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SA 'ignores' vast Mozambique gasfield

By Nicky Smith

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SA's revised 20-year energy draft plan "shockingly" ignores the vast Rovuma Basin gas find in Mozambique. It is the world's fourth-largest known natural gas deposit, that would solve Eskom's immediate energy crisis and avoid the costly construction of a third new coal power station.



Source: www.nyeleti.co.za

This is according to Johan de Vos, CEO of Pretoria-based firm Gigajoule, which manages the distribution of natural gas in Mozambique in the piped gas network it built almost 10 years ago. Gigajoule has completed technical and feasibility studies which it says have demonstrated the economic viability of a 2,450km pipeline from Cabo Delgado in northern Mozambique to Richards Bay in SA.

Mr de Vos says such a pipeline would cost \$5bn. In terms of the study Gigajoule commissioned from consultants VGI, two anchor clients in the form of gasfired power stations would be built: one in Maputo and one in Richards Bay, with a combined generation capacity of 5,000MW for another \$5bn.

"We have worked for two years on this feasibility study and we know that if you build a 5,000MW power station at the end of the pipeline this project is bankable," he says.

With a price of \$10bn, the pipeline-power station infrastructure investment was "cheaper than Medupi and will cost less to operate once all Medupi's interest charges are added in", says Mr de Vos.

"We (SA) wouldn't need to build Coal 3," he says, referring to the government plan to build a third coal-fired power station in addition to Medupi and Kusile.

SA's power supply has been precarious since 2008 when Eskom's electricity grid failed due to a lack of capacity. Eskom's major investment in two new coal-fired power stations has been hit by extensive technical and financial delays.

The costs have skyrocketed and power has yet to be delivered to the grid. The time and the expense associated with projects with the Gasoduto do Norte ao Sul de Mocambique (Gasnosu) show that if construction started next year, the project would be ready for gas from 2018.

"The Japanese are all over this," he says, referring to the Rovuma Basin gas. "The Japanese prime minister was in Mozambique this week to sign agreements with the government on energy. We (SA) are doing nothing.

"It's technically feasible and it will have a massively positive social impact. If we get everyone aligned, it can happen, it's a window of opportunity that we have now and we shouldn't let it go to waste, we shouldn't go down the road of Coal 3 when there is this opportunity right on the doorstep," Mr de Vos says.

Cornelis van der Waal, head of the energy unit at Frost & Sullivan, says a pipeline is the most "exciting and sensible thing" he has heard of regarding the development of the deposit at Rovuma Basin. The Integrated Resource Plan (IRP) is being revised and it is not too late to take into account Mozambique's natural gas for SA's electricity planning.

"South African companies and the government are really missing an enormous opportunity in Mozambique, with their gas in the equation, the debate around the need for nuclear energy falls off the wagon.

"The beauty of a pipeline is if you do it right, you can replicate another Sasol and seriously reduce our dependence on crude (imports). There are so many companies and industries that could benefit from this, take them off the grid and supply them with cheap, clean gas. It (Rovuma) should absolutely be in the IRP."

JSE-listed Sasol is a world authority in using coal liquefaction to produce petroleum-like synthetic crude oil from coal.

The only mention in the IRP of what may be Rovuma, which is misspelt as Romvula, is that it is not being considered in the big gas scenario because of its distance and the cost of transporting liquefied natural gas.

According to a study done by Stellenbosch-based Econex the Rovuma Basin deposit has shown reserves of 170-trillion cubic feet and "it is expected that the final discovered resource will be more than double the size".

In comments to the Department of Energy on its new IRP, Gigajoule describes the magnitude of the deposit as being able to supply all of SA's electricity needs, of about 40,000MW, for the next 170 years.

In 2004 Sasol commissioned a 865km pipeline from the Pande and Temane gasfield in Mozambique to deliver gas to its synthetic fuels plant in Secunda. This programme was feasible, even though the deposit was a fraction of the size of Rovuma at 3-trillion cubic feet.

Last year Eskom's outgoing CEO Brian Dames said gas could be the answer to avoiding building a third coal power station. Mr de Vos says Gigajoule has been in talks with Eskom about Gasnosu and the utility has shown interest in the programme.

Gas power stations are faster, cheaper and easier to build than coal power stations, says Mr de Vos. They can be built in series with generators that are able to produce 600MW of electricity.

Finding the money to build a third coal power station will be extremely difficult as Eskom has an existing funding gap for projects. The World Bank, which partially funded Kusile, has made it clear it can no longer fund "dirty" energy programmes.

It is time "people take notice of the failures of IRP 2010", says Mr de Vos.

In the latest draft, allowance is made for only about 200MW of gas power by 2019 but we already have about 700MW installed, Mr van der Waal says.

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