



15 January 2015

The National Energy Regulator
P.O Box 40343
Arcadia 0007
South Africa

Dear Sir

SAIPPA FEEDBACK ON THE SMALL-SCALE RENEWABLE EMBEDDED GENERATION: REGULATORY FRAMEWORK FOR DISTRIBUTORS

Thank you for affording us the opportunity to respond to this discussion document on behalf of the SAIPPA.

The goals of the South African Independent Power Producers Association [SAIPPA] are to promote the collective interests of IPP's in South Africa, to assist with public policy formation and implementation, and to serve as a platform for information dissemination to its members, with due regard for the prescripts and limitations imposed by the Competition Act. We seek to pro-actively engage with legislators, government officials, planners and regulators as part of our initiatives to achieve energy security in South Africa, as well as Southern Africa. An Independent Power Producer is a private entity, which is not a public electric utility, which owns and or operates facilities to generate electric power for sale to a utility, central government buyer and end users.

IPP's may also be privately-held facilities, such as rural solar or wind energy producers, and non-energy industrial concerns generating electric power for on-site use and who may also be capable of feeding excess energy into the distribution or transmission grid system.

Our members presently have an installed base in excess of 338 MVA with another 229 MVA presently under construction.

General Comments

SAIPPA supports the principles set out in the document:

- 1) Allowing embedded generators to sell excess electrical energy into the grid
- 2) Establishing rules for the above
- 3) Proposing a general feed in tariff

Embedded generation is probably the best chance South Africa has to bring distributed energy onto the grid on a large scale using private capital and without the requirement to strengthen the grid.

Embedded generation, although mostly small scale, remains very capital-intensive.

Almost all expenditures are made up-front. Keeping the cost of capital low is thus of primary importance. Investment and finance are very responsive to the quality of policy making. Clear and credible signals from policy makers lower risks and inspires confidence.

By contrast, where there is a record of policy incoherence, confusing signals or stop-and-go policy cycles, investors end up paying more for their finance and consumers pay more for their energy

Key SAIPPA Issues

1. The discussion should be focussed on all forms of embedded generation with no preference to any specific technology or fuel source.
2. The philosophy of embedded generation reducing the cost of peak electricity provision and not adding to it is supported
3. The principle of protecting municipal revenue is understood, however equally the principle of reducing customer energy costs is also supported
4. A pragmatic approach to kick start embedded generation within the confines of reasonable developer's project constraints would be supported.
5. There are a number of definitions with which SAIPPA has some concerns

Embedded Generation

SAIPPA is of the opinion that this document should not be prescriptive in the forms of embedded generation considered as many technologies, PV, small scale gas, wind, biogas, cryogenic, etc., – including waste heat from fossil fuels could made a meaningful contribution to job creation and reducing the price of electricity without negatively influencing municipal of Eskom revenue.

Cost of Peak Power Provision

The document rightfully is concerned with the cost of supplying peak power, however with the focus on rooftop PV in specific municipalities some key issues need reconsideration.

PV, roof top and other, over the breadth and length of South Africa can be functional for 15.5 hrs in summer and 11.5 hrs in winter – this might adversely affect individual municipalities where the geographic spread is smaller and consequently the generation window reduced, however from a national provision of power a significant spread into peak periods is foreseen.

Other forms of embedded power wind, biogas, waste heat, etc., will supplement peak power supply and some will even be dispatch able – this dispatch able aspect has not been considered in the document but has the potential to play a major role in cost reduction and revenue protection with specific application of time of use metering

It is suggested that some consideration be given to Time of Use [generation/consumption reduction] in the proposed feed in tariff to effectively encourage energy storage/consumption reduction during peak periods

Protecting Municipal Revenue and Reducing Customers Electricity Costs

At first it would seem as though an increase in application of embedded generation does seem to be a threat to existing municipal structures, however the world has moved in this direction and if municipalities are to support industrial development and job creation this should be seen as an opportunity and managed as such. Municipalities and South Africa Inc. has an advantage of being a follower and as such many of the embedded generation problems have been identified resulting in thriving small scale generation industries with reduced cost of supply in many countries

There are a number of aspects relative to municipal energy revenue loss;

- Embedded generation will happen anyway as the reliability of power supplied by ESKOM deteriorates.
- Rising Eskom price of energy, services and related taxes, increased by municipal tariffs, will cause business energy efficiency and in some instances business migration out of SA.
- Embedded generation is at point of use and hence customers will decrease their exposure to, supply uncertainty, additional tariffs, taxes and uncertain electricity increases
- Municipalities should benefit from value add, which is in the distribution and management of electricity and to a very limited extend to the provision of energy, which is in general contrary to the model presently preferred, but unchallenged during times of cheap energy.

- Dispatch able embedded generation, supported by a suitable “time of generation” tariff would be in a position to reduce municipal peak – whilst the municipality still benefits from charging many individual customers peak prices. This could encourage embedded generators to be net exporters over a 12 month period, contrary to the present proposal. Similarly the size of small scale embedded generation would seem to be defined by the existing municipal infrastructure as opposed to the concept of expanding infrastructure to allow increased generating capacity.

Kick Starting Embedded Generation

Tariff rate principles

The present tariff is skewed in favour of Johannesburg based generation – for good historical reason, however now that significant transmission development expenditure and loss avoidance [Reef to Western Cape is some 1000MW’s continuous] can be undertaken through distributed generation these “avoided costs” should be considered in the longer term

Tariff option considerations

Given the short and medium term crisis faced by SA and the delays likely to be encountered in changing tariffs and policy it is recommended that a pragmatic approach be taken to accelerate the application of embedded generation to relieve some of the pressure by, for instance opening a two year net metering tariff window – allowing potential developers to sign up a 10 -15 year PPA with relevant municipalities/Eskom from mid-2015 to end 2018 [30 months] based on a simple tariff to encourage development. In addition to option of specific and focussed time of generation metering to manage municipal peaks downwards by IPP’s should be considered [Steenbras pump storage is probably Cape Town’s best investment ever] and this could be replicated by small privately funded and owned embedded generators.

As the embedded generator capital cost is high and the investment long term, rates should not be subject to significant change during the life of the investment i.e. new tariffs should be imposed on new customers after the 2018 window and existing customers should be given the option to migrate at their discretion.

Peripheral charges should be managed to support the process i.e. Connection charges and the inability to charge for them is at odds with the connection quote where “un regulated” charges can be levied by the distributor.

Definitions

SAIPPA has some concerns with the consistency and alignment of definitions; however in the bigger scope of the discussion these are not considered material.

Kind Regards



Sisa Njikelana
Executive Chairman