



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:
Application Number:
Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable tick the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? YES NO
 If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

The project
 The project entails the connection of two power lines which is on either side of a railway line by means of an approximate 380 meter 66kV bypass power line.

Route Corridor
 A 140m wide route corridor is being investigated (70m on both sides of the proposed bypass power line). This route corridor must be approved by the Department of Environmental Affairs, which will allow for slight deviations of the power line within the approved corridor. Please note that Eskom will however only register the required servitude within the route corridor and *not* the entire corridor. The approval of the route corridor should be included in the Environmental Authorisation.

Location
 The study area is north of Wellington and close to the small town of Hermon, directly east of the R44 provincial road in the Western Cape.

b) Provide a detailed description of the listed activities associated with the project as applied for

The Environmental Impact Assessment Regulations which came into effect in December 2014 and amended in April 2017 applies.

Listing Notice 1	
<p>GN 983, Dec 2014, Number 11 The development of facilities or infrastructure for the transmission and distribution of electricity-</p> <p>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or</p> <p>(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more</p> <p>excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —</p> <p>(a) temporarily required to allow for maintenance of existing infrastructure;</p> <p>(b) 2 kilometres or shorter in length;</p> <p>(c) within an existing transmission line servitude; and</p> <p>(d) will be removed within 18 months of the commencement of development.</p>	<p>A new 66kV bypass power line will be constructed.</p>

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (Preferred Alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

Alternative 1

• Starting point of the activity	33° 25' 49.08" S	18° 58' 33.97" E
• Middle/Additional point of the activity	33° 25' 53.02" S	18° 58' 38.83" E
• End point of the activity	33° 25' 56.10" S	18° 58' 41.49" E

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Alternative 2

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative 3

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

BACKGROUND TO THE PROJECT

The Gouda 135.2MW Windfarm was announced as a preferred bidder in 2012. Their grid connection was going to be with a 132kV line from the LaBonne Substation to the Windmill Substation. As the condition and capacity of Eskom's existing 66kV lines was not favourable at that time, Eskom negotiated with the Independent Power Producer (IPP) to build a double circuit line: the 132kV line will be used by the IPP and the 66kV line will be operated by Eskom. Eskom also needed to refurbish the Gouda substation and had already initiated a project to rebuild it on an adjacent site called Nuwekloof. The windfarm's substation, LaBonne is ± 5 km from Gouda/Nuwekloof substation.

The full scope could not be implemented as the Nuwekloof Substation was not available in time for the commissioning of the LaBonne 132kV line for the IPP. The scope that was not completed was to connect one circuit of the new line into Dagbreek and Nuwekloof substations.

The current construction contract does not include tying-in the new 66kV line into Gouda/Nuwekloof and Dagbreek. If the old Dagbreek-Gouda line is turned into Nuwekloof now, more work will be required in future to connect the new line. This is because 66kV feeder bay swops will be required due to the line crossing. Practically, this will require a full substation outage and likely cost at least R2m .

Carrying on using the old 66kV line could impact network performance due to line condition. It also limits the transfer capabilities on the 66kV network between Gouda, Moorreesburg, Romansrivier and Windmill under contingency.

Costly rework at a later stage will be avoided if the Dagbreek Bypass which will connect the Dagbreek and Windmill – Labonne power lines are now constructed.

SITE DESCRIPTION

The site is adjacent to the R44 provincial road and runs across ploughed / fallow agricultural fields. The line will cross a railway track. It lies north of Wellington and close to the small town of Hermon.



CONSIDERATION OF ALTERNATIVES

- The layout of the route close to existing powerlines of similar nature is a logical route and is the shortest possible route which is cost effective and will result in the least visual intrusion in an already disturbed micro environment. From this perspective it would therefore serve no purpose to consider an additional layout/route.
- The only alternative that could potentially have been considered is the pylon structure to use. However, the Eskom Planning Engineers can only confirm the final pylon structure during the design phase – this will be based on technical considerations. All indications are that similar pylons (monopole steel structures) would be utilised.
- The site does not reflect any environmental sensitivities which could influence viable alternatives.
- The scale of the project is relatively small (\pm 380m of power line); therefore insignificant in context with the macro area.

