# POWER PURCHASE AGREEMENT

Between

**(1)** [Seller]

and

(2) [Purchaser]

**FOR** 

[•]

Dated [●]

#### STANDARD POWER PURCHASE AGREEMENT

#### **BETWEEN**

[●] a company incorporated in [●] with its registered office at [●] (hereafter referred to as the **Seller**); and [●], a company incorporated in Kenya with its registered office at [●] (hereafter referred to as the **Purchaser**).

#### **WHEREAS**

- A. Purchaser is entitled to purchase electricity and to transmit and distribute electricity in the Republic of Kenya;
- B. Seller proposes to develop, design, finance, insure, construct and complete, own, operate and maintain a [hydro/geothermal/gas fired] power generation facility with a net capacity of [●] located at [●];
- C. Seller wishes the sell to Purchaser, and Purchaser wishes to purchase from Seller, the capacity of such power generation facility and all of the Net Electrical Output pursuant to the terms and conditions set forth herein; and
- D. This Agreement is the power purchase agreement agreed between the Parties referred to in the [describe tender/request for proposals].

#### IT IS HEREBY AGREED as follows:

#### **CLAUSE 1: Definitions and interpretation**

- 1.1. In this Agreement, unless the context otherwise requires, the following words and expressions shall have the following meanings:
  - **Agreement** means this power purchase agreement together with all schedules hereto as the same may be supplemented or amended from time to time;
  - **Authorisation** means any approval, consent, license, permit, authorisation or other permission to be granted by a Governmental Authority required for the enforcement of rights or performance of obligations under this Agreement by a Party;
  - **Availability** means the ability of the Plant, at a particular instant or over a particular period of time, to deliver electricity to the Purchaser's System and the terms "Available" and "Unavailable" shall be construed accordingly;
  - Available Capacity means the Capacity Available (by reference to the Reference Conditions) in any Settlement Period being the Declared Capacity unless there has been an Availability Failure in respect of the Plant in that Settlement Period in which event the Available Capacity shall be the volume weight average Availability achieved in response to valid Despatch Instructions for that Settlement Period;

- **Availability Failure** means in respect of the Plant in any Settlement Period, a failure to deliver electricity in accordance with a Despatch Instruction;
- **Back-Up Metering Equipment** means the equipment for check metering to be provided by and installed by Seller and transferred to Purchaser pursuant to Schedule 2:
- **Bankruptcy Event** means the occurrence of any of the following events in respect of a Party ("affected Party"), unless such event is capable of being and is set aside within thirty (30) days of the occurrence of the relevant event:
  - i. There is entered against the affected Party a decree or order by a court adjudging the affected Party bankrupt or insolvent, or approving, as properly filed by or on behalf of the affected Party, a petition seeking reorganisation, arrangement, or reconstruction, or appointing a receiver, liquidator, trustee (or other similar official) of the affected Party over all or substantial part of its property or assets, or ordering the winding up or liquidation of its affairs;
  - ii. The institution by the affected Party of proceedings to be adjudicated bankrupt or insolvent, or the consent by it to the institution of bankruptcy or insolvency proceedings against it, or the filing by it of a petition or consent seeking relief from its creditors generally under any applicable law, or the consent by it to the filing of any such petition or for the appointment of a receiver, liquidator, trustee (or other similar official) of the affected Party or of all or any substantial part of its property; or
  - iii. The admission by the affected Party in writing of its inability to pay its debts generally as they become due;
  - or any other event shall have occurred which under any applicable law would have an effect analogous to any of the events referred to above;
- **Black Start Test** means the test specified in Section [3(b)(vi)] of Part A of Schedule 5;
- **Capable** means the state of being able to generate electricity in accordance with the Functional Specifications;
- **Capacity"** means the capacity of the Plant or each Unit as the case may be as set out in the Functional Specifications;
- **Capacity Demonstration Test** means a test to demonstrate the Capacity of each Unit conducted in accordance with Section 2 of Part A of Schedule 5;
- **Capacity Payments** means the amounts payable by Purchaser to Seller in respect of the Contracted Capacity in accordance with Part B of Schedule 6;
- **Change in Law** means the adoption, promulgation, or modification, after the date of this Agreement, of any Legal Requirement, or the imposition after the date of this Agreement of any material condition or any restriction in

- connection with the issuance, renewal, extension, replacement or modification of any Authorisation that in either case establishes requirements for the operation or maintenance of the Plant or of Purchaser's System that are materially more onerous than the requirements in effect as of the date of this Agreement;
- **Commercial Operation Date** in respect of a Unit, means the date notified as such by Seller in accordance with Clause 4.12;
- **Commissioning** means the conduct of tests and procedures necessary (including those specified in Part A of Schedule 5) to put a Unit or the Plant (as the case may be) into operation;
- **Confidential Information** has the meaning ascribed thereto in Clause 15.1;
- **Construction Programme** means the programme for the construction and installation of the Plant set out in the [Development Agreement] as from time to time adjusted by agreement of the Parties;
- Construction Security means an on demand performance bond in the amount of US Dollars [ ] (US[ ]) drawn on an internationally recognised bank acceptable to Purchaser in the form specified by Purchaser;
- Consumer Price Index" or CPI: the index known as "The Consumer Prices Index for All Urban Consumers (CPI-U) for the US City Average for All Items 1982-84=100, not seasonally adjusted", as published by the United States Department of Labor, Bureau of Labor Statistics or such other index as may be agreed or determined pursuant to Part E of Schedule 6;
- Contracted Capacity means at the date of this Agreement [ ●] net under the Reference Conditions (hereafter referred to as "Contracted Capacity at the date of this Agreement") and from and after the Full Commercial Operation Date such revised amount as may apply following a Contracted Capacity Test or as may otherwise be determined pursuant to Clause 6.8 or Clause 6.11;
- **Contracted Capacity Test** means the test of the normal full load Capacity of the Plant carried out in accordance with the requirements of Section 3 of Part A of Schedule 5:
- **Daily Liquidated Damages Sum** means an amount of US Dollars [ullet] (US\$[ullet]);
- **Declared Capacity** in respect of a Settlement Period, means the Capacity declared in accordance with the Operating and Despatch Procedures, by Seller to be Available for that Settlement Period;
- **Default** means any one or more of the events specified in Clauses 13.1 and 13.2;
- **Default Rate** means two (2) percentage points above LIBOR or any rate above or below LIBOR that the parties agree upon in writing;

**Delivery Point** means the point of common coupling at which Net Electrical Output from the Plant is delivered to the Purchaser's System being the point specified in Schedule 3;

**Despatch** means the giving of a Despatch Instruction;

**Despatch Instruction** means an instruction given by Purchaser to Seller in relation to the operation of the Plant in accordance with Clauses 5.3 and 5.4 and with Part C of Schedule 5:

**Dispute** has the meaning ascribed to it in Clause 16.1;

**Effective Date** has the meaning ascribed thereto in Clause 3.1;

**Electric Power Production License** has the meaning ascribed thereto in the Electric Power Act 1997;

**Electricity Regulatory Board** means the board established pursuant to section 119 of the Electric Power Act, 1997;

Emergency means a condition or situation that, in the sole but reasonable opinion of Purchaser, (i) materially and adversely affects, or is likely materially and adversely to affect the ability of Purchaser to maintain a safe, adequate and continuous electrical service to its customers, having regard to the then current standard of electrical service provided to its customers, or (ii) presents or is likely to present a physical threat to persons or property or the security, integrity or reliability of Purchaser's System;

**Energy Charges** means the amounts payable by Purchaser in respect of the Net Electrical Output in accordance with Clause 8.3;

**Environmental Performance Tests** means the tests specified in Part A of Schedule 5;

**Event of Default** has the meaning ascribed to it in Clause 13.4;

**Expert** means a person appointed in accordance with the provisions of Clause 16.2;

**Financing Agreements** means all loan agreements, notes, mortgages, indentures, security agreements, hedging agreements, credit agreements and other such agreements and documents, if any, executed by Seller to finance the construction and/or operation of the Plant;

**First Commissioning Date** has the meaning ascribed to it in Clause 4.6(a);

**Force Majeure** has the meaning ascribed to it in Clause 12.1;

**Fuel Supply Agreement** means the agreements for the supply of fuel to the Plant entered into by Seller from time to time, and as amended from time to time:

**Full Commercial Operation Date** means the date notified by Seller in accordance with Clause 4.13;

**Functional Specification** means the functional specification for the Plant and each Unit as set out in Schedule 1:

**Governmental Authority** means the Government of the Republic of Kenya, any ministry or department or division thereof, any government owned or controlled agency, and any other authority including any regional and local authorities of Kenya;

**Independent Engineer** means the Person appointed pursuant to Clause 4.16;

Indirect Taxes and Duties means all forms of taxation, impost, levy or duty imposed, pursuant to the laws of the Republic of Kenya, after the date of this Agreement in respect of the sale of electricity or on the purchase, import and use or consumption of any plant, equipment or materials used in connection therewith or in respect of the right or act of producing or delivering electricity, which result, directly or indirectly in an increase or decrease in the costs of Seller in performing its obligations under this Agreement provided that for the avoidance of doubt Indirect Taxes and Duties do not include any value added tax, business rates and payments in respect of the employment of any Person or any form of taxation, impost, levy or duty imposed on the income of Seller upon which income tax is chargeable under section 3(2) of the Income Tax Act CAP 470, as the same may be amended or replaced from time to time;

**ISO** means the International Standards Organisation;

kW means kilowatt:

**kWh** means kilowatt hour, being three million six hundred thousand (3,600,000) Joules as defined in ISO 1000.1992(E);

**Legal Requirement** means any statute, law, regulation or other legislation, or any decree, order or directive of any Governmental Authority having jurisdiction in respect of this Agreement or either Party;

LIBOR (London Interbank Offering Rate): means, in respect of any day and any amount, the offered rate of interest for US Dollars quoted on Telerate Screen page 3750 (or any replacement page on the Telerate System or such other page on that or another system as may be agreed between the Purchaser and Seller) at 11.00 hours (London time) for a deposit of a principal sum equivalent to the sum in question for a period commencing on such day and ending 30 days later provided that if the said rate is not quoted on any day the rate last quoted shall be used;

**Long Stop Dates** means any of the Long Stop Effective Date and the Long Stop Full Commercial Operation Date;

**Long Stop Effective Date** means the date falling [●] months after the date of this Agreement or any extension thereof agreed between the Parties or applicable pursuant to Clause 12.4;

- **Long Stop Full Commercial Operation Date** means the date falling [●] months after the date of this Agreement or any extension thereof agreed between the Parties or applicable pursuant to Clause 12.4;
- **Main Metering Equipment** means equipment for metering and monitoring the operation and output of the Plant to be provided by Seller as specified in Section 1 of Schedule 2;
- **Metering System** means the Main Metering Equipment and the Back-Up Metering Equipment;
- MW means megawatts being one thousand (1,000) kW;
- **MWh** means megawatt hours being one thousand (1,000) kWh;
- **Net Electrical Output** means electrical energy measured in kWh generated by the Plant and delivered to Purchaser in accordance with Despatch Instructions;
- Non-Default Rate means LIBOR:
- **Operating Characteristics** means the performance and operating characteristics of the Plant and each Unit for which values are specified in the Functional Specification;
- **Operating and Despatch Procedures** means the procedures set out in Part C of Schedule 5:
- **Operating and Maintenance Agreement** means the agreement for the operation and maintenance of the plant to be entered into between Seller and [●];
- **Operating Period** means the period from the Full Commercial Operation Date until the end of the Term;
- **Operating Year** means a period of one (1) year beginning on the first day of the month following the Full Commercial Operation Date or any anniversary thereof;
- **Parties** means Purchaser and Seller, and **Party** means either of them;
- **Person** means individuals, corporations, partnerships, joint ventures, trusts and other commercial entities, whether public or private, and any Governmental Authority;
- **Planned Maintenance** means maintenance of the Plant or a Unit which has been planned in accordance with Clause 6.3, or where the context admits, the period allowed or the dates planned for such maintenance;
- **Plant** means the plant (comprising the Units and other equipment) described in the Functional Specification, and including Seller's Connection Facilities and the Metering System;
- **Plant Commercial Operations Tests** means the [Reliability Run Test, the Contracted Capacity Test, the Unit Trip Test, Environmental Performance Tests and Black Start Test];

- **Project Agreements** means the Development Agreements Operating and Maintenance Agreement, the Turnkey Construction Agreement, and the Fuel Supply Agreement;
- **Prudent Operating Practice** means in relation to either Party, standards of practice obtained by exercising that degree of skill, diligence, prudence and foresight which could reasonably be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances including in respect of the construction of the Plant or facility similar in size and operational characteristics;
- **Purchaser's Connection Facilities** has the meaning ascribed to it in Part B of Schedule 1;
- **Purchaser's System** means the high voltage transmission system operated by Purchaser, together with all the distribution system(s) and ancillary electrical plant and equipment connected to such transmission and distribution systems;
- **Purchaser's System Interruption** means any failure or inability of Purchaser to receive delivery of electrical energy from the Plant however arising other than as a result of an event which is caused by Seller;
- **Reference Conditions** has the meaning ascribed thereto in the Functional Specification;
- **Reliability Run Test** means the test carried out in accordance with the requirements of Schedule 5;
- **Remedial Programme** has the meaning ascribed to it in Clause 13.4(a)(ii);
- **Required Full Commercial Operation Date** means the date falling [●] months after the date of this Agreement;
- **Scheduled Commercial Operation Date** in respect of a Unit, means the date specified as such in the Functional Specification or any extension thereof agreed by the Purchaser and the Seller;
- **Security Stock** means has the meaning ascribed to it in Clause 7.10;
- **Seller's Connection Facilities** means the connection facilities specified in Part C Schedule 1 as being installed by Seller;
- **Settlement Period** means a period of thirty (30) minutes beginning on the hour or the half-hour, as the case may be;
- **Site** means that area of land [insert description of Power Station site];
- System Characteristics means the characteristics of the Purchaser's System specified in Schedule 1; [note: these will need to be added into Schedule 1 in each case]
- **Target Effective Date** means the date falling [●] month[s] after the date of this Agreement;

- **Taxes** means all forms of taxation, duties, imposts, levies and rates whenever imposed and applicable pursuant to the laws of Kenya including Indirect Taxes and Duties:
- **Term** means the period from the date of this Agreement until expiry of this Agreement in accordance with Clause 2.2 or earlier termination;
- **Turnkey Construction Agreement** means the agreement or agreements for the construction of the Plant to be entered into between Seller and [ ];
- **Unit** means a generating unit and related facilities as described in the Functional Specification;
- **Unit Commercial Operations Tests** means the tests to be carried out in accordance with Schedule 5;
- **Unit Tests** means the tests to be carried out on each of the Units as specified in Schedule 5 including the Unit Commercial Operations Tests;
- **Unit Trip Tests** means the test carried out in accordance with the requirements of Schedule 5;
- **US Dollar** means the lawful currency of the United States of America.
- **1.2 Interpretation**: In this Agreement, unless the context otherwise requires;
  - a) reference to a business day is a reference to any day which is not a Saturday, Sunday or recognised public holiday in Kenya and is a day on which commercial banks are open for business in Kenya;
  - b) reference to a day, month or year is a reference to a calendar day, month or year;
  - c) references to Clauses, Schedules, Sections and Figures are references to clauses, schedules, sections and figures of, to or contained in this Agreement;
  - words in the singular shall be interpreted as including the plural and vice versa, and words denoting natural persons shall be interpreted as referring to corporations and any other legal entities and vice versa;
  - e) the term "including" shall be construed without limitation;
  - f) in the event of any conflict between the Clauses and the Schedules, the Clauses shall prevail;
  - g) headings are for convenience only and shall not affect the construction of this Agreement; and
  - h) where an obligation is required to be performed by a specified time and is not so performed, such obligation shall continue (until performed) notwithstanding that the time specified for its performance has elapsed.
  - i) References to dollars and to \$ are to United States dollars.

