

# THE PRESIDENCY

# REPUBLIC OF SOUTH AFRICA

**Private Bag X1000, Pretoria, 0001**

**NATIONAL ASSEMBLY**

**QUESTIONS FOR WRITTEN REPLY**

**DATE OF PUBLICATION: 19 MAY 2023**

**QUESTION NUMBER:1873 (NW2124E)**

**1873. Mr N Singh (IFP) to ask the Minister in The Presidency for Electricity:**

(1) What immediate steps are being taken to ensure uninterrupted electricity supply to critical services, such as water and sanitation pump stations, hospitals and other essential services, considering the inability of Eskom to meet the electricity demands of the country, the increasing frequency of load shedding and the possibility of a nationwide grid collapse;

(2) Whether there is a plan to establish (a) separate reticulation lines, (b) dedicated transformers and (c) substations for essential service providers as currently many essential services share the same grid with surrounding residential areas, leading to some areas not experiencing load shedding for months while others face additional load shedding; if not, what is the position in this regard; if so, (i) is the specified plan feasible and (ii) how long will it take to implement;

(3) Whether there are any potential risks to the stability of the electricity grid associated with such a reengineering; if not, what is the position in this regard; if so, will he furnish Mr N Singh with the comprehensive details which include how he, together with the First Respondent in the Matter: Eskom Holdings SOC Ltd, intends to meet the 60-day court ordered directive handed down in the High Court, Gauteng Division, Pretoria, Case No: 005779/2023 on 5 May 2023?

**REPLY**

(1) At present, Eskom is engaging with both the Department of Health and the Department of Water and Sanitation regarding their points of supply in the Eskom supply area identified as critical. Once completed and where possible, measures will be implemented to mitigate the impact of loadshedding as far as practically possible. Currently, Eskom exempts or partially exempts 25 public health establishments within its area of supply.

The Ministry of Electricity has developed costing scenarios for installing an embedded generation (solar installation) to address the impact of load shedding and mitigate the impact of high diesel costs on medical facilities (large and small hospitals).

Small Hospital (400kW power load) based on a 4-hour outage period for battery storage, solar panel and inverters option; R13 million per hospital capital expenditure is required. Large Hospital (1MW power load) based on a 4-hour outage period for battery storage, solar panel and inverters option; R59 million per hospital capital expenditure is required.

Based on the Department of Health figures, to cover 137 Hospitals (varying between small and large), R10.1 Billion capital expenditure will be required to provide a combined Solar, Battery and inverter solution.

In contrast, for the same 137 small hospitals, diesel generators will cost R89.1 Million in capital costs, whilst large hospitals will cost R411 Million (capital costs). However, the operating cost (primarily diesel purchase) will cost R3.3 Billion and R655 Million annually for large and small hospitals, respectively.

A rapid deployment of embedded generation or “micro-grid” solutions, including roof-top solar for hospitals, other critical installations, and economic hubs, will be possible through an aggregated power purchase agreement. Ministry to issue RFI before end of July 2023 and outline a fast track procurement process to secure IPPs for micro gridding.

(2) (a), (b), (c), (i) and (ii) Where a facility is deeply embedded in the network, partial exemption at lower stages of loadshedding has been granted. Eskom has concluded a preliminary assessment of establishing dedicated feeders for certain hospitals. This assessment has been shared with the Department of Health, and discussions on implementation are ongoing. A similar approach will be followed for other critical infrastructure. The implementation time is envisaged to take between 12 to 24 months, after the investment decision, depending on the type of solution and other factors such as environmental approvals and land acquisition.

(3)The legal matter before the Courts falls within the responsibility of the Minister of Public Enterprises and the Honourable Member should accordingly direct the question to the relevant Ministry.