

- b. Energy efficient lighting programmes.
- c. Installation of solar water heaters.
- d. Various other demand side management projects.
- e. Mechanism to make renewable energy sources competitive with non-renewables.
- f. Assisting with energy switching away from electricity.

Policy Position: 64

- a) *All levies / funds collected from electricity customers must be grouped as one.*
- b) *This is to be quantified accurately and be shown as a transparent levy on electricity sales.*
- c) *The funds generated shall be managed on an integrated basis under one independent body to be appointed by the Minister of DME.*
- d) *The funds shall be applied and be prioritised on a least total cost basis.*
- e) *All parties in the ESI shall be treated fairly and independently based on the measure to which the application meets the qualification criteria.*

11 REGULATION

DME determines the EPP to be applied in the ESI and NERSA (appointed by the Minister of Minerals and Energy) is tasked with establishing these or to establish the rules, regulations, plans, programmes and projects in finer detail. In terms of the Electricity Regulation Act of 2006 NERSA is *inter alia* responsible for the consideration and issuing of licenses for all operating functions (locally and internationally), regulation of prices and tariffs and mediation of disputes. Based on the objectives of the Electricity Regulation Act of 2006, it is necessary to accentuate the following with regard to the efficient execution of the EPP:

- a. Orderly coordination of licensing, system of appeals and public hearings are important aspects in the regulation process.
- b. Timescales in respect of submissions and feedback of information to various parties are essential to ensure cooperation in all respects.
- c. The nature of regulation should be established. The tougher the attitude of the regulatory personnel, the more difficult co-operation could become. A balanced approach is necessary.
- d. A justification for and acceptance of all aspects of regulation are required because the level of tariffs is argued in many instances.
- e. A case has to be made for *ex post* and *ex ante* regulations because they could affect the magnitude of the adjustments.
- f. The acceptance of a fair return on capital employed is necessary. Returns in line with the risks involved should be the aim and should include full costs as well as a reasonable margin. Please also see the application of this concept under section 2.2.
- g. Co-operation between generation, transmission, distribution and other divisions of the market participants are necessary to ensure achievable goals for the various divisions.
- h. The formulation of the primary objectives of stakeholders aligned with ensuring a balance between the required capital investments (adequate capacity) and utilisation levels is attained.
- i. Economic and technical efficiency is necessary to minimise prices and maximise both supply and service quality.

- j. Competition as far as possible and justified is required.
- k. Price discrimination should be justified.
- l. Harmony in the ESI is necessary.
- m. Disputes and complaints should be addressed promptly.

The above requirements imply that the acts of the Regulator should demonstrate *inter alia* the following attributes: Openness, transparency, aptness, informative, timeliness, efficiency, customer focus, fairness and equity, independence, honesty and integrity.

In the EPP implementation plan, which is defined in section 12, reference is made to several additional duties to be allocated to NERSA. This is likely to increase the work load of NERSA, which according to current indications, is already inappropriately staffed. There is consequently an urgent need for the appointment of suitably qualified staff with the necessary experience.

A committee that could make valuable contributions should consist of *inter alia* of representatives of DME, all other Public Service Departments related to electricity affairs, NERSA, Eskom, municipalities (to be replaced by REDs), pricing, customers, trade unions and outside consultants with expertise in pricing, technical, financial, legal and related disciplines.

Policy Position: 65

a) *In view of the increasing workload expected at NERSA and the urgency to execute the EPP it is strongly recommended that a committee of experts be established to assist and advise regarding the implementation of the EPP. Inter alia the staffing requirements and other resource constraints of NERSA should be addressed.*

12 IMPLEMENTATION PLAN

Table 2 below summarises the implementation plan for the EPP. It shows the main task description, responsible party and completion period for every policy position. There are a total 65 policy positions with most of the workload being shared by DME and NERSA. It must be highlighted that National Treasury also carry some responsibilities, especially in the areas of subsidies and funding support.

