APPENDIX: G

THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ESKOM NUCLEAR-1 POWER STATION: CHECKLIST OF COMPLIANCE WITH LEGISLATIVE REQUIREMENTS

This checklist has been compiled to assist in ensuring that all requirements for the Environmental Impact Report have been addressed. The categorisation and source of the requirements is provided in the table below.

Category No.	***Category***	***Source of Requirement***
1	Legal requirements – National Environmental Management Act	• Regulation 32 of Government Notice R.385, promulgated in terms of section 24 of the National Environmental Management Act, 1998 (Act No. 107 of 1998)
2	DEA specific requirements	• Department of Environmental Affairs (DEA) response (January 2010) to the Final Plan of Study for EIA (September 2009)

Requirement Number	*Requirement*	*Section/s of this Report Where Requirement has Been Addressed*
1. Legal requirements – National Environmental Management Act		
1.1	Details of – (i) the EAP who compiled the report; and (ii) the expertise of the EAP to carry out an environmental impact assessment.	Chapter 2 Details of the Applicant, the Environmental Assessment Practitioner and the Decision-making Authority, Section 2.3 Details of the Environmental Assessment Practitioner
1.2	A detailed description of the proposed activity.	Chapter 3 Project Description and Chapter 5 Project Alternatives
1.3	A description of the property on which the activity is to be undertaken and the location of the activity on the property, or if it is – (i) a linear activity, a description of the route of the activity; or (ii) an ocean-based activity, the coordinates where the activity is to be undertaken.	Chapter 5 Project Alternatives, Section 5.2 and Appendix B1 Application Form
1.4	A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.	Chapter 8 Description of the Baseline Environment, Chapter 9 Environmental Impact Analysis, Appendix A Site Photographs and Appendices E2 to E27 (Draft Technical Specialist Reports)
1.5	Details of the public participation process conducted in terms of subregulation (1), including – (i) steps undertaken in accordance with the plan of study;	Chapter 7 EIA Process and Methodology and Appendix D Public Participation Documentation (Scoping and EIA Phases)

	(ii) a list of persons, organisations and organs of state that were registered as interested and affected parties; (iii) a summary of comments received from, and a summary of issues raised by registered interested and affected parties, the date of receipt of these comments and the response of the EAP to those comments; and (iv) copies of any representations, objections and comments received from registered interested and affected parties.	
1.6	A description of the need and desirability of the proposed activity and identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity.	Chapter 4 Need and Desirability for the Project and Chapter 9 Environmental Impact Analysis
1.7	An indication of the methodology used in determining the significance of potential environmental impacts.	Chapter 7 EIA Process and Methodology
1.8	A description and comparative assessment of all alternatives identified during the environmental impact assessment process.	Chapter 5 Project Alternatives and Chapter 9 Environmental Impact Analysis
1.9	A summary of the findings and recommendations of any specialist report or report on a specialised process.	Chapter 9 Environmental Impact Analysis, Executive Summary of Draft EIR, Appendices E2 and E27, Executive Summaries of Technical Specialist Reports
1.10	A description of all environmental issues that were identified during the environmental impact assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures.	Chapter 9 Environmental Impact Analysis, Executive Summary of Draft EIR, Appendices E2 and E27 Technical Specialist Reports, Appendix D8 Issues and Response Report
1.11	An assessment of each identified potentially significant impact, including – (i) cumulative impacts; (ii) the nature of the impact; (iii) the extent and duration of the impact;	Chapter 9 Environmental Impact Analysis, Executive Summary of Draft EIR, Appendices E2 and E27 Technical Specialist Reports

