



## NATIONAL POWER CORPORATION

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**SUPPLEMENTAL /BID BULLETIN NO. 2**  
to the Bid Documents for the  
**SUPPLY, DELIVERY, INSTALLATION, TEST AND COMMISSIONING OF FOUR (4) UNITS**  
**OF DIESEL GENSETS FOR SIBOLO DPP AMD GUIWANON DPP IN WESTERN VISAYAS**  
**INCLUDING ITS ASSOCIATED ELECTRICAL EQUIPMENT UNDER PACKAGE 31**  
**PR NO. SO-OPD21-009/REF. NO. PB211202-JC00437(PB2)**  
**26 JANUARY 2022**

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All prospective bidders and authorized copyholders of the terms of reference are hereby informed of the changes in:

**SEE ATTACHED REVISED FILE FOR SECTION VI, PART II – TECHNICAL DATA SHEETS, MW-MECHANICAL WORKS for the following pages:**

- p. VI-TDS(MW)-i
- p. VI-TDS(MW)-ii
- p. VI-TDS(MW)-1
- p. VI-TDS(MW)-2
- p. VI-TDS(MW)-3
- p. VI-TDS(MW)-12

All other terms and conditions shall remain the same.

For the information and guidance of all authorized copyholders of the Terms of Reference (TOR) and prospective bidders.

For the Bids and Awards Committee:

  
**ATTY. ROGEL T. TEVES**  
Vice President, Power Engineering Services and  
Chairman, Bids and Awards Committee



**PART II – TECHNICAL DATA SHEETS**

**MW – MECHANICAL WORKS**

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<b>DOCUMENTS TO BE SUBMITTED DURING BID OPENING</b>		
M-1.0	Diesel Engine-Generator and Associated Equipment Data Summary	VI-TDS(MW)-2
M-2.0	Fuel Consumption Form for Diesel Engine-Generator Sets	VI-TDS(MW)-3
Annex A.1	Letter of Authorization and Guarantee Statement either from: 1) <i>Original Equipment Manufacturer (OEM) or 2) Licensee of the OEM accompanied by a Certification from OEM as a Licensee or the Licensee Agreement or 3) Authorized Distributor/Dealer (accompanied by a Certificate of Authorized Distributorship/Dealership from the OEM/Licensee of the OEM). If from the Licensee, a Certification from the OEM as a Licensee or the Licensee agreement must also be submitted</i> , for the 40 kW and 50 kW Prime Rated Power Diesel Engine-Generator Set/Diesel Generating Set.	Attachment As Annex A.1
Annex A.2	Performance Curve (duly signed with full name) issued by the Diesel Engine-Generator Set/Diesel Generating Set (Engine + AC Generator) Manufacturer/ Assembler/Integrator @ Specified Reference Site Conditions of the Diesel- Generator Set Model/Type being offered.	Attachment As Annex A.2
Annex A.3	Performance Curve (duly signed with full name) issued by the Diesel Engine Manufacturer @ Specified Reference Site Conditions of the Diesel Engine Model/Type being offered.	Attachment As Annex A.3
<b>DOCUMENTS TO BE SUBMITTED DURING POST QUALIFICATION BUT NOT LIMITED TO:</b>		
M-3.0	Diesel Engine	VI-TDS(MW)-5
M-4.0	Spare Parts	VI-TDS(MW)-6
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M-4.2	Spare Parts per Unit of 50 kW Diesel Generating Set During the Warranty Period	VI-TDS(MW)-7
M-4.3	Spare Parts per Total Units of 40 kW Generating Sets Supplied and to be Delivered at Sibolo DPP	VI-TDS(MW)-8
M-4.4	Spare Parts per Total Units of 50 kW Generating Sets Supplied and to be Delivered at Guiwanon DPP	VI-TDS(MW)-9
M-5.0	Standard/Special Tools	VI-TDS(MW)-10
M-5.1	Standard/Special Tools per Total Units of 40 kW Generating Set Supplied and Delivered at Sibolo DPP	VI-TDS(MW)-10
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SECTION	DESCRIPTION	PAGE
<b>DOCUMENTS TO BE SUBMITTED DURING PROJECT IMPLEMENTATION BUT NOT LIMITED TO:</b>		
M-6.0	ISO 9001 Certificate of the Manufacturer/Assembler/Integrator or equivalent for each of the Diesel Engine-Generator Set Package.	
M-7.0	<b>Standard Certification</b> of the proposed offered model Diesel Engine-Generator Set from any of the following internationally recognized certifying body/organization: a) Canadian Standard Association (CSA) b) Underwriter's Laboratories (UL) c) Japanese Industrial Standards (JIS) d) European Commission (CE) e) Lloyd's Register (LR) f) Germanischer Lloyd (GL) g) Nippon Kaiji Kyokai (NKK) h) American Bureau of Shipping (ABS)	
M-8.0	<b>Power Derate Curves and Details or Certificate/Statement from Diesel Engine-Generator Set /Genset Manufacturer/Assembler/ Integrator</b> that the proposed Diesel Engine-Generator Set have no deration at Specified Reference Site Conditions.	
M-9.0	<b>Manufacturer/Assembler/Integrator General Data, Catalogue and Brochures of model/type of equipment</b> offered and published as standard products for the Diesel Engine-Generator Set which contain the following information: a) Manufacturer/Assembler/Integrator b) Model/Type c) Prime Rated Power d) Voltage e) Power Factor f) Frequency g) Rated Speed h) Arrangement & Number of Cylinders	
M-10.0	<b>Technical Data for Engine and Auxiliaries</b>	VI-TDS(MW)-13
M-11.0	<b>Supplier/Manufacturer/Assembler Drawings, Brochures, Instruction Manuals and other Documents</b> as specified in Clause GW-6.3 and other relevant Clauses of the Technical Specifications	