## **CLAUSE 2: SCOPE AND DURATION**

## 2.1 **Scope:**

In accordance with and subject to the terms and conditions of this Agreement:

- a) Seller will [enter into the Project Agreements and Financing Agreements], finance, design, procure, construct, install, test, commission, operate and maintain the Plant in accordance with Prudent Operating Practice, [purchase fuel for the Plant], [maintain the Security Stock], make the Contracted Capacity Available in compliance with the Operating Characteristics and sell the Net Electrical Output to Purchaser; and
- b) Purchaser will take delivery of Net Electrical Output and pay Energy Charges for such Net Electrical Output and make Capacity Payments for the Contracted Capacity (adjusted for Availability).
- 2.2 **Term of Agreement:** Unless terminated in accordance with its terms, this Agreement shall come into force on the date of this Agreement and shall continue in force until the [●] anniversary of the Full Commercial Operation Date.
- 2.3 **Extension:** The Term may be extended, subject to agreement in writing by the Parties to such extension at the latest [●] months prior to the then expiry date, and on such terms as the Parties shall agree.

#### CLAUSE 3 EFFECTIVE DATE AND SECURITY

- 3.1 **Effective Date**: The Parties' obligations hereunder shall commence on the date (the "Effective Date") on which each of the following conditions precedent shall be satisfied
  - (a) this Agreement is approved by the Electricity Regulatory Board and
  - (b) [the Construction Security is unconditionally provided by Seller to Purchaser; and]
  - (c) [other conditions]
- 3.2. **Non-Approval:** If the conditions precedent to the Effective Date occurring have not been satisfied or waived by the Long Stop Effective Date then either Party may by notice terminate this Agreement and from the date of such notice this Agreement shall terminate and shall be deemed to be null and void *ab initio* save that the provisions of Clause 14 and 15 shall apply.

# 3.3 **Construction Security:**

- a) On or prior to the Effective Date and with effect therefrom Seller shall provide to Purchaser the Construction Security;
- b) If the Full Commercial Operation Date has not occurred by the Required Full Commercial Operation Date then for each day occurring after the Required Full Commercial Operation Date and until such day as the Full Commercial

- Operation Date occurs, Purchaser shall be entitled to draw from the Construction Security the Daily Liquidated Damages Sum;
- c) If the Full Commercial Operation Date does not occur by the Long Stop Full Commercial Operation Date, then Purchaser shall be entitled to draw the balance remaining on the Construction Security; and
- d) If the Full Commercial Operation Date occurs before the Long Stop Full Commercial Operation Date, the Construction Security shall be returned by Purchaser to Seller, in full or as partially drawn upon in accordance with this Clause 3.3.

#### CLAUSE 4: CONSTRUCTION AND COMMISSIONING

- 4.1 **Co-ordination:** Seller shall keep Purchaser informed of its activities at the Site and shall take all steps necessary to co-ordinate such activities with Purchaser to ensure that any activities at the Site or at any adjacent site being undertaken by or on behalf of Purchaser are not interfered with or disrupted.
- 4.2 **Purchaser's Responsibility**: No later than one (1) month after the Effective Date, Purchaser shall provide to Seller a specification which shall provide details of Purchaser's requirements for the Purchaser's Connection Facilities.
- 4.3 **Information**: Seller shall keep Purchaser informed of the progress of the design, furnishing, supply, construction and installation of the facilities and equipment to be installed by it pursuant to this Agreement, and every month shall provide a progress report in respect thereof which report shall itemise the extent to which each material task in the Construction Programme has been completed and the expected completion date for each outstanding task.

# 4.4 **Monitor Progress**: The Seller shall:

- a) ensure that Purchaser and any representatives appointed by Purchaser, are afforded reasonable access to the Site upon giving the Seller reasonable notice provided that such access does not materially interfere with the construction works or expose any person on the Site to unsafe conditions;
- b) make available for inspection at the Site copies of all plans and designs, other than any proprietary information of the Seller or any sub-contractor, in relation to the construction of any part thereof; and
- c) within six (6) months of the Full Commercial Operation Date, supply Purchaser with one (1) set of reproducible copies and five (5) sets of white print copies (or equivalent) of all "as built" plans and designs relating to the operation or maintenance of the Plant as Purchaser may reasonably require.

# 4.5 **Disclaimer:** The Seller:

a) accepts that any engineering review or inspection conducted by Purchaser is solely for its own information and accordingly by conducting such review or inspection or electing not to do so Purchaser makes no representation as to the

- engineering soundness of the Plant nor shall it be treated as having accepted the Plant as fit to meet the terms of this Agreement;
- b) shall in no way represent to any third party that, as a result of any review or inspection by Purchaser, Purchaser is responsible for the engineering soundness of the Plant; and
- c) shall, subject to the other provisions of this Agreement be solely responsible for the economic and technical feasibility, operational capacity and reliability of the Plant.
- 4.6 **Seller's obligations:** Seller shall carry out Commissioning in accordance with Prudent Operating Practice and the procedures agreed or determined in writing pursuant to Clause 4.8.
  - a) The First Commissioning Date: The First Commissioning Date shall be the date specified in the Functional Specification (including any extension thereof) as the target date for the start of Commissioning of the first Unit, or such earlier date as Seller may specify by notice given to Purchaser not less than [●] days before such earlier date subject to Purchaser's agreement to such earlier date which agreement shall not be unreasonably withheld or delayed.
  - Notifications: seller shall give purchaser not less than [●] days' notice of the date of commencement of commissioning of each unit provided that seller may postpone any such date by giving purchaser notice of the postponed date in accordance with such detailed procedures agreed in accordance with clause 4.8. in the event that the detailed procedures have not been agreed or determined pursuant to clause 4.8, seller shall give purchaser not less than [●] days' notice of the date of each test of each unit, and not less than [●] days notice of the postponement of such date.
- 4.7 **Purchaser attendance:** Purchaser shall have the right to attend the Site on each occasion on which a test is being conducted, and to inspect and witness the test, and to receive, within [●] days after the test, a written copy of the test reports.
- 4.8 **Detailed procedures:** The Parties shall, not later than [●] days before the First Commissioning Date, agree (or failing such agreement an Expert shall determine) detailed procedures consistent with Prudent Operating Practice for Commissioning the Units in accordance with, and consistent with, the terms of the Development Agreement.
- 4.9 **Purchaser Connection Facilities:** Seller shall complete the installation of the Purchaser Connection Facilities and transfer the Purchaser Connection Facilities to Purchaser not less than [●] months before the First Commissioning Date to enable Purchaser to complete the testing and Commissioning of Purchaser Connection Facilities on or before the First Commissioning Date.
- 4.10 **Purchaser Co-operation:** Purchaser shall, subject to any constraints on the Purchaser's System, co-operate with Seller so as to enable Seller to Commission each

Unit in accordance with this Clause 4 and in particular will authorise connection to the Purchaser System and Despatch the Unit or Units to the extent reasonably required by Seller for such purpose and in accordance with the procedures contained in the Development Agreement and agreed or determined under Clause 4.8.

- 4.11 **Re-testing:** Where any test of a Unit is not completed satisfactorily Seller may arrange a further test by giving Purchaser not less than [●] days' notice in accordance with the foregoing provisions of this Clause.
- 4.12 Completion of Commissioning and Commercial Operation Date: On the satisfactory completion of the Commissioning of a Unit Seller shall procure the issue of a certificate of the Independent Engineer addressed to Purchaser and Seller, certifying that the Unit's Commissioning has been so completed and the Unit is available for commercial operation and shall, upon issue of the certificate, notify Purchaser of the Commercial Operation Date for that Unit being a date not earlier than [●] days nor later than [●] days after the date of the notice.
- 4.13 Plant Commercial Operations Tests: Following satisfactory completion of the Unit Commercial Operations Tests for each Unit, Seller shall conduct the Plant Commercial Operations Tests. Upon satisfactory completion of the Plant Commercial Operations Tests, Seller shall procure the issue of a certificate of the Independent Engineer addressed to Purchaser and Seller, certifying, without any qualification, that Seller has installed all plant and equipment specified in the Functional Specification, that the Plant's Commissioning has been completed, that the Plant is available for full commercial operation and certifying that the Contracted Capacity achieved by the Plant during the Contracted Capacity Test forming part of the Plant Commercial Operations Tests which shall be not less than nine-five per cent (95%) of the Contracted Capacity at the date of this Agreement. Seller shall, upon issue of the certificate, give notice to Purchaser of the date (the "Full Commercial Operation Date") being a date not later than [ ] days after the date of the notice.
- 4.14 **Commissioning and testing output:** Purchaser shall pay the fuel component of the Energy Charges to Seller for all Net Electrical Output supplied after the First Commissioning Date and prior to the Full Commercial Operation Date.
- 4.15 Purchaser failure to take electricity from the First Commissioning Date: If Seller is unable to achieve the Full Commercial Operation Date by the Required Full Commercial Operation Date solely due to a failure by Purchaser to take electrical energy from Seller, Purchaser shall pay to Seller monthly (and pro-rated for any proportion of the month), in arrears, an amount equal to the interest costs under the Financing Agreements provided that Purchaser shall not be required to pay any interest costs exceeding LIBOR.
- 4.16 **Appointment of Independent Engineer:** For the purposes of Clauses 4.12 and 4.13, Seller shall not less than [●] months prior to the commencement of the tests under Clause 4.12 and Clause 4.13 appoint an independent suitably qualified professional engineer approved by Purchaser who shall among other things witness the

Commissioning and testing of the Plant pursuant to this Clause 4 ("Independent Engineer"). If Purchaser fails to approve such appointment, Seller shall have the right to request the Electricity Regulatory Board to make such appointment and such appointment shall be binding on Seller and Purchaser. All fees and costs payable in respect of the Independent Engineer (including those incurred in making such appointment) shall be borne by Seller.

4.17 **Failure to Achieve Full Commercial Operation Date by the Long Stop Full Commercial Operation Date:** If the Full Commercial Operation Date has not occurred by the Long Stop Full Commercial Date Purchaser may demand payment in full under the Construction Security in accordance with the provisions of Clause 3.3(c) and serve notice of termination of this Agreement, such notice to take immediate effect and such termination shall be subject to the provisions of Clause 13.

#### CLAUSE 5: OPERATING AND DESPATCH PROCEDURES

- 5.1 **Operation:** Seller shall during the Operating Period operate the Plant in a manner consistent with Prudent Operating Practice and in compliance with Despatch Instructions with a view to making the Contracted Capacity Available to Purchaser at all times and Seller shall operate the Plant in accordance with the Operating Characteristics. Seller shall ensure that the Net Electrical Output will not fall below the Contracted Capacity by reason of plant and equipment connected to the Units and/or the Plant.
- Notification: In accordance with the Operating and Despatch Procedures and any procedures agreed or determined under Clause 5.4, Seller shall keep Purchaser informed by regular daily declarations, together with prompt declarations of any changes, of the Available Capacity and any impairment of the Plant's Operating Characteristics, provided that if Seller fails to give a declaration in respect of a Unit that Unit shall be deemed to be declared Unavailable unless Seller makes a contrary declaration.
- 5.3 **Despatch Instructions:** Purchaser shall issue Despatch Instructions consistent with and within the Functional Specification, the prevailing declaration of Availability and any declared impairment of the Plant's Operating Characteristics, and any Despatch constraints and in accordance with the Operating and Despatch Procedures and any procedures agreed under Clause 5.4 and shall seek to ensure that Purchaser's System maintains and complies with and does not deviate from the System Characteristics. Purchaser shall not be required to issue Despatch Instructions (and may require Seller to disconnect or reduce the Net Electrical Output) where:
  - a) an Emergency exists; or
  - b) for so long as a disconnection or a reduction in energy deliveries is necessary to enable Purchaser to construct, install, maintain, repair, or test any part of the Purchaser Connection facilities, or any other affected part of the Purchaser's System.