Table 2: EPP Implementation Plan

Policy	Task Description	Responsibility For Development And Oversight	Completion Period
1	Review various electricity policies to ensure coherent macro-economic energy policies.	DME	3 years. Ongoing thereafter.
2	Review and update Revenue Requirement methodology.	NERSA	Immediate implementation. Review every three years.
3	Tariffs to become cost reflective.	NERSA	5 years.
4	Achieve appropriate transparency and unbundling.	NERSA	3 years. Monitor thereafter.
5	Reach tariff non-discrimination.	NERSA	3 years. Monitor thereafter.
6	Allow full access to and use of networks and develop wheeling methodology.	NERSA	2 years.
7	Develop and approve special products and prices.	Licensees to develop, NERSA to approve.	Immediate. Ad hoc review and approval.
8	Develop and publish indicative long term price outlook.	NERSA with support from licensees.	1 year. Annually thereafter.
9	Generator Applicability: Apply policy. Develop any exclusion criteria.	DME to develop criteria, NERSA apply.	1 year. As required thereafter.

DME EPP (FINAL)

31 March 2008

Page 52 of 57

Policy	Task Description	Responsibility For Development And Oversight	Completion Period
10	Generator tariff structure: Apply policy.	NERSA	Immediate and ongoing.
11	Generator tariff level: Apply policy.	NERSA	Immediate and ongoing.
12	Develop renewable energy guideline and funding support mechanisms. Apply policy statements.	DME (with NERSA, National Treasury and other stakeholders) to develop guideline and mechanisms. NERSA to apply.	1 year. Update as required thereafter.
13	Wholesale energy tariff structure.	Licensees to implement, NERSA to approve.	Immediate with periodic review of tariff structure.
14	Wholesale energy tariff level.	Licensees to implement, NERSA to approve. NERSA to develop over/under recovery mechanism.	Immediate. Develop and implement over/under recovery mechanism in 2 years.
15	Negotiated Pricing Agreements.	DME to develop application and approval process. NERSA to update NPA framework. NERSA to determine cost estimates.	Process within 2 years. Update NPA framework in 2 years. Determine cost estimates within 1 year and annually thereafter.
16	International sales: Develop framework and implement policy.	NERSA to develop framework and implement policy.	Develop framework within 1 year. Immediate policy implementation.
17	Ancillary services and standby charges.	Licensees to implement and NERSA to oversee.	Immediate and ongoing.
18	Transmission tariff structure and connection policy development.	Licensees to implement tariff structure and develop connection policy and NERSA approve and oversee.	Develop policy within 2 years. Immediate and ongoing for tariff structure.
19	Transmission tariff levels.	Licensees to implement and NERSA approve and oversee.	Immediate and ongoing.
20	Charges to generators and customers.	Licensees to implement and NERSA approve and oversee.	Implementation within 1 year and ongoing thereafter.
21	Geographic differentiation	NERSA to evaluate geographic differentiation for customers and generators.	Generation -1 year. Customers - 3 years
22	Transmission charges for international customers.	Licensees to implement and NERSA approve and oversee.	Implementation within 1 year and ongoing thereafter.
23	Determine qualification criteria for wholesale purchases.	DME in consultation with NERSA.	1 year.
24	Distribution pricing: Cost of supply studies.	NERSA to develop and update COS standard. Licensed distributors to comply with standards.	Licensed distributors to comply within 2 years.
25	Refurbishment / maintenance backlog.	Licensees to implement and NERSA approve and oversee.	5 years.
26	NERSA to develop standards for non-technical losses and provision for bad debt.	NERSA	2 years.
27	Distribution customer categories.	Licensed distributors to comply with policy position and NERSA to ensure compliance.	5 years.
28	Distribution tariff components.	Licensed distributors to comply with policy position and NERSA to ensure compliance.	5 years.
29	Distribution tariff simplification.	Licensees to implement and NERSA approve and oversee.	3 years.
30	Distribution seasonality.	Licensees to implement and NERSA approve and oversee.	3 years.
31	Distribution tariff structure and level.	Licensees to implement and NERSA approve and oversee.	3 years.

DME EPP (FINAL)