Based on the above, it is the EAP's recommendation that no additional alternatives, apart from the No Go Alternative will be considered during this application.

Further to the above, it was confirmed by the ecologist that the impact on the fauna & flora will be negligible before and after mitigation. There are no surface water within the immediate vicinity of the site and no impacts on heritage resources are anticipated.

This Dagbreek Bypass project is of a very small scale and the associated impacts are minimal and very easily mitigatable.

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

Alternative 1 (preferred alternative)
Alternative 2
Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)

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Alternative 2
Alternative 3

e) No-go alternative

The Gouda 135.2MW Windfarm was announced as a preferred bidder in 2012. The grid connection was going to be with a 132kV line from the LaBonne Substation to the Windmill Substation. As the condition and capacity of Eskom's existing 66kV lines was not favourable at that time, Eskom negotiated with the Independent Power Producer (IPP) to build a double circuit line: the 132kV line will be used by the IPP and the 66kV line will be operated by Eskom. Eskom also needed to refurbish the Gouda substation and had already initiated a project to rebuild it on an adjacent site called Nuwekloof. The windfarm's substation, LaBonne is ± 5 km from Gouda/Nuwekloof substation.

The full scope could not be implemented as the Nuwekloof Substation was not available in time for the commissioning of the LaBonne 132kV line for the IPP. The scope that was not completed was to connect one circuit of the new line into Dagbreek and Nuwekloof substations.

The current construction contract does not include tying-in the new 66kV line into Gouda/Nuwekloof and Dagbreek. If the old Dagbreek-Gouda line is turned into Nuwekloof now, more work will be required in future to connect the new line. This is because 66kV feeder bay swaps will be required due to the line crossing. Practically, this will require a full substation outage and likely cost at least R2m .

Carrying on using the old 66kV line could impact network performance due to line condition. It also limits the transfer capabilities on the 66kV network between Gouda, Moorreesburg, Romansrivier and Windmill under contingency.

Costly rework at a later stage will be avoided if the Dagbreek Bypass which will connect the Dagbreek and Windmill – Labonne power lines are now constructed.

It is clear that if the status quo remains, Eskom will have to carry considerable costs to provide appropriate transfer capabilities on the 66kV network between Gouda, Moorreesburg, Romansrivier and Windmill. The maintaining of the status quo, in other words the application of the no-go option, is definitely not recommended for this project.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Site Alternative A1¹ (Preferred Alternative)

Size of the activity:

± 380 meters

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

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Site Alternative A2	
Alternative A3 (if any)	m ²

or, for linear activities:

Alternative:	Length of the activity
Alternative 1	Km
Alternative 2	Km
Alternative 3	Km

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:	Size of the site/servitude:
Site Alternative 1	The servitude width will be 31 meters
Site Alternative 2	
Alternative 3	

4. SITE ACCESS

Does ready access to the site exist?	YES	NO
If NO, what is the distance over which a new access road will be built	m	

Describe the type of access road planned:

Access to the site will be obtained from an existing gate on the R44 and a temporary access road of approximately 300m under the line will be required during the construction period only.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and

- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

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10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES	NO	Please explain
A servitude will be registered along the power line route. The servitude width will be 31m.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
<p>The Western Cape PSDF has a set of objectives which aims to guide development to be sustainable, thereby ensuring that development follows the principles of the 'triple bottom line', namely Ecological integrity (health of the Planet), Social equity (situation of the People) and Economic efficiency (attainment of Prosperity).</p> <p>It is a widely accepted fact that the provision of reliable electricity has a positive impact on the social life of people as well as the economy of the region to which the electricity is provided.</p> <p>The proposed project will not impact on the natural or heritage resources of the area and the mitigation measures as proposed in the Environmental Management Plan will further ensure the ecological integrity of the proposed development.</p> <p>This Eskom project is therefore in support of the 'triple bottom line' as advocated in the Western Cape PSDF.</p>			
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
Not applicable			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO	Please explain
<p>The Final Drakenstein Municipality Integrated Development Plan (IDP) 2013 – 2018 states that the main energy source for the lighting of households is the usage of electricity. Electricity usage by households increased from 40,307 (2001) to 56,799 (2011). The use of paraffin and candles decreased significantly, while the use of solar lighting increased. More households within Drakenstein Municipality have access to electricity.</p> <p>Eskom is the primary bulk provider of electricity in Drakenstein. Approximately 90% of households have access to electricity. Additional bulk capacity is required in most areas.</p> <p>Investing in infrastructure will encourage growth by ensuring the physical supporting capacity for people to build opportunities.</p> <p>The IDP further states that a concerted focus to take care of the natural environment is required. It is important to ensure that future generations are able to enjoy a clean and safe environment, in which biodiversity is conserved and tourism and recreational opportunities are maximised.</p>			

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<p>The Dagbreek Bypass Project as proposed is in line with the improvement of electrical infrastructure whilst ensuring the protection of the biophysical environment.</p> <p>Drakenstein Spatial Development Framework, 2015 - 2035 The existing Paarl electricity networks do not have spare capacity to support additional new development. The limited availability of infrastructure is limiting development of land within the urban edge. Limitations in the capacity of the bulk infrastructure networks of the municipality will impact on the time frames for development of land parcels.</p> <p>The Dagbreek Bypass project will assist in ensuring a wider and more reliable electricity network within the Drakenstein Municipality.</p>			
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
<p>A Structure Plan for the City of Cape Town is not available / does not exist.</p>			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO	Please explain
<p>The Environmental Management Framework: Cape Winelands District Municipality, May 2011 states that Cape Winelands District Municipality (CWDM) is located in both the Fynbos and Succulent Karoo regions and has a very high number of different plants and animals (high biodiversity), many of which only occur in the CWDM or small parts of it and nowhere else.</p> <p>The following are, amongst other a threat to biodiversity in the study area:</p> <ul style="list-style-type: none"> Inappropriate development which contribute to land degradation and the gradual deterioration of biodiversity and ecosystem services in the study area. <p>The Dagbreek Bypass development is a very small development within cultivated / fallow agricultural lands and will not impact on sensitive areas within the CWDM.</p> <p>Furthermore, the development as proposed takes due cognisance of all mitigation measures included in the Environmental Management Plan, which will further minimise impact on the natural environment to acceptable levels.</p>			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
<p>Unknown</p>			
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain

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<p>The proposed project assists in providing the area with a long term solution to accommodate the expected increase in electricity demand. The economic sector as well as local communities (distribution of electricity by the municipalities) will benefit from this project. The project will strengthen the electricity network; thereby ensuring less dips and power failures.</p>			
<p>4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	YES	NO	Please explain
<p>The proposed project will contribute to the provision of a long term solution to reliable electricity supply. The economic and private sectors will benefit from this project.</p>			
<p>5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>The project is for the distribution of existing available electricity and no additional capacity is required for this Eskom development.</p>			
<p>6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>This development will not impact on municipal infrastructure.</p>			
<p>7. Is this project part of a national programme to address an issue of national concern or importance?</p>	YES	NO	Please explain
<p>This project does ultimately contribute on national level. Eskom is the national electricity utility which generates and distributes electricity to industrial, mining, commercial, agricultural and residential electricity consumers and re-distributors.</p>			
<p>8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)</p>	YES	NO	Please explain
<p>All impacts can be mitigated to acceptable levels and this activity will not impact negatively on the current landuse along the route.</p>			
<p>9. Is the development the best practicable environmental option for this land/site?</p>	YES	NO	Please explain
<p>All impacts can be mitigated to acceptable levels and this activity will not impact negatively on the current landuse along the route.</p>			