Purchaser shall notify Seller promptly and, insofar as it is practicable, prior to the beginning and end of such reduction or disconnection, and Purchaser shall co-ordinate such reduction or disconnection with Seller. Any action requiring such disconnection or reduction of energy deliveries shall be implemented and completed as soon as reasonably practicable.

- 5.4 **Further procedures:** The Parties shall, not later than the First Commissioning Date, agree (in accordance with and consistent with the Operating and Despatch Procedures and all other terms of this Agreement) such further procedures as shall be necessary in accordance with Prudent Operating Practice for the Despatch of the Plant and operational communications between the Parties. Any procedures not agreed by the Parties by the First Commissioning Date shall be specified by Purchaser in accordance with Prudent Operating Practice. If circumstances arise subsequent to the First Commissioning Date, which either Party deems to require changes in procedures, the Parties shall work together in good faith to establish procedures satisfactory to both Parties, giving due consideration to issues of safety. If the Parties are unable to agree on any such procedures relating to matters of safety, these shall be referred to an Expert. While the Expert is adjudicating the matter, the Parties shall abide by existing agreed procedures, or if there are none applicable, relevant Purchaser procedures existing at the time.
- 5.5 **Over-generation:** In the event that Seller over a period of two (2) or more Settlement Periods delivers to Purchaser electricity in excess of the Despatch Instructions, Purchaser may by notice require Seller to comply with Despatch Instructions and if such excess delivery continues, Seller shall not be entitled to receive the Energy Charges in respect of any excess delivery notwithstanding any other provision in this Agreement to the contrary.
- 5.6 **Under-generation:** In the event that Seller over a period of two (2) or more Settlement Periods delivers to Purchaser electricity which is less than the quantity required by the Despatch Instructions ("under-generation"), Seller's Declared Capacity for each settlement period shall be deemed to be equal to the Net Electrical Output for that Settlement Period in which there is an under-generation.
- 5.7 **Notice:** Any notice given by Purchaser under Clause 5.5 shall be given in writing and delivered by facsimile to Seller at the address and marked for the attention of the person, specified in Schedule 8 or such other address or person from time to time designated by Seller and such notice shall be deemed to be received upon confirmation of uninterrupted transmission by a transmission report provided that such notice shall be confirmed by letter sent by hand or post, but without prejudice to the original facsimile notice.
- 5.8 **Personnel:** Seller shall only employ personnel, directly or indirectly, who, in its sole reasonable opinion, are adequately qualified and experienced for operating and monitoring the units and the Plant and for co-ordinating operations of the Units and the

Plant with the Purchaser System. Seller shall ensure that sufficient personnel are on duty at the Plant at all times, in accordance with Prudent Operating Practice.

- Ouality of Supply: If at any time the supply of electricity to the Delivery Point does not comply with the applicable requirements of the Purchaser's System Characteristics, the Purchaser's System or any other standards which the Parties may from time to time agree, as a result of the breach by Seller of any such requirements:
  - a) Seller shall immediately take the steps necessary pursuant to Prudent Operating Practice to remedy such non-compliance as soon as possible;
  - b) if and to the extent that, as a result of such non-compliance, any Unit is unable to generate supply of electricity, that Unit shall be deemed not to be Available.

In the event of any dispute arising between the Parties as to any such non-compliance, the matter in dispute shall be referred to determination by an Expert in accordance with Clause 16.

# CLAUSE 6: MAINTENANCE AND REPAIR

- 6.1 **Seller's obligation:** Seller shall maintain and repair the Plant in accordance with Prudent Operating Practice during the Operating Period.
- 6.2 **Planned Maintenance:** Seller shall be entitled to withdraw each Unit from operation for planned maintenance and inspection in each Operating Year for periods not exceeding those specified in Schedule 4 or as may otherwise be agreed in accordance with Clause 6.3.
- 6.3 **Planned maintenance programme:** The programme of Planned Maintenance for each Operating Year shall be established as follows:
  - Seller shall not later than [●] days before the start of each Operating Year submit to Purchaser proposed dates for Planned Maintenance in that Operating Year;
  - b) Purchaser may within [●] days after receiving Seller's proposed dates notify Seller of alternative dates which Purchaser prefers, in which case the Parties shall consult and Seller shall use reasonable endeavours to accommodate Purchaser's proposal;
  - c) Not less than [•] days before the start of the relevant Operating Year Seller shall issue a final programme for Planned Maintenance in accordance with the agreement reached by consultation under paragraph (b) provided that where no agreement was reached then Purchaser's last notified alternative dates shall prevail.
- 6.4 **Changes to programme:** The Parties shall cooperate and use their reasonable endeavours to accommodate any reasonable request by either Party to reschedule any Planned Maintenance in any Operating Year.

- 6.5 **Maintenance outages:** Without prejudice to Clause 6.1 and subject to applicable notification requirements under the Operating and Despatch Procedures, nothing in this Agreement shall oblige Seller to take a Unit out of operation at the start of the relevant period specified in the programme for Planned Maintenance nor prevent Seller from returning a Unit to operation before the end of such period.
- 6.6 **Other outages:** Subject to the terms of this Agreement the Seller may carry out maintenance or repair of the Plant (and taking a Unit out of operation for this purpose) at times other than during Planned Maintenance where such maintenance or repair cannot, in accordance with Prudent Operating Practice, be deferred to the next scheduled Planned Maintenance or upon the occurrence of any outage or emergency.
- 6.7 **Purchaser maintenance:** Purchaser shall, in accordance with Prudent Operating Practice, maintain and repair Purchaser's Connection Facilities and shall use reasonable endeavours to co-ordinate the timing of such maintenance and repair with Seller's Planned Maintenance.
- Revision to Contracted Capacity: Not less than once in every period of [●] months Seller shall conduct a Contracted Capacity Test. Following a Contracted Capacity Test Seller may revise the Contracted Capacity in accordance with the results of such test provided that the Contracted Capacity may not be less than the Contracted Capacity at the date of this Agreement nor greater than one hundred and five per cent (105%) of the Contracted Capacity at the date of this Agreement. If in any period of [●] months the average Contracted Capacity, demonstrated by Contracted Capacity Tests conducted over that period, is less than [●] per cent [●%] of the Contracted Capacity at the date of this Agreement, the Parties shall forthwith meet and agree a programme to be implemented by Seller during the next following [●] month period for restoring the Contracted Capacity to not less [●] per cent [●%] of the Contracted Capacity in the first [●] years from the Full Commercial Operation Date and thereafter, to [●] per cent [●%] of the level which was established by the Contracted Capacity Test conducted as part of the Plant.

Commercial Operations Tests. If Seller fails to so restore the Contracted Capacity during the said  $[\, \bullet \,]$  months period the Capacity Payments from the end of such  $[\, \bullet \,]$  month period until the date on which the Contracted Capacity is to restored in accordance with this Clause 6.8 shall be multiplied by a factor of decimal five (0.5).

- 6.9 **Attendance at Contracted Capacity Test:** Seller shall give Purchaser reasonable notice of its intentions to conduct a Contracted Capacity Test and Purchaser shall be entitled to attend or send representatives to witness such test.
- 6.10 **Additional Contracted Capacity Tests:** In addition to the Contracted Capacity Tests provided for in Clause 6.8 either Party may at any time and from time to time call for a Contracted Capacity Test and the provision of Clauses 6.8 and 6.9 shall apply thereto, mutatis mutandis.
- 6.11 **Availability Failure:** If within forty eight (48) hours of an Availability Failure, Purchaser calls for a Contracted Capacity Test pursuant to Clause 6.10 and such

Contracted Capacity Test (which shall be carried out immediately after Purchaser calls for such test) demonstrates that the Capacity Available is less than the Contracted Capacity demonstrated by the preceding Contracted Capacity Test then for the period beginning from the Settlement Period within which such Availability Failure occurred and ending when the Available Capacity has been agreed or determined pursuant to the Contracted Capacity Test, the Contracted Capacity for such period shall be equal to the average Availability of the Plant achieved in response to Despatch Instructions for the Settlement Period immediately after the one in which such Availability Failure occurred.

6.12 **Disputes:** Any dispute as to the results of a Contracted Capacity Test shall be referred to an Expert.

# CLAUSE 7: SALE AND PURCHASE OF ELECTRICITY AND FUEL PROCUREMENT

- 7.1 **Payments prior to the Full Commercial Operation Date:** Prior to the Full Commercial Operation Date, Purchaser shall pay to Seller such sums as may be payable in accordance with Clause 4.14.
- 7.2 **Sale and Purchase:** Except as provided for in Clause 7.1, Seller shall sell and Purchaser shall purchase in accordance with this Clause 7 all the Net Electrical Output delivered in accordance with Despatch Instructions.
- 7.3 **Energy Charges:** Purchaser shall pay Seller Energy Charges ascertained in accordance with Part A of Schedule 6 in respect of all Net Electrical Output delivered in accordance with Despatch Instructions.
- 7.4 **Delivery:** Electrical energy sold and purchased under this Agreement shall be delivered by Seller at the Delivery Point.
- 7.5 **Metered Quantities:** The quantities of Net Electrical Output delivered by Purchaser shall be metered and determined in accordance with the provisions of Clause 9.
- Capacity Payments: Purchaser shall in respect of the month in which the Full Commercial Operation Date occurs and for each month thereafter during the Term pay Seller for the Contracted Capacity (with adjustments reflecting Availability), in accordance with Part C of Schedule 6 provided if the Full Commercial Operation Date occurs other than on the first (1<sup>st</sup>) day of the month then in the month in which the Full Commercial Operation Date occurs, the Capacity Payment for that month shall be prorated for the number of days from the Full Commercial Operation Date until the last day of that month.
- 7.7 **Further Provisions:** The further provisions of Schedule 6 shall take effect for the purposes of determining the amounts from time to time payable to Purchaser by way of Energy Charges and Capacity Payments.
- 7.8 **Despatch:** Purchaser intends to despatch the Plant according to economic merit order provided that it shall have no liability under this Agreement or otherwise if it fails to do so. [Amend if dispatch is carried out by an Independent System Operator].

- 7.9 Indirect Taxes and Duties: if any Indirect Taxes and Duties are imposed either Party may, within [●] months of the change occurring, by notice to the other, seek an adjustment to the Energy Charges and/or Capacity Payments which will have the effect of placing Seller in the same financial position as it would have been in had the change not occurred. The Parties shall meet and endeavour to agree the adjustment and if the Parties shall fail within [●] days of a notice under this Clause 7.9 to agree upon such adjustment either Party may refer the matter to an Expert for determination. All other Taxes shall be for Seller's account and shall be borne by and be payable by Seller.
- Practice, (at the Site) a stock of fuel for the day to day operation of the Plant (such that Seller can perform its obligations under this Agreement) and Seller shall, in accordance with Prudent Operating Practice, also maintain a stock of fuel for the Plant (the "Security Stock") which stock shall not be less than the total amount of fuel required to operate the Plant at full load capacity for a continuous period of [●] days. If, in order to comply with a Despatch Instruction, Seller has to use any part of the Security Stock it shall replace any such part of the Security Stock as it shall have used as soon as reasonably practicable and in any event not later than [●] days after use. Seller shall provide to Purchaser such evidence of quantities of Security Stock delivered and used as Purchaser may reasonably request.

[Modify to provide for water storage level requirements for hydro and well replacement programmes for geothermal].

# **CLAUSE 8: INVOICING AND PAYMENT**

- 8.1 **Invoices:** Seller shall prepare and issue to Purchaser an invoice in respect of the charges due from Purchaser after the end of each month of the Term (beginning with the month in which the First Commissioning Date occurs).
- 8.2 **Content of Invoice:** Each invoice prepared by Seller shall contain the information specified in Part C of Schedule 6. If such invoice does not contain the information so specified or is not in the view of Purchaser, accompanied by the supporting documentation required thereby, Purchaser shall be entitled, no later than five (5) days after receipt, to notify Seller that such invoice does not materially conform to Part C of Schedule 6 or it is not accompanied by all the supporting documentation and in such event non-payment by Purchaser of any amount in the invoice shall be deemed to be the subject of a bona fida dispute for the purposes of Clause 8.5 until such time as Seller issues an invoice which contains the information specified in Part C of Schedule 6 and is, in the view of Purchaser, accompanied by the supporting documentation required thereby. Any dispute under this Clause 8.2 shall be referred to an Expert for determination.
- 8.3 **Payment due date:** Energy Charges, Capacity Payments and any other amounts, payable by Purchaser hereunder shall be due and payable on the thirtieth (30<sup>th</sup>) day

- after the date of delivery of the invoice except where such thirtieth (30<sup>th</sup>) day is not a business day in which event the due date shall be the next following business day.
- 8.4 **Late payment interest:** Any amount properly due, from Purchaser to Seller, or from Seller to Purchaser, under this Agreement and remaining unpaid after the due date for payment shall bear interest at the Default Rate from and including the date when the amount in question was due until but excluding the date when it is received by Seller, or Purchaser (as the case may be) accruing from day to day and compounded quarterly.
- 8.5 Disputed payments: If part of any sum shown on an invoice is disputed in good faith by Purchaser then payment of any undisputed part shall not be withheld and shall be paid to Seller when due. Purchaser shall be entitled to withhold payment of any disputed sums and interest at the Non-Default Rate shall be payable on any disputed sum subsequently agreed or determined by an Expert to be due, from and including the date when the sum in question was due until, but excluding, the date when it is received by Seller accruing from day to day and compounded quarterly.
- 8.6 **Taxes, etc:** All payments under this Agreement shall be made free and clear from, and without set-off, deduction or withholding on account of, any form of Taxes save to the extent that Purchaser is duly appointed by the Commissioner for Income Tax as agent for Seller under section 96 of the Income Tax Act and makes payments to the Commissioner of Income Tax as agent for Seller pursuant to sub-section 96(3).
- 8.7 **Seller's account:** Payment of any sum payable under this Clause shall be made to the account of Seller at such bank as may be notified by Seller to Purchaser from time to time provided that if such bank is located outside the Republic of Kenya, Seller shall reimburse Purchaser for all banking charges payable by Purchaser in effecting such payment.
- 8.8 **Currency for payments:** Unless otherwise agreed by the Parties in writing, all amounts falling due under this Agreement shall be payable in US dollars and Seller shall not be obliged to accept payment in any other currency.

