

REPUBLIC OF SOUTH AFRICA

THE RENEWABLE ENERGY FEED IN TARIFF AND INCENTIVES BILL

*(As introduced in the National Assembly as a section 75 Bill)
(The English text is the official text of the Bill)*

(DR R RABINOWITZ, MP)

[B ---- 2008]

REPUBLIEK VAN SUID – AFRIKA

WETSONTWERP OP HERNUBARE ENERGIEBRONNE

*(Soos by die Nasionale Vergadering ingedien as 'n artikel 75-wetsontwerp)
(Die afrikaanse teks is die amptelike vertaling van die Wetsontwerp)*

(DR R RABINOWITZ, MP)

[B ---- 2008]

BILL

To provide for the supply of electricity from renewable energy sources; to provide incentives for use of renewable energy and to provide for matters connected therewith.

WHEREAS the burning of fossil fuels for energy generation contributes relentlessly to climate change and climate chaos

AND WHEREAS South Africa is well endowed with renewable energy sources that can be sustainable alternatives to fossil fuels

AND WHEREAS a strategic programme of action is required to develop South Africa's renewable energy sources, particularly for power generation reducing the need for fossil fuel-based power generation

AND WHEREAS such a programme would have beneficial social, economic and environmental effects

Be it enacted by the Parliament of the Republic of South Africa, as follows:-

Definitions

1. In this Act, unless the context otherwise indicates-

“Consumer” means a user of electricity, whether purchasing electricity or not.

“Distribution” means the conveyance of electricity, excluding reticulation services, through a distribution power system, and “distribute” and “distributing” have corresponding meanings.

“Eskom” means the national utility established in terms of Eskom Conversion Act, 2001 (Act No 13 of 2001). (amending Act 40 of 1987)

“electrical corporation” means any institution responsible for the distributing, supplying or transmission of electricity,

“feed-in tariff” means the schedule detailing the rates, rules, and terms of service that is filed by an electrical corporation and approved by the Regulator that is applicable to the purchase of electricity, generated by a renewable electric generation facility, by the electrical corporation pursuant to this section.

“Generation” means the production of electricity by any means, and “generate” and “generating” have corresponding meanings.

“distributor” means a licensed distributor in terms of the Electricity Regulation Act, 2006 (Act No 4 of 2006)

“Licensee” means the holder of a licence granted by the Regulator under the Electricity Regulation Act, 2006 (Act No 4 of 2006).

“Minister” means the Minister of Minerals and Energy.

“National utility” means the parastatal (Eskom) responsible for the generation and ownership of the national grid.

“Regulator” means the National Energy Regulator referred to in the National Energy Regulator Act, 2004 (Act No 40 of 2004).

“Renewable energy” means renewable non-fossil, non-nuclear energy, excluding large hydropower.

(i) "Renewable energy electricity generation facility" means a facility for the generation of electricity

“Supply” means the generation, transmission, distribution, reticulation and trading of electricity,

“Trading” means the wholesaling or retailing of electricity as a commercial activity, whether for the account of the person buying or selling that electricity, or on behalf of somebody else

“Transmission” means the conveyance of electricity through a transmission power system, and

“Transmission grid” means a transmission power system which transports electricity from generation to distribution points operating at above 132 Kilovolts.

“transmitter” means a licensed transmitter in terms of the Electricity Regulation Act, 2006 (Act No 4 of 2006)

“net metering” means the installation of small renewable systems at homes or businesses and linking these with the grid.

Purpose and objectives of Act

2. (1) The purpose of the Act is to encourage energy production from renewable energy sources.

(2) The utilisation of feed-in-tariffs for electricity generated by renewable energy sources.

(3) The development and implementation of a feed-in tariff that provides for payment for every kilowatt-hour of electricity generated by a renewable electric generation facility at the approved tariff price.

(4) Through the implementation of a feed-in tariff for electricity generated by renewable electric generation facilities the objectives are the following:

- (a) The generation of electricity from eligible renewable energy sources in an amount and location commensurate with the growth of electrical load within each load area.
- (b) The deployment of eligible renewable energy sources in a timely manner in order to eliminate, to the greatest

extent possible, the need for additional power facilities using fossil fuels to generate electricity.