31 March 2008

Page 53 of 57

Policy	Task Description	Responsibility For Development And Oversight	Completion Period
32	Cost-reflective versus pricing signal.	Licensees to apply and NERSA approve and oversee.	3 years.
33	Distribution TOU tariffs.	Licensees to apply and NERSA approve and oversee.	5 years.
34	Distribution TOU tariff structure.	Licensees to apply and NERSA approve and oversee.	5 years.
35	Distribution geographic price differentials.	Licensees to apply and NERSA approve and oversee.	5 years.
36	Eskom shall apply pooling of costs and base its tariffs on the proposed RED boundaries.	Eskom to implement and NERSA approve and oversee.	3 years.
37	A tariff plan for phased increases in tariffs at lower voltages and decrease of tariffs at higher voltages.	NERSA in consultation with distribution licensees.	5 years.
38	Domestic tariffs to become more cost reflective.	Licensees to apply and NERSA approve and oversee.	5 years.
39	Rationalise existing electricity distribution tariffs into a set of electricity tariff structures for the EDI.	NERSA in consultation with EDI Holdings and other stakeholders.	3 years.
40	Investigate TOU life line tariffs.	NERSA	3 years.
41	Treatment of distribution network capital contributions.	Licensees to apply and NERSA approve and oversee.	Immediate and ongoing.
42	Develop standard for the determination of distribution capital contributions.	NERSA in consultation with EDI Holdings and other stakeholders.	2 years.
43	Public lighting.	Licensees to apply and NERSA approve and oversee.	Phase in over 2 years.
44	Distribution design standard.	Licensees to apply.	Immediate and ongoing.
45	Develop and implement an effective mechanism to ensure that quality customer services are provided by distributors.	NERSA in consultation with EDI Holdings and other stakeholders.	3 years.
46	Reseller charges.	Non-licensed re-sellers to implement and NERSA to ensure compliance.	1 year.
47	Cross-subsidy / MSOE.	Licensees to apply and NERSA approve and oversee.	2 years.
48	Achieve transparency of cross-subsidy / MSOE	Licensees to apply and NERSA approve and oversee.	2 years.
49	Future electrification capital subsidies.	DME in consultation with National Treasury.	2 years.
50	Ringfencing of and mechanism for past electrification capital debt.	Licensees to apply and NERSA approve and oversee.	2 years.
51	Low income customer tariff subsidisation.	Licensees to apply and NERSA approve and oversee.	To be phased in over 5 years.
52	Life line tariff level.	Licensees to apply and NERSA approve and oversee.	1 year.
53	Life line customer subsidy impact.	Licensees to apply and NERSA approve and oversee.	2 years.
54	Free basic electricity.	Licensees to apply and NERSA in consultation with DPLG to approve and oversee.	2 years.
55	State tariffs.	Licensees to apply and NERSA approve and oversee.	3 years.
56	Perform COS studies and investigate alternative subsidy mechanisms to address the challenges relating to farm network replacements.	Licensees to perform COS studies and DME investigate alternative mechanisms.	All within 2 years.

DME EPP (FINAL)

31 March 2008

Page 54 of 57

Policy	Task Description	Responsibility For Development And Oversight	Completion Period
57	Implementation of MSOE.	Licensees to apply and NERSA approve and oversee.	2 years.
58	Concurrent phasing in of MSOE and cost reflective tariffs for non-municipal customers.	Licensees to apply and NERSA approve and oversee.	3 years.
59	Consider viability assistance.	DME in consultation with National Treasury, DPLG and other stakeholders.	2 years.
60	DSM price signals.	Licensees to apply and NERSA approve and oversee.	5 years.
61	Cost of DSM.	Licensees to apply and NERSA approve and oversee.	2 years.
62	Implementation and funding of domestic DSM and AMR.	Licensees to apply and NERSA approve and oversee implementation. DME in consultation with National Treasury to investigate funding options.	3 years.
63	Implementation and approval of emergency measures.	Licensees to apply and NERSA approve and oversee.	1 year.
64	DSM and energy efficiency funding.	DME in consultation with National Treasury and other stakeholders.	2 years.
65	Establish a committee of experts to assist and advise regarding the implementation of the EPP.	DME	Immediate.

13 CONCLUSIONS

At this point in time it is essential that the proposed EPP should receive the highest possible priority. The ESI is faced with a number of important challenges as pointed out in this report. Although there are perhaps other burning issues to be addressed at this stage, the finalisation and implementation of the proposed EPP would make a very important contribution to the state of the industry. The EPP involves *inter alia* aspects of generation, transmission, distribution, cross-subsidies, DSM and regulatory matters.

South Africa needs to make substantial investments in the generation, transmission and distribution industries to meet the growing demand of an expanding economy. In addition it is recognised that certain infrastructure backlogs also need to be addressed to maintain and improve quality of supply and service delivery. Furthermore, it is anticipated that independent power producers and renewable energy projects will play a more prominent role in South Africa's future energy mix.

It is against this backdrop that it is important that the industry moves towards tariff levels that will sustain a viable industry. In addition, the EPP highlights the importance of non-discriminatory pricing practices as well as the need to promote pricing transparency and the unbundling of tariffs. These are essential requirements to attract investments and to unlock efficiencies.

