

TERMS OF REFERENCE FOR THE ENERGY R&D INNOVATION AND ADVISORY COMMITTEE (ERDIAC)

1. INTRODUCTION

1.1.1. The White Paper on Energy Policy (1998) states that

Government will consider the development of a system to prioritise national research funding into the three main research categories in order to address the medium to long-term research needs in the energy sector. This will consist of an integrated, multi-year, national, needs-driven, energy research strategy, developed from time to time by an experienced team of experts appointed by the Minister. This strategy will identify medium and long-term priority programmes and themes'

'International and bi-national research activities may be handled as partnerships with local role players, particularly industry as this is where the main potential for improvement exists, and should be aligned with national strategic energy research priorities'

1.1.2 The National Research and Development Strategy (2002) has identified "Leveraging resource-based industries and developing new knowledge-based industries from them (mobilising the power of existing sectors)" as an area of critical investment. Energy research, development and innovation is a strategic focus for the area of the National Research and Development Strategy. The aim is to address the challenge of developing a sustainable base for national energy research.

1.1.3. The establishment of a national energy research institute is key to the coordination of public interest energy R&D (PIER&D) in South Africa and to assist in ensuring the development and transformation of the human capital component of energy research. A nationally supported programme needs to be put in place to protect and nurture indigenous innovation and assist government in meeting its energy-related strategic objectives.

1.2. Background

1.2.1 It was in this context that Cabinet supported the establishment of NERI in 2001 to ensure that the existing national energy research capacity will be sustained and appropriately funded. In addition, South Africa's National Research and Development Strategy (2002) identifies the energy industry as a component of the Resource Based Industries mission out of which South Africa will leverage benefits and maximise competitive advantage based on enhanced innovation.

1.2.2. In 2002, Cabinet "*supported in principle the creation of an Energy Research Institute as a vehicle to maintain and develop the competence in electricity R&D at Eskom and fill the vacuum created a decade ago following the closure of Enertek at the Council for Scientific and Industrial Research...*"

Cabinet also "*Approved that a Steering Committee (consisting of the Department of Arts, Culture, Science and Technology, Public Enterprises, Trade and Industry and Minerals and Energy) as a matter of urgency, investigate mechanisms to establish such an Institute, in particular the strategy for funding from within the electricity sector and report back to Cabinet...*"

This steering committee met on a number of occasions and eventually proposed that the Institute should be independent and housed within CEF (Pty) Ltd. This was decided on the basis of CEF's extensive involvement in the energy sector and the mandate contained in the CEF Act (1977), which makes for provision for the undertaking of R&D in the energy sector. The Steering Committee also commissioned the development of an Energy R&D Strategy for South Africa. This strategy makes provision for the establishment of an Advisory Body to inform decision making by SANERI (Pty) Ltd and its Board.

1.2.3. In July 2003 a Cabinet Memorandum from the DST recommended that -

- a) NERI be established as a subsidiary of CEF (Pty) Ltd
- b) Initially funding received from the state should be split:
 - a. ~30% own research work
 - b. ~70% agency function
- c) Over time this ratio should change to:
 - a. ~80% own research work
 - b. ~20% agency function
- d) Initially NRF would be commissioned to outsource the research until CEF had built capacity

These recommendations were supported by Cabinet.

1.2.4. A Ministerial Directive, in terms of section 1 (2) (a) (iA) of the Central Fund Act, 1977 (No38 of 1977, instructed CEF (Pty) in October 2004 to

- *Establish a national energy research, development and innovation body*
- *NERI to be registered in terms of Companies Act*

This Terms of Reference applies to the Energy R&D Innovation and Advisory Committee contemplated in the Energy R&D Strategy of South Africa (2006)

2. ESTABLISHMENT OF ENERGY R&D INNOVATION AND ADVISORY COMMITTEE

2.1 The Energy R&D Innovation and Advisory Committee is established in November 2006 as a non-juristic person distinct from the Board and sub-committees of SANERI (Pty) Ltd.. It's mandate is consistent with the objectives of the South African Energy R&D Strategy (2006) and its establishment sanctioned as per resolution of the Board of Directors of SANERI (Pty) Ltd. on 3rd August 2006.