**PART II – TECHNICAL DATA SHEETS**

**MW – MECHANICAL WORKS**

**DOCUMENTS TO BE SUBMITTED DURING THE BID OPENING**  
**(Sections M-1.0, M-2.0, Annexes A.1, A.2 & A.3)**

**NOTES**

1. The Bidder shall complete this technical data sheet and submit the filled-up forms with the technical proposal. The Bidder shall use additional sheets as necessary for any other additional information following the format shown herein or by reproducing the same.
2. The data required are technical features and characteristics of the Equipment to be provided by the bidder. Bidder's proposal shall at least be equal or superior to the requirements specified by NPC.
3. Deviation from the requirements indicated in the technical data sheets M-1.0, M-2.0 and non-submission of the required documents listed as Annexes A.1, A.2 and A.3 shall be ground for disqualification.
4. All data and information shall be in English language.

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Name of Firm	Name & Signature of Representative	Designation
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**M-1.0 DIESEL ENGINE-GENERATOR SET AND ASSOCIATED EQUIPMENT DATA SUMMARY**

ITEM	DESCRIPTION	NPC REQUIREMENT	SUPPLIER'S DATA	
			40 kW	50 kW
M-1.1	Diesel Engine-Generator Set/Diesel Generating Set (DG Set) -Prime Duty *	Designed, manufactured & tested in compliance with the latest version of the standards* listed below, mounted on heavy duty steel base frame with anti-vibration pads		
M-1.1.2	Manufacturer/Assembler/Integrator of DG Set being offered	By Supplier		
M-1.1.3	Brand Name of DG Set being offered	By Supplier		
M-1.1.4	Model of DG Set being offered	By Supplier		
M-1.1.5	DG Set Manufacturer/Assembler/Integrator Experience, Year	5 (minimum)		
M-1.1.6	DG Set Prime Rated Power at Specified Reference Site Conditions* & 0.8 Power Factor, kW	40 (minimum) 50 (minimum)		
M-1.1.7	DG Set Guaranteed Fuel Rate at Required DG Power Output & at Reference Site Conditions, 100 % Rated Load, li/kW-hr	0.34 (maximum)		
M-1.1.8	Voltage, V	480 (± 5%)		
M-1.1.9	Power factor	0.80 (min.)		
M-1.1.10	Frequency, Hz	60		
M-1.1.11	No. of Phases, Ø	3		
M-1.1.12	Rated Speed, RPM	1800		
M-1.1.13	Governor	electronic		
M-1.1.14	Arrangement & Number of Cylinders	In-line Multi-cylinder		
M-1.1.15	Maximum Sound Pressure Level @ 1-meter distance, dBA	85		
M-1.1.16	Maximum Permissible NOx, mg/Nm <sup>3</sup>	2000 as NO <sub>2</sub>		
M-1.1.17	Maximum Permissible Sox, mg/Nm <sup>3</sup>	700 as SO <sub>2</sub>		
M-1.1.18	Maximum Permissible CO, mg/Nm <sup>3</sup>	500 as CO		
M-1.1.19	Particulates, mg/Nm <sup>3</sup>	200		
M-1.1.20	Performance Curve (duly signed with full name) issued by the Diesel Engine-Generator Set/Diesel Generating Set (Engine + AC Generator) Manufacturer/Assembler/Integrator @ Reference Site Conditions of the Diesel-Generator Set Model/Type being offered.	(To be Submitted as Annex A.2)		