- (c) The growth of jobs in South Africa by developing industries that build and deploy eligible renewable energy sources.
- (d) The provision of capital for eligible renewable electric generation facilities by ensuring a stable revenue stream for project developers.
- (e) The adoption of just and reasonable payments for electricity generated by renewable electric generation facilities
- (f) Reduce long term price volatility of fossil fuels
- (g) To increase the diversity of technologies that are eligible renewable energy sources.

Scope of Application

- 3. (1) This Act regulates-
 - (a) priority connection to transmission grid systems or distribution systems for general electricity supply of facilities generating electricity from renewable energy sources within the territory of the Republic of South Africa; and
 - (b) the priority purchase and transmission of, and payment for, such electricity by the transmission grid system operators and

Feed-in from renewable energy generators to electricity network

- 4. (1) This section applies to—
 - (a) an electricity distributor licensed to distribute electricity through an electricity network; and
 - (b) an electricity supplier licensed to supply electricity from the network.
- (2) It shall be a condition of the electrical corporation's license that the corporation must,

on application by the occupier of premises at which there is a Regulator approved and licensed renewable energy generator connect the generator to the corporation's network to enable electricity generated by the generator to be supplied to the network.

- (3) (a) Notwithstanding the provisions of 4(2) the Minister may exclude private individuals or companies who employ net metering from licensing requirements.
- (b) Net metering and connection of renewable energy with the grid, will be in accordance with regulations issued by the Minister.

Feed-in Tariffs

6. (1) The Regulator shall develop and approve a feed-in tariff for each electrical corporation that provides for payment for every kilowatt-hour of electricity generated by a renewable electric generation facility that is delivered to the grid, at the tariff price approved by the Regulator for a period of 15, 20 or 25 years.

(2) The Regulator shall develop both of the following for each eligible renewable energy resource:

- (i) A methodology for determining a base rate to be paid for electricity that is generated by a renewable electric generation facility. A separate base rate shall apply for each technology that is an eligible renewable energy resource. The base rate shall be calculated based upon the cost of generation, using best available practices for the individual technology, plus a reasonable profit as determined by the Regulator.
- (ii) A methodology for adjusting the base rate to be paid for electricity generated by renewable electric generation facilities in future years so that the base

rate declines over time to reflect improvements in technology and operational practices.

(3) The Regulator shall, upon development of the methodology pursuant to subsection (2), require each electrical corporation to file a feed-in tariff for approval by the Regulator. An electrical corporation may adjust the base rate of its feed-in tariff to incentivize the generation of electricity to meet load within the electrical corporation's individual service territory, including generation of electricity to match peak demand and regional adjustments to match deliverability of electricity to load areas. Any adjustment to the base rate shall be based upon future projections of electricity demand within its service territory or a load area.

(4) The Regulator shall reduce the tariff rate to reflect tax and other credits, subsidies, or other incentives, received for a renewable electric generation facility. The Regulator shall review tariff rates at least annually to ensure that the rate is reduced to reflect tax and other credits, including CDM related, subsidies, or other incentives received for a renewable electric generation facility.

(5) The Regulator shall annually adjust the contracted feed-in tariff rates paid for electricity generated by a renewable electric generation facility for inflation and component price in light of current market conditions.

(6) The Regulator shall ensure that a customer's eligibility to receive service pursuant to the feed-in tariff is determined in advance so that a customer can invest in a renewable electric generation facility knowing that the customer will be eligible to receive service pursuant to the feed-in tariff and the tariff price that will be applicable to that customer. The Regulator may place time limitations upon a customer for completion of the renewable electric generation facility to remain eligible for the feed-in tariff at the applicable tariff price. The Regulator may establish reasonable operation and reliability standards in accordance with the operational grid code, for a renewable electric generation facility to remain eligible for the feed-in tariff at the applicable tariff price.

Eligible Renewable Energy Source

- 7 (1). The following energy sources are eligible renewable energy sources:
- (a) Small hydropower <10MW;
 - (b) hydro;
 - (c) wave;
 - (d) tide;
 - (e) wind;
 - (f) solar(water heaters, photo voltaic and solar thermal)
 - (g) geothermal-aquifer;
 - (h) hot dry rock;
 - (i) energy crops;
 - (j) wood waste;
 - (k) agricultural waste;
 - (l) waste from processing of agricultural products;
 - (m) food waste;
 - (n) food processing waste;
 - (o) bagasse;
 - (p) biomass-based components of municipal solid waste;
 - (q) landfill gas;
 - (r) sewage gas and biomass-based components of sewage;
 - (s) any other energy source prescribed by the regulations.
- (2) Despite subsection (1), the following energy sources are not eligible renewable energy sources:
- (a) fossil fuels
 - (b) nuclear power;
- (3) For the purposes of this Act, the regulations may provide that an energy source referred to in subsection (1) or (2) has the meaning prescribed by the regulations.
- (4) For the purposes of this Act, the regulations may make provision for and in relation to limiting the meaning of an energy source referred to in subsection (1).

