



National Power Corporation

SUPPLEMENTAL/BID BULLETIN NO. 2

to the Bid Documents for the:

SUPPLY, DELIVERY, INSTALLATION, TEST & COMMISSIONING OF 1x600 KW STANDBY POWER (OPEN TYPE) DIESEL GENERATOR SET AND ASSOCIATED ELECTRICAL EQUIPMENT FOR NPC HEAD OFFICE UNDER PR NO. HO-TFM22-091

05 JULY 2022

All prospective bidders and authorized copy holders of the Bid Documents of the above mentioned project are hereby advised of changes in the provisions of the bid documents, to wit;

1. SECTION VI, PART I – TECHNICAL SPECIFICATIONS, CLAUSE TS-2.0 SCOPE OF WORK , ITEM B AND C

Table with 2 columns: FROM and TO. Row 1: Item b) Site development and grading to required elevations of designated areas/equipment location for open-type generator control and protection panel (GCPP) in accordance with the details shown on the drawing. TO: To be deleted. Row 2: Item c) Design and construction of new reinforced concrete foundations for open-type genset and control panel, smoke stack and its structural supports as required, including anchor bolts/machine bolts to ensure proper anchoring and installation. Design calculations and detailed drawings shall be submitted for NPC's review and approval prior to construction. TO: Item c) Alignment of the set level and true grade of the existing genset foundation before the final fixing of the genset. Foundation bolts and bed plates with the appropriate size and quantity required in the installation shall be supplied and installed by the contractor.

2. SECTION VI, PART I – TECHNICAL SPECIFICATIONS, CLAUSE TS-6.1 GENERAL, 2ND PARAGRAPH

Delete: "The equipment shall be subjected to the manufacturer's standard factory tests prior to delivery."

3. SECTION VI, PART I – TECHNICAL SPECIFICATIONS, CLAUSE TS-6.1 GENERAL

Addition: CLAUSE TS-6.1.1 FACTORY ACCEPTANCE TEST - Prior to shipping/delivery and final inspection, equipments supplied by the supplier shall have Factory Acceptance Test (FAT) that will be conducted by the supplier at the manufacturer's plant and will be witnessed by the NPC and/or its duly authorized representative.

BIR Road corner Quezon Avenue, Diliman
1100 Quezon City, Philippines
Tel. Nos. (632) 921-3541 to 79 • Fax No. (632) 921-2468
Website: www.napocor.gov.ph



Management System
ISO 9001:2015



www.tuv.com
ID 910665265

NPC and/or its duly authorized representative shall be entitled to attend and/or witness all applicable test detailed in the relevant sections. NPC shall be notified by the contractor sixty (60) days in advance about any test requiring the presence of NPC. NPC's acceptance of the work by waiving the inspection of tests and acceptance of the contractor's certificate test reports and inspection and testing certificate shall be in no way relieve the contractor of his responsibility in accordance with the requirement of the specifications.

The supplier shall carry out test, as may be required by the specified Standards and the Quality Control and Assurance Program, as well as the entire test program approved by NPC. Prior to the witnessing of Factory Test, the Supplier shall remove all faults found and correct all failures noted to the best of his knowledge such that no functional or procedural errors will occur during the test.

At the commencement of the witnessing of Factory Test, all applicable equipment and materials shall be brought together in one place, integrated, and the configuration/set-up at the factory shall be identical to that to be installed at the site and any equipment and software necessary for the proper operation of the equipment shall have reached its final form, not to be changed during the Factory Test and until commencement of commissioning at site.

The Supplier shall immediately advise NPC should failures occur, take remedial action subject to NPC's approval, and proceed with the Factory Test as and when directed by NPC. It shall be NPC's prerogative to order a repeat of all such tests that he deems may have been affected by the failure.

The Supplier shall ensure that during the test, all hard copies from output devices are retained and that no outside parties interfere in any way with testing, equipment or test instruments, fixtures and jigs for the entire duration of the Factory Test. Only Supplier's personnel who are needed on the testing of the equipment shall be allowed in the test area.