#### **CLAUSE 9: METERING**

- 9.1 **Obligations:** Purchaser shall, in accordance with the Prudent Operating Practice, install and maintain the Main Metering Equipment in accordance with Schedule 2 and shall operate the same in accordance with the procedures contained in Part B of Schedule 5. Purchaser shall in accordance with Prudent Operating Practice supply and install the Back-Up Metering Equipment and Purchaser shall test, Commission, maintain and operate the same.
- 9.2 **Defective Metering Equipment:** Where it is agreed or determined that any part of the Metering System is defective (including operating outside the relevant limits of accuracy in Schedule 2), then such part shall be repaired, adjusted or replaced at the cost of the Party responsible for maintaining the same.

- 9.3 **Meter Sealing:** Purchaser shall ensure that the Metering System shall comply with the specifications set out in Schedule 2 and shall be jointly sealed. Such seals shall be broken only when both Seller and Purchaser personnel are present. Seller shall be given at least twenty-four (24) hours advance notice of the breaking of seals on any part of the Metering System provided however that no such notice will be necessary when the breaking of a seal is necessitated by the occurrence of an Emergency.
- 9.4 **Meter Tampering:** Subject to Clause 9.3, Purchaser and Seller undertake not to tamper or otherwise interfere with any part of the Metering System in any way and shall ensure that the Metering System is not tampered with by any other person. Where it is established that the Main Metering Equipment has been tampered or interfered with, or is defective:
  - a) the quantity measured or recorded shall be that measured or recorded by the Back-Up Metering Equipment or, failing that, any secondary metering; and
  - b) if there is no Back-Up Metering Equipment or secondary metering, or it is also established to have been tampered with, interfered with or is defective, the quantity shall be determined by agreement between the Parties, or failing such agreement, as determined by an Expert.
- **9.5 Metering Procedures:** The Parties shall adopt and implement the procedures and arrangements set out in Part B of Schedule 5 for reading, testing, adjusting and recalibrating the Metering System.
- 9.6 **Disputes:** Any Dispute arising under this Clause 9, Schedule 2 or Part B of Schedule 5 shall be referred to an Expert.

#### **CLAUSE 10: INSURANCE**

#### 10.1 Seller shall:

- a) at its sole cost and expense, obtain and maintain, in full force and effect, for the periods specified in Schedule 9 the insurance policies set forth in Schedule 9, in the amounts stipulated, with reputable insurance companies approved by Purchaser (such approval not to be unreasonably withheld) and such other insurance as would be obtained by a prudent owner or operator of an international electricity generating business, [financed on a project finance basis], of a size and with the characteristics comparable to the Plant, provided that Seller shall not be in breach of its obligations if and to the extent that any particular insurance is unavailable to it on reasonable commercial terms with reference to terms generally offered in the international insurance market for non-utility electricity generators for reasons other than any negligence or default by, or condition (financial or otherwise) of Seller;
- b) provide to Purchaser copies of all policies effected by it and evidence that the premiums payable thereunder have been paid;
- c) provide access to Purchaser or its representatives to its offices during office hours to inspect the original policies;

- d) apply the proceeds of claims under such policies, relating to damage to the Plant, in repairing and restoring the Plant; and
- e) obtain such waivers of rights of subrogation against Purchaser in a form and manner satisfactory to Purchaser.

#### CLAUSE 11: UNDERTAKINGS AND WARRANTIES OF THE PARTIES

#### 11.1 **Undertakings of Seller:** Seller undertakes:

- a) to comply with all applicable Legal Requirements;
- b) to apply for and use reasonable endeavours to obtain, in each case prior to the date that such Authorisations are required by Seller to ensure that Seller is not to be in breach of any Legal Requirement in performing this Agreement, and to keep in force all Authorisations required to be in Seller's name for the operation of the Plant and any other of its obligations under this Agreement.
- c) to indemnify Purchaser against all reasonable costs incurred by Purchaser in the discharge of its obligations under Clause 11.3(b);
- d) to secure that the Plant is constructed in accordance with the Functional Specification and is operated and maintained in accordance with Prudent Operating Practice, all Insurances, the all Legal Requirements and the terms of this Agreement (including without limitation the Operating and Despatch Procedures in Part C of Schedule 5); and
- e) to operate and maintain the individual Units and Plant in such a manner so as not to have an adverse effect on the Purchaser System.

#### 11.2 **Representations and Warranties of Seller:** Seller represents and warrants that:

- a) Seller is a limited liability company duly organised and validly existing under the laws of Kenya and has all the requisite legal power and authority to execute this Agreement and to carry out the terms and conditions and provisions thereof;
- b) this Agreement constitutes valid, legal and binding obligations of Seller, enforceable in accordance with the terms hereof except as the enforceability may be limited by applicable laws affecting creditors' rights generally;
- c) there are no actions, suits or proceedings pending or, to Seller's knowledge, threatened against or affecting Seller before any court or administrative body or arbitral tribunal that might materially adversely affect the ability of Seller to meet and carry out its obligations under this Agreement; and
- d) the execution, delivery and performance by Seller of this Agreement have been duly authorised by all requisite corporate action and will not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a party or by which it or its property may be bound.

# 11.3 **Undertakings of Purchaser:** Purchaser undertakes:

- a) to comply with all applicable Legal Requirements and keep in force all its Authorisations;
- b) to assist Seller in obtaining on a timely basis and maintaining in force (as required under Clause 2, and the Construction Programme), and to assist Seller in maintaining until the first anniversary of the Full Commercial Operation Date (to the extent that Purchaser can so do), all Authorisations required by Seller;
- c) to the extent there is a Change in Law affecting Seller, to use reasonable endeavors to assist Seller in obtaining all Authorisations necessary for the construction, continued operation or maintenance of the Plant.
- d) to own, [design, construct] operate and maintain the Purchaser Connection facilities substantially in accordance with the Operating and Despatch Procedures in Part C of Schedule 5 and with all Legal Requirements;
- e) to operate and maintain the Purchaser's System in such a manner so as not to knowingly have a materially adverse effect on the Plant; and
- f) to exercise its right hereunder to Despatch the Plant in accordance with the Operating and Despatch Procedures and the Functional Specification.

# 11.4 **Representations and Warranties of Purchaser:** Purchaser represents and warrants that:

- Purchaser is a limited liability company duly organised and validly existing under the laws of Kenya and it has all requisite legal power and authority to execute this Agreement and to carry out the terms, conditions and provisions hereof;
- b) all action required to authorise the execution, delivery and performance by Purchaser of this Agreement and the transactions contemplated hereby have been taken and are in full force and effect;
- c) this Agreement constitutes valid, legal and binding obligations of Purchaser, enforceable in accordance with the terms hereof except as the enforceability may be limited by applicable laws affecting creditors' rights generally;
- d) there are no actions, suits or proceedings pending or, to Purchaser's knowledge, threatened, against or affecting Purchaser before any court or administrative body or arbitral tribunal which might materially adversely affect the ability of Purchaser to meet and carry out its obligations under this Agreement; and
- e) the execution, delivery and performance by Purchaser of this Agreement have been duly authorised by all requisite corporate action, and will not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a party or by which it or its property may be bound.

#### **CLAUSE 12: FORCE MAJEURE**

- 12.1 **Events of Force Majeure**: For the purposes of this Agreement "Force Majeure" means subject to Clause 12.2 any event or circumstance which materially and adversely effects the performance of either Party of its obligations or enjoyment of its rights under this Agreement and is not within the reasonable control (directly or indirectly) of the Party affected, and such event or circumstance or its effects cannot be prevented, avoided or removed by such Party acting in accordance with Prudent Operating Practice. "Force Majeure" shall include each of the following events and circumstances to the extent that they satisfy the foregoing requirements:
  - a) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil commotion, act of terrorism, or sabotage provided that any such event occurs within or directly involves the Republic of Kenya;
  - b) an act of God including but not limited to lightning, fire, earthquakes, volcanic activity, floods, storms, cyclones, typhoons, or tornadoes;
  - c) epidemics or plagues;
  - d) explosions, radioactive or chemical contamination;
  - e) labour disputes including strikes, works to rule or go-slows or lockouts that extent beyond the Plant or are widespread or nationwide; and
  - f) Change in Law.
- 12.2 **Exclusions from Force Majeure:** The following events or circumstances shall not constitute Force Majeure:
  - a) late delivery to Seller of machinery, equipment, materials, spare parts, labour (other than labour disputes), or consumables;
  - b) a delay in the performance of any contractor;
  - c) normal wear and tear of, or random flaws in, materials and equipment or breakdowns of equipment;
  - d) unavailability of funds; and
  - e) unavailability of fuel.
- 12.3 **Effect of Force Majeure:** If a Party is prevented from or delayed in performing an obligation hereunder by reason of Force Majeure the affected Party shall:
  - a) be relieved from the consequences of its failure to perform that obligation;
  - b) promptly notify the other Party of the occurrence of the event and the cessation of the event and, where relevant, the cessation of the effect of such event of Force Majeure on the enjoyment of the affected Party of its rights or the performance by it of its obligations under this Agreement; and
  - c) use all reasonable endeavors to overcome the consequences of the event.

- 12.4 **Extension of Long Stop Dates:** Where Seller is as a result of an event of Force Majeure delayed in or prevented from performing any of its obligations before the Long Stop Dates (or any of them) the Long Stop Dates which have not then occurred shall be revised on a day for day basis to new dates which reflect the period of delay resulting from such Force Majeure provided that no Long Stop Dates may be delayed by more than [●] days in aggregate or such longer period as may be agreed pursuant to Clause 12.5.
- 12.5 **Force Majeure Termination:** If an event of Force Majeure continues beyond a period of [●] days, the Parties shall meet in good faith with a view to determining mutually acceptable terms for continuing this Agreement notwithstanding the effects of the event of Force Majeure provided that if at the end of [●] days, no solution is found, either Party shall be entitled to terminate this Agreement by giving notice of not less than [●] days to the other Party.
- 12.6 **Payments During Force Majeure:** On the occurrence of an event of Force Majeure affecting Seller, then during the event of Force Majeure, Purchaser shall pay to Seller the Energy Charges for the Net Electrical Output Delivered in accordance with Despatch Instructions.
- 12.7 **Mitigation:** The Party affected by an event or circumstances of Force Majeure shall use its reasonable efforts to mitigate the effects of any event of Force Majeure affecting the enjoyment by such Party of its rights or the performance by it of its obligations under this Agreement, and the Parties shall co-operate to develop and implement a plan to remedy the relevant event or circumstance and/or reasonable alternative measures to remove the event or circumstances of Force Majeure.

# **CLAUSE 13: TERMINATION AND DEFAULT**

- 13.1 **Seller's Default:** For the purposes of this Agreement a Default by Seller shall be:
  - a) any breach or default by Seller of its obligations under the [Development Agreement or any other Project Document];
  - b) the failure by Seller to install all the plant and equipment specified in the Functional Specification;
  - c) the failure by Seller to achieve the Full Commercial Operation Date by the Long Stop Full Commercial Operation Date;
  - d) the wilful and unexcused failure by Seller to operate the Plant (including the abandonment of the Plant) in accordance with the provisions of this Agreement;
  - e) the breach by Seller of any of its other material obligations under this Agreement;
  - f) the Declared Capacity being less then [●] per cent ([●] %) of the Contracted Capacity at the date of this Agreement for a continuous period of [●] days;
  - g) the occurrence of a Bankruptcy Event affecting Seller; and

- h) any statement, representation or warranty made by Seller herein or in any Certificate or other document delivered or made under or pursuant to their Agreement proving to have been incorrect, in any material respect, when made or when deemed to have been made.
- 13.2 **Purchaser's Default:** For the purposes of this Agreement a Default by Purchaser shall be:
  - a) subject to the provisions of Clause 13.4, the breach by Purchaser of any of its material obligations under this Agreement other than the failure to make any payment under this Agreement when due and payable;
  - b) the occurrence of a Bankruptcy Event affecting Purchaser; and
  - c) any failure to pay any sum of money due and owing for thirty (30) business days or more from the date when such sum was first due and demanded where such sum is not subject to a bona fide dispute.
- 13.3 **Defaulting Party, etc:** For the purposes of this Agreement Seller is the defaulting Party in relation to the events of Default specified in Clause 13.1 and Purchaser is the defaulting Party in relation to the events of Default specified in Clause 13.2, and (in each case) the other Party is the non-defaulting Party.
- 13.4 **Default Notice:** Upon the occurrence of a Default, the non-defaulting Party may give notice to the defaulting Party of the occurrence of such Default. If:
  - a) the Default is not capable of remedy; or
  - b) the Default is capable of remedy and the defaulting Party does not, where such Default is capable of remedy within a [ •] day period, remedy the Default; or
  - c) the Default is capable of remedy but not within a [●] day period, the defaulting Party does not furnish to the non-defaulting Party a detailed programme ("Remedial Programme") for the remedy as promptly as is practicable of the Default and the defaulting Party fails to remedy the Default in accordance with the Remedial Programme;

then the non-defaulting Party may give notice to the defaulting Party that such Default is an "Event of Default". Any Remedial Programme shall be agreed between the Parties (such agreement not to be unreasonably withheld or delayed) and in the event of a Dispute (including any Dispute in relation to the Remedial Programme) may be referred to an Expert.

- 13.5 **Termination:** Upon the occurrence of an Event of Default the non-defaulting Party may upon not less than [●] days notice to the defaulting Party terminate this Agreement.
- 13.6 **Survival of Rights:** The expiry or termination of this Agreement shall not affect any rights or obligations which may have accrued prior to such expiry or termination and shall not affect obligations of each of the Parties under this Agreement or, any other

- licence, agreement or document between the parties which are expressed to continue after such expiry or termination.
- 13.7 **Other Remedies:** Notwithstanding the other provisions of this Clause either Party may pursue such other remedies as may be available to it under any applicable law if this Agreement is terminated in accordance with this clause, or clause 13.5.