- (5) For the purposes of this Act, the regulations may make provision for and in relation to extending the meaning of an energy source referred to in subsection (2).
- (6) An eligible renewable energy source facility or product shall meet the safety and technical standards set down by the National Energy Regulator of South Africa and the South African Bureau of Standards, or an equivalent international body, for connecting to, and for supplying electricity into the grid, or to benefit from an incentive programme

Grid Connection, Reinforcement and Costs

8. (1) Transmission grid and distribution system operators shall as a priority connect facilities generating electricity from renewable energy sources to their systems and guarantee priority purchase and transmission of all electricity from renewable energy sources by such facilities.

(2) The purchase and transmission of electricity in accordance with subsection (1) shall be prescribed by the Regulator in guidelines

Priority purchase obligation

9. The transmission grid system operator shall purchase according to a power purchase agreement and the relevant feed in tariff, and the transmission grid system operator shall transmit, as a priority, the electricity produced from eligible a renewable energy source facility. The grid system operator shall not refuse to purchase, and the transmission grid system operator shall not refuse to transmit, such electricity on the grounds of insufficient grid capacity.

Targets

10. The Minister will set targets for installation of solar water heaters and for electricity to be produced and purchased from renewable energy sources in South Africa by 2010, 2015 and 2020.

Incentives

11. (a) Financial incentive schemes for solar water heater installation, will be facilitated through a rationalization of existing legislation to enable such incentives to be provided by a variety of sources and levels of government.

(b) The process referred to in (a) shall be carried out by the division for renewable energy in the Department of Minerals and Energy within one year of the introduction of this legislation.

(c) Schemes referred to in (a) shall endeavour to provide ease of access to solar water heating technology for all South Africans.

(d) The Minister shall introduce regulations for the progressive conversion to solar water geysers in all new buildings and geyser replacements where feasible.

Progress reports

12. (1) The Minister shall cause a progress report on the operation of this Act to be published and submitted to Parliament:

- (a) not later than two years after the commencement of the Act
- (b) thereafter, at intervals of not less than two years and not more than four years.

(2) A progress report shall include assessment of:

- (a) growth rates and average production costs of the eligible renewable energy sources;
- (b) progress towards the achievement of targets;
- (c) economic, social and environmental benefits of the Act (such as the amount of investment and export trade, the number of jobs created and the amount of carbon dioxide emissions avoided);
- (d) additional costs for the consumer;
- (e) ecological effects of the use of renewable energy sources on nature and landscapes; and
- (f) whether in all the circumstances tariff adjustments are necessary and equitable.

Regulations

13. (1) The Minister may, by notice in the *Gazette*, make regulations regarding any matter which may be necessary or expedient in order to achieve the objects of this Act.

(2) Any regulation under this section may provide that any person contravening such regulation or failing to comply therewith, is guilty of an offence and shall be liable on conviction to a fine or to imprisonment for a period not exceeding twelve months

Short title and commencement

14. This Act is called the Renewable Energy Sources Act, 2008, and comes into effect as soon as possible on a date set by the President by proclamation.

MEMORANDUM ON THE OBJECTS OF THE RENEWABLE ENERGY SOURCES BILL, 2008

1. PURPOSE OF THE BILL

-To provide incentives for the generation and use of energy from renewable energy resources in South Africa.

-To guarantee a fixed tariff over a fixed period of time to persons who generate renewable energy that can be fed into a transmission grid or distribution system and to provide assurances thereto.

The feed-in tariff model has been used in over 21 countries, states and provinces worldwide and has been shown to achieve greater results at a lower cost than other strategies including tax incentives, subsidies, tendering, quotas and renewable electricity standards.

