

**DEPARTMENT: PUBLIC ENTERPRISES**

**REPUBLIC OF SOUTH AFRICA**

**NATIONAL ASSEMBLY**

**QUESTION FOR WRITTEN REPLY**

**QUESTION NO.: PQ 141**

**QUESTION:**

**141. Ms O M C Maotwe (EFF) to ask the Minister of Public Enterprises:**

**(1)**

Whether, in light of the fact that the Just Transition Framework envisions that from 2025 onwards the Republic will embark on a concerted effort to close down power stations and foresees that this would take at least 15years to complete, and that by 2040 the country would have closed most of its power stations and transitioned to renewable energy regimes, while almost 77% of the Republic’s energy needs are currently sourced from coal and the country has about 200 years’ worth of coal reserves, he has found that it is possible to transition a country that is as dependent on coal as ours in just 15 years; if not, what is the position in this regard; if so, what are the relevant details;

**(2)**

What (a) concrete studies has Eskom undertaken to conclude that renewable sources of energy would be able to satisfy the country’s industrial and domestic needs by 2040 and (b) are the details of the power station that Eskom considers closing between now and 2030? **NW146E**

**REPLY**

**According to the information received from Eskom**

1. The two fundamental facts need to be clarified at the outset:

The IRP19 makes clear reference to a mix of energy sources: for example, coal, nuclear, hydro, gas, renewables.

In some of these instances plans are in place to acquire energy from these sources.

1. The responsibility for ensuring that the country has adequate capacity for the “country’s industrial and domestic needs” rests with the Department of Mineral Resources and Energy (DMRE) as prescribed in the National Energy Act 34 of 2008, which empowers the Minister of Mineral Resources and Energy to plan for and ensure the security of supply for the energy sector.

(2)(b)

The table below illustrates the intended shutdown dates of the first and last unit of each coal-fired power station and compares this to the assumptions in the Integrated Resource Plan (IRP). From this, it can be seen that, with the exception of Tutuka Power Station, shutdown dates are in line with the IRP2019 assumptions and in many cases, the shutdown dates of some of the older stations have been extended.



Eskom’s plans on the JET are aligned with the country’s plan towards carbon reduction in transitioning to net zero emissions by 2050. In this regard, the Eskom JET Strategy recognises the financial prudence of investing limited capital budgets towards establishing new generating capacity from renewables, rather than investing in aged coal plants to extend their lives or to make them environmentally compliant. Many coal plants are non-compliant with national minimum emissions standards requirements.

The continued operation of these plants would require extensive refurbishments of aging equipment, as well as the retrofitting of flue gas desulphurization (FGD) to achieve full environmental emissions compliance.

Thus, a full retrofit and refurbishment of the fleet would cost approximately R400 billion. In addition, refurbishments and retrofits would also require significant periods of shutdown: life-extension retrofits would take, at minimum, two years to complete, while FGD retrofits could take up to seven years to complete. Such work would reduce supply and thus exacerbate the supply deficit currently causing loadshedding in South Africa.

Since the cost of Renewable Energy (RE), specifically large wind and solar photovoltaic (PV) plants, has become far cheaper than the cost of a new coal plant, and RE plants can come on- line far sooner; investment in wind and PV represents the lowest-cost and most expeditious option to address the capacity shortage. Notably, Eskom is not able to finance capital spend for new coal plants as funders have already communicated a policy decision not to fund coal or coal-related initiatives. It must be reiterated that renewables will form part of the energy-mix reflected in IRP’19.

An important consideration is that Eskom will only shut down coal plants when they are no longer economical to continue operating. Eskom will continue the operation of Medupi, Kusile, Lethabo, Matimba, Kendal, and Majuba Power Stations well beyond 2040, and the Eskom JET Strategy does not call for premature shutdown of any of these plants. Therefore, Eskom will still be utilising coal as a fuel source well into the 2040s.

It must be emphasized that South Africa will ultimately have the mix of energy sources reflected in IRP’19 and its subsequent updates. South Africa decarbonization path and the Just Energy Transition (JET) will take into account of our global commitments and our own specific needs.

3.

Reducing carbon emissions is a global project and necessity, for the future of the planet and its inhabitants. Climate change is an undeniable reality.

The United Nations convenes annual meetings of all countries in the global community- UN climate Change conference (copy 27 in Egypt being the most recent). Various agreements and conventions are agreed at these meetings (and, also, not agreed)

At Cop 26, each participating country presented its National Determined Contribution to achieving the 1,5 degrees global warming target for 2050. However, the recently published report of the International Panel on Climate Change (IPCC), which is attached for your reference raises serious concerns about global warming and its implications for humanity.

In this regard extensive and inclusive consultations, research and discussions took place within and by the Presidential Climate Commission. This included the agreement on the NDC, consultations with various stakeholders, and interactions with communities.

**Remarks: Reply: Approved / Not Approved**

**Jacky Molisane PJ Gordhan, MP**

**Acting Director-General Minister**

**Date: Date:**