



NSBE (SA)

NATIONAL SOCIETY OF BLACK ENGINEERS OF SOUTH AFRICA "BRIDGING THE ENGINEERING SKILLS GAP"

FROM THE OFFICE OF THE PRESIDENT
MEDIA RELEASE

TO: PRINT & ELECTRONIC MEDIA HOUSES
FROM: MDU MLABA
SUBJECT: ESKOM's LOAD SHEDDING CRISIS
DATE: 23 MARCH 2021

NSBE STATEMENT ON ESKOM's LOAD SHEDDING CRISIS

The National Society of Black Engineers ("NSBE") has noted with concern the recent developments involving our key strategic State Owned Company, Eskom. These include amongst others, the following:-

- Increased frequency of load shedding despite the declining trend in peak demand over the last 10 years. 2020 registered the lowest peak demand of 34.2GW compared to 36.7GW in 2010.
- Flip flopping decisions and mixed messages communicated around load shedding,
- Unclear reports of maintenance challenges at various coal power stations,
- NERSA's approval for Eskom's tariff increase of +15% for the 2021/22 financial year whilst ordinary South Africans are experiencing financial difficulty due to the increasing levels of unemployment and zero salary increases year-on-year, and
- Announcement by the Minister of the Department of Mineral Resources and Energy ("DMRE") of 8 new investment projects to generate extra 2000MW of power.

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The Eskom's Group Chief Executive Officer ("GCEO") has on 15 March 2021 given an update that South Africans should embrace themselves for more load shedding as there would be a shortfall of 4000MW over the next five years. This statement, however, is mischievous and creates unnecessary panic since the shortfall can easily be covered by Medupi & Kusile Power Stations. The two brand new coal fired power stations are capable to deliver an extra 9000MW of base load power to the grid. The focus should be on assembling a competent technical team to get on top of the current engineering challenges at Medupi & Kusile to get them to perform at the Energy Availability Factor ("EAF") of at least 90% so that South Africans can start enjoying the benefits of that massive investment. In 2017, Eskom managed to deal with load shedding when the peak demand was higher at 35.8GW and at the time we did not have the option of Medupi and Kusile in the energy mix. Despite the briefing by the Minister of the Department of Public Enterprises ("DPE") to parliament on 06 May 2020, which entailed the approach to maintenance philosophy and Eskom roadmap, the GCEO's comments on 15 March 2021 still apportion blame to the old fleet of coal power stations as if this problem did not exist in 2017. This lame excuse about the old fleet of coal power stations as a root cause of load shedding is completely unacceptable as this myth was proven wrong just over three years ago.

The above developments and the latest Eskom Integrated Report which was published on 31 March 2020 show that Eskom under the leadership of Mr Andre De Ruyter is unable to fulfil its mandate to provide electricity in an efficient, reliable and sustainable manner. Page 92 of the same report, clearly shows that the Technical Key Performance Indicators (EAF, PCLF, UCLF, OCLF & UAGS trips) are all in the red compared to targets in his performance contract. Furthermore, the NSBE is unable to find or hear of tangible solutions coming from Eskom Executive Leadership, on how they are innovatively solving the prevailing load shedding fiasco in South Africa, while improving the financial viability and sustainability of the company. These shortcomings effectively pose a risk to the country's National Development Plan 2030 goals, as well as other critical government programs announced on the recent State of the Nation Address.

NSBE has therefore lost confidence in the ability of the current GCEO to ultimately solve the electricity crisis in the country. The latest allegations of racism against him have added a

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dark cloud above his head and thus we do not think he will be in a position to successfully inspire and unite the Eskom workforce to deliver on their mandate moving forward. In terms of Section 32(1) of the Constitution of the Republic of South Africa Act 108 of 1996, which gives right of access to records and/or information held by the state or any other state organ, the NSBE requests that the Minister of DPE urgently declassifies and avails the Eskom Technical Task team report as requested in the past. We would like to see the following:-

- Progress update on the maintenance strategy/approach/plans for the Eskom coal fleet, as presented by the Minister of Public Enterprises to parliament on 06 May 2020,
- Progress update on the change in strategy from run-to-failure to just-in-time and impact thereof, pertaining to the Distribution power network, as reported on the 2019 Eskom annual report,
- Short-, medium- and long-term maintenance and/or upgrade plans for the Eskom Distribution power network, and
- Progress update on the Eskom energy efficiency programs, related budgets, and how this aligns with the company's developmental role to promote transformation, economic development, and broad based black economic empowerment.

It is further requested that the Minister of DMRE avails the power purchase agreement terms relating to the 8 new investment projects. This information will be read closely with the prevailing electricity prices and the Eskom's spiralling debt. The media reports about the three Turkish Liquefied Natural Gas (LNG) fired floating power stations coming to dock in our waters in Saldanha, Richards Bay and Gqeberha in August 2022 are seriously concerning. The same reports indicate that these mobile powerships will supply 2,000MW to the grid and will be contracted to operate for a period of over 20 years. The operating costs for these gas powered units are notoriously more expensive compared to coal and if they are going to be operated 24/7/365 as baseload then they will have a disastrous impact to fiscus. It is highly likely that the average cost paid by Eskom to this Istanbul based consortium will be at least three times the current R.50 - R1.60/KWh charged to consumers. The government will then be expected to pay the difference as bailout for Eskom. NSBE is of the firm belief that the following issues need to be addressed urgently by the Eskom Executive Leadership team to get rid of the load shedding problem once and for all within the next 18 months:-

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- Improve the quality of workmanship during outages to avoid failure of units that had just come out of planned maintenance shutdown,
- Ensure that the major maintenance outage timelines are strictly adhered to and there should be serious consequence management for slippages,
- Restore the reliability of auxiliary plant (water production plant, coal handling plant, ash handling plant, cooling water plant, condensate extraction pumps, hydrogen plant, condensate polishing plant, etc) to 90% and above. This plant has built in redundancies and it should not be difficult to achieve this. It is completely unacceptable to introduce load shedding due to the failure of auxiliary plant.
- Ensure that there's benchmarking and sharing of best practices within Generation. Apart from the new Medupi and Kusile Power Stations, which are plagued by reliability issues, Majuba Power Station is the youngest in the old coal fleet but it not performing to the required standard. Matimba Power Station, in contrast, is older than Majuba but its performance is world class. Hence, the age of plant has got nothing to do with its performance.
- Accelerate the upgrade of C&I equipment at Tutuka, Duvha and Majuba Power Stations to avoid load shedding caused by UAGS trips.
- Rein in the primary energy costs (Coal & IPP Bid Windows 1, 2 & 3) of Eskom. They are increasing exponentially and rendering Eskom financially unsustainable.

As reported previously, the National Society of Black Engineers has technical capacity amongst its patriotic members, who shall analyse the above requested information together with other best practice information and propose other viable solutions for Eskom going forward in the best interest of our beloved country.

Regards,

Mdu Mlaba

President

23/03/2021

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