2. OBJECTS OF THE BILL

The primary objectives of the Bill are to facilitate sustainable development of energy supply from renewable resources, contributing to reduced carbon emissions and lessening the impact of climate change which is resulting in climate chaos. Other objectives are to reduce the pressure on Eskom to provide peak energy, to spread the cost of energy throughout the country, to protect the environment, to provide energy security, to encourage investment in the energy sector among a diversity of players, to build a local industry in renewable energy, to stimulate jobs, contribute to social and economic well being and to place South Africa in the forefront of developing technologies for the generation of electricity from renewable energy sources.

Currently Eskom has a monopoly on the generation and provision of electricity to end-users. The implementation of a REFIT will liberalise and diversify the electricity market, stimulating the competitive development of one of the fastest growing markets in the world, that of environmentally sound technologies.

Currently there is haphazard and marginal use of renewable energy resources in South Africa, notwithstanding our superb climate and plentiful supply of sunlight and other entities (such as biomass and wind) for the production of secure, safe energy.

Promoting a greater use of renewable energy sources will give South Africa international credibility, cater to the betterment of quality of life in rural and urban areas and impact on sustainable regional development in SADC, contributing towards social and economic cohesion.

The Bill envisages the setting of minimum prices for feeding electricity, generated from renewable energy sources, into electricity transmission grids.

It also provides incentives to home owners to install solar water heaters and to generate electricity from photovoltaic panels. It provides for the progressive enforcement of the use of solar water geysers.

An obligation is placed upon existing transmission grid operator(s) to connect renewable energy source electricity generators, purchase the electricity and pay compensation for the electricity purchased.

The key regulatory element contained in the envisaged Bill, is the obligation to purchase electricity from licensed renewable energy sources facilities, based upon tariffs to be determined by the National Energy Regulator.

The objects of the Bill are contained in the following sections:

Clause 1 deals with the various definitions

Clause 2 deals with the purpose of the Bill and envisages the encouragement of energy production from renewable energy sources.

In terms of clause 4 it is envisaged that current transmitters, distributors and suppliers of electricity shall allow a renewable energy source facility to connect to the electricity network.

Clause 6 deals with the tariffs payable in respect of electricity fed by a renewable energy source facility to a transmission

grid. These tariffs will be fixed by the National Energy Regulator.

Clause 7 purports to provide a list of those sources that may be regarded as eligible renewable energy sources.

In terms of clause 8 it is obligatory for a grid system operator to connect facilities generating electricity from renewable energy sources to their systems and also to ensure that the grid would be suitable to receive such envisaged feed-in of electricity.

Clause 9 places an obligation on transmission grid system operators to purchase electricity generated by a renewable energy source facility for eventual provision to an end-user.

In terms of clause 9 certain targets are set regarding the provision of electricity generated by renewable energy sources and clause 10 requires of the Minister of Minerals and Energy to submit reports in this regard to Parliament.

Clause 11 provides for incentives to be introduced for use of solar water heaters and the gradual phasing in of solar water heating countrywide. It is accepted that there might be technical and other details that need to be addressed to achieve the objects of the proposed Bill, thus provision is made in clause 13 for the Minister to make regulations that may be necessary or expedient to achieve the objects of the proposed Bill.

3. DEPARTMENTS/BODIES/PERSONS CONSULTED

SANERI South African National Energy Research Institute

Earthlife Africa

World Future Council

SESSA Sustainable Energy Society of South Africa

NERSA

TERRA POWER SOLUTIONS

Department of Minerals and Energy during November 2003 had published a "White paper on Renewable Energy". NERSA has drafted guidelines for the Feed in Tariff. In the five year period since then no apparent progress in this regard has been made by the Department

4. IMPLICATIONS FOR PROVINCES

There are implications for provinces since it deals with a functional area of concurrent National and Provincial legislative competence.

5. FINANCIAL IMPLICATIONS FOR STATE

The proposed legislation should have no financial implications for the State. The Feed-in tariff system is based on the shared burden principle and not on state subsidies. The transmission grid or distribution system operator or utility company pays a fee for electricity that is fed into the grid. The costs then can be apportioned to all grid system operators and then further charged to the end-users.

6. PARLIAMENTARY PROCEDURE

The opinion is held that the Bill must be dealt with in accordance with the procedure established by section 76 of the Constitution since it falls within a functional area listed in Schedule 4 of the Constitution.