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10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain
<p>The benefits of a reliable electrical supply network combined with the fact that negative impacts can be mitigated to acceptable levels confirms that the benefits of this project outweigh the minimal negative impacts thereof.</p>			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
<p>Existing electrical infrastructure such as power lines always has the potential for future upgrade and or construction of additional components to the facility and powerlines.</p>			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
<p>No person's rights would be negatively affected by the proposed activity. A thorough public participation programme was conducted and issues raised by interested & affected parties are satisfactorily addressed.</p>			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
<p>The activity is irrelevant to the urban edge.</p>			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
<p>This project contributes to a more reliable electrical network and is therefore in support of "SIP 10: Electricity Transmission and Distribution for all - Expand the transmission and distribution network to address historical imbalances, provide access to electricity for all and support economic development. Align the 10-year transmission plan, the services backlog, the national broadband roll-out and the freight rail line development to leverage off regulatory approvals, supply chain and project development capacity."</p>			
15. What will the benefits be to society in general and to the local communities?	Please explain		
<p>A reliable electrical distribution network has well-known economic and social benefits and positive impacts to which this project will ultimately contribute.</p>			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
<p>An important consideration of the project is to ensure that the proposed solution to enhance the network does not have a negative impact on the environment. Mitigation measures as proposed in this report will ensure the protection of the environment.</p>			
17. How does the project fit into the National Development Plan for 2030?	Please explain		
<p>The National Development Plan aims to eliminate poverty and reduce inequality by 2030. South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society.</p>			

The Commission's **Diagnostic Report, June 2011** set out South Africa's achievements and shortcomings since 1994. It identified a failure to implement policies and an absence of broad partnerships as the main reasons for slow progress, and set out nine *primary challenges of which the following is relevant to this project*: "Infrastructure is poorly located, inadequate and under-maintained". Given the complexity of national development, the plan sets out six *interlinked priorities*. *Relevant to this project is bringing about faster economic growth.*

The **National Development Plan** makes a firm commitment to achieving a minimum standard of living. *Elements of a decent standard of living include the following relevant to this project*:

- A more efficient and competitive infrastructure.
- Infrastructure to facilitate economic activity that is conducive to growth and job creation.

An approach will be developed to *strengthen key services* such as commercial transport, energy, telecommunications and water, while ensuring their long-term affordability and sustainability.

Economic infrastructure: The proportion of people with access to the electricity grid should rise to at least 90 percent by 2030, with non-grid options available for the rest.

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

Current procedures and/or organisational structures are not necessarily achieving integrated decision-making and/or co-operative governance and, as a result, there is a failure to properly achieve the objectives of IEM as set out in Section 23 of NEMA. EIA's however often focus on the immediate harm a project will cause rather than any benefits it might create in the long term to sustainable development.

The stated objectives of Section 23 are to ensure integrated decision-making and co-operative governance so that NEMA's principles and the general objectives for integrated environmental management of activities can be achieved. The goals are to

- a) promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment;
- b) identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2;
- c) ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them;
- d) ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment;
- e) ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment; and
- f) identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

For this project the following actions were taken to reach the general objectives of Integrated Environmental Management as set out in Section 23 of NEMA:

- a) Applicable environmental, economic and social aspects have been assessed, thereby ensuring an integrated approach in order to balance the needs of all whom would be affected by this development.
- b) Impacts have been described and assessed elsewhere in this report. Mitigation measures have been supplied in order to ensure that all identified impacts are mitigated to acceptable levels. Alternatives have been thoroughly assessed and the best possible solution represents this development proposal.
- c) The development proposal has to be evaluated and approved by DEA and no construction may commence prior to the issuing of the Environmental Authorisation.
- d) The procedures which were followed during the public participation programme were based on the NEMA EIA Regulations which came into effect on 14 December 2015.
- e) DEA will take all information as represented in this report into consideration and may request further information should they feel that further studies/information is required before an informed decision can be made.
- f) The mitigation measures as supplied in this report together with the measures as per the Environmental Management Programme are deemed to be the best way to manage anticipated impacts.