#### **CLAUSE 14: INDEMNIFICATION AND LIABILITY**

- 14.1 **Liability:** Subject to Clauses 14.2, 14.3,14.4 and 14.5, each Party shall be liable to the other Party for the loss directly and foreseeably resulting from any breach by the first Party of its obligations hereunder.
- 14.2 **Own loss:** Notwithstanding Clause 14.1, each Party shall be responsible for, and shall indemnify the other Party against claims in respect of, loss of or damage to persons or property incurred by the first Party (including without limitation reasonable legal fees) and its contractors, employees and agents resulting from any negligent act or of the other Party in the performance of or otherwise in connection with this Agreement. The indemnity provided to each Party under this clause shall not extend to:
  - any loss of or damage to persons or property to the extent that it was caused by any act or omission of that Party, or the failure of that Party to take reasonable steps in mitigation; or
  - b) any loss of or damage to persons or property to the extent that that Party is compensated under the terms of the Development Agreement or any relevant policy of insurance.
- 14.3 **Excluded liability:** Except as provided in Clause 15.1, neither Party shall have any liability to the other for any loss or damage or other liability, whether arising in contract, tort or otherwise, in connection with this Agreement.
- 14.4 **Consequential Losses:** In no case shall either Party be liable to the other for any indirect or consequential losses or damages.
- 14.5 **Limitation of Liability:** Notwithstanding any other term or provision of this Agreement, the aggregate liability which each Party shall have for all claims made under this Agreement shall not exceed [●].
- 14.6 **Assertion of Claims:** Neither Party shall be entitled to assert any claim for indemnification until such time as all claims of such Party for indemnification under this Agreement exceed the equivalent of US\$[●] (converted, in each case, as of the date any would-be claim becomes certain), in the aggregate, at which time all claims of such party for indemnification under this Agreement may be asserted.
- 14.7 **Defence of Claims:** Each Party indemnified herein shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such person in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder and the reasonable cost and expenses thereof shall be subject to the indemnification

obligation of the Party indemnified hereunder. Provided that if the Party indemnifying acknowledges in writing its obligation to indemnify the Party indemnified in respect of loss to the full extent provided the Party indemnifying shall be entitled, as its option, to assume and control the defence of such claim, action, suit or proceeding liabilities, payments and obligations at its expense and through counsel of its choice if it gives prompt notice of its intention to do so to the Party indemnified and reimburses the Party indemnified for the reasonable cost and expenses incurred by the Party indemnified prior to the assumption by the Party indemnifying of such defense.

- 14.8 The Party indemnified which exercises its rights under Clause 14.7 shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Party indemnifying (which consent shall not be unreasonably withheld or delayed).
- 14.9 Any Party indemnified which exercises its rights under Clause 14.7 shall have the right to employ its own counsel and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of such Party indemnified, when and as incurred, unless:
  - (a) the employment of counsel by such Party indemnified has been authorised in writing by the Party indemnifying;
  - (b) the Party indemnified shall have reasonably concluded that there may be a conflict of interest between the Party indemnifying and the Party indemnified in the conduct of the defense of such action;
  - (c) the Party indemnifying shall not in fact have employed independent counsel reasonably satisfactory to the Party indemnified to assume the defence of such action and shall have been so notified by the Party indemnified; or
  - (d) the Party indemnified shall have reasonably concluded and specifically notified the Party indemnifying either that there maybe specific defences available to it which are different from or additional to those available to the Party indemnifying or that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement.

Provided that if paragraphs (ii), (iii) or (iv) shall be applicable, counsel for the Party indemnified shall have the right to direct the defense of such claim, action, suit or proceeding on behalf of the Party indemnified and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

#### **CLAUSE 15: CONFIDENTIALITY**

15.1 **Confidential Information:** Each Party agrees that it shall, and shall ensure that its employees, officers and directors shall, hold in confidence this Agreement and all information, documentation, data and know-how disclosed to it by the other Party and designated in writing as 'confidential' both before and after the date of this Agreement ("Confidential Information"), and shall not disclose to any third party or use Confidential Information other than in connection with the performance of this

Agreement or any part thereof without the other Party's prior written approval, provided that:

- a) this Clause shall not apply to Confidential Information which is in the public domain other than by reason of a breach of this Clause 15.1, or was already in the rightful possession of the recipient Party, or was obtained by the recipient Party in good faith from a third party entitled to disclose it;
- b) a Party may disclose Confidential Information in accordance with any Legal Requirement to do so, or to consultants and contractors (subject to obtaining undertakings of confidentiality except where professional duties already impose an obligation of confidentiality) whose duties reasonably require such disclosure; and
- c) a Party may disclose Confidential Information, subject to obtaining an undertaking to keep the same confidential; to:
  - i. any prospective assignee of the Party and its advisers;
  - ii. to any bank or financial institution or investor from whom the Party is seeking finance;
  - iii. to any Expert or Arbitrator under this Agreement.
  - iv. any insurer under a policy of insurance; and
  - v. to any Government Authority for the purpose of acquiring or complying with any necessary Authorisation, provided that such disclosure is in good faith and is necessary to enable such party to perform this Agreement or to protect or enforce its rights under this Agreement or to enable it to comply with any requirement referred to in paragraphs (c)(i) (v) above or to carry on its business.
- 15.2 **Survival:** The provisions of this Clause 15 shall survive the termination or expiry of this Agreement.

# **CLAUSE 16: DISPUTE RESOLUTION**

- 16.1 **Arbitration:** Subject to Clauses 16.2 and 16.3, any dispute or difference of any kind between the Parties in connection with or arising out of this Agreement including the interpretation of this Agreement, its validity and any purported breach or termination (a "Dispute") shall be finally settled by arbitration under the Rules of Conciliation and Arbitration of the International Chamber of Commerce in accordance with the said Rules which Rules are deemed to be incorporated by reference into this Clause 16.1. It is hereby agreed that:
  - a) the seat of the arbitration shall be [London, England];
  - b) there shall be a single arbitrator;
  - c) the language of the arbitration shall be English;
  - d) the award rendered shall apportion the costs of the arbitration;

- e) the award shall be in writing and shall set forth in reasonable detail the facts of the Dispute and the reasons for the tribunal's decision; and
- f) the award in such arbitration shall be final and binding upon the Parties and judgment thereon may be entered in any Court having jurisdiction for its enforcement; and the Parties renounce any right of appeal from the decision of the tribunal insofar as such renunciation can validly be made.

If there is a conflict between this Agreement and the said Rules, this Agreement shall prevail.

- 16.2 **Expert:** Where the Agreement provides that any Dispute or other matter shall be referred to an Expert or the Parties otherwise so agree the following provisions shall apply:
  - a) The Expert shall be an independent person with relevant experience and willing to act, agreed between the Parties, or if not agreed within [●] days of a request in writing by either Party, appointed by the Chairman of the International Chamber of Commerce;
  - Other than in the case of invoices disputed by Purchaser in accordance with Clause 9.6, for a period of [●] days after the appointment of the Expert or such other period as the Parties may agree, each Party may make such written submissions as it wishes to the Expert and shall simultaneously provide a copy to the other Party, and at the end of such [●] day period each Party shall have a period of [●] days to make counter-submissions to the Expert (with a copy to the other Party) in reply to the other Party's written submissions made during the aforementioned [●] day period provided that neither Party shall during such [●] day period make any written counter-submission which purports to reply to, raise or refer to, any new matters not raised or referred to in any submission made during the aforementioned [●] day period;
  - c) At the end of the [●] day period referred to in paragraph (b) above, and no later than [] days thereafter, either Party may, with the consent of the Expert and at a time and place decided by the Expert, make an oral presentation to the Expert in the presence of the other Party commenting on or explaining matters previously submitted to the Expert in writing;
  - d) The Expert shall render his determination in writing within [●] days of the completion of the oral presentation given in accordance with Clause 16.2(c) and give reasonable details of the reasons for his determination;
  - e) The decision of the Expert shall be final and binding on the Parties save in the event of fraud or manifest error or mistake;
  - f) The Expert shall act as an expert and not as an arbitrator;
  - g) The costs of the Expert shall be borne as determined by the Expert or, in default of such determination, equally by the Parties.

- 16.3 The parties may alter the terms of clause 16 by agreement in writing.
- 16.4 **Exclusivity:** Neither Party shall have any right to commence or maintain any legal proceeding concerning a Dispute until the Dispute has been resolved in accordance with Clause 16.1 or 16.2, and then only to enforce or execute the award under such procedure.
- 16.5 **Confidentiality:** The Parties shall each secure that all Experts and arbitrators shall agree to be bound by the provisions of Clause 15 of this Agreement as a condition of appointment.
- 16.6 **Continuance of Obligations:** The Parties shall continue to perform their respective obligations under this Agreement during any Expert or arbitration proceeding, provided that the right to terminate pursuant to Clause 13 on grounds different to those referred to the Expert or arbitrator shall not be restricted by this Clause 16.6.

#### **CLAUSE 17: MAINTENANCE OF OPERATING RECORDS**

- (a) Each Party shall keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this Agreement. Among other records and data required hereby or elsewhere in this Agreement, Seller shall maintain an accurate and up-to-date operating log, in a format reasonably acceptable to Purchaser, at the Plant with records of:
  - i. real and reactive power production for each clock hour and [●] bus voltage at all times;
  - ii. changes in operating status, scheduled outages, forced outages and partial forced outages, noting times and causes;
  - iii. any unusual conditions found during inspections; and

all such records and data shall be maintained for a minimum of [•] months after the creation of such records or data provided that each Party shall not dispose of or destroy any such records or data after such [•] month period unless the Party desiring to dispose of or destroy such records or data gives [•] days prior notice to the other Party, generally describing the records or data to be destroyed or disposed of, and the Party receiving such notice does not object thereto in writing within [•] days. If a written objection is received within such [•] day period, the objecting Party shall have a period of [•] days after the date of such written objection within which to inspect and copy the records or data proposed to be disposed of or destroyed, which records and data shall be made available within such [•] day period by Purchaser or Seller as the case may be, at such Party's offices in [•]. After the expiration of such [•] day period, the Party desiring to dispose of or destroy such records or data shall be permitted to do so.

(b) Either Party shall have the right, upon [ ●] days prior notice to the other Party, to examine the records and date of the other Party relating to this Agreement or the operation and Despatch of the Plant at any time during normal office hours

during the period such records and data are required hereunder to be maintained.

# **CLAUSE 18: OPERATIONAL/MAINTENANCE REQUIREMENTS**

18.1 [Include if applicable for BOT etc.]

# **CLAUSE 19: MISCELLANEOUS**

## 19.1 **Assignment**

- (a) Any assignment by a Party of all (but not part only) of its rights and obligations under this Agreement is permitted but only with the prior written consent of the other Party, provided that:
  - such consent shall not be unreasonably withheld or delayed if the Party wishing to assign can satisfy the other Party of such proposed assignee's financial, technical and legal status and ability to observe and perform this Agreement; and
  - ii. the Party wishing to assign shall have given notice to that effect to the other Party and such notice shall have given sufficient information to show the status and ability of the proposed assignee to carry out the terms of this Agreement.
- (b) No assignment pursuant to Clause 19.1(a) shall be effective unless and until the assigning Party has:
  - i procured the proposed assignee to covenant directly with the other Party (in a form reasonably satisfactory to such Party) to observe and perform all the terms and conditions of this Agreement and if reasonably required by the other Party arrange for a guarantee or other equivalent security in favour of such other Party in respect of all obligations or liabilities to be assigned; and
  - ii provided to the other Party a certified copy of the assignment (excluding the consideration paid or payable for such assignment);
  - iii obtained written consent from ERB to make the assignment.
- 19.2. **Sub-Contractors:** Seller shall be entitled to engage third parties as contractors for the performance of its obligations hereunder provided that no such engagement shall relieve Seller of its obligations under this Agreement.
- 19.3 **Variation:** This Agreement may not be varied nor any of its provisions waived except by an agreement in writing signed by the Parties.
- 19.4 **Waivers of Rights:** No delay or forbearance by either Party in exercising any right, power, privilege or remedy under this Agreement shall operate to impair or be construed as a waiver of such right, power, privilege or remedy.
- 19.5 **Notices:** Except for communications in accordance with the Operating and Despatch Procedures, any notice or other communication to be given by one Party to the other

under or in connection with this Agreement shall be given in writing and may be delivered or sent by prepaid mail or facsimile to the recipient at the address, and marked for the attention of the person, specified in Schedule 8 or such other address or person from time to time designated by notice to the other in accordance with this Clause; and any such notice or communication shall be deemed to be received upon delivery, or five (5) days after posting, or when sent by facsimile upon confirmation of uninterrupted transmission by a transmission report provided that any notice given by facsimile shall be confirmed by letter sent by hand or post, but without prejudice to the original facsimile notice if received in accordance with this Clause 19.5.

- 19.6 **Effect of Illegality, etc:** If for any reason whatsoever any provision of this Agreement is or becomes or is declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, then in any such case the Parties will negotiate in good faith with a view to agreeing one or more provisions to be substituted therefor which are not invalid, illegal or unenforceable and produce as nearly as is practicable in all the circumstances a situation where the commercial position of the parties is as close as possible to the situation provided for under this Agreement prior to the invalidity, illegality or unenforceability occurring.
- 19.7 **Entire Agreement:** This Agreement contains and expressly refers to the entire agreement between the Parties with respect to its subject matter and expressly excludes any warranty, condition or other undertaking implied at law or by custom and supersedes all previous agreements and understandings between the Parties with respect to its subject matter and each of the Parties acknowledges and confirms that it does not enter into this Agreement in reliance on any representation, warranty or other undertaking by the other Party not fully reflected in the terms of this Agreement.
- 19.8 **Counterparts:** This Agreement may be executed in two or more counterparts and by each Party on a separate counterpart, each of which when executed and delivered shall constitute an original, but both counterparts shall together constitute but one and the same instrument.

