

Submission to
on Constitution

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NATIONAL ELECTRIFICATION FORUM

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The Chairman
Planning Committee
Multi-Party Negotiating Council
World Trade Centre
Kempton Park

Dear Sir

RATIONALISATION OF THE ELECTRICITY SUPPLY INDUSTRY AS DETERMINANT FOR THE POWERS AND FUNCTIONS OF FUTURE GOVERNMENTAL SPR'S

1. INTRODUCTION

The provision of affordable electricity on a sustainable basis to South Africans can be a major stimulus for economic growth and social upliftment in a new South Africa. To this end it will be necessary to accelerate the electrification of the country and that can only be achieved if major obstacles inherent in the electricity supply industry are overcome.

The magnitude of the task is depicted by the fact that approximately 56 % (3 million) of South Africa's households involving about 23 million people do not have access to electricity (Appendix A). In addition the present highly fragmented industry will not be able to respond to this challenge efficiently and effectively.

2. THE CURRENT ELECTRICITY SUPPLY INDUSTRY (ESI)

2.1 Factual information on the industry

The ESI employs approximately 75 000 people and has an annual turnover in excess of R15 billion. It serves 3 million customers country-wide and contributes 4 % to the GDP. There are 36 power stations with a combined generating capacity of \pm 40 000 MW, including a large generating capacity surplus. The surplus generating capacity obviates the need for additional capital investment in power stations in the medium term to meet the demand for extended domestic electricity usage.

Electricity enjoys a 29 % share of the end-use energy market at present.

2.2 A fragmented industry

In the existing ESI structure there are 450 distributors of electricity i.e. ESKOM, local authorities, TBVC countries and national states. More than 2 000 tariffs are applied by these distributors. Many of the so-called white local authorities derive a surplus from electricity sales collectively estimated at more than R1,2 billion. These surpluses are used to fund other services such as roads, libraries, parks etc. and to reduce rates and taxes.

Regulation / control in the case of ESKOM is effected through the ESKOM Council and to a limited extent the Electricity Control Board (ECB). In the case of local authorities it is done by the Local Councils and outside their legal boundaries the ECB. For the TBVC countries regulation is effected by the respective governments and by the ECB where electricity is supplied under licence.

3. THE NATIONAL ELECTRIFICATION FORUM (NELF)

3.1 Recognition of the need for change

For some time major stakeholders in the ESI have recognised the need for electrification, the opportunities for realising it, the benefits that could accrue and the obstacles inhibiting it. At the beginning of 1992 the Government and the ANC by separate means initiated the convening of a national conference on electrification on 1 and 2 September 1992. At this conference and a follow-up conference on 14 May 1993 a National Electrification Forum was established by the major stakeholders representing broadly based constituencies. The aim was to respond to the challenges facing the industry through proper consultation and shared decision making.

3.2 Structure

The NELF structure (Appendix B) provides for a Plenary which is inclusive of national role players, a Management Committee (Appendix C) which is exclusive and consisting of major role players as approved by the Plenary and seven Working Groups that are responsible for the detailed work of the Forum. A Trust administers the receipt and expenditure of funds which are dedicated to finance the efficient operation of the NELF structures. A Secretariat based at the offices of the Development Bank of Southern Africa is responsible for the administration of NELF.

3.3 Goal

The NELF goal is to develop an implementable strategy for the accelerated electrification of South Africa that will lead to general access to affordable electricity for the entire population on a non-racial basis as rapidly as possible to complement other developmental policies in a sustainable manner.

The intention is to substantially satisfy this goal which was translated into objectives within a year for NELF. (Appendix D).

4. ACCELERATED ELECTRIFICATION

4.1 Why?

Electrification is essential for

- economic growth. It is recognised, however, that electrification is a necessary but insufficient stimulus for economic growth since other initiatives are necessary in concert. Apart from the large generating capacity surplus referred to par. 2.1, the electrical contracting and equipment manufacturing industries have between 30 to 60 % spare capacity. For very little capital investment South Africa can therefore have better utilization of production capacity, significant job creation and increased wealth creation;
- social development and upliftment, especially the support of family activities;
- enhanced education (better lighting in dwellings and classrooms, use of audio visual equipment, television broadcasting etc.);
- health (sterilization of equipment, examination lights, cooling of medicines etc.);
- reduction of deforestation (at present about 12 million tons of firewood are used in a non-sustainable manner);
- expectations amongst people in rural and urban areas to improve their quality of life through access to electricity;
- population development; and
- improvement of the physical environment, especially at local level.

