

A MONTHLY REVIEW OF ENERGY-RELATED NEWS

# SOUTH AFRICA ENERGY ROUNDUP

APRIL 2018



## ENERGY PLANNING AND REGULATION

### New rules needed to facilitate transition to decentralised electricity system

South African Local Government Association (Salga) president Parks Tau has called for an overhaul of the policy and regulations governing electricity supply in South Africa to facilitate a transition towards a more decentralised electricity system. Addressing a Salga Energy Summit in March, Tau said the shift from a centralised supply model could not be avoided, nor could a fundamental restructuring of the “unsustainable” large-scale utility business model. However, the rules needed to change to allow for decentralisation, as well as to enable traditional electricity consumers to play an active role in the production, storage and sale of power into the grid. Government should take the lead by creating an enabling policy framework and by coordinating, across sectors, to ensure the transition is embraced and institutionalised. The call for a new policy framework found broad-based support, with several local government leaders expressing frustration about the difficulty associated with securing a licence for municipal generation projects. Polokwane executive mayor Thembi Nkadimeng has revealed that 14 municipalities currently were being prevented, owing to policy and regulation, from securing licences for their renewable-energy projects. The City of Cape Town had taken the Department of Energy to court for preventing it from contracting directly with independent power producers.

### NPC engages stakeholders on South Africa's future energy mix

The National Planning Commission (NPC) has hosted a roundtable discussion on its energy paper, which was released in February. The discussion covered mainly coal and carbon pricing, the end-state of the electricity industry, nuclear energy, the integration of renewables into the national grid and whether or not the life span of existing coal-fired power stations should be extended. NPC commissioner Jarrad Wright and NPC head of secretariat Tshediso Matona say the energy paper is aimed at assisting the country

achieve the transformative goals envisioned in the National Development Plan 2030, while remaining cognisant of the dynamic environment within which the global and domestic energy sector operates. Attendees at the roundtable included representatives from the departments of Energy, Mineral Resources, Public Enterprises and Science and Technology; the National Treasury; financial service providers such as Standard Bank; energy fund companies; independent power producer organisations; researchers; and economic advisers. Economic risk consultant Rob Jeffrey has pointed out that, if South Africa is to shift away from coal-fired power generation, it will have a significant impact on the economy in terms of employment. He stated that clean coal technologies and their cost structures are superior to other technologies. Department of Science and Technology hydrogen and energy chief director Rebecca Maserumule also advocated for the adoption of clean coal technologies. An NPC secretariat member rebutted that the Integrated Resource Plan does consider transitioning away from coal-fired power generation. “Energy transition should be just, but just transition should not be confused with delayed transition. Coal and other fossil fuels add to climate change, which are big considerations for a just energy transition.” Meanwhile, with regard to an end-state for electricity, State-owned power utility Eskom energy thought leader Mike Rossouw said electricity planning has always been a battle between choosing between generation technologies, but adds that planning should be more open-minded and unbiased towards certain technologies. Other attendees agreed, saying that, ultimately, government should have an end-state vision that talks to the policy and vice versa.

## COAL

### Civil society organisations oppose coal IPP generation licence applications

Civil society organisations continue to oppose the Thabametsi and Khanyisa power station projects, which have applied to the National Energy Regulator of South Africa for generation licences. The Life After Coal Campaign, which comprises the Centre for Environmental Rights, Earthlife Africa Johannesburg

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and groundwork, has challenged the applications for licences on the grounds that the power stations will be harmful to the environment and human health.

The organisations also consider Thabametsi and Khanyisa as “risky projects” that will produce “expensive electricity that South Africa does not need”. The 557.3 MW Thabametsi project, in Limpopo, and the 306 MW Khanyisa project, in Mpumalanga, were named as preferred bidders in the Department of Energy’s (DoE’s) Coal Baseload Independent Power Producer Procurement Programme, which aims to procure 2 500 MW of new coal-fired electricity capacity from private developers. In early March, Energy Minister Jeff Radebe announced that he had requested the office of the director-general of the DoE and the Independent Power Producer (IPP) Office to proceed with the two coal baseload projects, which had stalled, owing to State-owned power utility Eskom’s past hostility towards IPP projects. Both proposed coal-fired power station projects are embroiled in legal challenges from civil society organisations, owing to their climate impacts.

### Construction of Colenso coal IPP set to start this year

The construction of the 1 050 MW Colenso power station, in KwaZulu-Natal, is set to start in September, according to project developer Colenso Power. The environmental-impact assessment for the project is based on the construction of a 1 050 MW power station that will be built in three phases of 350 MW each, with the first phase taking about four years to complete at a capital cost of about R7-billion.

Colenso Power CEO John James says the company’s technical partner, Chinese engineering and construction company SEPCO Electric Power Construction Corporation, has completed a technical and financial feasibility study which shows that the power project is technically and financially feasible. He says South African commercial banks, development finance institutions and Chinese financial institutions will fund the project, pending an announcement on the second round of the Coal Baseload Independent Power Producer Procurement Programme facilitated by the Department of Energy.

