Energy security key for agribusinesses

By Theo Boshoff, Agbiz CEO

With the winter chill settling in, we have once again been reminded just how fragile South Africa's electricity system is as increased consumption has been met with a fresh bout of load shedding. For South Africans living in rural areas, this is nothing new. Aside from the broad supply-side issues which the whole country faces, rural towns often face the additional challenge of ageing transmission and distribution networks and roving blackouts due to municipal debt. This is certainly an irritation for most, but it has become one of the biggest challenges to sustainability for businesses operating in these areas. Solar energy is often touted as the way to go but the realities of generating one's electricity are often more complicated than many may realise. At a recent Agbiz workshop, we zoomed into some of the factors that businesses should take into consideration.

Costs will always play a central role in decision-making. It is unclear when the cost of renewable energy infrastructure will come down so is it worth investing now when the prices may drop in the future? Perhaps a counterargument is the fact that Eskom-generated energy will become progressively more expensive. According to a study done on South Africa's electricity price path forecast from 2022 to 2032, the cost of electricity will primarily be influenced by critical maintenance and the phasing-out of old generation power stations, the adoption of renewables and electricity demand. Should South Africa implement the Integrated Resource Plan of 2019, which incorporates significant procurement from Independent Power Producers, supply and demand can be balanced which could limit electricity price increases to an average of 5,4% per annum, or 69% in total over this period. However, this presupposes that the economy manages to ride out the current interruptions. Should economic activity slow Down due to electricity constraints and other factors, the electricity demand could fall. In this scenario, the transmission and distribution costs, which are fixed, would have to be shared by fewer and fewer consumers, resulting in higher prices. According to the forecasts, if demand for electricity drops by 1% by 2027 and 0.75% thereafter, it could mean a price increase of 8.1% per annum or 118% over in total. Likewise, should demand reduce even more, the price will increase even more. Luckily, there are also positive scenarios. Should South Africa meaningfully embrace renewables and move towards a diversified energy mix, price increases could be tempered over the medium term.

Self-generation could be a viable alternative but the regulatory framework is still a challenge to navigate. Embedded generation essentially involves generating electricity closer to the source of consumption. It can either be through renewable sources such as solar or it can be through traditional means such as a generator. It does not necessarily imply total self-sufficiency but can also be seen as a means to supplement energy when supply is constrained. Last year the Minister of Minerals and Energy announced a shift in policy to encourage embedded generation. Previously, any entity that generated more than 1 megawatt of power would need a licence from the National Energy Regulator.

This threshold was increased 100-fold as companies would now only need a licence if they exceed 100 MW. This was music to businesses' ears but as always, the devil is in the details. A license may not be needed but registration is still required with several strings attached. In certain instances, the licenced distributor may need to grant consent and a purchasing agreement approved by NERSA is sometimes required where separate units or sites within the same business are supplied. In addition, various authorisations may be required for the installation. As the mining industry has indicated, it takes significant time to obtain the necessary authorisations but many companies have started the process as there is simply no viable alternative. The benefits of embedded generation are clear, but it is not a simple process. Hence, companies who chose to go that route should be prepared for the long haul. From Agbiz's side, we will continue to work on improving the regulatory environment. It seems as if the high-level intention is there to promote embedded generation but a lot more red tape needs to be removed to make it attractive, especially for small and medium-sized businesses.

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