), documents to be submitted by the Contractor include: (i) bill of lading, (ii) commercial invoice, (iii) packing list, (iv) certificate of origin.
5. After the Commencement of Works the Contractor shall submit detailed price breakdown of Goods (Plant and Materials) and description of each pay item for Employer's approval.
6. For the payment of PO of the Major Equipment, the Contractor shall submit copies of purchase

orders of all the Major Equipment.

7. The sum of the shipping invoices for Goods (Plant and Materials) shall equal exactly 79% (rounded to the nearest tenths of US dollars) of the total Contract price.

Annex 6

Financial and Technical Proposals

dated [●] submitted by the Contractor in response to the Request for Proposals (RFP # [●]) for EPC/Turn Key Project for Construction of 272 MW Combined Cycle Thermal Power Plant – Gardabani-3

(The Financial and Technical Proposals are deemed to be attached to the Contract Agreement)

Annex 7

Advance Payment Guarantee Form related to the first installment
of the Advance Payment

**FORM OF ADVANCE PAYMENT [BANK] GUARANTEE RELATED TO
THE FIRST INSTALLMENT OF THE ADVANCE PAYMENT**

(Through [●] Bank, which meets the requirements of Sub-Clause 14.2 [*Advance Payment*])*

Date:

No:

Applicant: [●]

Address: [●]

Beneficiary: **GOGC/GARDABANI TPP 3 LLC**

Address: [●], **Georgia**

Dear Sirs,

LETTER OF GUARANTEE No _____

Whereas, **GOGC/GARDABANI TPP 3 LLC** (hereinafter referred as EMPLOYER or YOU) has executed the TURNKEY CONTRACT AGREEMENT dated [●], with [●] (hereinafter referred to as CONTRACTOR) regarding engineering, procurement and construction of **GARDABANI-III COMBINED-CYCLE THERMAL POWER PLANT** (hereinafter referred to as the “Contract”) in a total value of [●] **US Dollars** ([●] US Dollars),

Whereas under the terms of the “Contract” CONTRACTOR has undertaken to provide to YOU an Advance Payment Guarantee in a form of a bank guarantee (hereinafter referred to as “Bank Guarantee”) for the payment by YOU of the first installment of the Advance Payment in the amount of [●] **US Dollars** ([●] US Dollars) to be received by CONTRACTOR in relation to and as stipulated by the “Contract”,

AND WHEREAS, we have agreed to give CONTRACTOR such “Bank Guarantee”;

NOW THEREFORE, we [●] Bank hereby declare that we are the Guarantor and that we are legally bound and responsible to YOU and that we unequivocally, irrevocably and unconditionally (for the avoidance of any doubts, EMPLOYER will not be required to prove grounds or reasons for the respective request, notwithstanding any objection by CONTRACTOR) guarantee to pay YOU (the Beneficiary) for the account of CONTRACTOR the total sum of [●] **US Dollars** ([●] US Dollars) in the event that CONTRACTOR does not duly fulfill its respective obligations (including improper performance and/or breach of such obligations) under the “Contract” thereby giving YOU the right of claim, and

we [●] Bank undertake to pay YOU on your written demand, immediately (i) without it being necessary obtaining CONTRACTOR's consent, (ii) without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and (iii) regardless of any dispute that may have arisen between the aforesaid CONTRACTOR and EMPLOYER and regardless of its consequences in the event that:

- it is stated in the aforementioned written demand signed by EMPLOYER's representatives and presented to us through EMPLOYER's banker(s) in Georgia by means of swift message that CONTRACTOR has failed to duly perform (including improper performance and/or breach of obligations) the above mentioned obligations as stated in the "Contract" or that CONTRACTOR has refused to perform the above mentioned obligations as stated in the "Contract")

We [●] Bank further agree that this "Bank Guarantee" set forth in full, our undertaking and that no change or addition to or other modifications of the terms of the "Contract" or the delivery of Works to be performed under the "Contract" or any of the Contract Documents, attachments or annexes made thereto, which may have been made between YOU and CONTRACTOR shall in no way release us from our liability and obligations under this "Bank Guarantee" and we hereby waive any notice of change, addition or modification. Our undertaking is limited to the amount and period as issued in the original guarantee, regardless of any change or modification of the terms of the "Contract" thereafter.