The Supplier shall also be responsible that an accurate record of tests are kept and each individual test is duly initialed and dated by the Supplier and stamped or marked either "passed" or "failed" with annotations of antecedents and observations concerning the test. For each day of testing, the Supplier shall submit to NPC the proposed disposition of each criterion that failed during the previous day of testing, prior to commencement of the tests scheduled for that day.

Tests witnessed by NPC's representative shall affix its initial on the test record. The test record and dispositions, and any other pertinent supporting data and documents shall form part of a test report to be submitted in accordance with the specification.

#### **a) Diesel Engine-Generator Sets**

Before leaving the factory, the diesel engine generator set shall be carefully tested, using diesel fuel oil, by the Supplier in the presence of NPC and/or its duly authorized representative.

The diesel engine shall be subjected to the following tests in direct connection with the main generator:

BIR Road corner Quezon Avenue, Diliman  
1100 Quezon City, Philippines  
Tel. Nos. (632) 921-3541 to79 • Fax No. (632) 921-2468  
Website: [www.napocor.gov.ph](http://www.napocor.gov.ph)

AFG-LOG-002.F07  
Rev. No. 0  
Page 2 of 5



Management  
System  
ISO 9001:2015



www.tuv.com  
ID 910054205

a.1 Starting Test and Maneuvering Test at no load

a.2 Load Test

<u>Load</u>	<u>Duration</u>
50%	0.5 hour
75%	0.5 hour
100%	1.0 hour

a.3 Governor Regulation Test

a.4 Overspeed Trip Test

a.5 Engine High Temperature, Low Oil Pressure and Emergency Device Trip Test

a.6 Fuel Oil Consumption Test

a.7 Test for Sound Level at 1 M distance from genset

After the factory test, the diesel engine generator set shall be thoroughly checked and inspected to determine the condition of the external and internal parts. If defective parts are found, those parts shall be replaced or remedied and necessary adjustments shall be made at the expense of the Supplier. Emission testing on each stack is required for diesel gensets with dual stacks.

**Notes: 1. The use of Weighing Scale shall be the basis for the acceptance of Fuel Rate requirement during the conduct of Factory Acceptance Test (FAT) or as specified in the approved Test Procedures.**

**2. The conduct of Sound and Vibration Tests shall be done during Factory Acceptance Test (FAT) and at Site Acceptance Test.**

**b) Sound Test and Vibration Test**

The genset shall be tested for Vibration Test and Sound Level @ 1-meter distance from any point of the unit which shall not exceed 120 dBA.

**4. SECTION VI, PART I – TECHNICAL SPECIFICATIONS, CLAUSE TS-6.2.3 COMMISSIONING TEST**

**Addition: Item A. n) 8 hours Reliability Test using NPC Head Office Building as load.**

**5. SECTION VI, PART I – TECHNICAL SPECIFICATIONS, CLAUSE TS-6.2.4 PERFORMANCE TEST, LAST PARAGRAPH**

**Delete:** "In the event that the guaranteed power output cannot be tested due to unavailability of the required load at the time of testing, the available loads that fall either 50% or 75% shall be used for reference/record purposes. The results shall be used as basis for comparing with the results taken from the FAT and shall then be the basis of acceptance if found satisfactory."



**6. SECTION VII – SCHEDULE OF REQUIREMENT (BID PRICE SCHEDULE),  
BPS.2 – BREAKDOWN OF PRICES**

FROM	TO
E.1 Miscellaneous Equipment and Materials (Clause MW – 9.0 of the Technical Specification)	E.1 Miscellaneous Equipment and Materials

**7. SECTION IX – BID DRAWINGS, MECHANICAL DRAWINGS NO. HO-BDM-17.001, LOCATION LAYOUT, HO-BDM-17.002 1000L FUEL OIL DAY TANK & FUEL OIL TRANSFER AND ELECTRICAL DRAWING NO. HO-BDE-17.002, LOCATION LAYOUT**

FROM	TO
Dwg. No. HO-BDM-17.001 Equipment Layout	See copy attached annex A 1. Location for the propose 600kW DG set
Dwg. No. HO-BDM-17.002 1000L Fuel Oil Day Tank & Fuel Oil Transfer	See copy attached annex B 1. Slope/incline Base plate of Fuel Tank 2. Relocation of Drain outlet from right to left side (parallel to Hand pump)
Dwg. No. HO-BDM-17.001 Equipment Layout	See copy attached annex C 1. Location for the propose 600kW DG set

All other terms and conditions shall remain the same.