The balance between economic growth and social development hinges on affordability for the individual, the industry and the country (Appendix E).

4.2 A possible national electrification program

During 1992 a total of about 200 000 connections was achieved through the efforts of mainly ESKOM, Durban Corporation and a few other municipalities. Concerted efforts by all distributors will be required to increase the number of new connections up to a desirable and practical

rate of 450 000 p.a. as depicted on the attached diagram (Appendix F) and even higher but it will require the removal of certain key constraints.

The capital requirements pose one such a significant constraint. In 1993 the average cost per connection amounts to R3 000 for connections which can be made on a financially viable basis. If all of the existing 3 million households without electricity have to be electrified, the average capital cost will increase to R5 000 per connection (i.e. a total cost of R15 billion), raising the issue of individual affordability.

Therefore the envisaged national programme provides for the electrification of households which can be connected to the grid on a basis which is viable for the industry and the country (Appendix G). The energy needs of the balance of the households should be met through other forms of electricity supply such as solar cells, wind or small hydro systems or other energy sources such as solid fuels, oil, gas, biomass etc. The other key constraint is the present fragmentation of the ESI as indicated in paragraphs 2 and 5.

4.3 Electrification issues

The following issues impact significantly on a possible electrification programme:

- population growth and urbanization;
- the provision and thermal performance of formal and informal housing;
- the availability of a water supply;
- an integrated energy policy and related research programme;
- the initial low consumption of electricity by newly connected customers thus requiring subsidization to cover costs;
- the management of subsidization policies to ensure sustainability and the effective allocation of resources;
- the shortage of funding;
- non payment;
- community participation;
- institutional issues;
- low-cost technology; and
- a large number of diverse tariff structures

5. FUNDAMENTAL CHANGES IN THE ESI

5.1 The need for restructuring

It is evident that many of the distributors do not and will not have the capability of implementing a programme of accelerated electrification. This may be due to a lack of resources (money, manpower, material) or a lack of incentives or political will. Furthermore, electrification can involve many risks as is clear from par. 4.3.

A national perspective and approach will be required to achieve a national programme for electrification. This can facilitate better access to funding, the benefits of standardization and achieving synergy through resource optimization which will in effect lead to a reduction in cost.

5.2 Criteria for the evaluation of ESI structures

When considering alternative ESI structures specific criteria should be used to assess the suitability of such structures for South African conditions. The criteria developed by NELF are listed in Appendix H.

5.3 An appropriate ESI structure

NELF favours a structure more or less as outlined in Appendix I.

In this structure GENTRAN (a national body responsible for generation and transmission) supplies electricity to a limited number (between 6 and 15) distributors who supply to customers in their area of supply. Provision is made for a separate funding mechanism for electrification. An independent regulator which implements the Government's policies is envisaged.

It must be emphasized that the abovementioned structure is still under discussion and a substantial amount of work and consultation still need to be done before the ideas and thoughts will cristalize into a definite proposal.

5.4 Transition

A restructured ESI will involve extensive and fundamental change for most of the stakeholders, be they distributors, consumers or employees. NELF realizes the need for this transition to be properly planned and to be managed with great care, wisdom and sensitivity.

6. PROPOSED MEASURES FOR ACCOMMODATING NELF PROPOSALS

6.1 Short term: constitutional debate

- (i) Since sustainable electricity supply is in the national interest and of strategic importance to the country, it is of paramount importance that political accountability for electricity supply should be allocated with circumspection and great care to the various levels of Government. However, the allocation of accountability and regulation to the respective tiers still has to be worked out by NELF and that process will take time.

Attention still needs to be given to the ownership of these distributors. Their shares can for instance be held by constituent local authorities and representation given on their boards.

The request from NELF is that it be allowed time to develop recommendations pertaining to a new ESI structure, regulation, political accountability, ownership and legal personality of distributors, tariffs etc. It is also requested that in the meantime NELF be allowed access to the Planning Committee.