This "Bank Guarantee" is not transferable. Partial draws are permitted. Any draw under this "Bank Guarantee" is made in reduction of our obligation as aforesaid under this "Bank Guarantee".

This Guarantee shall become effective from the date that the said advance payment has been credited to the Applicant's account with our Bank.

This "Bank Guarantee" shall be released within 14 (fourteen) days after issuance of a construction permit for the GARDABANI-III CCTPP. Consequently, any demand for payment under it must be received by us at (name and address of our office) on or before that date.

Upon expiry, this "Bank Guarantee" shall automatically become null and void whether or not returned to us for cancellation.

Unless otherwise expressly defined herein, capitalized expressions in this "Bank Guarantee" have the meaning ascribed to them in the "Contract".

Except as expressly stated here above, this "Bank Guarantee" is subject to the Uniform Rules for Demand Guarantees, International Chamber of Commerce publication No. 758.

Signatures of Authorized Bank personnel*

Notes :

- * The authorizations (Power of Attorneys) of the signatories that will sign on behalf of the Guaranteeing Bank will be given to EMPLOYER provided required by EMPLOYER.

Annex 8

Advance Payment Guarantee Form related to the second
installment of the Advance Payment

**FORM OF ADVANCE PAYMENT [BANK] GUARANTEE RELATED TO
THE SECOND INSTALLMENT OF THE ADVANCE PAYMENT**

(Through [●] Bank, which meets the requirements of Sub-Clause 14.2 [*Advance Payment*])*

Date:

No:

Applicant: [●]

Address: [●]

Beneficiary: **GOGC/GARDABANI TPP 3 LLC**

Address: [●], **Georgia**

Dear Sirs,

LETTER OF GUARANTEE No _____

Whereas, **GOGC/GARDABANI TPP 3 LLC** (hereinafter referred as EMPLOYER or YOU) has executed the TURNKEY CONTRACT AGREEMENT dated [●], with [●] (hereinafter referred to as CONTRACTOR) regarding engineering, procurement and construction of **GARDABANI-III COMBINED-CYCLE THERMAL POWER PLANT** (hereinafter referred to as the “Contract”) in a total value of [●] **US Dollars** ([●] US Dollars),

Whereas under the terms of said “Contract” CONTRACTOR has undertaken to provide to YOU an Advance Payment Guarantee in a form of a bank guarantee (hereinafter referred to as “Bank Guarantee”) for the payment by YOU of the second installment of the Advance Payment in the amount of [●] **US Dollars** ([●] US Dollars) to be received by CONTRACTOR in relation and as stipulated by the “Contract”,

AND WHEREAS, we have agreed to give CONTRACTOR such “Bank Guarantee”;

NOW THEREFORE, we [●] Bank hereby declare that we are the Guarantor and that we are legally bound and responsible to YOU and that we unequivocally, irrevocably and unconditionally (for the avoidance of any doubts, EMPLOYER will not be required to prove grounds or reasons for the respective request, notwithstanding any objection by CONTRACTOR) guarantee to pay YOU (the Beneficiary) for the account of CONTRACTOR the total sum of [●] US Dollars ([●] US Dollars) in the event that CONTRACTOR does not duly fulfill its respective obligations (including improper performance and/or breach of such obligations) under the “Contract” thereby giving YOU the right of claim, and

we [●] Bank undertake to pay YOU on your written demand, immediately (i) without it being necessary obtaining CONTRACTOR's consent (ii) without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and (iii) regardless of any dispute that may have arisen between the aforesaid CONTRACTOR and EMPLOYER and regardless of its consequences in the event that;

- it is stated in the aforementioned written demand signed by EMPLOYER's representatives and presented to us through EMPLOYER's banker(s) in Georgia by means of swift message that CONTRACTOR has failed to perform the above mentioned obligations as stated in the "Contract" or that CONTRACTOR has refused to duly perform (including improper performance and/or breach of obligations) the above mentioned obligations as stated in the "Contract".