Additionally, hereby advised of the clarification in the provision of the Bid documents, to wit:

**A. PROVISION OF LOAD BANK**

As stated in Section VI – Technical Specifications, TS-6.2.3 Commissioning

**"B. Supplier Participation:**

- a) Supply sufficient fuel and lube oil to conduct all testing.
- b) Provide portable calibrated emission tester (for testing only during acceptance)
- c) Provide load bank (at 50%, 75% and 100%) during commissioning and performance testing.
- d) Provide test instrument to determine electrical test parameter."



## B. SYNCHRONIZATION CAPABILITY

- a) The existing stand-by genset at NPC Head office can be paralleled as long as the new synchronizing system is capable of load sharing function for Base and Regulating Load Operation.
- b) 600kW stand-by generator set that is compatible with load sharing function for Base and Regulating Load Operation is available in the market.

### Bid Submission and Opening Schedule:

14 July 2022 @ 9:30 A.M., NPC-H.O., Kanao Function Room

For the information and guidance of all authorized copy holders of the Bid Documents and prospective bidders.

For the Bids and Awards Committee:

  
**RENE B. BARRUELA**  
Vice President, CAG and  
Chairman, Bids and Awards Committee

BIR Road corner Quezon Avenue, Diliman  
1100 Quezon City, Philippines  
Tel. Nos. (632) 921-3541 to79 • Fax No. (632) 921-2468  
Website: [www.napocor.gov.ph](http://www.napocor.gov.ph)