## RENEWABLE ENERGY

### AMCU demands summit to discuss renewable-energy jobs

The Association of Mineworkers and Construction Union (AMCU) has called for an urgent summit with labour, State-owned utility Eskom and government to discuss renewable energy and jobs. The trade union wants the departments of Trade and Industry and Economic Development to formulate an industrialisation plan to ensure that South Africa produces renewable-energy inputs through labour-intensive methods of production. AMCU says it supports the need to move to a low-carbon economy, but stresses that the shift to renewable energy being the main energy source and the basis for affordable electricity for all should be a “just transition”.

### Court blocks Numsa’s bid to stop signing of renewable-energy PPAs

The North Gauteng High Court has ruled against the National Union of Metalworkers of South Africa (Numsa) and civic group Transform RSA’s urgent application to stop State-owned Eskom from signing contracts with private renewable-energy projects. Numsa had asked the court to block the signing of 27 power purchase agreements (PPAs) with independent power producers until the court heard an application by the Coal Transporters’ Forum, which argues that a switch to renewable energy from coal-fired electricity will lead to job losses in linked sectors. However, the court ruled that the application was not urgent and that it should be set aside. South African Wind Energy Association CEO Brenda Martin has said that it is the organisation’s understanding that there is nothing in the law now preventing the signing of the PPAs. On March 13, the Department of Energy refrained from overseeing the planned signing of the 27 renewable-energy projects, owing to the legal challenge.

### Link between IPPs and tariffs surge dismissed

The South African Wind Energy Association (SAWEA) has dismissed as a “falsehood” claims by the National Union of Metalworkers of South Africa (Numsa) and Transform RSA that the 27 renewable-energy projects for which power purchase agreements are set to be

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signed will raise the cost of electricity in South Africa. SAWEA CEO Brenda Martin has described claims that the independent power producer (IPP) roll-out will raise the cost of electricity as incorrect. "It is noteworthy that the statement offers no reliable evidence in support of this falsehood," she says. The new IPPs, she adds, will produce power that costs substantially less than the cost of State-owned power utility Eskom's new coal-fired power from Medupi and Kusile, and are also expected to cost less than Eskom's current average sales price of electricity. The Department of Energy (DoE) disclosed that the 20-year power purchase agreements for the wind projects will have associated tariffs ranging from 56c/kWh to 76c/kWh, while the solar photovoltaic tariffs range from 77c/kWh to 87c/kWh. The tariff for the concentrated solar power project selected during Bid Window 3.5 was not immediately disclosed. Eskom has not disclosed the final cost of generation from Medupi and Kusile, but estimates in the public domain point to generation costs well above 100c/kWh. It has also emerged that the tariffs associated with two IPP coal baseload projects, which have not yet been procured by the DoE, are higher than 100c/kWh. IPP Office head Karen Breytenbach has also stressed that all authorisations, including the endorsement of the National Energy Regulator of South Africa, have been secured for the 27 projects. The implication is that any IPP costs will be treated as a full "pass through" for Eskom, so as not to place any further burden on the utility's finances.

### Park Inn by Radisson installs Cape Town's first PVT project

Hotel brand Park Inn by Radisson, together with hybrid solar products producer Solarus, have installed a large-scale commercial hybrid photovoltaic and thermal (PVT) project in Cape Town's central business district – the first PVT project in the city. The project entails the installation of 30 PowerCollectors – a unique technology that combines the generation of thermal energy with the photovoltaic generation of electricity to produce one of the highest energy yields. Park Inn by Radisson states that, when compared with traditional solar panels, the PowerCollector produces electricity and hot water output of up to 70 °C and delivers three times more energy on the same surface area. The installation, located on the hotel's rooftop, will produce an average

of 1 050 kWh of energy a week for the hotel. The energy produced – in conjunction with the reduced demand from the grid – will provide for electricity and heat throughout the hotel and will save the hotel about €250 000 in heating and energy costs over a 20-year period.

### Renewables advisory firm still bullish on South African prospects

International renewable-energy advisory firm K2 Management remains convinced that, despite recent setbacks, the role of wind and solar will continue to rise in the South African electricity mix. Therefore, the company is preparing to expand its presence in the country, as well as the rest of Africa. Headquartered in Denmark, K2 Management has 15 global offices, from where its 170 employees have been directly involved in more than 1 400 wind and solar photovoltaic (PV) projects in more than 40 countries. The firm opened an office in Johannesburg in 2013 and, in 2016, acquired Prevailing Analysis, which played an advisory role in 25 utility-scale projects procured under South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). K2 Management South Africa head Hebrén James says the Johannesburg office is also being used as a base for pursuing opportunities in the rest of Africa, where the pipeline of wind and solar PV projects is maturing. James believes the recent stalling of the REIPPPP – owing initially to State-owned power utility Eskom's refusal to sign further power purchase agreements with renewable-energy independent power producers as it returned to a generation surplus, and, more recently, as a result of a union-led legal challenge to the conclusion of the 27 delayed contracts – is temporary.