We [●] Bank further agree that this "Bank Guarantee" set forth in full, our undertaking and that no change or addition to or other modifications of the terms of the "Contract" or the delivery of Works to be performed under the "Contract" or any of the Contract Documents, attachments or annexes made thereto, which may have been made between YOU and CONTRACTOR shall in no way release us from our liability and obligations under this "Bank Guarantee" and we hereby waive any notice of change, addition or modification. Our undertaking is limited to the amount and period as issued in the original guarantee, regardless of any change or modification of the terms of the "Contract" thereafter.

This "Bank Guarantee" is not transferable. Partial draws are permitted. Any draw under this "Bank Guarantee" is made in reduction of our obligation as aforesaid under this "Bank Guarantee".

This "Bank Guarantee" shall become effective from the date that the said advance payment has been credited to the Applicant's account with our Bank.

This "Bank Guarantee" shall be released within 14 (fourteen) days after the issuance of the Taking-Over Certificate.

Upon expiry, this "Bank Guarantee" shall automatically become null and void whether or not returned to us for cancellation.

Unless otherwise expressly defined herein, capitalized expressions in this "Bank Guarantee" have the meaning ascribed to them in the "Contract".

Except as expressly stated here above, this "Bank Guarantee" is subject to the Uniform Rules for Demand Guarantees, International Chamber of Commerce publication No. 758.

Signatures of Authorized Bank personnel*

Notes :

- * The authorizations (Power of Attorneys) of the signatories that will sign on behalf of the Guaranteeing Bank will be given to EMPLOYER provided required by EMPLOYER.

Annex 9

Performance Security Form

FORM OF PERFORMANCE [BANK] SECURITY

(Through [●] Bank, which meets the requirements of Sub-Clause 4.2 [*Performance Security*])*

Date:

No:

Applicant: [●]

Address: [●]

Beneficiary: **GOGC/GARDABANI TPP 3 LLC**

Address: [●], **Georgia**

Dear Sirs,

LETTER OF GUARANTEE No _____

Whereas, **GOGC/GARDABANI TPP 3 LLC** (hereinafter referred as EMPLOYER or YOU) has executed the TURNKEY CONTRACT AGREEMENT dated [●], with [●] (hereinafter referred to as CONTRACTOR) regarding engineering, procurement and construction of **GARDABANI-III COMBINED-CYCLE THERMAL POWER PLANT** (hereinafter referred to as the “Contract”) in a total value of [*insert number as per the “Contract”*] USD ([*put the amount in words*]),

Whereas under the terms of said “Contract” CONTRACTOR has undertaken to provide to YOU a Performance Security in a form of a bank guarantee (hereinafter referred to as “Bank Guarantee”) to secure the due performance of CONTRACTOR’s obligation under the “Contract” in the amount of [*insert number as per the “Contract”*] USD ([*put the amount in words*]) in relation and as stipulated by the “Contract”,

AND WHEREAS, we have agreed to give CONTRACTOR such “Bank Guarantee”;

NOW THEREFORE, we [●] Bank hereby declare that we are the Guarantor and that we are legally bound and responsible to YOU and that we unequivocally, irrevocably and unconditionally (for the avoidance of any doubts, EMPLOYER will not be required to prove grounds or reasons for the respective request, notwithstanding any objection by CONTRACTOR) guarantee to pay YOU (the Beneficiary) for the account of CONTRACTOR up to a total sum of [*insert number as per the “Contract”*] USD ([*put the amount in words*]) as per the “Contract” in the event that CONTRACTOR does not duly fulfill its respective obligations (including improper performance and/or breach of such obligations) under the “Contract” thereby giving YOU the right of claim, and

we [●] Bank undertake to pay YOU on your written demand, immediately and without it being necessary obtaining CONTRACTOR's consent and regardless of any dispute that may have arisen between the aforesaid CONTRACTOR and EMPLOYER and regardless of its consequences in the event that;

