



## NATIONAL POWER CORPORATION

### SUPPLEMENTAL / BID BULLETIN NO. 6

PR NO. HO-PIG25-002 / REF. NO. PB250408-AM00075  
SUPPLY, DELIVERY, CONSTRUCTION, INSTALLATION, TESTING AND  
COMMISSIONING OF 10MVA MASBATE (MALINTA) SUBSTATION

08 MAY2025

All prospective bidders and authorized copyholders of the Bid Documents of the project mentioned above are hereby informed of the changes/clarifications as follows:

<b>INVITATION TO BID (PUBLIC BIDDING -BCS 2025-0131) BID SUBMISSION / OPENING</b>	
<b>FROM</b>	<b>TO</b>
13 MAY 2025 9:30 A.M. Kaňao Room	<u>20 MAY 2025</u> 9:30 A.M. Kaňao Room

<b>BID DOCUMENTS SECTION VI – TECHNICAL SPECIFICATIONS ANNEX B (TO BE SUBMITTED DURING POST-QUALIFICATION)</b>	
<b>FROM</b>	<b>TO</b>
B.21.0: VOICE AND DATA (TELEPHONE AND LAN), CCTV, AND TWO-WAY RADIO COMMUNICATION EQUIPMENT	<u>B.22.0:</u> VOICE AND DATA (TELEPHONE AND LAN), CCTV, AND TWO-WAY RADIO COMMUNICATION EQUIPMENT

All other terms and conditions shall remain the same. Supplemental for clarifications shall only supersede the affected requirements.

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

For the Bids and Awards Committee:

  
**LARRY I. SABELLINA**

Vice-President, Mindanao Generation  
and Chairman, Bids and Awards Committee



### NATIONAL POWER CORPORATION

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**B.22.0: VOICE AND DATA (TELEPHONE AND LAN), CCTV, AND TWO-WAY RADIO COMMUNICATION EQUIPMENT****B.22.1 Technical Characteristics and Requirements**

The Contractor shall indicate that their data corresponds to the NPC requirements for the Telephone System.

**B.22.2 Telephone Cabinet and UPS**

	<b>NPC Requirement</b>	<b>Contractor's Data</b>
a. Cubicle type	19" rack, sheet steel with powder-coated black finish	
b. Panel type	42(H) x 600mm(W) x 800mm(D)	
c. Perforated front and back doors, detachable side panels with lock & keys	Yes	
d. Accessories	3-fixed trays, 4-top mounted exhaust fans, adjustable square-hole rail with cage nut & bolts	
e. Cable manager & Power Distribution Unit (PDU)	Vertical mount cable manager, 15-outlet, 3-prong PDU with 3M cable length	
f. Cable entrance	Top & bottom	
g. 6KVA Uninterruptible Power Supply (UPS), online double conversion with power factor correction system, rack mounted complete with network communication card	To be provided	

Name of Bidder:

Name & Signature of Bidder's Representative:

Designation:



**B.22.3 Telephone (IP-PBX)****General**

a. Main unit	IP-PBX (Hybrid) VoIP technology, multi-service platform	
b. Mounting	19"-horizontal rack-mounted	
c. Module slot	At least four (4) slots	
d. FXO module (trunk line)	≥ 3-FXO port (analog trunklines)	
e. FXO module (analog device)	≥ 8-FXO port (analog extensions)	
f. Ethernet port	≥ 3 x 10/100/1000 Mbps ports	
g. Supported G.729a compression channel	≥ 64-channel	
h. Operating temperature	≥ 40 °C	
i. Support dedicated media gateway	Yes	
j. Input voltage & frequency rating	100 ~ 240VAC, 60Hz	
k. Configuration Editor Software	To be provided as part of the supply of IP-PBX equipment	
l. 1U 24-port Cat6 (180°) patch panel With labelling holder, dual type	To be provided	

Name of Bidder:

Name &amp; Signature of Bidder's Representative:

Designation:





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|---|----------------|--|
| m. SIP trunk/channel proxy licenses,<br>DSP module/controller | To be provided |  |
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**B.22.4 Operator IP-Phone Handset**

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| a. 1-unit, at least 3.5" color LCD, HD<br>audio, full-duplex, 2-gigabit POE<br>port, black color | To be provided |  |
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**B.22.5 Telephone Analog Handset**

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| a. Analog phone (8 units), black color |  |  |
|  | At least eight (8)<br>programmable<br>keys, hands-free<br>speakerphone |  |

**B.22.6 Terminal Block and Cable Requirements**

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|---|----------------|--|
| a. Supply of interconnecting cables<br>between IP-PBX and the<br>telephone handsets and outlets   | To be provided |  |
| b. Supply of interconnecting cables<br>from the IP-PBX to the Low Earth<br>Orbit (LEO) internet link  | To be provided |  |
| c. 4 x 10-pair, type 110 punch-down<br>terminal block with back plate,<br>2-port faceplate Information Outlet<br>(I/O), RJ45 and RJ11 connectors,<br>Cat5e Foil Twisted Pair (FTP)<br>cable, and 1U cable management. | To be provided |  |

**B.22.7 Programming Requirements**

The IP-PBX program configuration shall follow the NPC dialing plan, including application software and a data retriever/programming device.

	To be provided	
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**B.22.8 Contractor's Field Service Representative**

The contractor shall provide the services of a testing engineer at the job site.

Name of Bidder:

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**B.22.9 Data Retriever/Programming Device**

	<b>NPC Requirement</b>	<b>Contractor's Data</b>
a. Type	<u>Laptop computer</u>	<u></u>
b. Hardware		
1. Processor	<u>Intel Core i5 or better</u>	<u></u>
2. Clock Frequency, GHz	<u>Fastest speed available</u>	<u></u>
3. Memory	<u>≥16GB SSD</u>	<u></u>
4. Storage	<u>≥1TB SSD</u>	<u></u>
5. Video Card	<u>≥4GB</u>	<u></u>
6. Display	<u>≥15" LED display</u>	<u></u>
7. Built-in audio system	<u>Yes</u>	<u></u>
8. Built-in camera with microphone	<u>Yes</u>	<u></u>
9. Operating and application software	<u>Licensed Windows 11 Pro 64-bit and Microsoft Office 2022 Pro Plus</u>	<u></u>
10. Power supply/battery backup	<u>To be included</u>	<u></u>
11. Interface ports	<u>USB, HDMI, and card reader ports</u>	<u></u>
12. Network	<u>Wi-Fi, Bluetooth external LAN adapter</u>	<u></u>

Name of Bidder:

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**B.22.10 CCTV EQUIPMENT**

	<b>NPC Requirement</b>	<b>Contractor's Data</b>
a. Network Video Recorder (NVR)	One (1) unit 8-channel, 2–1 x 8TB NAS HDD, VGA, HDMI, USB interface	
b. 5MP bullet type (outdoor) IP-camera POE with 4 x 4 WP box	Five (5) units	
c. 5MP dome type (indoor) IP-camera POE with 4 x 4 WP box	Three (3) units	
d. 8-port gigabit POE managed switch with 2-1x10Gbe transceiver uplink port	One (1) unit	
e. Cat6 STP (shielded twisted pair) cable	One (1) box	
f. LED monitor display, complete with wall mounting bracket	One (1) unit, VGA, HDMI interface ports, with 15-meter HDMI cable	

**B.22.11 TWO-WAY RADIO COMMUNICATION**

	<b>NPC Requirement</b>	<b>Contractor's Data</b>
a. Base station 136~174MHz, 45 watts' output, analog/digital sensitivity 0.3uV/ 0.22uV, ABME+ 2TM digital vocoder Provisions of OTA programming, dual capacity, IP-54, complete with external speaker, PTT mic, 30A switching power supply	One (1) unit, compliant to FCC & ICC standards	
b. Base antenna, Omni-directional fiberglass $\geq$ 3.8dB gain, 144~174MHz, 200 watts (max) complete with 50-ohm high-grade RG-8 coaxial cable, connectors and surge protector	One (1) set	