- (ii) The Draft Constitution Chapter 9 Clause 118 Section 1 indicates that SPR Governments shall have exclusive legislative competencies, including all necessary ancillary powers in the functional area of "delivery of electricity".

In view of the need for an integrated national policy and an institutional approach for the resolution of fundamental problems facing the ESI, NELF recommends the following amendments to the Draft Constitution:

- delete clause 118 (1)(J) "Delivery of water, electricity and other essential services".
- add clause 118 (4)(M) "Supply and delivery of water, electricity and other essential services".

6.2 Medium term: TEC phase

During the forthcoming months NELF will develop recommendations as referred to in par 6.1 (i) and (ii). There will be a need to test these recommendations and to seek advice on the processing thereof. Furthermore, debates will take place and decisions will be made which affect electricity supply. NELF's involvement in these deliberations is crucial.

To this end NELF's request is that a link be structured between itself and the TEC via the Sub-Council for Local and Regional Governments and Traditional Authorities amongst others.

6.3 Long term: Government of National Unity

At present electricity supply is regulated through the ESKOM Act no. 40 of 1987 and the Electricity Act no. 41 of 1987 as well as through a legion of provincial and local authorities' bye-laws.

Amendments to legislation and bye-laws will be inevitable and NELF will as a priority have to establish appropriate links with the new government structures to enable it to initiate new legislation or amendments to legislation and to be consulted on legislative issues

affecting electricity supply. In this process cases may arise where fast tracking procedures need to be used.

7. **CONCLUSION**

The need for an efficient and effective ESI to supply and extend affordable electricity to a new South African nation has brought the industry to a watershed.

A broad based, inclusive forum that is functioning professionally and efficiently on a consensus basis and that is investing extensive resources can guide South Africa to a structure and policies which will best serve the interests of all existing and future customers.

Mechanisms need to be created between NELF and the Government structures as proposed to allow NELF to play its role and to make its contributions on the short, medium and long term.

The Planning Committee's response to this memorandum will be greatly appreciated.

Yours sincerely



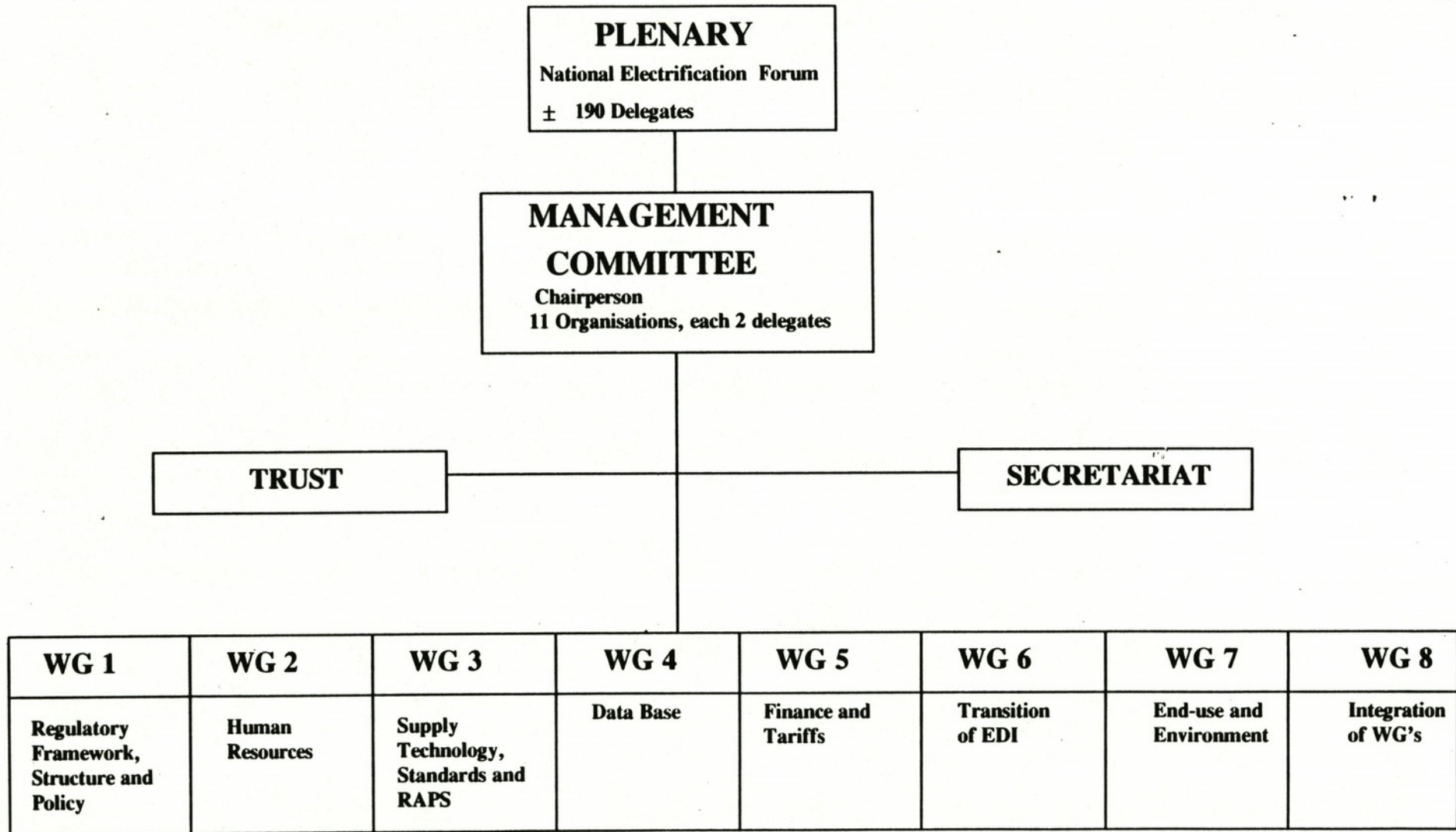
Johan Kruger
CHAIRMAN
MANAGEMENT COMMITTEE

