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Embassy of the People's Republic of China

CE--364--23

The Embassy of the People's Republic of China in the Republic of South Africa presents its compliments to the Department of International Relations and Cooperation of the Republic of South Africa, and has the honor to communicate with the latter as follows:

In order to deepen China-South Africa comprehensive strategic partnership and assist South Africa in resolving power crisis, at the request of the South African side, the Chinese side plans to provide a batch of emergency power equipment to South Africa as grants, worth of R167 million, including 5 sets of power supply vehicles, 450 sets of gasoline generators, 39 sets of diesel generators, and 60 sets of photovoltaic energy storage power supply systems (see attached Material List).

In order to speed up China's provision of emergency power equipment to South Africa, the Chinese side has worked out the division of responsibilities between the two sides, the list of aid materials to be provided and things to be clarified. It would be highly appreciated if DIRCO could kindly coordinate with Department of Public Enterprises (DPE) and Presidency for Electricity [Ministry of] to confirm the attached contents as soon as possible and provide written feedback to the Embassy.

The Embassy of the People's Republic of China avails itself of this opportunity to renew to the Department of International Relations and Cooperation of the Republic of South Africa the assurances of its highest consideration.

Pretoria, May 29, 2023



Department of International Relations and Cooperation
Republic of South Africa

Cc:

Presidency for Electricity[Ministry of]
Department of Public Enterprises

Issues to Be Discussed Regarding Aid Project for Emergency Power Equipment

I. Responsibilities of China and South Africa

The Chinese side is responsible for providing materials, transporting all materials to Durban Port in South Africa, dispatching technical personnel to provide technical services, and bearing the above expenses. The South African side is responsible for exempting all taxes and fees for material imports, handling access permits and standard certification procedures for all materials, as well as their customs clearance and delivery, domestic transportation and distribution inside South Africa, providing necessary facilitation for Chinese technical service personnel in South Africa and bearing the related expenses of the above-mentioned work. The South African side is also responsible for overdue storage fees and truck and container detention fees caused by failure of the South African side to timely clear customs, pick up goods, unload goods and unpack containers, etc.

II. Type of materials to be provided

1. Power Supply Vehicle

The power supply vehicles provided in this project are right

rudder diesel vans with supply capacity of 600-800kVA. They can be used in several areas in turn and have necessary devices such as box, circuit breaker, isolator, protection, and connection cables. They are mature products that can fully meet the demand of South Africa. The recommended manufacturers of power supply vehicles provided in this project are all first-tier Chinese brands.

2. Gasoline generator set

The gasoline generator set is a 6KW mobile gasoline generator set commonly used in Africa. It is easy to operate and has a wide range of applications. When the municipal power supply is unstable or during outage, the small gasoline generator set can be used as a backup power supply.

3. Diesel generator set

Chinese diesel generator set products are very mature. The sets provided in this project are 150KW ones equipped with silent box and heat dissipation function. They can adapt to the tropical savanna climate of South Africa and have the characteristics of large power, convenient operation, wide range of use.

4. Photovoltaic energy storage power supply system

As the South African requested, this project will provide

100KWh and 200KWh photovoltaic energy storage power supply systems, ensuring electricity supply for various medical institutions in South Africa.

III. Things to be clarified by the South African side

1. Please provide the requirements for the power supply vehicle to be registered locally, such as emission standards, etc.

2. Please clarify whether the photovoltaic energy storage power supply system needs to be off-grid or be switchable between off-grid and grid-connected. If it needs to be connected to the grid, it is necessary for the South African side to provide technical parameters such as the capacity of the external grid transformer in South Africa, as well as the capacity of the transformer used by the local unit. The equipment provided in this project will be off-grid.

3. Please describe the installation environment of the photovoltaic energy storage power supply system, such as ground installation, roof installation, etc.. As for the roof installation, the information of roof form, such as flat or inclined roof, is required to choose the appropriate installation method and bracket according to different buildings. Given that 100KWh system covers an area of about 220m² and weighs about 8 tons, and the 200KWh system covers an area of about

431m² and weighs about 12 tons, the Chinese side proposes to install it on the ground.

4. Please provide access and certification requirements (if necessary) for all products entering South Africa, and what documents are required from the Chinese side? All the products provided in the project have IEC standard certification.