Name of Bidder:

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Designation:





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| c. 60-foot antenna mast, painted as per CAA standard complete with climbing steps, accessories: concrete pedestal, anchor bolts, turn-buckle, guy wire, ground cable and lightning rod<br>(Refer to reference drawing)       | One (1) set  |  |
| d. Mobile station 136~174MHz, 45 watts output, analog/digital sensitivity 0.3uV/0.22uV, ABME+ 21M digital vocoder Provisions of OTA programming, dual capacity, IP-54, complete with PTT mic and vehicle DC cable with fuse. | Two (2) units,<br>compliant to FCC<br>& ICC standards    |  |
| e. Mobile antenna, Omni-directional, 5/8 wave whip with PO/SO-239 magnetic base mount, 200 watts (max) at 50-ohms, complete with 50-ohm high-grade RG-58 coaxial cable and PL-259 connector                                  | Two (2) sets   |  |
| f. Portable station, LKP display, 5 watts RF output, analog/digital sensitivity 0.16uV/0.14uV, AMBE+2TM, digital vocoder, IP-67, MIL-STD, complete with spare lithium-ION battery pack and battery charger                   | Four (4) sets,<br>compliant to<br>FCC & ICC<br>standards |  |
| g. Programming (as per NPC licensed radio frequency), VWSR test, NTC licensing, and assistance fee for the two-way radio communication system  | To perform   |  |

Name of Bidder:

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Name &amp; Signature of Bidder's Representative:

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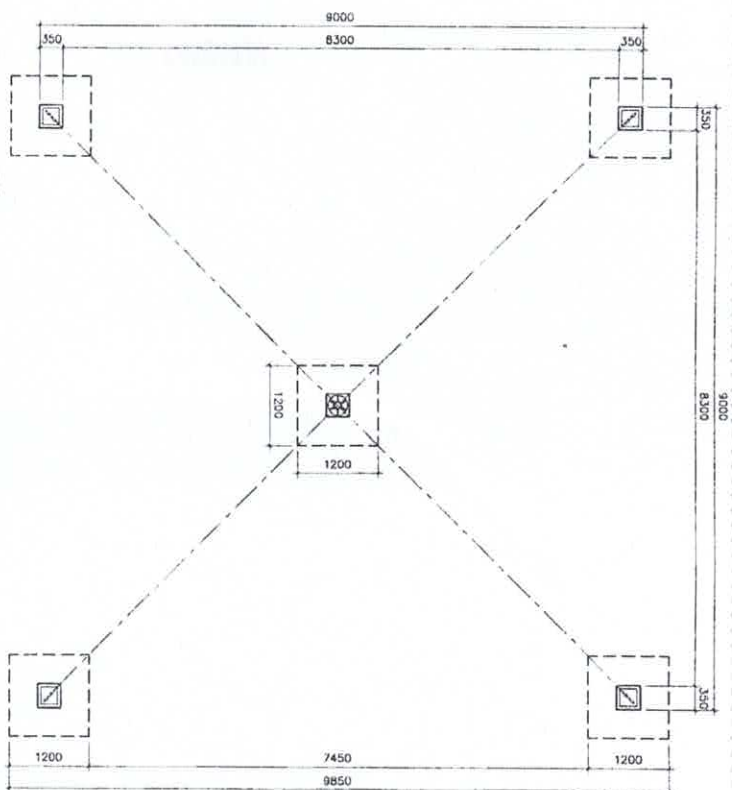
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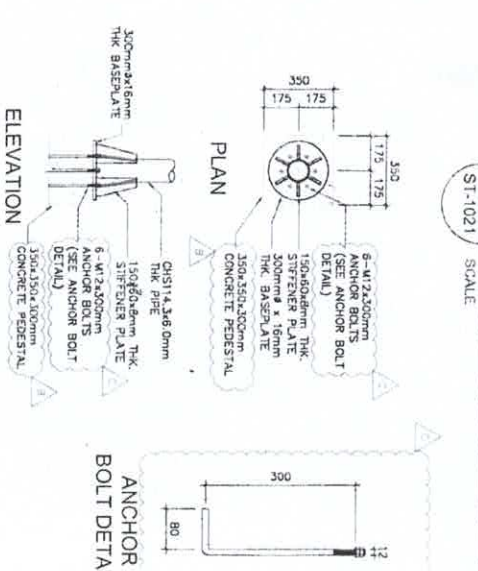