STATUS OF ELECTRIFICATION IN S.A. - 1992

	METRO	TOWNS	FARMER H	TRUST AREAS	TBVC	NAT. STATES	TOTAL
TOTAL DWELLINGS	2 314 112	1 366 539	390 000	85 000	1 165 225	1 467 503	6 788 379
WITH ELECTRICITY	1 775 840	758 944	65 601	20 767	98 170	246 461	2 982 983
WITHOUT ELECTRICITY	538 272	607 595	307 199	64 233	1 067 055	1 221 042	3 805 396
% WITHOUT ELECTRICITY	23	44	79	76	92	83	56
POTENTIAL	323 687	216 023	131 699	49 358	331 247	509 853	1 561 867
"LEFT-OVER"	214 586	391 572	175 500	14 875	753 808	711 189	2 243 529

NOTE: *UCT DATA USED TO CALCULATE FARM ELECTRIFICATION
 SOURCES: DBSA, URBAN FOUNDATION, ESKOM, DINGLEY, TESCOB, VEKOR, BECOR, NEDSIBSI

NELF
 OCT 1993



NELF MANAGEMENT COMMITTEE REPRESENTATION

AMEU	ASSOCIATION OF MUNICIPAL ELECTRICAL UNDERTAKINGS
ANC	AFRICAN NATIONAL CONGRESS
BUSINESS SECTOR	
COM	CHAMBER OF MINES
DMEA	DEPT. MINERAL AND ENERGY AFFAIRS
ESKOM	
NUM	NATIONAL UNION OF MINeworkERS
NUMSA	NATIONAL UNION OF METALWORKERS OF SA
SAAU	SOUTH AFRICAN AGRICULTURAL UNION
SANCO	SA NATIONAL CIVIC ORGANISATION
UME	UNITED MUNICIPAL EXECUTIVE
DBSA	FACILITATING CHAIRPERSON