Even under South Africa's current outdated Integrated Resource Plan (IRP), the role of solar and wind is projected to expand materially. However, there is an expectation that the penetration of renewables could expand even further once the IRP is updated, using up-to-date technology costs derived not only from the latest REIPPPP bid windows, but also from competitive auctions in other countries, such as the United Arab Emirates and India.

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## ESKOM FINANCES

### Eskom attracting more investors

State-owned enterprise Eskom has raised R43-billion from the market, equating to R33-billion in net terms. Acting Eskom CEO Phakamani Hadebe says it indicates that fund managers and investors are beginning to welcome Eskom back into the financial market. It also highlights that Eskom can begin to diversify its funding because it is attracting various investors. Hadebe also says that the electricity group has asked the Minister of Energy to approve a one-year corporate plan. A longer-term, comprehensive, integrated strategy will be available by September.

### Eskom goes to Parliament to argue its case for a higher tariff increase

Power group Eskom's top officials have gone to Parliament to argue their case for a higher tariff increase, saying the 5.23% tariff increase that the National Energy Regulator of South Africa (Nersa) granted for 2018/19 will harm the utility. "The 2.2% price increase for 2017/18 has strained the cash flow situation, and the 5.23% for the 2018/19 financial year will also negatively impact on Eskom's going concern status," says Eskom acting CEO Phakamani Hadebe.

Eskom has applied for a 19.9% tariff hike. The Eskom board has decided to use the processes of the National Energy Regulator Act for a review of the Nersa 2018/19 revenue decision. The utility maintains that Nersa's decision has not been made in accordance with the Electricity Regulation Act. Hadebe is hoping for a solution.

### Moody's downgrades Eskom's ratings to a negative outlook

Moody's Investors Service has downgraded power utility Eskom's long-term corporate family rating (CFR) from B1 to B2 and the zero coupon eurobonds to the same rating in line with the CFR. Moody's says the rating action reflects the fact that, despite a number of improvements at the company in relation to its corporate governance and liquidity, there is limited visibility at this juncture on Eskom's plans to place its longer-

term business and financial position on a sustainable footing. Further, the rating factors in the lack of any tangible financial support for the company in the February Budget, and the liquidity and funding challenges Eskom may continue to face. Moody's also downgraded to (P)B3/B3 from (P)B2/B2 the global medium term note (GMTN) programme and the senior unsecured GMTNs of Eskom. It has also downgraded the probability of default rating to B3-PD from B1-PD and the national scale rating long-term CFR to Ba2. za from Baa2.za.

## OTHER

### Africa needs private investment to meet energy needs – Radebe

The cost of meeting sub-Saharan Africa's power demand has been estimated at about \$14-billion a year and cannot be met by public funding alone. Although public utilities have historically been the major sources of funding for new power generation capacity, South African Energy Minister Jeff Radebe believes that the trend is changing in Africa, where 600-million people are without access to modern forms of energy. "Public utilities do not have enough capacity to meet sufficient demand at affordable rates," he said during his keynote address at the Power and Electricity World Africa conference, in March. Finance institutions have only partially filled the funding gap, he said, adding that it is "very clear that we need to encourage, facilitate and leverage private-sector investment and partnerships".

### Eskom turns 95

South African State power utility Eskom is celebrating its 95th anniversary with 100 380 households having been connected to the national grid over the past six months. Eskom says it hopes to achieve universal access to electricity by 2025, with the National Treasury allocating R17.3-billion to the utility and municipalities to electrify a further 640 000 households over the next three years. "Turning 95 years is a great milestone for our organisation and a self-motivation as we manoeuvre through the liquidity and governance challenges that we are currently grappling with as an organisation," interim group CEO Phakamani Hadebe has said.

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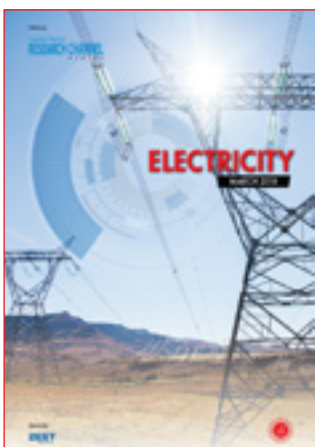


## South Africans saved 410 MW during Earth Hour - Eskom

South Africans joined the rest of the world when they switched off their lights for Earth Hour from 20:30 to 21:30 on March 24 and together they saved 410 MW, Eskom has said. Earth Hour is a global call to protect

the planet and for people to take a stand against climate change. Each year on the last Saturday of March, South Africans join hundreds of thousands of people around the globe and use their collective voice to inspire, motivate and lead the charge on their hopes, dreams and concerns about the planet.

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but we can see it coming.

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