## **CLAUSE 20: GOVERNING LAW**

20.1 This Agreement shall be governed by and construed in all respects in accordance with the laws of Kenya.

AS WITNESS the hands of the duly authorised representatives of the Parties the day and year first above written.

Signed and sealed	,
for and on behalf of	,
[Purchaser]	`
Director	
Secretary	

Signed and sealed for and on behalf of	
[Seller]	,
Director	
Secretary	

#### **SCHEDULE 1**

#### FACILITIES TO BE INSTALLED BY THE SELLER

#### Part A:

# **Functional Specification of the Plant**

#### 1. INTRODUCTION

The Functional Specification agreed between the Parties will fully describe the Plant to be installed by Seller.

# 1.1 Role of the Functional Specification

The technical requirements of the Plant are presented in this specification which defines the general functional requirements of Purchaser including specifications for some of the types of equipment, systems, process and/or design philosophies to be adopted. It is not the intention of this Functional Specification to provide a detailed plant specification but to provide the outline performance requirements with Seller being responsible for the provision of a complete working plant which meets these requirements, and which is fully compliant with all Legal Requirements.

It is fundamental that where there is any conflict between any specified general or functional requirements and any particular specification as to how any requirement is achieved then the general or functional requirements shall prevail. It shall be the responsibility of Seller to identify any such conflicts and report them to Purchaser. Seller shall carry out all necessary work, whether of design, construction or otherwise, arising as a result of such conflict.

No defect, error or omission in this document in relation to any design, data, specification or method shall relieve Seller from its obligations under this Agreement.

# 1.2 Project Description



# 1.3 Functional Specification

The specification (the "Functional Specification") describes the general and functional requirements for the design, construction, commissioning, testing and putting to work of the Plant and its ancillary equipment and systems to be provided under the Agreement.

The permanent works at the Plant shall include those items listed below together with all other plant, equipment, building, civil and other works as necessary to provide a complete station in all respects whether listed below or not:



# 1.4 General Information

All equipment installed on the Site shall be new plant with 15,000 fleet operating hours of effectively interchangeable units,, with a high level of reliability. The Purchaser may

waive the requirement that the equipment is new at its discretion where the requirement is not practical in the circumstances.

The design philosophy for the Plant shall be that no failure of a single item, other than that of the generator unit itself, shall result in the loss of a generating unit.

[No plant shall be dependent upon the effects of air conditioning or ventilation equipment for its satisfactory operation. Failure of such equipment shall not adversely affect the operation of any plant. Site ratings of Plant shall not be dependent upon the effects of air conditioning or ventilation equipment.]

Termination points for the Plant are given in the terminal points schedule in Attachment A of this Schedule 1.

It shall be the responsibility of Seller to liaise with Purchaser to ensure that there is no disruption to the existing supplies during the construction phase.

#### 1.5 Site Ambient Conditions/Climate

The following data is provided for information only. It shall be the responsibility of Seller to verify all data.

The climate at both sites is tropical with typical conditions as follows:-

[ •]

# 1.6 Generally Applicable Codes and Standards

The Plant shall comply with the requirements of all Legal Requirements including but not limited to:

Health and safety in employment;

Codes of practice for the design and safety, operation, maintenance and servicing of pressure vessels;

Noise;

*Electricity regulations/codes of practice;* 

Public works:

*Fire protection;* 

Environmental protection.

Where appropriate legislation is not available, the latest version of national or international standards will define the minimum requirements. The mixing of various national and international standards shall only be permitted with the prior approval of Purchaser. This Functional Specification is based on the use of one set of standards for each discipline:

Civil, structural, and building Works – Kenyan Standards with supplementary requirements for seismic design as given in Kenyan Standard;

*Mechanical Works – ASME/ANSI, API, ASHRAE, ISO, EN or DIN;* 

*Electrical Control and Instrument – IEC, IEEE;* 

*Quality Systems – ISO;* 

Deviations from the referenced standards or substitution by equivalent ones shall be subject to the approval of Purchaser.

[The scope of the majority of the referenced standards is limited to the supply of equipment. To define a contractual basis for the operation of the Plant Seller shall include in its bid the proposed operation and maintenance philosophy including a list of operational and maintenance procedures].

#### 1.7 Environmental Aspects

All equipment shall be designed and constructed to minimise the environmental impact. Seller shall give consideration to visual impact, wildlife and temporary disturbance during construction, maintenance and operation.

The project shall comply with the World Bank Environmental Guidelines current at the Effective Date.

The Seller shall obtain and hold all licenses relating to environmental impact. The responsibility for obtaining, holding and complying with the terms of any such licenses will rest with the Seller only.

#### (a) Exhaust Emissions

Exhaust emissions shall not exceed the following or those in the World Bank Guidelines as defined above whichever is the more stringent:

[•]

(b) Liquid and Solid Wastes

[•]

(c) Land Disturbance

[•]

(d) Visual aspects

[•]

(e) Noise

[ •]

(f) Discharges to surface and ground waters

[•]

(g) Construction dust

[•]

(h) Nuisance

[•]

#### 1.8 Quality Assurance Requirements

#### (a) Quality System

Seller shall have a certified Quality System that meets the requirements of the ISO 9001 series of standard or equivalent.

Prior to Commissioning a plan containing the applicable procedures, design, verification, plans and inspection test plans shall be developed. Purchaser reserves the right to examine any procedures referred to in the plan and to audit Seller against the requirements of the plan at any time.

Seller shall provide details of a programme to ensure that the Plant operates to the standards required by this Functional Specification, which programme shall include details of measures to be taken to monitor adherence to such standards.

(b) Three (3) copies of all appropriate quality records as required by applicable codes and standards shall be submitted to Purchaser for review prior to or concurrent with the shipment of all materials and equipment required for the Project

#### 1.9 **Inspection and Testing**

The Plant shall undergo inspection and testing during manufacture, erection and on completion for verification that the components satisfy all the requirements as specified. All Plant inspection and testing shall be conducted in accordance with the applicable codes and standards. Seller shall consider the provisions specified as minimum requirements and also use its own experience in determining requirements for additional inspection and testing that it considers necessary.

At the completion of erection and prior to putting the Plant into commercial service a thirty (30) day reliability performance test shall be carried out by Seller.

#### 2. PLANT

#### 2.1 General Requirements

The design and construction of the Plant shall meet the performance requirements set out herein. Adequate design margins shall be included to allow for normal deterioration of plant performance between overhauls. All equipment used shall be new plant of with 15,000 fleets operating hours of effectively interchangeable units suitable for operation under the environmental conditions found at the site. The plant and all components shall be designed for a design life of [twenty-five (25) years]. The Purchaser may waive the requirement that the equipment is new at its discretion where the requirement is not practical in the circumstances.

High availability shall be achieved by the use of standby equipment (redundancy) and design measures that give extended periods of operation between planned maintenance shut-downs.

2.2 Mechanical Equip
----------------------

**2.2.1 Engines** 

[•]

2.2.2 Rotating Equipment

[•]

2.2.3 Pressure Vessels and Piping

[ •]

2.2.4 Heat Exchangers

[ •]

2.2.5 Storage Tanks

[ •]

## 2.3 Control, Instrumentation and Electrical Equipment

2.3.1 Outline of Electrical Requirements

[•]

2.3.2 Generators and Associated Control Equipment

[•]

2.3.3 Power Transformers

[•]

2.3.4 Emergency and Maintained Power Supplies

[•]

2.3.5 Earthing and Lightening Protection

[•]

2.3.6 Communications

[ •]

#### 2.3.7 33kV Cable Interconnector

Complete cabling installation including the associated control, protection and instrumentation shall be the responsibility of Seller, who will design, procure and install cables within and between the 33 kV substation at the Plant.

Seller shall provide an installation in accordance with the best modern practice ad complete in every detail for continuous maximum current operation. Cables shall comply with the appropriate IEC standards.

Cable Details

[ •]

## 2.4 Operating Characteristics

## 2.4.1 Station Starts

(a) The notice required by the Plant operator to start-up a single Unit and synchronise to the Purchaser System will vary according to the length of time for which the Unit has been shut down. The length of notice required against various periods of shutdown are:

[•]

2.4.2 Loading Rates

[ • ]

2.4.3 Load Changes

[•]

2.4.4 Load Rejection

[•]

2.4.5 Power Factor

[•]

2.4.6 Voltage Variations

[•]

## ATTACHMENT A TERMINAL POINTS SCHEDULE

Seller shall be responsible for provision of all connections between the Plant and off-site services/facilities at designated terminal points as follows:



In all cases above Seller shall be responsible for making all arrangements with the other party/parties involved in the tie-in to agree on the detailed location and other connection details, the planning of the installation of the connection and the acquisition of all necessary Authorisations.

# PART B PURCHASER CONNECTION FACILITIES



#### **PART C**

#### **SELLER'S CONNECTION FACILITIES**

Seller shall be responsible for provision of all connections between the Plant and off-site services/facilities at designated terminal points as follows:



In all cases above Seller shall be responsible for making all arrangements with the other party/parties involved in the tie-in to agree the detailed location and other connection details, the planning of the installation of the connection and the acquisition of all necessary permits and authorisations.

#### **SCHEDULE 2**

#### **METERING EQUIPMENT**

#### 1. Metering System

- (a) Purchaser shall, at its expense, procure, install, own and maintain the principal metering equipment (the "Main Metering Equipment"). Purchaser shall, at its expense, procure and install the back-up metering equipment ("the Back-Up Metering Equipment") and once Purchaser has installed the Back-Up Metering Equipment Purchaser shall test, Commission, own and maintain it.
- (b) Purchaser shall provide and install a strip chart recorder and shall make a continuous recording of the Net Electrical Output. Such Net Electrical Output shall be recorded on appropriate magnetic media or equivalent, which recording shall be used to compute adjustments to the Capacity Payments as provided by Schedule 6. Upon installation, such strip chart recorder shall constitute a part of the Metering System.
- (c) The metering points to record the active power (MWh) and reactive power (MVARh) exchange between Seller and Purchaser shall be as shown in an appropriate diagram to be provided by Purchaser. The current and voltage transformers will measure current and voltage on the outgoing [●] kV cables at the Delivery Point. Any photographic facilities will be provided by Purchaser as part of the verification process for monthly meter readings.
- (d) The Main Metering Equipment and the Back-Up Metering Equipment shall be to a mutually agreed international standard providing a measured accuracy of [ ●].

#### 2. Installation of Metering System and Protection Schemes

Purchaser shall, at its expense, install the Metering System at a location to be agreed upon by the Parties. Before installing the Metering System, Purchaser will deliver to Seller the protection scheme and the metering plan for the Plant for Seller's comment. Seller will provide written comments on the protection scheme and the metering plan with [●] days of their receipt. Purchaser will consider Seller's comments and may make changes to the protection scheme and the metering plan. Purchaser will deliver the final copies to Seller within a [\*] day period of receiving the Seller's comments. Purchaser will complete the design and commence construction of the Metering System. Such installation shall be

completed not later than  $[\, \bullet \,]$  days prior to the scheduled date to begin initial testing of the Plant. Purchaser shall provide Seller with  $[\, \bullet \,]$  days advance notice of, and Purchaser shall have the right to observe and inspect, the installation of the Metering System. Seller shall be notified not less than  $[\, \bullet \,]$  days prior to, and shall have the right to observe, the installation of the Back-Up Metering Equipment by Purchaser.

## SCHEDULE 3

## **DELIVERY POINT**

The point at which the Net Electrical Output passes from Seller to Purchaser. This will be the point of common coupling to Purchaser's System, and is [●].

## **SCHEDULE 4**

## MAINTENANCE ALLOWANCES OF THE PLANT

[To set out maximum allowances for Seller's maintenance. To be based on the maintenance schedule for the Plant which is to be provided by Seller in accordance with the RFP and agreed prior to the date of this Agreement.]

#### **SCHEDULE 5:**

#### **PROCEDURES**

#### Part A:

#### **Commissioning and Testing Procedures**

#### 1. Tests Prior to Synchronisation of each Unit

Prior to the first synchronisation of each Unit, Seller shall carry out the following tests:



## 2. Tests after Synchronisation of each Unit and Unit Commercial Operations Tests

- (a) After first synchronising each Unit, initial operational testing of each Unit shall be conducted by Seller. Once Seller is satisfied that each Unit is capable of continued reliable operation, Seller shall so notify Purchaser in accordance with Clause 4.6(b) and carry out the following tests (the "Unit Commercial Operations Tests"), which if the Unit satisfies the minimum performance criteria therefor, will result in the Unit having satisfied that test:
  - (i) Capacity Demonstration Test;
  - (ii) automatic voltage regulator drop;
  - (iii) reactive capability;
  - (iv) minimum load capability;
  - (v) response of plant to step load changes;
  - (vi) unit full load rejection tests; and
  - (vii) unit start up and loading rate tests.
- (b) Minimum performance criteria for the Unit Commercial Operations Tests are set out below.

#### (i) Capacity Demonstration Test

During the period of the Capacity Demonstration Test, the capacity of the Unit will be demonstrated in the following manner:

- The Unit shall be in operation at full output with normal auxiliaries load.
- Seller will declare to Purchaser the commencement of the test so that the Purchaser can arrange for the reading of the meter. Purchaser will record the reading of the Metering System.
- The test duration will be that duration stipulated in the Test Code's procedure and at the end of this period Seller will notify Purchaser to record the new reading of the Metering System. The Capacity as determined by such test shall be the difference between the reading

taken at the end of the that duration stipulated in the Test Code's procedure and the reading taken at the beginning of such period, divided by number of hours of the duration stipulated by the Test Code's procedure; provided, that the Capacity shall not be considered to have been established unless the result of such determination is equal to or greater than the minimum criteria for such test set out below.