By providing electricity whilst not impacting negatively on the environment, the project would contribute to a sustainable environment.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

Chapter 2 of NEMA provides a number of principles that decision-makers have to consider when making decisions that may affect the environment, therefore, when a Competent Authority considers granting or refusing environmental authorisation based on an Environmental Impact Assessment, these principles must be taken into account.

The NEMA principles with which this application conforms are described as follows —

1. Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
2. Development must be socially, environmentally and economically sustainable.
3. Sustainable development requires the consideration of all relevant factors.

The social, economic and environmental impacts of activities, including disadvantages and benefits, were considered, assessed and evaluated, and informed decision-making by the authority is hereby made possible.

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

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Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act (Act 107 of 1998), as amended	Environmental Authorisation is required	Department of Environmental Affairs	
National Heritage Resources Act (25 of 1999)	Comment is required	Heritage Western Cape	
National Water Act (Act 36 of 1998)	Authorisation is not required	Department of Water Affairs	
Section 7(1) and 15(1) of the National Forests Act of 1998 (Act 84 of 1998)	No protected trees will be removed Authorisation is not required	Department of Agriculture	
Environment Conservation Act (Act 73 of 1989)	Authorisation is not required	Department of Environmental Affairs	
National Environmental Management: Biodiversity Act (Act 10 of 2004)	Authorisation is not required	Department of Environmental Affairs	
National Environmental Management: Biodiversity Act (Act 10 of 2004): Threatened & Protected Species Regulations	Authorisation is not required	Department of Environmental Affairs Department of Agriculture, Forestry & Fisheries for permit applications	
National Spatial Biodiversity Assessment (2004)	Authorisation is not required	Department of Environmental Affairs	
National Biodiversity Strategy Action Plan	Authorisation is not required	Department of Environmental Affairs	
Conservation of Agricultural Resources Act (43 of 1983)	Authorisation is not required	Department of Agriculture	
Endangered and Rare Species of Fauna and Flora (AN 1643 February 1984)	Authorisation is not required	Lists endangered species in terms of the Nature Conservation Ordinance, 1983 (Ordinance 12 of 1983)	

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If YES, what estimated quantity will be produced per month?

YES	NO
Undetermined (minimal waste will be generated for the construction of the ±380m bypass power line)	

How will the construction solid waste be disposed of (describe)?

General construction waste

- Unusable waste will be disposed of at registered waste disposal sites according to the applicable waste classification.
- Steel (ferrous and non-ferrous) and aluminium will be recovered and sold as scrap for recycling.
- Refuse bags will be supplied to construction personnel for dumping of household waste. Bins with lids will be provided at construction camps for household waste.

BASIC ASSESSMENT REPORT

Where will the construction solid waste be disposed of (describe)?

- It will be transported off site by the contractor and returned to Eskom stores where scrap will be handed over to buyers. Any waste that cannot be recycled will be transported to appropriate registered waste disposal sites.
- General household waste generated by the construction team will be removed by the relevant contractor to a registered waste disposal site / municipal waste transfer station.

For all waste that is disposed of, Eskom shall obtain waste manifests and disposal certificates, which shall be recorded and reported to the ECO on a monthly basis.

Will the activity produce solid waste during its operational phase? If YES, what estimated quantity will be produced per month?	YES	NO

How will the solid waste be disposed of (describe)?