OBJECTIVES OF THE FORUM

To develop a strategy for accelerated electrification on a sustainable basis

To formulate a fundamental restructuring proposal

To co-operate with other fora

To allow current structures to execute

To operate on an inclusive, consensus basis

To give guidance

ELECTRICITY FOR ECONOMIC GROWTH AND SOCIAL DEVELOPMENT

ECONOMIC GROWTH

- COMPETITIVE ADVANTAGE
- FOREIGN INVESTMENT
- EXPORT OPPORTUNITIES
- SMALL BUSINESS

SOCIAL DEVELOPMENT

- BACKLOG & EXPECTATIONS
- QUALITY OF LIFE
- HEALTH & EDUCATION
- ENVIRONMENTAL



AFFORDABILITY

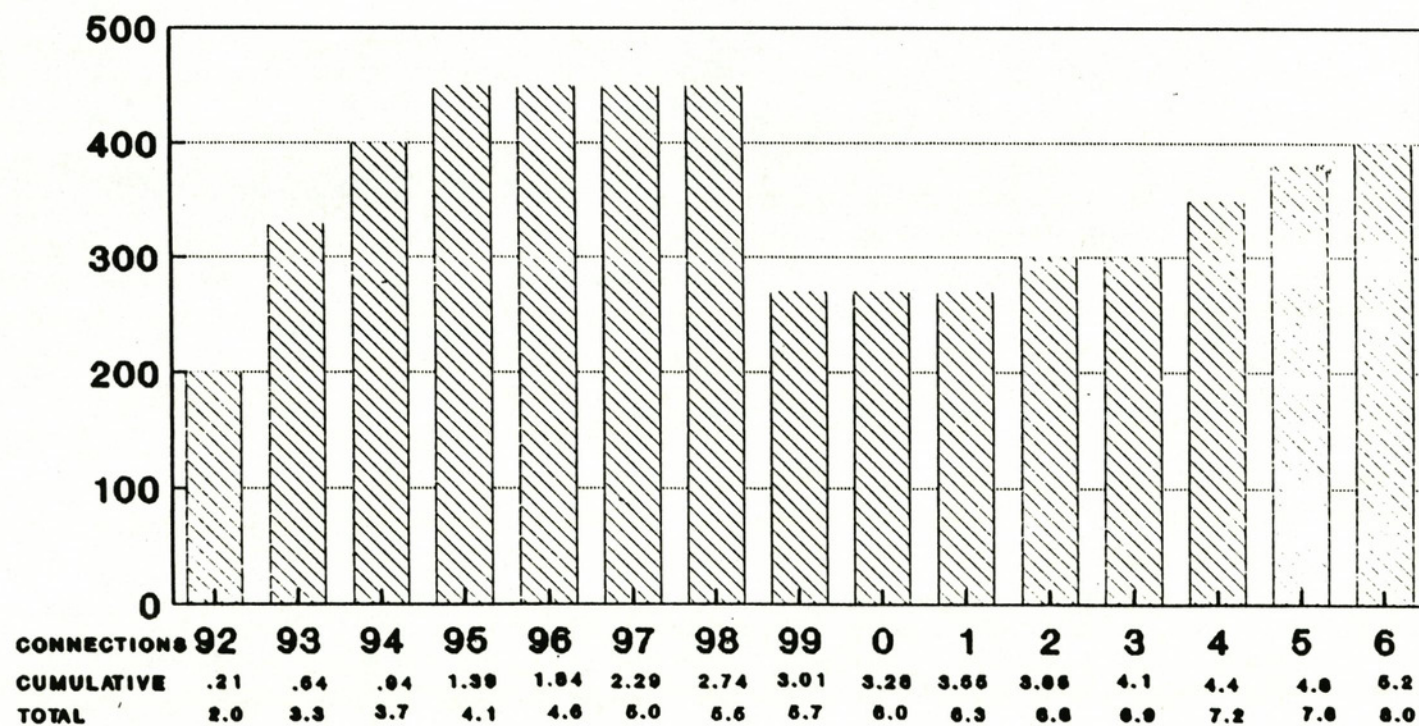
- INDIVIDUAL
- INDUSTRY
- COUNTRY

ELECTRIFICATION

