

MINISTERIAL STATEMENT

ON

ELECTRICITY SITUATION IN ZAMBIA

BY

THE HON. MINISTER OF ENERGY, MR NKHUWA, MP

Mr Speaker, I thank you most sincerely for giving me this opportunity to update the nation through this August House on the current electricity situation in Zambia and the various programmes that the Patriotic Front Government (PF) is spearheading through my ministry.

Sir, you may recall that in July 2019, I rendered a ministerial statement on the Floor of this House on the effects of low water levels in Zambezi River on electricity generation. I highlighted that the seasonal rainfall forecast experience for the period 2018/2019 season posed a hydrological risk similar to what the country experienced in 2014/2015 season. The rainfall over the southern half of the country had been poor with most parts of Zambezi and Kafue basins receiving below normal rainfall compared to 2017/2018.

Mr Speaker, the in-flows in both the Kariba and Itzhi-tezhi reservoirs are lower than the normal trend and the dam levels continue to recede. For instance, Zambezi River flows into Kariba Dam were reported at $247\text{m}^3/\text{s}$ as at 8th September, 2019 which are below the normal trend that averages about $36\text{m}^3/\text{s}$. The lake levels at Kariba Dam as of 8th September, 2019 were 478.28m above sea level. In September, 2015 the lake levels was 479.79m representing a 1.51m reduction.

Sir, the poor rain season experienced in both the Zambezi and Kafue basins have affected the major power plants on the Zambezi and Kafue rivers negatively. With the prevailing and forecasted hydrological conditions, load management was implemented on 1st June, 2019 with the initial duration of four hours.

Mr Speaker, after further assessment of the Kariba dam levels as at 1st September, 2019 the Zambezi River Authority (ZRA) recommended that generation be adjusted to 290MW to the end of the year while, at Zambia Electricity Supply Corporation (ZESCO) hydrology also

recommended that generation at Kafue Gorge Power Station be revised to 625MW. It should be noted that in both cases generation levels were reduced to allow for planning and operation in 2019/2020 season. In view of the above mentioned generation situation at Kariba North Bank complex and Kafue Gorge Power Station, the power deficit has been increasing and currently stands at an average of 600MW with the deficit reaching 700MW during peak times. The estimated average power deficit of about 600MW is anticipated for the period 1st September, 2019 to 31st December, 2019.

Mr Speaker, ZESCO commenced load management on a twenty-four hour period on Saturday, 1st June, 2019, with customers experiencing outages for about four hour period daily. Further revision to a minimum of eight hours has since been implemented to help mitigate the effect of load management. We are currently implementing load management as a measure to prolong the operations at our main generation stations. This programme further reduces the risk of damage to national power system infrastructure. If implemented effectively the main objective of the load management is to minimize the effects on economic activities in the country while ensuring that energy is conserved in our major reservoirs to be utilised in early 2020.

The following reason made it necessary to implement load management:

- (a) the river inflows into Kariba and Itzhi-tezhi reservoirs are below normal due to poor rainfall patterns experienced during the 2018/2019 rainy season in the north-western, western and southern parts of the country. This can also be seen has a drought experience in other parts of the country during the 2018/2019 season;
- (b) if ZESCO had maintained normal generation at Kariba complex with the current low water levels, this would result into shutting down the plant by November, 2019. The Zambezi River Authority also recommended a further reduction of about 290MW average generation out of an installed capacity of 1,080MW at 1st September, 2019; and

- (c) the average generation at Kafue gorge which produces 990MW was similarly further reduced from 700MW to 650MW to prolong the water resources in the Itezhi-tezhi reservoir, which would have drained to lower levels and would render it difficult to build up the reservoirs levels in the next hydrological season.

Sir, it should be noted that the availability of Independent Power Producers (IPPs), namely, Maamba Collieries Limited Power Plant with 300 MW, Itezhi-tezhi Power Co-operation with 120 MW, Ndola Energy Company Limited with 105 MW and the recently commissioned renewable energy plants namely, Ngonyi and Bangweulu Solar Power Plants have contributed to mitigating the power crisis. However, Lunsemfwa Hydro Power Company shut down its operation in July, 2019 due to non-availability of water for generation purposes.

Mr Speaker, in an event that water levels deteriorate lower than planned, the Government has taken a number of measures to address the power deficit and these include:

- (a) implementation of load management on 24 hour period with each customer experiencing the outage for a minimum of 8 hours period daily;
- (b) engagement of bulk customers by the Zambia Electricity Supply Corporation Limited (ZESCO) to participate in energy saving strategies and ensure commitment to agreed quantum;
- (c) engagement with Eskom for 300 MW power importations for a period of about six months. The ZESCO team has already engaged their counterparts on realising this deal.

Sir, the ministry and ZESCO Limited have put up the following mitigation measures to accelerate the implementation of following generation projects which will be brought into service as follows:

- (a) Lusiwasi Upper, 15 MW Hydro Power Project by Quarter, 4, 2019 at 88.2 per cent completion;
- (b) Kafue Gorge Lower, 750 MW HPP by Quarter 4, 2020 at 80 per cent completion;
- (c) Lusiwasi Lower, 86 MW by Quarter 3, 2023. It is a green field project not reached financial closure;
- (d) Chishimba Falls, 15 MW Hydro Power Project by Quarter 4, 2023. Procurement of consultants is under way. This a power plant where we received US\$41 million from the Germany Government;
- (e) feasibility studies for Luapula River basin, 1,000 MW and Batoka Gorge, 1,200 MW underway.

Mr Speaker, lastly, I would like to state that we have started implementing the directives by His Excellence the President of the Republic of Zambia, Mr Edgar Chagwa Lungu to make sure that the supply of power to hospitals and water supply centres is not interrupted.

Mr Speaker, I thank you.