**NOTES:**

1. \* IEC 60034, IEC 60085, IEC60529, ISO 9001, ISO 3046 and ISO 8528
2. Guaranteed Fuel Consumption which is more than the specified maximum value will be ground for rejection of the equipment being offered.
3. Experience less than what is required will be ground for rejection of the equipment being offered.

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Name of Firm

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Name & Signature of Representative

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Designation



SECTION VI – TECHNICAL SPECIFICATIONS

**M-1.0 DIESEL ENGINE-GENERATOR AND ASSOCIATED EQUIPMENT DATA SUMMARY *Cont'd...***

ITEM	DESCRIPTION	NPC REQUIREMENT	SUPPLIER'S DATA
M-1.2	Diesel Engine		
M-1.2.1	Manufacturer	By Supplier	
M-1.2.2	Manufacturer's Experience, years	10	
M-1.2.3	Place of Manufacture	By Supplier	
M-1.2.4	Brand Name of Diesel Engine being offered	By Supplier	
M-1.2.5	Model/Type	By Supplier	
M-1.2.6	Engine Prime Brake Power Output at Specified Reference Site Conditions, kWm or BHP	By Supplier	
M-1.2.7	Diesel Engine Performance Curve (duly signed with full name) issued by the Diesel Engine Manufacturer @ Specified Reference Site Conditions of the Diesel Engine Model/Type being offered.	(To be Submitted as Annex A.3)	

**M-2.0 – FUEL CONSUMPTION FOR DIESEL ENGINE-GENERATOR SETS**

A	B**	C	D*	E
DG Set Guaranteed Prime Rated Power at Specified Reference Site Conditions (Minimum KW)	DG Set Guaranteed Fuel Rate at Required Prime Rated Power & at Specified Reference Site Conditions (liters/kilowatt-hour)	Cost of Fuel (PhP/ltr)	No. of operating hours per year (hrs)	1-Year Cost of Fuel Consumption, (A x B x C x D) (PhP)
40		40.40	3,427	
50		40.40	3,427	

**NOTES:** \* For evaluation Purposes: The estimated number of operating hours per year is based on 16 hrs/day operation, 25 days PMS, 10% Outages and assumed 70% Utilization Factor.

\*\* Write the Guaranteed Fuel Rate in three decimal places, i.e. 0.270 L/kW-hr. If Fuel Rate is indicated in more than three decimal places, only the first three decimal numbers will be considered regardless of any number written in the fourth decimal number.

\_\_\_\_\_  
Name of Firm

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SECTION VI – TECHNICAL SPECIFICATIONS

**PART II – TECHNICAL DATA SHEETS**

**MW – MECHANICAL WORKS**

**DOCUMENTS TO BE SUBMITTED DURING THE PROJECT IMPLEMENTATION BUT NOT LIMITED TO:**

**(Sections M-6.0, M-7.0, M-8.0, M-9.0, M-10.0 & M-11.0)**

**NOTES**

1. The Bidder shall complete this technical data sheet/documents and submit the filled-up forms during the project implementation (during contract stage). The Bidder shall use additional sheets as necessary for any other additional information following to the format shown herein or by reproducing the same.
2. The data required are technical features and characteristics of the Equipment to be provided by the bidder. Bidder's proposal shall at least be equal or superior to the requirements specified by NPC. The data provided shall be used as basis for evaluation of brochures, drawings and other documents to be submitted for review and approval during the project implementation.
3. All data and information shall be in English language.

SECTION	DESCRIPTION	PAGE
M-6.0	ISO 9001 Certificate of the Manufacturer/Assembler/Integrator or equivalent for each of the Diesel Engine-Generator Set Package.	
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