AFG-LOG-002.F07  
Rev. No. 0  
Page 5 of 5



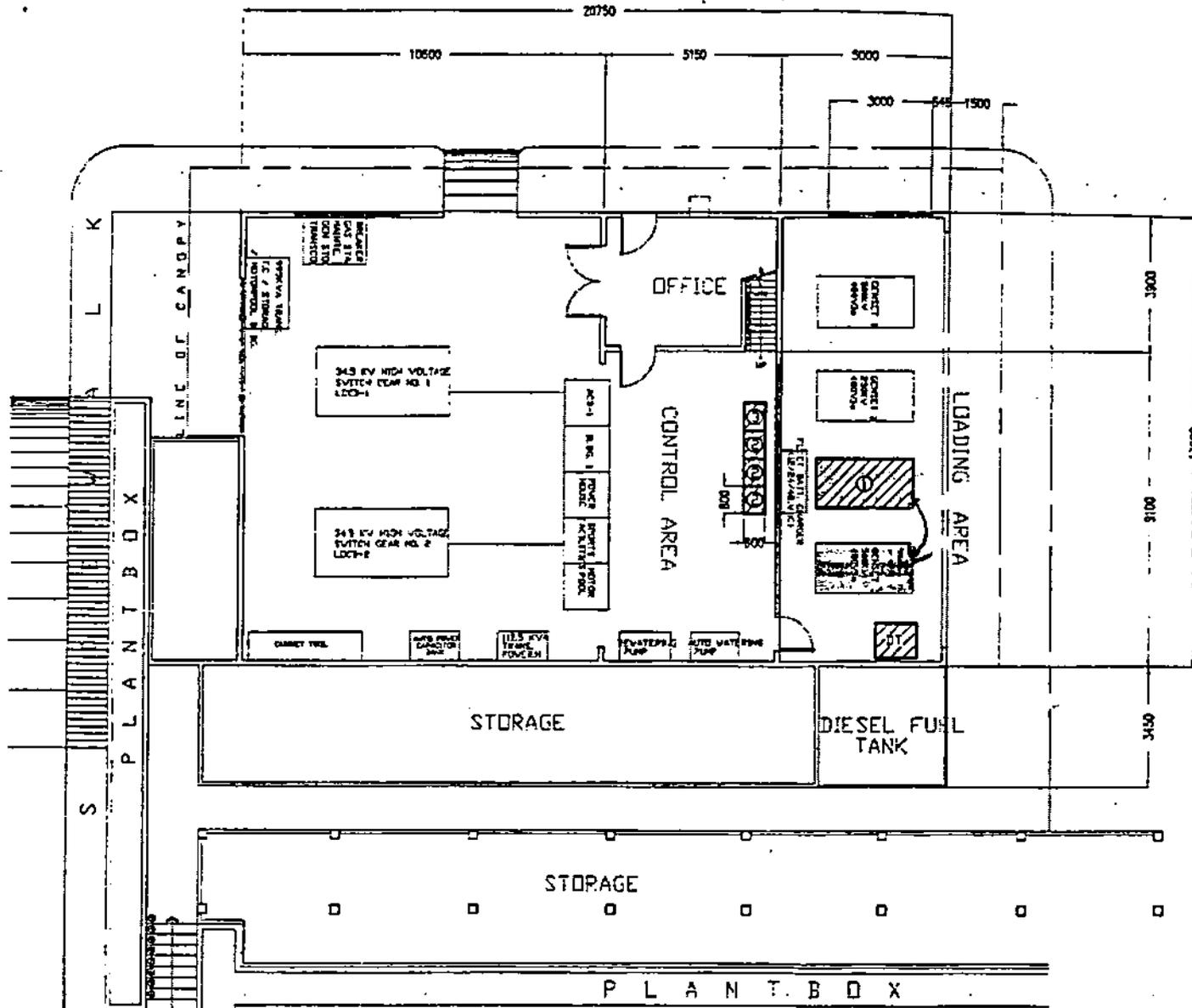
Management  
System  
ISO 9001:2015



[www.tuv.com](http://www.tuv.com)  
ID #10865625







NOTES:

1. ALL DIMENSIONS INDICATED ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. ALL SHADED EQUIPMENT ARE INCLUDED IN THE CONTRACT, ALL OTHERS ARE EXISTING.
3. THE EXISTING GENERATOR CONTROL AND PROTECTION PANELS (GCPP) OF GENSETS 1, 2, AND 3 SHALL BE DISMANTLED AND RELOCATED TO THE DESIGNATED STOCKYARD TO BE PROVIDED BY THE END-USER.
4. NEW GCPPs FOR GENSETS 1 AND 2 SHALL BE SUPPLIED IN ADDITION TO THAT OF THE NEW DIESEL GENERATOR. IT SHALL BE PROPERLY INTEGRATED WITH THE EXISTING EQUIPMENT AND EQUIPPED WITH THE CONTROL, MONITORING, AND PROTECTION DEVICES AS SPECIFIED BY THE MINIMUM REQUIREMENT SHOWN ON DWG. NO. HO-BDE-17.001.

LEGEND:

- ① - DIESEL GENERATOR
- ② - GENERATOR CONTROL AND PROTECTION PANEL
- ③ - LOW VOLTAGE STANDBY GENERATOR METAL-CLAD SWITCHGEAR
- DT - DAYTANK

○ NPC HEAD OFFICE - POWER HOUSE  
SCALE 1 : 250 MTS.

OWNER:		NATIONAL POWER CORPORATION AGHAM ROAD, DILMAN, QUEZON CITY	
PROJECT:		EPC, BIDDING, INSTALLATION AND COMMISSIONING OF TWO (2) 115KV POWER TRANSFORMERS AND TWO (2) 115KV/34.5KV SUBSTATIONS, 34.5KV/11KV AND 11KV/0.4KV	
LOCATION:		BIDDER-SPECIFIED DIESEL, BIDDING HEAD OFFICE	
TITLE:		EQUIPMENT LAYOUT	
DESIGNED BY	CHKD BY	DATE	SUBMITTED BY
DRWING NO.	REV.		BY
REVISION	PROPOSED	REASON	DATE
CHECKED BY	APPROVED BY		
SCALE: MTS	DWG. NO. HO-BDE-17.002		PLAT. NO. L122P22213815e
REV. DATE		NATURE OF REVISION	
BY	CHKD.	RECD.	APPV.
		BID DRAWING	
		REV 0	