2.2 For the purposes of this Terms of Reference –

- (a) **“SANERI (Pty) Ltd¹”** means the South African National Energy Research Institute, a company registered under the Companies Act and which is a 100% owned subsidiary of CEF (Pty) Ltd.
- (b) **“Energy Research and Development²”** means the linked process by which an energy supply, energy end use, or carbon management technology moves from its conception in theory (including necessary enabling basic research) to its feasibility testing and small scale deployment. "Energy R&D" encompasses activities such as basic and applied research as well as technology development and demonstration in all aspects of resource extraction and production (e.g., mining, drilling, refining, exploration); power generation (e.g., nuclear fission and fusion, fossil, and renewable energy); transmission, distribution and energy storage; energy efficiency; and carbon management technologies.
- (c) **“Strategic Direction Reports”** means the theme-specific strategic report for a period coinciding with the term of the latest approved corporate plan for SANERI (Pty) Ltd. The report contains the projected costs for projects in a particular theme as well as the predicted strategic direction that the theme should take in order to satisfy national energy priorities.

¹ SANERI was previously referred to as NERI, but registration of the name NERI was not possible

² Definition of the Global Climate Change Group of the Pacific Northwest National Laboratories

3. FUNCTIONS OF THE ENERGY R&D INNOVATION AND ADVISORY COMMITTEE

- 3.1 The Energy R&D Innovation and Advisory Committee –
- (a) must assist SANERI (Pty) Ltd's management and Board in the provision of expert advice on matters related to energy research and development in South Africa
 - (b) May advise the management and Board of Directors of SANERI (Pty) Ltd on matters of national importance that have a material impact on SANERI (Pty) Ltd's operation;
 - (c) Make recommendations on suggested policy or strategies that need to be implemented at a national level;
 - (d) May constitute sub-committees focused on a particular research theme as and when required;
 - (e) must take into account any decisions of Cabinet or Departments of Minerals and Energy as well Science and Technology, relating to the activities of SANERI (Pty) Ltd;

4. COMPOSITION OF COMMITTEE

- 4.1 The Energy R&D Innovation and Advisory Committee shall consist of no less than 5 persons and no more than 15 persons. Members of the Committee shall be invited by the Board and shall be individuals, recognized nationally and preferably internationally, for their expertise in energy research, with particular emphasis on the following thematic areas–

1. Energy Infrastructure Optimisation,
2. Energy Efficiency and DSM,
3. Stimulating Socio-economic Development through the Productive Use of Energy,
4. The Impact of Energy Use on the Environment,
5. Renewable Energy,
6. Alternative energy (including fuel cells and the hydrogen economy),
7. Cleaner fossil fuels, particularly clean coal technologies,
8. Energy Policy and Planning; and
9. Energy Modelling,

- 4.2 Representatives of relevant national Departments and state entities, with the necessary requisite expertise will also be invited to participate and will be

- approached through the management of the relevant department, institution or agency.
- 4.3 Each national Department and state entity must also appoint an alternative representative.
 - 4.4 Additional members can be co-opted onto the committee at any time, subject to the approval of a quorate meeting of the committee.
 - 4.5 Nominating entities may change their representatives at any time but are strongly urged not to do so as this will effect continuity and efficiency.
 - 4.6 The term of office for a member shall be three (3) years. A member may be reappointed at the discretion of the management of SANERI (Pty) Ltd.
 - 4.7 A member's term of office shall be terminated should that Member –
 - a) Be convicted of a criminal act that involves fraud or a sentence of imprisonment
 - b) Act contrary to the provisions of this Terms of Reference
 - c) Fail to declare any conflict of interest that may arise during the process of proposing, reviewing and recommending further actions, and
 - d) Bring SANERI (Pty) Ltd. into disrepute