	(iv) the probability of the impact occurring; (v) the degree to which the impact can be reversed; (vi) the degree to which the impact may cause irreplaceable loss of resources; and (vii) the degree to which the impact can be mitigated.	
1.12	A description of any assumptions, uncertainties and gaps in knowledge.	Chapter 9 Environmental Impact Analysis and Appendices E2 and E27 Technical Specialist Reports
1.13	An opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorization.	Chapter 10 Conclusions and Recommendations (Environmental Impact Statement) and Executive Summary
1.14	An environmental impact statement which contains – (i) a summary of the key findings of the environmental impact assessment; and (ii) a comparative assessment of the positive and negative implications of the proposed activity and identified alternatives.	Chapter 10 Conclusions and Recommendations (Environmental Impact Statement)
1.15	A draft environmental management plan that complies with regulation 34.	Appendix F Draft Environmental Management Plan and Annexures A to C
1.16	Copies of any specialist reports and reports on specialised processes complying with regulation 33.	Appendices E2 to E27 Technical Specialist Reports and Appendix E28 Eskom Grid Planning Report
1.17	Any specific information that may be required by the competent authority.	See DEA Specific Requirements – 19 January 2010

3. DEA Specific Requirements – 19 January 2010		
1	Figure 1 in the revised POS for EIA must be amended in the EIR to clearly show where in the process the study currently is, and all of the opportunities for public comment.	Chapter 7 EIA Process and Methodology, Figure 1-1
2	The EIR must clearly differentiate between the existing application and the possible future applications for Nuclear 1, 2 and 3, as to ensure that no confusion is experienced by the I&APs.	Chapter 1 Introduction and correspondence to registered Interested and Affected Parties (I&APs) dated March 2010
3	The detailed assessment in the EIR should be limited to construction and operational phases. However, the EAP should include a description of the decommissioning options, together with the most likely option, and require each specialist to provide a strategic level assessment of the likely impacts or risks, together with any conceptual mitigation measures or studies that may be required in future.	Chapter 3 Project Description, Section 3.21 Decommissioning of the proposed Nuclear Power Station, Appendices E2 to E27 Technical Specialist Reports, Appendix F Draft Environmental Management Plan and Annexures A to C
4	Section 3.2: The implications of sediment disposal should be added to the scopes of works as applicable.	Chapter 5 Project Alternatives, Section 5.12, Chapter 7 EIA Process and Methodology, Chapter 9 Environmental Impact Analysis, Appendices E2 to E27 Technical Specialist Reports
5	Section 4.1 and 4.2: A construction category should be added to the duration criteria and the text describing the method and table with the rating scales should be aligned.	Chapter 7 EIA Process and Methodology, Table 7-10
6	Section 4.2.8: The cumulative impacts of the associated infrastructure of the proposed NPS must be included in the EIR.	Chapter 9 Environmental Impact Analysis and Appendices E2 to E27 Technical Specialist Reports
7	Section 4.2.11: DEA suggests that mitigation measures describe the “best practice” and then based on the degree of benefit, cost, technical availability, or other criteria, Eskom can commit to implement specific mitigation measures or provide a rationale on why they are not able to	Chapter 7 EIA Process and Methodology, Chapter 9 Environmental Impact Analysis, Appendices E2 to E27 Technical Specialist

