

**FIRST SCHEDULE**  
**POWER SUPPLY SCOPE AND SPECIFICATIONS**

**1. Project Scope**

WINNING BIDDER shall be responsible for the financing, design, engineering, supply, construction, installation and erection, including civil works, testing and commissioning of the Project including its auxiliaries, substation, and connection assets from the Site(s) to the Connection Point and the operation and maintenance of the Project during the Cooperation Period.

**1.1. Cooperation Period**

The Cooperation Period shall be period of \_\_\_ months commencing on the Commercial Operations Date until 08 October 2030, unless earlier terminated in accordance with the provisions of the PSA, in accordance with the following schedule:

Schedule No.	Start Month	End Month	Capacity (in MW)	Location
<b>TOTAL</b>				

**1.2. Contracted Energy**

WINNING BIDDER shall generate, deliver, and offer to ORMECO the Contracted Energy as set forth in Clause 7 of this Agreement.

## **2. Site**

The Sites shall be zoned properly for industrial use, sufficiently away from residential areas, and not susceptible to flooding and shall be located described, as follows:

Schedule 1&2:

- a. Municipality:
- b. Barangay(s):
- c. Longitude:
- d. Latitude:
- e. Property Owner(s):

## **3. Supply Scope**

WINNING BIDDER, at its own costs, shall be responsible for the following:

### **3.1. Site Development**

Site Development shall consist of, but not limited to, the following:

- 3.1.1.** Soil investigation and survey works, if necessary;
- 3.1.2.** Site levelling and excavation works, piling/piled footings, if necessary;
- 3.1.3.** Roads, within and access, to the Site, if necessary;
- 3.1.4.** Landscaping and gravel surface roads.

### **3.2. Civil Works and Infrastructure Facilities**

Civil works and infrastructure facilities associated with the Project shall consist of, but not limited to, the following:

- 3.2.1.** Site levelling clearance and preparation;
- 3.2.2.** Tower and building construction, if necessary;

- 3.2.3.** Site Drainage
- 3.2.4.** Adequate Fuel Storage
- 3.2.5.** Switchyard

### **3.3. Electromechanical Works, Equipment, and Auxiliaries**

Electromechanical works, equipment, and auxiliaries shall consist of, but not limited to, the following:

- 3.3.1.** Electrical generator and auxiliaries
- 3.3.2.** Switchyard equipment and accessories
- 3.3.3.** Plant control and monitoring system
- 3.3.4.** Fire detection and protection system
- 3.3.5.** Telecommunication and protection system
- 3.3.6.** All other equipment, works, and services not specifically mentioned but are necessary for the complete, safe, and satisfactory operation and maintenance of the Project

### **3.4. Connection Asset**

Connection Assets shall be either Cut-in or Bus-in to the NPC's 69 kV Transmission System, made through the application of the Connection Agreement between the Winning Bidder and NPC. The Cut-in scheme may be adopted if the location of the small grid user exceeds at least twenty circuit kilometers from the nearest substation. Connection Assets shall consist, but not limited to, the following:

- 3.4.1.** All electrical equipment, gantry structures, power, control, and instrumentation cables, protection equipment, and other appurtenances required for the connection of WINNING BIDDER's Power Station. The Circuit Breaker that is capable of interrupting the maximum short circuit current at the point of connection including protective relays, breaker fail protection, and any other multifunction protective devices and equipment shall be provided by the WINNING BIDDER

- 3.4.2.** Disconnect switches and other isolating means to isolate the circuit breaker for maintenance purposes. All equipment and conductor shall be identical with the existing or upgraded equipment and conductor ratings consistent with NPC's approved equipment and conduct specification
- 3.4.3.** All equipment at the Connection Point/s shall comply with the IEC Standards and the requirements of the PSGG. Equipment shall be designed, manufactured and tested in accordance with the quality assurance requirements of the ISO 9000 Standards and requirements prevailing at the time of design and modification of the Equipment, rather than the Test and Commissioning.
- 3.4.4.** WINNING BIDDER shall install a new set of potential and current transformers dedicated for their multifunction meter and relay devices.
- 3.4.5.** The multifunction protective devices must have an Overcurrent (50/51/51N) and Under/Over Voltage (27/59) function to be used as back-up protection.
- 3.4.6.** Switchyard equipment and accessories
- 3.4.7.** Plant control and monitoring system
- 3.4.8.** Fire detection and protection system
- 3.4.9.** Telecommunication and protection system
- 3.4.10.** All other equipment, works, and services not specifically mentioned but are necessary for the complete, safe, and satisfactory operation and maintenance of the Project as required in the Connection Agreement, NPC, System Operator, and other grid users.

#### **4. Design Criteria/Specifications**

*(provided here is only applicable to conventional power plants. Other technologies will be based on the proposals.)*

##### **4.1. Power Units**

The engine-generator units with an aggregate capacity of not less than \_\_ MW for each Schedule shall be capable of

delivering the Guaranteed Dependable Capacity at the following site conditions:

**4.1.1. Rated Output**

With respect to each Unit, rated output shall be a continuous output of \_\_ MW at the generator terminal with the following conditions:

Ambient Air Temperature	40°C
Relative Humidity	85%

**4.1.2. No-Load Operation.**

In case of failure to accept electricity, the Power Plant shall be able to operate safely while it is disconnected from the external network and fed only to its own auxiliary services.

**4.1.3. Plant Operative Characteristics**

The Power Plant shall be designated for the following operative conditions:

- a. \_\_\_\_\_ Operation
- b. Programmed loading up to an average rate of not more than 1.0 MW per minute per Unit; and
- c. instantaneous load variations of not more than 90% of the rated output

**4.1.4. System Voltage Level**

<b>Generator Terminal Voltage</b>	
<b>Nominal Voltage for auxiliary equipment</b>	
<b>AC System</b>	
<b>DC System</b>	

**4.1.5. System Frequency**

The system frequency is set from 59.7 Hz to 60.3 Hz.

**4.1.6. Generator and Accessories**

<b>Nominal Power Output per Unit</b>	
<b>Connection</b>	
<b>Rated Terminal Voltage</b>	
<b>Rated Power Factor</b>	
<b>Short-circuit Ratio</b>	
<b>Allowable Voltage Variations</b>	