During Commissioning and the Operating Period the Capacity will be determined by measuring the output at the outgoing busbars of the Unit through the Metering System. Tests will be based on relevant ASME power test codes, IEC standards and ISO test codes, using plant instrumentation and the Metering System. Where plant instrumentation does not meet the quality standards specified in the Test Code alternative instrumentation meeting the quality standards will be used. The procurement of this instrumentation will be the responsibility, and will be at the expense of the Seller. [Test results shall be corrected to the Reference Conditions provided for in the Construction Contract.

The Seller will record all data relevant to the Tests including but not limited to:

- Material, plant, and external variables;
- Ambient conditions;
- Dates, times, names of personnel.

The Seller will provide the Purchaser with all raw test data, the Seller's calculations, and the calculated, corrected, test results.

The Unit will have satisfied this test if it is demonstrated that the Capacity of the Unit is greater than ninety per cent (90%) of the amount shown as the Contracted Capacity at the date of this Agreement divided by the number of Units at the Plant (assuming each unit is similarly sized).

#### (ii) Automatic Voltage Regulator (AVR) Drop

The AVR will be demonstrated to control the generator voltage over the range of  $\pm$  10 percent of rated voltage with a droop characteristic of  $\pm$  0.5 percent.

#### (iii) Reactive Capacity

Tests will demonstrate the capability of the Plant to operate at rated voltage and frequency at power factors and under reactive conditions as follows:

100% output:- 0.95 Leading Power Factor

100% output:- 0.85 Lagging Power Factor

0% output: - MVAR Leading Power Factor (to be agreed with Seller).

0% output:- MVAR Lagging Power Factor (to be agreed with Seller)

#### (iv) Minimum Load Tests

Each Unit shall prove its capability to operate stably at fifty per cent (50%) of the Capacity demonstrated in its Capacity Demonstration Test for a period of one (1) hour with all other Units shut down and all normal auxiliaries in operation.

#### (v) Step Load Change Tests

Each Unit shall undergo a test which demonstrates its capability to change load in steps up to twenty per cent (20%) of rated operating load. At the start of each test the Unit shall be operated at approximately forty per cent (40%) of maximum output for a continuous period of five (5) minutes. The load shall be increased by up to twenty per cent (20%) in one step. The unit shall have passed the test if it immediately responds to the change in load and maintains the increased load for a further five (5) minutes.

#### (vi) Full Load Rejection

Each Unit shall undergo a test to demonstrate that it will continue to operate safely following sudden desynchronisation and be resynchronised within a period of one (1) hour. Immediately prior to the desynchronisation the Unit shall have been operating at maximum rated output.

### (vii) Start Up and Loading Rate Tests

Each Unit shall undergo a test which demonstrates its capability to perform a Cold Start and increase load at the minimum rates called for in the Functional Specification.

#### 3. Plant Commercial Operations Test

- (a) Following satisfactory completion of the Unit Commercial Operations Tests for all Units, the Plant Commercial Operations Tests shall be carried out. Seller shall notify Purchaser of its intention to carry out such tests in accordance with Clause 4.6(b) which, if the Plant satisfies the minimum performance criteria thereof, will result in the Plant having satisfied that test. These tests are:
  - (i) Contracted Capacity Test;
  - (ii) Reliability Run Test;
  - (iii) Unit Trip Test;
  - (iv) Environmental Performance Tests; and
  - (v) Black Start Test.
- (b) The minimum performance criteria for the Plant Commercial Operations are:

#### (i) Reliability Run and Contracted Capacity

Upon completion of the Reliability Run Test prerequisites as included below Seller shall declare to Purchaser the commencement of the Reliability Run Test. During the period of the Reliability Run Test, the Contracted Capacity of the Plant will be determined in the following manner:

- The Plant shall be in operation at full output with normal auxiliaries load;
- Seller will declare to Purchaser the commencement of the test and purchaser will record the reading of the Metering System.
- The test duration will be that duration stipulated in the Test Code's procedure hours and at the end of this period Seller will notify purchaser to record the new reading of the Metering System. The Contracted Capacity as determined by such test shall be the difference between the reading taken at the end of the that duration stipulated in the Test Code's procedure hour period and the reading taken at the beginning of such period, divided by number of hours of the duration stipulated by the Test Code's procedure; provided, that the Contracted Capacity shall not be considered to have been established unless the result of such determination is equal to or greater than the minimum criteria for such test set forth below.

#### (ii) Contracted Capacity Test

During the Commissioning and commercial operations the Contracted Capacity will be determined by measuring the output at the outgoing busbars of the Plant through the Metering System. Tests will be based on relevant ASME power test codes IEC standards and ISO test codes, using plant instrumentation and the Metering System. Test results shall be corrected to the Reference Conditions provided for in the [ ] Agreement. Test results are to be corrected to the reference Conditions but no corrections are to be applied for degradation or for test tolerances

In the event the Contracted Capacity Test carried out during Commissioning to enable the Full Commercial Operation Date to occur demonstrates that the Capacity of the Plant is greater than ninety-five per cent (95%) but less than one hundred per cent (100%) of the Contracted Capacity at the date of this Agreement of this Agreement then the Contracted Capacity shall be adjusted to such lesser amount. Where the test shows the Contracted Capacity to be below ninety-five per cent (95%) of the Contracted Capacity at the date of this Agreement, the test shall be deemed to have failed.

#### (iii) Reliability Run Test

A reliability run test for the Plant will be carried out as part of the Commissioning tests. The run will be for a period of 30 days and will include seventy-two (72) continuous hours at one hundred per cent (100%) base load (i.e. maximum continuous rating at the prevailing ambient temperatures). The output during the remaining hours of the test will be as requested by Purchaser. The test shall have been satisfactorily completed only if the Plant experiences no more than five (5) events which prevent the Plant from delivering its Contracted Capacity and no single event exceeds five (5) hours.

#### (iv) Unit Trip Test

Tests shall demonstrate the ability of the Plant to withstand the simultaneous tripping of no less than fifty per cent (50%) of the installed Units and its ability to remain in a safe condition.

## (v) Environmental Performance Test

The Plant shall undergo environmental performance tests which demonstrate that the Plant will comply into the environmental limits specified in the Functional Specification.

#### (vi) Black Start Test

The Black Start Test will only apply to a plant where this Agreement requires the plant to be Black Start capable.

A Black Start capable plant shall undergo a test which demonstrates its capability to synchronise at least sixty per cent (60%) of the Units installed within a time period of thirty (30) minutes following a Despatch Instruction from Purchaser when the plant has been disconnected from the Purchaser Systems for at least one (1) hour prior to the Despatched Instruction. There will be no external supply during the test. [consider whether external fuel deliveries are permitted]

#### **PART B:**

#### METER PROCEDURES

#### 1. Testing of Metering System

- (a) Purchaser shall initially test the Metering System for accuracy in accordance with this Schedule 5 by the later of fifteen (15) days after it is installed by Purchaser or five (5) days prior to the date scheduled for initial testing of the Plant to begin, and thereafter at intervals of not less than one hundred and eighty (180) days and after giving Seller no less than forty-eight (48) hours advance notice. Seller may have a representative present during any such testing, as well as during any inspection of the Metering System or adjustment thereof.
- (b) Purchaser shall also test the Metering System at any other time reasonably requested by Seller, such additional testing to be at Seller's expense unless the test indicates that the Metering System is inaccurate by more than one-half percent (0.5%), in which case Purchaser shall bear the cost of the additional test. Seller may have a representative present during any such testing, as well as during any inspection of the Metering System or adjustment thereof.
- (c) When on the Seller's Site, Purchaser shall comply with all reasonable instructions of Seller and, notwithstanding any other provision in this Agreement to the contrary, shall indemnify and hold Seller harmless from any loss or damage sustained by virtue of Purchaser's negligence or wilful misconduct in the performance of its obligations but only to the extent that such loss or damage is not covered by insurance of Seller. The requirements of this clause will apply equally to the Seller when the Seller is on the Purchaser's site.
- (d) The calibration of meters will be checked to ensure that the accuracy remains within the specified limits. The method of calibration and frequency of tests will be agreed between Seller, and Purchaser based on knowledge of the performance and the design of the installed meters and the manufacturers' recommendations.
- (e) Compensation will be made for the errors of current and voltage transformers in the meter calibration or during the computation of records. Current and voltage transformers will be tested for ratio and phase angle errors following manufacture at an accredited testing station in the presence of representatives from Seller; and Purchaser. Test certificates issued by the testing station will be issued independently to both parties.
- (f) Testing and calibration of the Back-Up Metering Equipment shall be carried out by Purchaser after giving appropriate notice to Seller, in line with the agreed frequency of testing or in the event of either Party having reasonable cause to believe the meters are outside specified limits. During such tests and calibration Seller shall have the right to have a representative present at all times.

(g) Testing and calibration of the Main Metering Equipment shall be carried out by Purchaser as in paragraph (f) above. During such tests and calibration Seller shall have the right to have a representative present at all times.

#### 2. Reading of Meters

(a) **Procedures**: The Metering System shall be read monthly on the last business day of each month (or such other day as may be agreed upon by the Parties) for the purpose of determining the Net Electrical Output of the Plant since the preceding reading. Purchaser shall read the Metering System during normal business hours and Purchaser shall give Seller at least forty-eight (48) hours notice of the time Purchaser shall read the Metering System. The Seller or a representative of the Seller may be present for the reading.

The Net Electrical Output of the Plant shall be determined using the Main Metering Equipment.

In the event that a Seller's representative is not present at a reading of Net Electrical Output, then Purchaser's representative shall take and record such reading and make a photographic record thereof. Purchaser shall maintain a log of all such meter readings. Measurements recorded shall be delivered by the recording party to the non-recording Party by facsimile within forty-eight (48) hours after the readings are taken. In the event that the Main Metering Equipment is not in service as a result of maintenance, repairs or testing, then the best available information, which may include the Back-Up Metering Equipment, shall be used during the period that the Main Metering Equipment is not in service and the foregoing provisions of this Section shall apply to the reading of the Back-Up Metering Equipment.

- (b) **Inaccuracies in Metering System**: When, as a result of any test of the Main Metering Equipment, the Main Metering Equipment is found to be inaccurate by more than one-half percent (0.5%) or is otherwise functioning improperly, then the correct amount of Net Electrical Output delivered to Purchaser for the actual period during which inaccurate measurements were made, if any, shall be determined as follows:
  - (i) First, the readings of the Back-Up Metering Equipment, if any, shall be utilised to calculate the correct amount of Net Electrical Output, unless a test of such Back-Up Metering Equipment, as required by either Party, reveals that the Back-Up Metering Equipment is inaccurate by more than one-half percent (0.5%) or is otherwise functioning improperly;
  - (ii) If there is no Back-Up Metering Equipment or if the Back-Up Metering Equipment is found to be inaccurate by more than one-half percent (0.5%) or is otherwise functioning improperly, then Seller and Purchaser shall jointly prepare an estimate of the correct reading on the basis of all available information and such guidelines as may have been agreed to between Seller and Purchaser;

- (iii) In the event that Purchaser and Seller fail to agree upon an estimate for the correct reading, Purchaser shall make any payments to Seller required as a result of its estimate of the correct reading and the matter may be referred by either party for determination by an Expert pursuant to Clause 16; and
- (iv) The difference between the previous payments by Purchaser for the period of inaccuracy and the recalculated amount shall be offset against or added to the next payment to Seller under this Agreement, as appropriate. If the period of inaccuracy cannot be accurately determined, it shall be deemed to have begun on the date which is midway between the date the meter was found to be inaccurate and the date of the last meter reading accepted by the Parties as accurate. In no event, however, shall any such adjustment be made for any period prior to the date on which the Main Metering Equipment was last tested and found to be accurate within plus or minus one-half percent (0.5%) and not otherwise functioning improperly.

#### **PART C:**

#### OPERATING AND DESPATCH PROCEDURES

#### 1. Scheduling and Despatch

- (a) In order to assist with scheduling of the Plant to meet the requirements of Purchaser the Parties agree that the following procedures will be adhered to:
  - (i) Year Ahead Notification: Not less than ninety (90) days before the Scheduled Commercial Operation Date of the last Unit, and thereafter not less than ninety (90) days before the beginning of each Operating Year, Purchaser shall provide to Seller estimated requirements on a monthly basis for Net Electrical Output for the remainder of the Operating Year in which the Full Commercial Operation Date is Schedule to occur, and thereafter for each subsequent Year, but Purchaser shall not be bound by these figures.
  - (ii) Month Ahead Notification: Not less than fourteen (14) days before the beginning of the Month prior to the Scheduled Commercial Operation Date of the last Unit and thereafter not less than fourteen (14) days before the beginning of each month, Purchaser shall provide Seller estimated requirements, on a day-by-day basis, for Net Electrical Output during that Month and also, provisionally, for the following Month, but Purchaser shall not be bound by these figures.
  - (iii) Week Ahead Notification: Not less than forty-eight (48) hours before the beginning of the Week prior to the Scheduled Commercial Operation Date of the last Unit and thereafter not less than forty-eight (48) hours before the beginning of each week, Purchaser shall provide to Seller estimated requirements, on an hour-by-hour basis, for Net Electrical Output during that week and also, provisionally, during the following week, but Purchaser shall not be bound by these figures.
  - (iv) Plant Availability Notification: To enable Purchaser to give final Schedule of requirements as required by subsection (v) below, Seller shall, by 1200 hours the day before the Scheduled Commercial Operation Date of the last Unit and thereafter by 1200 hours each day, inform Purchaser of the estimated Capacity Available during each hour of that Day commencing thirty-six (36) hours ahead and, provisionally, for the day immediately thereafter. Such estimated shall not be binding upon Seller, Seller shall advise Purchaser as soon as possible of any changes in its Declared Capacity for such days.
  - (v) **Day Ahead Notification**: Not less than seven (7) hours before the start of the date before the Scheduled Commercial Operation Date of the last Unit and thereafter not less than seven (7) hours before the start of each day, Purchaser shall provide to Seller firm requirements, on an hour by hour

basis, for Net Electrical Output, for the following day. The firm requirements shall not be binding upon Purchaser and Purchaser may subsequently alter its requirements.