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES	NO
-----	----

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	NO
-----	----

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO
--	-----	----

If YES, what estimated quantity will be produced per month? m³

Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO
---	-----	----

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

BASIC ASSESSMENT REPORT

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	NO
-----	----

If YES, provide the particulars of the facility:

Facility name:		
Contact person:		
Postal address:		
Postal code:		
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES	NO
-----	----

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

Describe the noise in terms of type and level:

<p>No permanent noise pollution will occur as a result of the proposed activity. Limited noise will however occur as a result of construction activities during the construction phase. Eskom shall provide all necessary equipment with standard silencers and maintain silencer units on vehicles where required. Equipment must always be in good working order to minimise unnecessary noise levels.</p> <p>Studies undertaken on behalf of Eskom confirmed that calculations of electric and magnetic field levels created by overhead powerlines / substations where the public may be exposed are well within the ICNIRP guidelines. Note that ICNIRP refers to Non-ionising Radiation Protection which receives world-wide support and is endorsed by the Department of Health in South Africa.</p>

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal (Construction)	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water (Operation)
------------------------------------	-------------	-------------	-------------------------------	-------	--

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

		litres
YES	NO	

14. ENERGY EFFICIENCY

Describe the design measures, if any, which have been taken to ensure that the activity is energy efficient:

[Not applicable](#)

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

[Not applicable](#)

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Western Cape
District Municipality	Cape Winelands District Municipality
Local Municipality	Drakenstein Local Municipality
Ward Number(s)	31
Farm name and number	Farm Rondeheuwel 25
Portion number	Portion 38
SG Code	C055 0000 00000025 00038

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Agriculture

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

Landowner consent is required before Eskom can register a servitude for the distribution of electricity across the relevant property. At this stage of the EIA process the landowner had been communicated with and concerns raised were satisfactorily addressed. As soon as Environmental Authorisation is obtained, the negotiator on behalf of Eskom will have option documents signed and he/she will appoint independent land valuers to determine the compensation amount relevant to the property. A negotiation process will then take place between Eskom and the landowners after which the servitudes will be registered on the relevant property deeds.

YES	NO
-----	----

BASIC ASSESSMENT REPORT

1. GRADIENT OF THE SITE1

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input checked="" type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>
2.10 At sea	<input type="checkbox"/>				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
	YES	NO	YES	NO	YES	NO
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

BASIC ASSESSMENT REPORT

4. GROUND COVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

BASIC ASSESSMENT REPORT

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Standard procedures and stipulations of Transnet Freight Rail (TFR), an Operating Division of Transnet SOC Limited must be followed for the crossing of the railway line.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Not applicable

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Not applicable

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

The Drakenstein Conservation Plan, indicating the CBAs and ESAs within the study area is attached under Appendix A.

A very small section of the proposed bypass line falls within a CBA. The entire study area is however cultivated / fallow agricultural lands and no sensitive fauna or flora was identified on site.

This Eskom project will not impact negatively on the CBAs / ESAs of the area.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES	NO
Uncertain	

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

A **Notification of Intent to Develop** was compiled by ACO Associates and is attached under Appendix D. It concluded that no impacts on heritage resources are anticipated from any of proposed project activities and no further heritage studies are required.

The NID was submitted to Heritage Western Cape and their comment will be incorporated into the Final BAR.

Will any building or structure older than 60 years be affected in any way?

YES	NO
-----	----

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO
-----	----

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

According to the **Final Drakenstein Municipality Integrated Development Plan (IDP) 2013 – 2018** the socio-economic information for the Municipal Area is as follows:

- Housing Backlog - 22,748
- Unemployment Rate(%) - 23
- Households with No Income (%) – 52.7
- People older than 14 years illiterate (%) – 26
- HIV/AIDS Prevalence (%) – HIV: 8,151

Economic profile of local municipality:

According to the **Final Drakenstein Municipality Integrated Development Plan (IDP) 2013 – 2018** the Key Economic Activities are as follows:

The Community Survey of 2007 highlighted that the biggest specified employment contributors in 2007 were:

Key Economic Activities	%
Agriculture, hunting, forestry and fishing	16.7
Manufacturing	15.1
Community, Social and Personal Services	13.4
Wholesale and retail trade	11.1
Unspecified	19.8
Not adequately defined	5.8

Level of education:

According to the **Final Drakenstein Municipality Integrated Development Plan (IDP) 2013 – 2018** the levels of education is as follows:
 The number of people with no schooling increased marginally from 7,570 (2001) to 7,745 (2011). The number of people with some form of primary/secondary education increased from 75,112 (2001) to 145,616 (2011) or with 93, 86 %. The number of people obtaining Grade 12 Certificates increased from 24,716 (2001) to 46,368 (2011) and people with higher/tertiary education increased from 10,911 (2001) to 18,918 (2011).