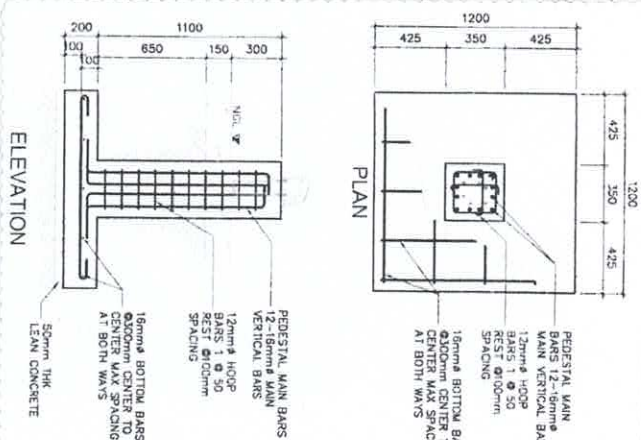




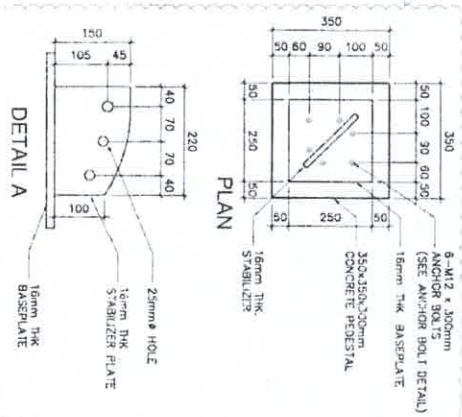
1 FOUNDATION LAYOUT  
SCALE 1:75



3 TYPICAL PEDESTAL DETAIL  
SCALE 1:50

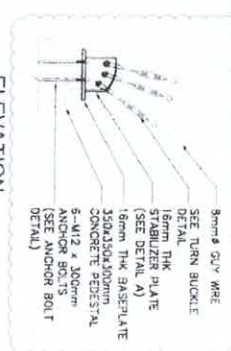


2 COLUMN FOOTING DETAIL  
SCALE 1:50



4 TYPICAL DEADMAN DETAIL  
SCALE 1:50

REVISION NOTES:	
A	UPDATED DISTANCE OF PEDESTAL
B	UPDATED PEDESTAL SIZES
C	UPDATED SIZES OF ANCHOR BOLTS
D	UPDATED DETAIL DRAWINGS



- NOTE:
- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED.
  - MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28-DAY PERIOD SHALL BE  $f_c = 30\text{MPa}$ . LEAN CONCRETE SHALL BE  $f_c = 25\text{MPa}$ .
  - ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
  - DETAILS OF REINFORCING BARS (SPICES, BENDS, HOOKS, ETC.) SHALL BE IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF ACI CODE.
  - ALLOWABLE SOIL BEARING CAPACITY SHALL NOT BE LESS THAN 115 KPA.
  - WATERMARKS:
  - STRUCTURE STEEL: A36
  - ANCHOR BOLTS: F1550/1500, F1550/1500
  - WASHERS: ASTM F436
  - ALL ASPECTS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST ACI CODE.