5. According to the relevant regulations of China's foreign aid, the logo of China's foreign aid will be used on the provided equipment.

6. Please specify the specific person in charge or material recipient to facilitate follow-up work.

IV. Material List

Material List

Serial number	Product name	Quantity	Unit	Brand	The main parameters	Production standard
1	Gasoline generator set	450	set	Xinyanda	<p>Model: YD7600E</p> <p>Type: Gasoline generator set</p> <p>Gasoline generator set</p> <p>Rated AC output power: 6KW</p> <p>Rated AC voltage: 220V-240V</p> <p>Rated frequency: 50HZ</p> <p>Phase number: Single phase</p> <p>Power factor: 1</p> <p>Fuel type: Unleaded gasoline</p> <p>Fuel tank capacity: $\geq 25L$</p> <p>Engine</p> <p>Maximum power: 15HP</p> <p>Start mode: Electric start</p> <p>Oil capacity: $\geq 1.1L$</p> <p>Others</p> <p>With functions such as oil alarm, oil volume display, voltage meter, overcurrent protection switch etc.</p> <p>Configuration module: Standard configuration castor</p>	Production in accordance with Chinese standards

2	Diesel generator set	39	set	Feihong	<p>Model: FH150GF25</p> <p>Type: Silent diesel generator set</p> <p>Rated output power: 150KW</p> <p>Output voltage: 230v/400v</p> <p>Frequency (Hz): 50HZ</p> <p>Wiring method: Three-phase four-wire</p> <p>Start mode: Electric start</p> <p>Insulation class: Class H</p> <p>Fuel tank capacity (L) $\geq 300L$</p> <p>Generator: Number of poles 4 Excitation mode: self-excitation</p> <p>Engine:</p> <p>Block structure: 6 cylinders</p> <p>Fuel type: 0 light diesel</p> <p>Basic configuration: muffler, chassis, shock absorber device, With control system, LCD display, with multiple protection functions such as low fuel pressure, overload protection, water temperature protection etc.</p> <p>Battery capacity: 100AH*2</p> <p>English operation instruction, English display interface</p> <p>Operating panel language: English</p>	Production in accordance with Chinese standards
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3	Power supply vehicle	5	set	Changfeng	<p>Model: CFQ5180XDY5D</p> <p>Vehicle type: right rudder van, Diesel generator set configured inside box</p> <p>Total mass: ≈ 16 tons</p> <p>Rated power: $\geq 158kW$</p> <p>Maximum speed: $\geq 85km/h$</p> <p>Radial tires for the whole car</p> <p>Adjustable driver seat, power window, central lock, air conditioning</p> <p>Diesel generator set rated power: 600-800 kVA</p> <p>Output voltage: 400V/230V</p> <p>Power frequency :50Hz</p> <p>Engine: Diesel engine</p> <p>Configuration: Necessary devices such as box, connection cables, diesel generator set etc.</p> <p>Matching fuel tank, ensure 6-8h power supply use, can be used in several areas in turn</p> <p>Generator has communication interface port, can realize remote control function.</p> <p>Generator set has circuit breaker (isolation breaker), protection device, control panel to display indicators such as power generation time and running time etc.</p> <p>Equipped with spare parts at 5% of the factory price</p>	Production in accordance with Chinese standards
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4	100KWh Off-grid Photovoltaic energy storage power supply system	35	set	Runda	<p>Model: 100KWh Off-grid Photovoltaic energy storage power supply system</p> <p>Photovoltaic power generation system: Rated generating power: 35KW; Output voltage: 520~850V; Energy storage system: Rated capacity: 102KWH; Output voltage: 400V; Frequency: 50/60HZ; Rated output power: 30KW; Including brackets and other necessary installation accessories</p>	Production in accordance with Chinese standards
5	200KWh Off-grid Photovoltaic energy storage power supply system	25	set	Runda	<p>Model: 200KWh Off-grid Photovoltaic energy storage power supply system</p> <p>Photovoltaic power generation system: Rated generating power: 70KW; Output voltage: 520~850V; Energy storage system: Rated capacity: 210KWH; Output voltage: 400V; Frequency: 50/60HZ; Rated output power: 50KW; Including brackets and other necessary installation accessories</p>	Production in accordance with Chinese standards