5. MEETINGS OF THE ENERGY R&D INNOVATION AND ADVISORY COMMITTEE

- 5.1 The Energy R&D Innovation and Advisory Committee must at its first meeting –
 - (a) Note the appointment of the Chairperson of the committee by the Chairperson of the SANERI (Pty) Ltd. Board of Directors
 - (b) Elect one of its members as a deputy Chairperson; and
 - (c) Appoint SANERI (Pty) Ltd. to provide secretarial services for the Energy Research and Development Innovation and Advisory Committee
- 5.2 The Committee must meet at such times and places as may be determined by the Chairperson, in consultation with the management of SANERI (Pty) Ltd
- 5.3 The Chairperson must as far as is reasonably practical provide *at least* seven days notice of a meeting and attach an agenda to such notice of a meeting.
- 5.4 The Chairperson must convene such meetings of the Committee as are necessary for the proper performance of its functions.
- 5.5 If the Chairperson is absent from a meeting the Deputy Chairperson must chair that meeting.
- 5.6 If both the chairperson and the deputy chairperson are absent from a meeting the meeting must elect a temporary chairperson to chair that meeting.
- 5.7 Unless other procedures are determined by the Committee, the chairperson of any meeting of the Committee must determine the procedures to be followed at such meeting.
- 5.8 The quorum for any meeting of the Committee is a majority of its serving members or seven members, whichever is the greater.
- 5.9 Decisions of the Committee must as far as is possible be taken by consensus.

- 5.10 A decision of the majority of the members present at a meeting constitutes a decision of the Committee.
- 5.11 In the event of an equality of votes on any matter the person chairing the meeting has a casting vote in addition to his or her deliberative vote.
- 5.12 Any meeting of the Committee must not be open to the public unless the quorate meeting passes a resolution to the effect that, for the part of the meeting concerned.
- 5.13 The Committee must cause minutes of its proceedings to be kept.
- 5.14 The Committee may establish subcommittees of its members to perform such functions of the Committee as it may determine, in line with the functions contemplated in Section 3 of this Terms of Reference.
- 5.15 The Committee must determine the composition of a subcommittee.
- 5.16 The Committee may at any time dissolve or reconstitute a subcommittee.
- 5.17 The Committee must designate a member of a subcommittee as chairperson of that subcommittee.
- 5.18 This Terms of Reference applies, with the changes required by the context, to a subcommittee established by the Committee.
- 5.19 The Committee must make rules governing –
 - 5.19.1 The period of notice of meeting
 - 5.19.2 The manner of giving notice of a meeting
- 5.20 The Committee must determine in which archive the records of the Committee will be housed.

6. DUTIES OF MEMBERS OF THE COMMITTEE

- Members of the Committee must –
- 6.1. at all times act in the interests of the Committee and not in their own or sectional interests;
 - 6.2. declare any potential or existing conflict of interest and recuse themselves from and refrain from voting on or discussing any matter, pending before the Board of Directors of SANERI (Pty) Ltd., in which they have a direct or indirect pecuniary interest;
 - 6.3. make decisions in the public interest.
 - 6.4.

7. RECOMMENDATIONS OF THE COMMITTEE

- Every recommendation of the Committee must –
- (a) be recorded in writing;
 - (b) be within the ambit of this Terms of Reference;
 - (c) be based on facts and reliable information.

8. REMUNERATION OF THE COMMITTEE

The remuneration of the Committee and its sub-committees will comprise –

- (a) An honorarium covering all related subsistence and travel claims associated with the duties contemplated in Section 3 above;
- (b) The size and limits applicable to such honoraria will be determined by the Board of Directors of SANERI (Pty) Ltd.
- (c) Such honorarium to be payable after each meeting or after the completion of specific outputs
- (d) No board fees will be payable, unless otherwise indicated by the Board of Directors.

9. REPORTING BY THE COMMITTEE

The Committee must –

- (a) report to the management of SANERI (Pty) Ltd with respect to its findings, recommendations and advice;
- (b) Sub-committees to report via their chairperson to the main Energy Research and Development Innovation and Advisory Committee plenary on actionable items
- (c) Prepare a written submission on its activities on a quarterly basis. These reports are to be submitted to the management of SANERI (Pty) Ltd.
- (d) Advice rendered to the Board of Directors is not construed as binding on the part of the Board of Directors.

10. INTERACTIONS WITH THE MEDIA

Members of the Committee must not issue media statements and must not comment in the media on the activities of the Committee or any aspect related to the business operation of SANERI (Pty) Ltd.