	implement the mitigation measures.	Reports and Appendix F Draft Environmental Management Plan and Annexures A to C
8	Section 4.3: The proposed public participation is supported, but thematic workshops where stakeholder groups can engage directly with the specialist are recommended.	Appendix B3 Correspondence: EIA Phase
9	Section 4.4: In addition to site layouts, alternatives relating to seawater intake and discharge systems, type of nuclear reactor, the disposal of sediment, the provision of potable water, the location of the construction and permanent accommodation and access roads should be considered.	Executive Summary, Chapter 5 Project Alternatives, Chapter 9 Environmental Impact Analysis, Chapter 10 Conclusions and Recommendations (Environmental Impact Statement) and Appendices E2 to E27 Technical Specialist Reports
10	Section 4.5: - All studies should be contextualised on a regional basis, in order to support the assessment of significance of the impact over-and-above the relative assessment of certain impacts associated with site layouts. - The EAP should include a town planning specialist, as well as explicitly task the economic, social, human health risk, agricultural, noise, tourism, site control and emergency response specialist to assess the externalities associated with any possible direct or indirect restriction on land use. - The transport, site control and emergency response terms of reference should be clarified both in terms of the issues to be addressed as well as the approach. Furthermore, any areas of overlap with the NNR process should be made clear. - Nuclear waste management: This issue of nuclear waste handling, management, storage and disposal is not covered by the specialist studies. - An avifaunal study to be added to the specialist reports and the ecological experts must evaluate the total ecological impact after the separate studies have been undertaken. This will ensure that the impact on ecological processes will also be determined. The impact of the potential protected area expansion plans for the areas should be considered.	Chapter 3 Project Description, Chapter 7 EIA Process and Methodology, Chapter 9 Environmental Impact Analysis, and Appendices E2 to E27 Technical Specialist Reports, Appendix B3 Authority Correspondence : EIA Phase

11	Section 4.5.4 (Dune Geomorphology): A study on the ecosystems functioning of the dune systems must be included. This must take into consideration the additional economic loss of coastal communities if the dunes are further stabilised and vegetated dunes are not cleared. This is of special importance to the Thyspunt site.	Appendix E11 Floral assessment for ecosystem functioning. Economic loss to coastal communities due to reduced functioning of dune systems was not identified as a significant issue at any time during the Scoping or EIA phases.
12	Section 4.5.6 (Floral): The vegetation study needs to include ground-truthing of the desktop study.	Chapter 7 EIA Process and Methodology, Chapter 8 Description of the Baseline Environment, Appendix E11 Floral Assessment, and Appendix B3 Authority Correspondence : EIA Phase
13	Section 4.5.7 (Fauna): This study includes penguins and cormorants. The study of these species should preferably form part of the avifaunal study and / or marine studies. Desktop studies for the possible occurrence of and ground-truthing for, particularly red data and listed species should be done.	Chapter 7 EIA Process and Methodology, Chapter 8 Description of the Baseline Environment, Appendix E13 Vertebrate Faunal Assessment, Appendix E15 Marine Biology Assessment, and Appendix B3 Authority Correspondence : EIA Phase
14	Section 4.5.12 (Marine Biology): - Impacts on the penguins should also form part of the marine study, as this is where their food supply is situated. - The proposed establishment of predictable consequence of sea-temperature rises on all forms of marine life should not only look at the impact on the squid spawning, but on the whole food chain and its effect on especially red data and listed species. This should include the effect on the cormorant and penguin populations. The impact of harbours (related to the project) on the marine ecosystems should also be identified. - The marine ecological study, with specific reference to the extent of the habitat change should also look at the resultant expected impact on Marine Protected Areas (MPAs)	Chapter 8 Description of the Baseline Environment, Appendix E15 Marine Biology, Appendix E 13 Vertebrate Faunal Assessment, and Appendix B3 Authority Correspondence : EIA Phase
15	Section 4.5.12 and 4.5.13: Editorial errors should be addressed as the approach and content of the EIR will be evaluated against the revised POS for EIR.	-

16	4.5.13 (Economic): The economic impact assessment should include the impact of disruption of ecosystem services to the area, especially to marginalized communities.	Chapter 9 Environmental Impact Analysis and Appendix E17 Economic Assessment
17	Section 4.5.14, 4.5.15 and 4.5.17: The EAP must ensure that social and public participation processes are integrated and must ensure that all impacts are assessed to the requisite level of detail by the suitably qualified and experienced specialists	Chapter 7 EIA Process and Methodology and Appendix E18 Social Impact Assessment
18	Section 4.5.21 (Transport): Transport requirements of waste and the identification of new infrastructure needed, should be evaluated in the light of the resultant impact on biodiversity	Chapter 9 Environmental Impact Analysis and Appendix E25 Transportation Assessment