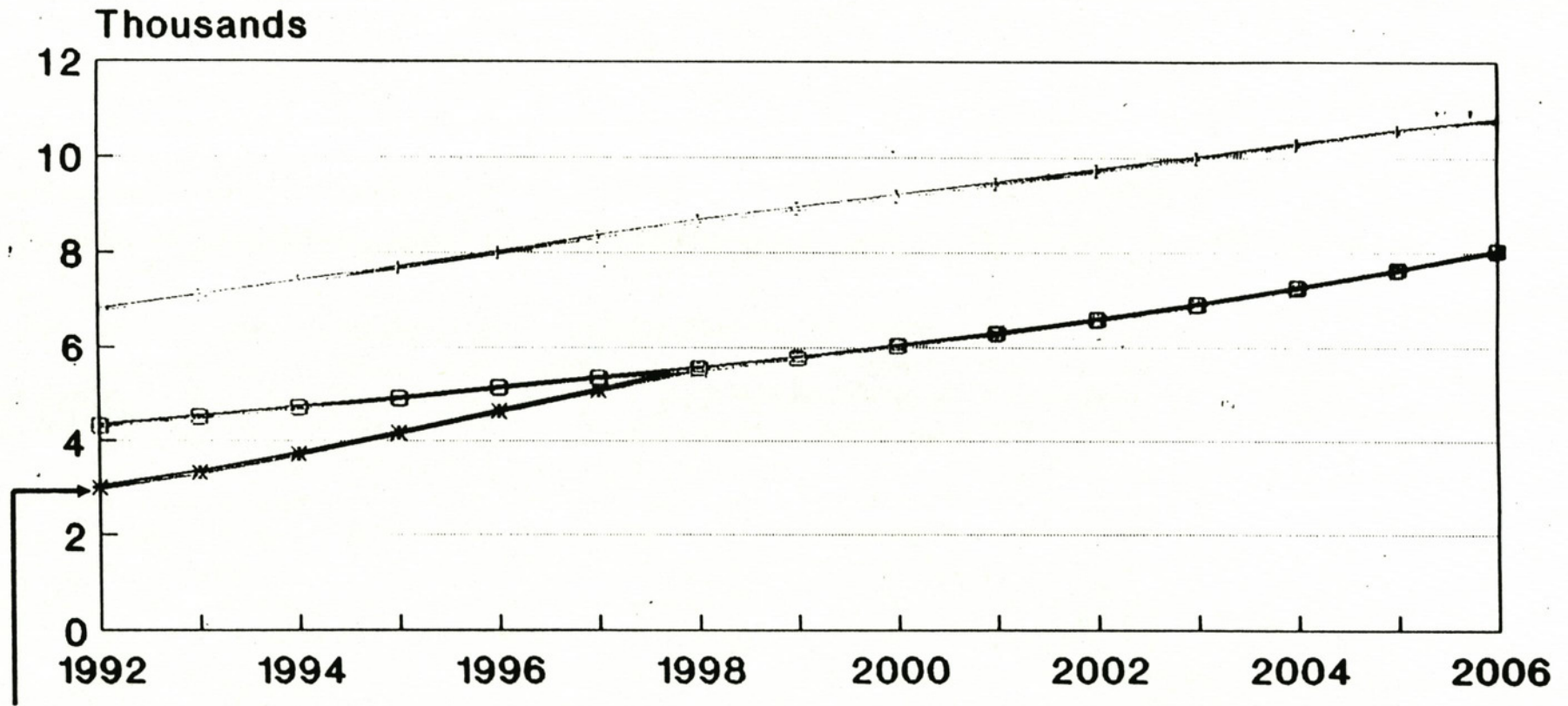
A POSSIBLE NATIONAL PROGRAM

NELF
OCT 93

/// TOTAL



NATIONAL ELECTRIFICATION PROGRAMME 1992 - 2006



HOUSES
ALREADY
ELECT.

—*— WITH ELECTRICITY
—△— TOTAL DWELLINGS

—□— TOTAL POTENTIAL

• TOTAL DWELLINGS (BACKLOG PHASED OUT)

NELF
OCT 1993

CRITERIA FOR EVALUATION OF ESI STRUCTURES

- **IMPLEMENTABILITY**
- **COST EFFECTIVENESS**
- **ACCEPTABILITY**
- **FUNDING EFFICIENCY**
- **ATTRACTIVENESS TO STAFF**
- **OPERATIONAL EFFICIENCY**
- **APPROPRIATE PRICING**
- **CONGRUENCE WITH NATIONAL POLICIES**
- **BUSINESS PROFESSIONALISM**
- **CUSTOMER INVOLVEMENT**
- **SUPPORT FOR NATIONAL GOALS**

APPROPRIATE ESI STRUCTURE DIAGRAM

