



groundWork

Environmental justice action

P.O. Box 2375, Pietermaritzburg, 3200, South Africa ● 6 Raven Street, Pietermaritzburg, 3201, South Africa  
Tel: +27-33-342 5662 ● Fax: +27-33-342 5665 ● team@groundwork.org.za ● www.groundwork.org.za

**Comment on Nersa consultation paper on: Small scale  
embedded generation (SSEG): regulatory rules  
Submitted by groundWork, Friends of the Earth, South Africa**

**Date:** Tuesday, 34<sup>th</sup> March 2015  
**For attention:** National Energy Regulator of South Africa,  
[embeddedgeneration@nersa.org.za](mailto:embeddedgeneration@nersa.org.za)  
**Pages:** Five

The consultation process includes only one public hearing. We believe they are of wider significance than this suggests and call for hearings in all provinces.

Implicit within the proposed regulations is a model shaping the emergence of embedded generation. Poor people do not figure in this model. Rather, it is assumed that embedded generation is relevant only to rich households and businesses. This model responds to the concern that rapidly growing rooftop Photo Voltaic (PV) is reducing consumption by the rich and threatens municipalities with the best part of their profit from electricity sales.

In this frame, the paper sets out to look at tariff options for 'promoting and incentivising installations that are grid tied' [17], implying 1. embedded generation should be promoted, and 2. the rich should not be encouraged to go off grid.

We agree on both these points but think the issue is reactively and narrowly framed: reacting to the growth in the PV market; and confined to electricity. This may reflect the narrowness of Nersa's mandate while government departments what might have brought a broader vision either do not see what is before them or are unable to act on it. We believe a national dialogue on the future energy system is called for.



In our view, a wider vision would include:

- recognising the urgent necessity for a just transition to a renewable energy system in response to climate and other environmental impacts from fossil fuels;
- establishing municipalities as centres of sustainable energy in partnership with citizens poor and rich;
- creating community owned mini-grids that can import or export power to the wider network or grid;
- a mix of publicly owned large scale storage capacity, small scale mini-grid and micro household storage;
- the principle that available renewable energy should be used first;
- urban and housing design and construction that reduces people's energy needs;
- ensuring that everyone has safe and clean energy and hence eliminating domestic emissions in poor areas;
- reducing local industrial emissions;
- reducing demand on the national grid and retiring coal fired capacity ahead of schedule.

We emphasise that sustainable energy does not include diesel generators which should be discouraged. We note that the 'war room' seems to be going the other way: offering very high prices for small scale private diesel generated supply to the national grid but nothing for renewables.

Below, we respond to some of Nersa's specific questions.

Comment # 1: Registration

Registration is preferred to licensing.

The information required is adequate.

Comment # 2: Reporting by distributors to Nersa

The information required is adequate.

Confidentiality is not argued and we see no reason for it.



#### Comment # 3: Grid interconnection standards

SSEG needs to be safely integrated with the distribution grid. As long as the present NRS series enables this, connections should go ahead.

#### Comment # 4: Inverter self-certification

Self-certification must be open for third party testing or random inspection. Penalties for false self-certification should be high and should include a ban on the business and its directors from further trading.

We do not comment on each of Nersa's technical questions (Comments # 5 – 10). In general: embedded generation should not create hazards for electrical system workers; the municipal system operator needs the information to balance the system; domestic units should automatically cut out from the grid when there is instability.

#### On tariffs:

Many municipalities subsidise the general rates with profits from the electricity tariff. Nersa does not have a broad enough mandate to discuss this but it seems desirable that municipalities run the utility on a non-profit basis with due allowance for capital expenditure etc. The loss of electricity profits should be made up from increased rates.

Nersa appears to have a set tariff structure in mind. At present, municipalities have different tariff structures and it is not clear if Nersa's proposed model is intended to replace them or whether municipalities will still decide their own models.

Nersa's approach has the single function of protecting municipal revenues. We recognise the need to protect municipal income but see nothing here that promotes grid tied embedded renewable energy. It seems as likely to 'incentivise' those who can afford it to go off grid altogether as the proposed structure may be used to impose maximum costs on SSEGs.

Community cooperatives should be actively supported because they contribute to broader social objectives. Where they establish mini-grids (e.g. in a block of flats, a street or specific settlement) they may also reduce transaction costs and take on local maintenance. This should be recognised.



Small scale diesel generators should not be encouraged.

**Comment # 11: Fixed network costs**

Fixed costs may be used to protect municipal income. However, there needs to be accountability to prevent line costs from being set arbitrarily.

**Comment # 12: Fixed retail costs**

As above. It should be recognised that community cooperatives may reduce retail costs.

**Comment # 13: Ancillary service costs**

It is not clear what these costs are for or why 'traders' and 'retailers' (other than the distributor) should be engaged at all.

**Comment # 14: Connection and metering charges for SSEG**

Fixed retail costs already cover metering, billing etc. Double counting should be prevented. Distributors should not arbitrarily require meter or connection upgrades. Distributors should support connections for community cooperatives.

**Comment # 15: Avoided costs**

Distributors may be tempted to minimise avoided costs and so transfer maximum costs to SSEGs.

**Comment # 16: Tariff design**

We do not object to the overall design as such but ask if this is intended as a universal model. The impact of line charges on poor people (and not just those on FBE) needs proper study: after paying the fixed charge will they be able to afford actual power? will those who use multiple energy sources be forced off grid in consequence?

What is meant by 'subsidies'? If this refers to subsidies to the rates, this portion should be moved to the rates.



Comment # 17: SSEG net billing

We do not object to the overall design as such but see little that promotes grid tied renewables.

Comment # 18: SEGG consumption tariff

As above.

The implications of variable network charges are not clear.

Comment # 19: SEGG export tariff

Local embedded renewables should be given a premium over the Eskom price.

Distributors should be compensated for the difference from national government.

Comment # 20: Connection charges

See comment # 14.

End:

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