NATIONAL POWER CORPORATION

SUPPLEMENTAL /BID BULLETIN NO. 1
to the Bid Documents for the
SUPPLY, DELIEVRY, INSTALLATION, TEST AND COMMISSIONING OF 1X200KW AND 1X100KW MODULAR DIESEL GENSETS AND ASSOCIATED ELECTRICAL EQUIPMENT FOR SARANGANI DPP UNDER PR NO. S4-PIC21-066/ REF. NO. PB220215-NA

08 February 2022

All prospective bidders and authorized copyholders of the bid documents are hereby informed of the change in:

SECTION VI – TECHNICAL SPECIFICATIONS PART II - TECHNICAL DATA SHEETS, MW-MECHANICAL WORKS

Please refer to the attached revised 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)-13

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

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PART II – TECHNICAL DATA SHEETS

MW – MECHANICAL WORKS

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DOCUMENTS TO BE SUBMITTED DURING IMPLEMENTATION BUT NOT LIMITED TO		
M-7.0	**ISO 9001 Certificate of the Manufacturer/Assembler/Integrator or equivalent** for each of the **Diesel-Engine-Generator Set** Package.	
M-8.0	**Standard Certification** 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-9.0	**Technical Data for Engine and Auxiliaries**	See Attached Forms on page III-TDS(MW)-14
M-10.0	**Power Derate Curves and Details or Certificate/Statement from Diesel-Engine-Generator Set Manufacturer/Assembler/ Integrator** that the proposed Diesel Engine-Generator Set have no deration at Reference Site Conditions.	
M-11.0	**Manufacturer's/Assembler/Integrator's General Data, Catalogue and Brochures of model/type of equipment** offered and published as standard products for the **Diesel-Engine-Generator Set** which contain the following information: a) Manufacturer/Assembler b) Model/Type c) Prime Rated Power d) Voltage e) Power Factor f) Frequency g) Rated Speed h) Arrangement & Number of Cylinders	
M-11.0	**Supplier/Manufacturer/Assembler Drawings, Brochures, Instruction Manuals and other Documents** 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 to M-2.0, Annexes A.1, A.2 and 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 continuation sheets as necessary for any other additional information keeping 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;

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; and

4. All data and information shall be in English language.

Name of Firm	Name & Signature of Representative	Designation

M-1.0 DIESEL ENGINE-GENERATOR SET AND ASSOCIATED EQUIPMENT DATA SUMMARY

ITEM	DESCRIPTION	NPC REQUIREMENT	SUPPLIER'S DATA	
			200 kW	100 kW
M-1.1	**Diesel Engine-Generator Set/Diesel Generating Set (DG Set) -Prime Duty ***	Designed, manufactured and tested in compliance with the latest version of the standards* listed below, mounted on heavy duty steel base frame with anti-vibration pads contained in a sound attenuated & weatherproof enclosure		
M-1.1.1	Manufacturer/Assembler/Integrator of D/G Set being offered	By Supplier		
M-1.1.2	Brand Name of DG Set being offered	By Supplier		
M-1.1.3	Model of DG Set being offered	By Supplier		
M-1.1.4	D/G Set Manufacturer/Assembler/ Integrator Experience, Year	5		
M-1.1.5	D/G set Guaranteed Prime Rated Power at Reference Site Conditions & 0.8 Power Factor, kW	200 minimum 100 minimum		
M-1.1.6	D/G set Guaranteed Fuel Rate at Required 200 kW and 100 kW Prime Power Output at Reference Site Conditions, 100 % Rated Load, li/kW-hr	0.30 (max)		
M-1.1.7	Voltage, V	480 (± 5%)		
M-1.1.8	Power factor	0.80 (min.)		
M-1.1.9	Frequency, Hz.	60		
M-1.1.10	No. of Phases , Ø	3		
M-1.1.11	Rated Speed, RPM	1800		
M-1.1.12	Governor	Electronic		
M-1.1.13	Arrangement & Number of Cylinders	In- line and Multi-cylinder		
M-1.1.14	Maximum Sound Pressure Level @ 1-meter distance, dBA	85		
M-1.1.15	Maximum Permissible NOx, mg/Nm^3	2000 as NO_2		
M-1.1.16	Maximum Permissible Sox, mg/Nm^3	700 as SO_2		
M-1.1.17	Maximum Permissible CO, mg/Nm^3	500 as CO		
M-1.1.18	Particulates, mg/Nm^3	200		
M-1.1.19	Factory Acceptance test	Yes		
M-1.1.20	**"Diesel Engine-Generator Set/Diesel Generating Set (Engine + AC Generator) Performance Curve"** @ Reference Site Conditions issued by the Manufacturer/ Assembler/Integrator (duly signed with full name) of the Diesel-Generator Set Model/Type being offered	To be Submitted/Attachment as Annex A.2		

NOTE:

1. **** IEC 60034, IEC 60085, IEC60529, ISO 901, ISO 3046 and ISO 8528***
3. ***Guaranteed Fuel Consumption which is more than the specified maximum value will be ground for rejection of the equipment being offered.***
4. ***Experience less than what is required will be ground for rejection of the equipment being offered.***

Name of Firm _____ Name & Signature of Representative _____ Designation _____

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

ITEM	DESCRIPTION	NPC REQUIREMENT	SUPPLIER'S DATA	
			200 kW	100 kW
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 Reference Site Conditions, kWm or BHP	By Supplier		
M-1.2.7	Performance Curve @ Reference Site Conditions issued by the Diesel Engine Manufacturer or Diesel Generating Set Manufacturer/Assembler/Integrator (duly signed with full name) for the Diesel Engine Model/Type being offered	To be Submitted/Attachment as Annex A.3		

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

A	B**	C	D*	E
DG Set Guaranteed Prime Power Output at Reference Site Conditions (Minimum kW)	D/G Set Guaranteed Fuel Rate at Required 200 kW and 100 kW Prime Power Output at 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)
200		40.4	3427	
100		40.4	3427	

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% Load 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 | Name & Signature of Representative | Designation

PART II – TECHNICAL DATA SHEETS

MW – MECHANICAL WORKS

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

(Sections M-7.0 M-8.0, M-9.0 M-10 M-11 & M-12)

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 continuation sheets as necessary for any other additional information keeping 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.

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M-12.0	**Supplier/Manufacturer/Assembler Drawings, Brochures, Instruction Manuals and other Documents** as specified in Clause GW-6.3 and other relevant Clauses of the Technical Specifications	

Name of Firm _____ Name & Signature of Representative _____ Designation _____