

Load shedding

EC motion regarding Solidarity's actions to reduce load shedding.



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Background

South Africa now is in its 15th year of load shedding. Electricity supply has been subject to frequent interruptions since 2007. The consequences for the economy simply are devastating. South Africa's GDP per capita in USD terms has declined from 2011 up to 2022. Unemployment has risen from 24% to more than 34%, using the narrow definition.

While this crisis is raging, the South African government has announced at best poorly formulated plans that would never be implemented, and at worst Eskom has been ransacked by state capturers.

Energy security is absolutely critical for economic growth and job security for every single South African citizen. Without energy security, all our members' jobs are being threatened as investments dwindle and businesses have to resort to retrenchment in order to keep going. Any institution that is serious about jobs should urgently intervene in the energy sector, not only to maintain jobs in that sector but also to protect and hopefully expand job creation throughout the entire economy.

Unfortunately, prospects for energy security in South Africa are extremely dim. Eskom currently has an installed generation capacity of 51 115 MW, with a nominal capacity of 46 466 MW. Yet, peak demand of 34 155 MW cannot be met at present owing to on-going unplanned failures of generating units. The continuing failures may be ascribed to the fact that the average age of Eskom's fleet of coal-fired power stations (excluding Medupi and Kusile) is 41 years at present. Most coal-fired power stations are designed for a useful life of 50 years, which implies that our coal-fired fleet is nearing the end of their useful life. Consequently, Eskom's planning is to demolish 22 000 MW of coal-fired generating capacity before 2035 owing to the end of their useful life being reached.

To address this energy crisis, the Integrated Resource Plan (IRP) was developed by the Department of Mineral Resources and Energy, in line with the Minister's responsibilities. This plan is supposed to be the leading document to describe and inform South Africa's energy future. Unfortunately, South Africa's IRP2019, the most recent version, is totally inadequate. The plan foresees a total generating capacity of 81 984 MW by 2030, provided that everything runs without a hitch. At the same time, the



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CSIR's estimates foresee an increase in electricity demand of approximately 40% by 2030. The government's plan relies heavily on solar and wind power to provide the new generating capacity. Because the sun does not shine all the time and at times there is no wind, solar and wind power generation is erratic, with capacity factors ranging between 30% and 40%. Therefore, the government's plan may be adequate only if everything is executed perfectly and the sun shines 24 hours per day in South Africa and the wind is blowing all the time. In short – this is totally impossible. The South African labour market therefore is facing the reality of permanent load shedding if we rely on the government alone to head off the energy crisis.

Although the imminent crisis is enormous, it is not insurmountable. A similar international example is that of Vietnam. In 2007 Vietnam also experienced an enormous energy crisis with regular power failures. The Communist Party of Vietnam, after a long struggle, eventually broke with their Marxist ideals in order to face the energy crisis. In 2017 the Communist Party of Vietnam announced a special supply tariff for companies and individuals who could generate solar power and feed it into the power grid before 2018. The results were remarkable: within a year, Vietnam added 4 500 MW of generating capacity to the system. A new tariff aimed specifically at individuals generating power with solar panels on the roofs of their homes and feeding it into the power grid, was announced and this resulted in the addition of another 9 000 MW of generating capacity by January 2021. Of this 9 000 MW, 6 000 MW was constructed in December 2020 alone. Stage 6 load shedding is a shortage of 6 000 MW.

Everything that is required to copy Vietnam's success is already in place in South Africa. NERSA launched a supply tariff way back in 2007 but has never used it. Furthermore, private generation of up to 100 MW is possible merely on the strength of a permit issued by NERSA. At present, the bottleneck simply is lack of political will to solve the energy crisis.

This lack of political will must be addressed urgently. It simply is not acceptable merely to assume that existing solutions are going to work. Therefore, it is critically important to encourage discussions at the highest political levels regarding solutions rather than analyses of problems. A parliamentary



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debate on supply tariffs and other possible policy options is needed so as to move and stimulate the discourse.

It is estimated that the cost of load shedding to the South African economy is R500 million per stage per day. Mike Schüssler calculated that more than a million jobs had been lost by 2021 owing to load shedding. If regard is had to Eskom's capacity and operational capability, as well as the government's history and best planning, it is clear that without radical intervention by community institutions and the private sector, load shedding simply is going to escalate.

Resolutions

1. Solidarity should encourage small-scale power generation on a large scale.

Every small-scale power generator should be encouraged to apply for a permit from NERSA and to start feeding power into the power grid. South Africa requires solar panels on the roof of every shopping centre, parking area, school building, university and factory to feed power into the grid as quickly as possible. Every single person or organisation that possibly can generate power and feed it into the power grid should do so as soon as possible.

Solidarity undertakes to assist in mobilising small-scale power generation in any way we can. This includes raising awareness, but also assisting power generators through the process of acquiring a permit from NERSA.

2. Solidarity itself is going to get involved in power generation.

The South African labour market cannot survive the energy crisis. Our members' jobs are being threatened directly by load shedding and we cannot sit back any longer. Therefore, Solidarity should get involved directly in the generation and selling of electricity.

Solidarity undertakes to get involved in power generation, among other things by means of its



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majority shareholding in the property investment company Kanton.

3. Solidarity is going to meet the skills shortage in small-scale power generation.

South Africa has an enormous skills shortage in the field of renewable energy and small-scale power generation. This shortage of competent staff cannot be allowed to be a barrier on South Africa's road to energy independence. Solidarity should do everything in its power to ensure that sufficient skills are available so as to offer energy security for South Africa and career security for our members.

Solidarity undertakes to look into ways in which its training institutions could be remodelled with a view to offering training in the design, maintenance and development of technology for energy generation and storage.

4. Solidarity is going to take part actively in the public discourse regarding solutions to the energy crisis.

South Africa can and should learn lessons from other states' struggles with similar energy problems. South Africa's public discourse should urgently move from an analysis of the problem to a radical focus on solutions to the energy crisis. Solidarity can play a critical part in this regard by publishing sound research and putting workable policy options on the table.

Solidarity undertakes to launch a parliamentary petition so as to have a debate on supply tariffs and other solutions to the energy crisis in parliament and in the broader public discourse.

5. Solidarity will be doing everything in its power to stabilise Eskom.

An energy landscape without Eskom simply is not realistic, and for this reason it is crucially important to stabilise Eskom so it will be able to play an important part in the energy future of South Africa. At present, Eskom simply is not sustainable, owing to enormous corruption,



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serious shortages of capacity and skills, and dangerous debt levels. Eskom is a state-owned company, which means that Eskom's debt is guaranteed by the South African government and by extension by the South African economy. Solidarity believes that more companies that generate electricity should be welcomed and that energy security will result in stronger economic growth, which will stabilise Eskom's financial as well as operational situation.

Solidarity undertakes to attempt to stabilise Eskom by helping to combat corruption, by helping to deal with the skills crisis in Eskom and by helping to create additional generation capacity in order to decrease the pressure on Eskom's operational capacity.



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