The EPP has been formulated using a number of key assumptions and pricing interfaces, namely; generator prices, wholesale energy prices, transmission prices and distribution prices. The tariff structure at the wholesale level will consist of generation energy charges and transmission charges.

The EDI should apply cost reflective tariffs for properly defined customer categories within a short period of time. This has to be applied as per the proposed REDs boundaries. The tariffs need to be set according to the results from the COS studies which must be undertaken periodically and all possible type of costs should be shown transparently.

The underlying approach in the development of the various policy positions is to promote economic efficiency while providing scope for the introduction of approved and transparent subsidies and support mechanisms. To this effect the EPP defines a specific set of cross-subsidies which should remain in the ESI. These are clearly defined with the transparent mechanisms of how each should be treated to ensure that the needs of various customer categories are addressed and that proper decisions are made.

The need to increase the utilisation of the generation, transmission and distribution infrastructure and natural resources in the country should be addressed with the application of appropriate pricing strategies. These include the provision of pricing strategies to ensure the provision of DSM, energy efficiency, rationing and other strategies funded from a range of sources to mobilise resources optimally.

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15 ANNEXURE 1: ELECTRICITY PRICING RELATED POLICIES

No electricity pricing policy can operate in a vacuum and it should always be seen in terms of broader industry policies. There are various gaps in the present electricity supply policies. Many old policies need to be modified because of some National Government direction changes and because of new challenges facing the ESI. This section highlights some of the key policies that need to be formulated and be approved as soon as possible. If these are not addressed, some of the EPPs would not have the basis they require.

15.1 Single Buyer

- Where should it be housed? (Within or outside Eskom?)
- Should all PPAs be with the single buyer, or may bilaterals exist?
- How would the single buyer market function?
- How would the conflict be addressed when Eskom is the single buyer, purchasing from itself and competing IPPs?
- Who is eligible to buy from it?
- Are there minimum/maximum requirements?
- What about self-generation?
- What about the wheeling of power?
- What about current non-Eskom generators?
- How should it support renewable generation?
- Would distributors have to apply for future energy supply from the single buyer?
- Should new loads within the distributor be approved without availability being provided by the single buyer?
- Can a customer / licensee in SA import electricity, and if so, under what terms and regulations?

15.2 Rights / Obligation to supply

- Do licensed distributors have the obligation to supply electricity to customers within their areas of supply?
- Can municipalities cede their obligation to supply electricity in their areas of jurisdiction to a relevant, licensed electricity utility, which would then have an obligation to supply customers within its areas of supply?
- Do licensed distributors have the sole right to provide distribution networks in their area of supply?
- Since customers have the obligation to pay for the electricity services provided to them, should their supply be disconnected in the case of non-payment or illegal use?

15.3 Choice for Customers

- Should customers be given the choice to select the supplier of their energy and customer services?

- Should key customers be given the choice to select the supplier of their energy and customer services and what would the qualification criteria be?
- Would some plan for the phasing in of choice be developed?
- Should customers, collectively per site, who fall within complexes and or commercial / industrial centres, have the right to purchase their power from the owner of the complex / his agent or the licensed distributor?
- Would supplies such as traction and bulk water supply industries which are of national strategic importance qualify for a choice of energy supplier even if they consume more than 100 GWh from different points of supply?

15.4 National Integrated Resource Plan (NIRP)

- Should the single buyer be the custodian of the NIRP plan?
- Should not only one NIRP plan involving all key stakeholders be developed jointly to develop one NIRP plan for South Africa?

15.5 DSM / Energy Efficiency Programme

- Who is the best custodian of the DSM / energy efficiency fund to assist with the financing of DSM and energy efficiency projects in the ESI?
 - Is Eskom able to act as impartial agent in managing the DSM / energy efficiency funds, considering its vested interest and own interest?
 - What strategies should be put in place to ensure the fast-roll out of solar water heaters?
 - What should be done to ensure that energy efficiency / DSM be solved with integrated solutions ensuring that optimal results are achieved with the available funds?
 - Would rules be developed of best / worst practice in terms of energy generation and how would these be enforced?
 - What should be done to ensure the rapid roll-out of energy efficient lighting and the recovery of old CFLs?
 - Who would drive the development and implementation of appliance labelling and building efficiency grading?
-