Actual operation levels requested of Seller will be determined by the requirements for operation in accordance with economic despatch and, if applicable, automatic generation control and may be substantially different from the information provided in accordance with this Part C; provided however, that actual operation levels requested by Purchaser shall at all times be subject to compliance Operating Characteristics.

(b) **Notice of change of Operation Levels**: In connection with its rights to Despatch the Plant in accordance with this Agreement, Purchaser will provide Seller with at least five (5) minutes advance notice of changes in operating levels to be achieved by the Plant (or such greater period as may be required by the Operating Characteristics) except that when the Plant is operated with automatic generation control, Purchaser shall not be required to provide such notice but Purchaser shall observe the Operating Characteristics in effecting the changes in operating levels

### 2. Operation in Accordance with Despatch

The Plan shall be operated by Seller in accordance with Despatch Instructions within a despatch tolerance band of +3%.

#### 3. Recording of Telephoned Communications

Each Party hereby authorises the other Party to record all telephoned voice communications relating to Declared Capacity control and Despatch of the Plant received from the other Party pursuant to this agreement and shall supply, at the request of the Party, a copy or transcript of any such recording.

#### **SCHEDULE 6:**

#### **PAYMENT**

#### Part A:

#### **Energy Charges**

#### 1. Calculation of Energy Charges

For the purposes of Clause 7.3, Purchaser shall pay to Seller Energy Charges in respect of the Net Electrical Output of the Plant in each month calculated as follows:

$$MEC = NEO \times ECR$$

Where:

MEC is the aggregate amount of Energy Charges (\$) payable in respect of that month

NEO is the aggregate Net Electrical Output (kWH) of the Plant in that month

ECR is the Energy Charge Rate (expressed in US\$/kWh) prevailing in accordance with paragraph 2 below on the last day of that month.

#### 2. Energy Charge Rate

The Energy Charge Rate for the Plant during each month shall be calculated as follows:

$$ECR_{p} = X + Y$$

where

ECR<sub>p</sub> = the Energy Charge Rate for month p (expressed as US\$/kWh)

$$X = \left(S_1 \times \frac{OPI_{p-1}}{OPI_b}\right) + \left(S_2 \times \frac{FPI_{p-1}}{FPI_b}\right)$$

(the fuel component of the Energy Charge Rate)

where

 $S_1$  = value agreed with Seller as the Base Fuel Price FOB Component (expressed as US\$/kWh)

 $S_2=$  value agreed with Seller as the Base Fuel Transport Cost Component (expressed as US\$/kWh)

 $OPI_{p-1} = [ \bullet ]$  fuel price index for the month ended 3 months prior to the beginning of month

 $OPI_b = [ \bullet ]$  fuel price index for September 1998, namely,  $[ \bullet ]$ 

 $FPI_{p-1} = [ \bullet^2 ]$  freight price index for the month ended 3 months prior to the beginning of month p

 $FPI_b = [ \bullet^2 ]$  freight price index for September 1998, namely,  $[ \bullet ]$ 

and

$$Y = T \times \frac{CPI_{p-1}}{CPI_b}$$

(the non-fuel component of the Energy Charge Rate)

where

 $T=value \ agreed \ with \ Seller \ as the \ Base \ Variable O \ \& \ M \ Component \ (expressed as \ US\$/kWh)$ 

 $CPI_{p-1}$  = the Consumer Price Index for the month ended 3 months prior to the beginning of month p

 $CPI_b$  = the Consumer Price Index for September 1998, namely, [ $\bullet$ ]

#### Part B:

#### **Capacity and Availability Payments**

#### 1. Calculation of Energy Charges

The Capacity Charge Rate for the Plant during each month shall be calculated as follows:

$$CCR_p = A + B$$

where

CCR<sub>p</sub> = the Capacity Charge Rate for month p, (expressed as US\$/kWh)

and

$$A = \frac{F}{12}$$
 (the non-escalable component of the Capacity Charge Rate)

where

F = value agreed with Seller as the fixed component of the Base Capacity Charge Rate (expressed in US  $\$  / kW/year)

and

$$B = \frac{E}{12} \times \frac{CPI_{p-1}}{CPI_b}$$
 (the escalable component of the Capacity Charge Rate)

where

 $E = value agreed with Seller as the escalable component of the Base Capacity Charge Rate US <math>\ / \ kW/year)$ 

 $CPI_{p-1}$  = the Consumer Price Index for the month ended 3 months prior to the beginning of month p;

 $CPI_b$  = the Consumer Price Index for September 1998, namely ?

#### 2. Calculation of Capacity Payments

Seller shall be entitled to Capacity Payments in respect of Capacity in each month calculated as follows:

$$CP_p = CCR_P \times CC$$

where

CP<sub>p</sub> = the Capacity Payment for month p (expressed in US \$);

CCR<sub>p</sub> = the Capacity Charge Rate for month p (expressed in US\$/kW);

CC = the Contracted Capacity (expressed in kW).

#### **PART C:**

#### MONTHLY AVAILABILITIES

#### 1. **Monthly Availabilities**

For each month in each Operating Year, starting with the month in which the Full Commercial Operation Date occurs, there shall be calculated a Monthly Target Availability and an Actual Monthly Availability as follows:

(i) Monthly Target Availability

$$MTA_p = (CC \times H_p) - SMA_p - USMA_p$$

where

MTA<sub>p</sub> = Monthly Target Availability (expressed in kWh);

CC = Contracted Capacity (expressed in kW);

 $H_p = Hours in month p.$ 

 $SMA_p$  = Scheduled Maintenance Allowance in month p (expressed in kWh) representing the total energy not available for delivery in month p due to scheduled maintenance outages computed assuming the Plant would otherwise have been despatched at its Contracted Capacity.

 $USMA_p = Unscheduled Maintenance allowance in month p (expressed in kWh)$ 

$$PPA_{t} \times M_{y} = \frac{\left(CC \times PPA_{t} \times H_{y} \times \frac{OA}{100}\right) - \sum_{p=1} SMA_{p}}{PPA_{t} \times M_{y}}$$

where:

 $PPA_t = Term of the PPA (initially = 20)$ 

 $H_y$  = Hours in a year (set as 8760)

 $M_y = Months in a year (set as 12)$ 

(ii) Actual Monthly Availability

[•]

# PART D START UP CHARGES

## [Start Charges]

[consider provision of start charges for gas turbine based plants and some thermal plants]

## [Gas turbine plants]

[Single start charge]

## [Combined and Thermal Plants]

[Cold starts]

[Warm starts]

[Hot starts]

## [Separate Energy Charge Rate]

[consider this where applicable]

#### **PART E:**

#### **CONSUMER PRICES INDEX**

- 1. If in the opinion of either Party the CPI cannot be properly calculated as a result of any of the following circumstances (an "Event");
  - (a) the non-availability or discontinuance of one or more of the figures, values or prices required to calculate the CPI (whether permanent or temporary);
  - (b) an error is contained in one or more of the published figures, values or prices required to calculate the CPI;
  - (c) the basis upon which the CPI is calculated has been changed and thereby superseded so as materially to affect the validity of CPI comparison over time other than any change arising from changes in the respective consumption patterns upon which the CPI was based;

then the Parties shall meet and seek in good faith to agree upon the means whereby the CPI may be adjusted or to agree upon a replacement index and if the Parties cannot agree upon such adjustment or replacement index within a period of thirty (30) days either Party may refer the matter to an Expert who shall determine such replacement index as most closely reflects the CPI prior to the Event and also the date from which such replacement index shall be applicable.

2. If an index other than the CPI shall be used, then the provisions of this Part E of this Schedule 6 shall apply to such index mutatis mutandis.

## **SCHEDULE 8:**

## PARTIES' ADDRESSES AND NOTICE DETAILS

Seller
Postal Address:
[•]
Fax Number: [ ● ]
Telephone Number: [ ● ]
Notices to be sent to: $[ \bullet ]$
Purchaser
Postal Address:
[•]
Fax Number: [ ● ]
Telephone Number: [ ● ]
Notices to be sent to: [●]

#### **SCHEDULE 9:**

#### **INSURANCE**

#### Part A:

#### **Construction Period**

(The period from the Effective Date until the Full Commercial Operation Date)

#### **Contractors' All Risks** 1.

Cover:

The contract works executed and in the course of execution, materials and temporary works, while on the Site, against all risks of physical loss or damage other than war and kindred risks, nuclear risks, unexplained shortage, cost of replacing or repairing items which are defective in workmanship, material or design; penalties; consequential losses; cash; vehicles; vessels; aircraft and other standard exclusions contained in such policies. Cover shall provide the equivalent terms, conditions and perils/causes of loss provided under an erection all risks insurance policy.

Sum insured: The Contract Price plus all costs associated with demolition of the

plant.

**Deductibles:** In relation to Contract Works, Materials etc.

> A. arising during the construction and testing period:

> > [•]

B. arising out of operational testing or Commissioning:

**Period of Cover**: Actual construction, testing and Commissioning.

**Insured**: Seller, its contractors and its lenders and all suppliers on site;

Purchaser shall be added as an additional insured as its interests may

appear.

#### 2. Loss of Revenue "Delay in Full Commercial Operation Date":

Cover: Against all loss of revenue following delay in start of commercial

> operations as a direct result of physical loss of or damage to the works during construction or operational testing to the extent that such loss or damage is not covered under the Contractors All Risks policy.

Sum insured: An amount equal to the estimated continuing expenses, including debt

service, during the indemnity period.

**Indemnity period**: Not less than 12 months.

**Insured**: Seller and its lenders.

**Deductible**: Not more than 90 days. **Period of Cover**:Construction, testing and Commissioning periods of the Plant from mobilisation of Seller's contractors until the day following the Full Commercial Operation Date.

## 3. Public Liability

**Cover:** Against legal liability to third parties for bodily injury or damage to

property arising out of construction, testing and Commissioning of the

Plant.

**Sum insured**: For any one claim: [●]

**Deductible**: Not to exceed [ • ] for each claim for damage to property. None for

injury to persons.

**Insured**: Seller and its contractors and Purchaser shall be added as an additional

insured as its interest may appear.

Period of Cover: The actual construction, testing and Commissioning of the Plant for

mobilisation of Seller's contractors until the day following Full

Commercial Operation Date.

#### 4. Miscellaneous

Other insurance as is customary, desirable or necessary to comply with local or other requirements, such as Workmen Compensation Insurance in relation to all workmen employed in the construction of the plant and Motor Insurance on a vehicle.

#### Part B:

#### **Operating Period**

(The period from the Full Commercial Date until the end of the Term)

#### 1. All Risks Insurance – Fixed Assets

**Cover:** All building contents, machinery, stock, fixtures, fittings and all other

personal property forming part of the plant against "All Risks" of physical loss or damage, including (but not limited to) those resulting from fire, lightning, explosion, spontaneous combustion, storm, wind, tempest, flood, hurricane, water damage, riot, strikes, malicious damage, earthquake, collapse and/or loss of contents of tanks, subject

to standard policy exclusions.

Sum insured: Full replacement value of the Plant plus all costs associated with

demolition of the plant.

**Deductible**: Not to exceed [●] for each loss.

**Insured**: Seller and its lenders; Purchaser shall be added, as an additional

insured as its interests may appear.

#### 2. Consequential Loss Following All Risks

Cover: Loss of revenue due to loss of capacity and/or loss of output as a

direct consequence of loss of or damage to the Plant and caused by a

peril insured under paragraph 1 above.

**Sum insured**: An amount equal to the estimated continuing expenses, including debt

service, during the indemnity period.

**Indemnity period**: Not less than 12 months.

**Deductible**: Not more than 60 days.

**Insured**: Seller and its lenders.

### 3. Machinery Breakdown

**Cover:** All machinery, plant and ancillary equipment forming part of the Plant

against sudden and unforeseen physical loss or damage resulting from mechanical and electrical breakdown or derangement, explosion or collapse of pressure vessels, electrical short circuits, vibration, misalignment, excessive current or voltage, abnormal stresses, centrifugal forces, failure of protective or regulating devices, overheating, entry of foreign bodies, impact, collision and other

similar causes.

**Sum insured**: Full replacement value of all machinery, plant, boilers, etc.

**Deductible**: US\$ [●] each loss.

Insured: Seller and its lenders; Purchaser shall be named as an additional

insured as its interest may appear.

#### 4. Consequential Loss following Machinery Breakdown

Cover: Loss of revenue due to loss of capacity and/or loss of output as a

direct consequence of loss or damage to the Plant caused by a peril

insured under paragraph 3 above.

**Sum insured**: An amount equal to the estimated continuing expenses, including debt

service, during the indemnity period.

**Indemnity period**: Not less than 12 months.

**Deductible**: Not more than 60 days.

**Insured**: Seller and its lenders.

#### 5. **Public Liability**

**Cover:** Legal liability of the insured for damage to property of third parties or

bodily injury to third parties arising out of the ownership, operation

and maintenance of the Plant.

**Sum insured**:  $US^{\bullet}$  for any occurrence.

**Deductible**: US\$[ ●] each claim for property. None for injury to persons

**Insured**: Seller and its lenders; Purchaser shall be named as an additional

insured as its interest may appear.

#### 6. Miscellaneous

Other insurance as is customary, desirable or necessary to comply with local or other requirements, such as Workmen's Compensation insurance in relation to all workmen employed in the Plant or in connection with its operation, and Motor Insurance on any vehicle.

If Purchaser is added as an additional insured on any of the insurances listed in this Schedule 9, Seller acknowledges and agrees that:

- (a) Purchaser may elect to be included as a loss payee on any insurance proceed payments relative to such insurance coverage; and
- (b) Purchaser may elect not be involved in any claim negotiations, discussions or settlements.

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