- it is stated in the aforementioned written demand signed by EMPLOYER's representatives and presented to us through your banker(s) in Georgia by means of a swift message that CONTRACTOR has failed to duly perform (including improper performance and/or breach of obligations) the above mentioned obligations as stated in the "Contract" or that CONTRACTOR has refused to perform the above mentioned obligations as stated in the "Contract".

We [●] Bank further agree that this "Bank Guarantee" set forth in full, our undertaking and that no change or addition to or other modifications of the terms of the "Contract" or the delivery of Works to be performed under the "Contract" or any of the Contract Documents, attachments or annexes made thereto, which may have been made between YOU and CONTRACTOR shall in no way release us from our liability and obligations under this "Bank Guarantee" and we hereby waive any notice of change, addition or modification. Our undertaking is limited to the amount and period as issued in the original guarantee, regardless of any change or modification of the terms of the "Contract" thereafter.

This "Bank Guarantee" is not transferable. Any draw under this "Bank Guarantee" is made in reduction of our obligation as aforesaid under this "Bank Guarantee".

This "Bank Guarantee" shall be valid until 21 (twenty-one) days after the issuance of the Taking-Over Certificate by EMPLOYER, however, this "Bank Guarantee" shall be extended and remain valid till (i) the completion of the Works and remedy of any defects by CONTRACTOR and issuance of the Taking-Over Certificate, (ii) reimbursement of all outstanding amounts due to EMPLOYER in accordance with sub-paragraphs (b) and (c) of Paragraph 7 of this Sub-Clause 4.2 [*Performance Security*], and (iii) delivery to and approval by EMPLOYER of the Warranty Bond.

Any demand for payment under it must be received by us at (name and address of our office) on or before that date.

Upon expiry, this "Bank Guarantee" shall automatically become null and void whether or not returned to us for cancellation.

Unless otherwise expressly defined herein, capitalized expressions in this "Bank Guarantee" have the meaning ascribed to them in the "Contract".

Except as expressly stated here above, this "Bank Guarantee" is subject to the Uniform Rules for Demand Guarantees, International Chamber of Commerce publication No. 758.

Signatures of Authorized Bank personnel*

Notes :

- * The authorizations (Power of Attorneys) of the signatories that will sign on behalf of the Guaranteeing Bank will be given to the Owner provided required by the Owner.

Annex 10

Warranty Bond Form

FORM OF WARRANTY [BANK] BOND

(Through [●] Bank, which meets the requirements of Sub-Clause 12.1 [*Warranty Bond*])*

Date:

No:

Applicant: [●]

Address: [●]

Beneficiary: **GOGC/GARDABANI TPP 3 LLC**

Address: [●], **Georgia**

Dear Sirs,

LETTER OF GUARANTEE No _____

Whereas, **GOGC/GARDABANI TPP 3 LLC** (hereinafter referred as EMPLOYER or YOU) has executed the TURNKEY CONTRACT AGREEMENT dated [●], with [●] (hereinafter referred to as CONTRACTOR) regarding engineering, procurement and construction of **GARDABANI-III COMBINED-CYCLE THERMAL POWER PLANT** (hereinafter referred to as the “Contract”) in a total value of [*insert number as per the “Contract”*] USD ([*put the amount in words*]),

Whereas under the terms of “Contract” CONTRACTOR has undertaken to provide to YOU a Warranty Bond in a form of bank guarantee (hereinafter referred to as “Bank Guarantee”) to secure CONTRACTOR’s obligations under the “Contract” during this Warranty Bond period, in the amount of [*insert number as per the “Contract”*] USD ([*put the amount in words*]) in relation and as stipulated by the “Contract”,

AND WHEREAS, we have agreed to give CONTRACTOR such “Bank Guarantee”;

NOW THEREFORE, we [●] Bank hereby declare that we are the Guarantor and that we are legally bound and responsible to YOU and that we unequivocally, irrevocably and unconditionally (for the avoidance of any doubts, EMPLOYER will not be required to prove grounds or reasons for the respective request, notwithstanding any objection by CONTRACTOR) guarantee to pay YOU (the Beneficiary) for the account of CONTRACTOR up to a total sum of [*insert number as per the CONTRACT*] USD ([*put the amount in words*]) as per the “Contract” in the event that CONTRACTOR does not duly fulfill its respective obligations (including improper performance and/or breach of such obligations) under the “Contract” thereby giving YOU the right of claim, and

we [●] Bank undertake to pay YOU on your written demand, immediately without it being necessary obtaining CONTRACTOR’s consent, without set-off, free and clear of any deductions, charges, fees, levies, taxes or withholdings of any nature, and regardless of any dispute that may have arisen between the aforesaid

CONTRACTOR and EMPLOYER and regardless of its consequences in the event that;

- it is stated in the aforementioned written demand signed by EMPLOYER's representatives and presented to us through your banker(s) in Georgia by means of a swift message that CONTRACTOR has failed to duly perform (including improper performance and/or breach of obligations) the respective Warranty Obligations as stipulated in the "Contract" and/or that CONTRACTOR has refused to perform the respective Warranty Obligations as stated in the "Contract".

We [●] Bank further agree that this "Bank Guarantee" set forth in full, our undertaking and that no change or addition to or other modifications of the terms of the "Contract" or the delivery of Works to be performed under the "Contract" or any of the Contract Documents, attachments or annexes made thereto, which may have been made between YOU and CONTRACTOR shall in no way release us from liability and obligations under this "Bank Guarantee" and we hereby waive any notice of change, addition or modification.

This "Bank Guarantee" is not transferable. Any draw under this "Bank Guarantee" is made in reduction of our obligation as aforesaid under this "Bank Guarantee".

This Warranty Bond shall be valid until 21 (twenty-one) days after the issuance of the Performance Certificate. Any claim hereunder must have reached us before the closing hours of that day. Upon expiry, this "Bank Guarantee" shall automatically become null and void whether or not returned to us for cancellation.

Unless otherwise expressly defined herein, capitalized expressions in this "Bank Guarantee" have the meaning ascribed to them in the "Contract".

Except as expressly stated here above, this "Bank Guarantee" is subject to the Uniform Rules for Demand Guarantees, International Chamber of Commerce publication No. 758.

Signatures of Authorized Bank personnel*

Notes :

* The authorizations (Power of Attorneys) of the signatories that will sign on behalf of the Guaranteeing Bank will be given to the EMPLOYER provided required by the EMPLOYER.

Annex 11

General Conditions of Dispute Adjudication Agreement

General Conditions of Dispute Adjudication Agreement

1

Definitions

Each "Dispute Adjudication Agreement" is a tripartite agreement by and between:

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who is defined in the Dispute Adjudication Agreement as being:
 - (i) the sole member of the "DAB" (or "adjudicator) and, where this is the case, all references to the "Other Member" do not apply,
 - or
 - (ii) one of the three persons who are jointly called the "DAB" (or "dispute adjudication board") 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 Adjudication Agreement, which incorporates this Appendix. In the Dispute Adjudication Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

2

General Provisions

The Dispute Adjudication Agreement shall take effect when the Employer, the Contractor and each of the Members (or Member) have respectively each signed a dispute adjudication agreement.

When the Dispute Adjudication Agreement has taken effect, the Employer and the Contractor shall each give notice to the Member accordingly. If the Member does not receive either notice within six months after entering into the Dispute Adjudication Agreement, it shall be void and ineffective.

This employment of the Member is a personal appointment. No assignment or subcontracting of the Dispute Adjudication Agreement is permitted without the prior written agreement of all the parties to it and of the Other Members (if any).

3

Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Employer's Representative. 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 or the Contractor, nor any financial interest in the Contract except for payment under the Dispute Adjudication Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer or the Contractor, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Adjudication Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Adjudication Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer or the Contractor, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Adjudication Agreement, be employed as a consultant or otherwise by the Employer or the Contractor, 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 Sub-Clause 20.4 of the Conditions of Contract;

- (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 or the Contractor regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Adjudication Agreement;
- (h) ensure his/her availability for any site visit and hearings as are necessary; and
- (i) treat the details of the Contract and all the DAB'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).

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 Contractor otherwise than in the normal course of the DAB's activities under the Contract and the Dispute Adjudication Agreement, and except to the extent that prior agreement is given by the Employer, the Contractor and the Other Members (if any). 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/she is relieved from liability under the preceding paragraph.

6

Payment

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

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

(i) each working day spent reading submissions, attending hearings (if any), preparing decisions, or making site visits (if any); and

(ii) each day or part of a day up to maximum of two days travel time in each direction for the journey (if any) between the Member's home and site or another location of a meeting with Other Members (if any) and/or the Employer and the Contractor;

(b) all reasonable expenses incurred in connection with the Member's duties, including the cost of secretarial services, telephone calls, courier charges, faxes and telexes, travel expenses, hotel and subsistence costs; a receipt shall be required for each item in excess of five percent of the daily fee referred to in subparagraph (a) of this Clause; and

(c) 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 daily fee shall be as specified in the Dispute Adjudication Agreement.

Immediately after the Dispute Adjudication Agreement takes effect, the Member shall, before engaging in any activities under the Dispute Adjudication Agreement, submit to the Contractor, with a copy to the Employer, an invoice for (a) an advance of twenty-five (25) percent of the estimated total amount of daily fees to which he/she will be entitled and (b) an advance equal to the estimated total expenses that he/she shall incur in connection with his/her duties. Payment of such invoice shall be made by the Contractor upon his receipt of the invoice. The Member shall not be obliged to engage in activities under the Dispute Adjudication Agreement until each of the Members has been paid in full for invoices submitted under this paragraph.

Thereafter the Member shall submit to the Contractor, with a copy to the Employer, invoices for the balance of his/her daily fees and expenses, less the amounts advanced. The DAB shall not be obliged to render its decision until invoices for all daily fees and expenses of each Member for making a decision shall have been paid in full.

Unless paid earlier in accordance with the above, the Contractor shall pay each of the Member's invoices in full within 28 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 Adjudication 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 DAB; and without prejudice to the Employer's rights or remedies. In addition to all other 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 Sub

Clause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 28 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 to the Employer and the Contractor. The notice shall take effect when received by them both. Any such notice shall be final and binding on the Employer, the Contractor and the Member.

7
Default of
the Member

If the Member fails to comply with any obligation under Clause 4, 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 DAB which are rendered void or ineffective.

8
Dispute

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

PROCEDURAL RULES

1. The Employer and the Contractor shall furnish to the DAB one copy of all documents which the DAB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the matter in dispute. All communications between the DAB and the Employer or the Contractor shall be copied to the other Party. If the DAB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
2. The DAB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DAB 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.
3. The DAB 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.
4. Except as otherwise agreed in writing by the Employer and the Contractor, the DAB 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 and the Contractor, and to proceed in the absence of any party who the DAB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
5. The Employer and the Contractor empower the DAB, among other things, to:
 - (a) establish the procedure to be applied in deciding a dispute,
 - (b) decide upon the DAB'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 Rules,
- (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, and
- (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Employer, relevant to the dispute.

6. The DAB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DAB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DAB comprises three persons:

- (a) it shall convene in private after a hearing, if any, in order to have discussions and prepare its decision;
- (b) it shall endeavor 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 Contractor does not agree that they do so,
 - (ii) or the absent Member is the chairman, and he/she instructs the other Members to not make a decision.