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	Unknown	
What is the expected yearly income that will be generated by or as a result of the activity?	Unknown	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	Minimal during construction	
What is the expected value of the employment opportunities during the development and construction phase?	Unknown	
What percentage of this will accrue to previously disadvantaged individuals?	Unknown	
How many permanent new employment opportunities will be created during the operational phase of the activity?	Unknown	
What is the expected current value of the employment opportunities during the first 10 years?	Unknown	
What percentage of this will accrue to previously disadvantaged individuals?	Unknown	

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

BASIC ASSESSMENT REPORT

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	<p>The Drakenstein Conservation Plan, indicating the CBAs and ESAs within the study area is attached under Appendix A.</p> <p>Critical Biodiversity Areas are regarded as essential areas for the achievement of regional conservation targets, and are designed to ensure minimum land take for maximum result, and Ecological Support Areas (ESAs) are less critical areas that still provide valuable habitat and support the CBAs.</p> <p>A very small section of the proposed bypass line falls within a CBA. The entire study area is however cultivated / fallow agricultural lands and no sensitive fauna or flora was identified on site.</p> <p>This Eskom project will not impact negatively on the CBAs / ESAs of the area.</p>

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural		
Near Natural (includes areas with low to moderate level of alien invasive plants)		
Degraded (includes areas heavily invaded by alien plants)		
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100%	The entire study area is cultivated / fallow agricultural lands. A railway line is present on site.

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

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Terrestrial Ecosystems		Aquatic Ecosystems								
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline			
	Endangered									
	Vulnerable									
	Least Threatened	YES	NO	UNSURE	YES	NO	YES	NO		

According to the SA Vegetation map (Mucina & Rutherford 2006) the underlying vegetation type in the area is Atlantis Sand Fynbos, with Swartland Shale Renosterveld nearby. Both these vegetation types are listed as Critically Endangered on a national basis (DEA 2011). The soils on site are best described a sandy loams, and *would have supported a mix of these two vegetation types prior to total transformation by cultivation.*

- d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

Specialist Fauna & Flora Input was given by Nick Helme Botanical Surveys and is attached under Appendix D and is summarised below.

FLORA
 The project will not impact on any natural vegetation at all, being fully within cultivated or fallow lands. The railway reserve supports a few alien invasive shrubs in the form of *Acacia saligna* (Port Jackson), along with various alien annual grasses (*Lolium*, *Avena*, *Briza*, etc), and the indigenous grass *Cynodon dactylon* (fynkweek). The likelihood of there being any plant Species of Conservation Concern within the study area is very low, and the botanical impact of the proposed project will be Negligible before and after mitigation.

FAUNA
 The terrestrial fauna in the area is unremarkable and unlikely to be impacted by the proposed project. Species present are likely to include Steenbok (*Raphicerus campestris*), Porcupine (*Hystrix africaeustralis*), and Cape Gerbil (*Tatera afra*). These are all common and widespread species, as well as being highly mobile, and will not be negatively impacted. Overall terrestrial faunal impacts are likely to be Negligible before and after mitigation.

CONCLUSION
 No specific faunal or botanical mitigation is required or proposed.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Die Courant	
Date published	21 June 2017	
Site notice position	Latitude	Longitude
At the gate next to the R44 in very close proximity to the new proposed line.	33° 25' 56.90" S	18° 58' 42.76"E
Date placed	9 June 2017	

Include proof of the placement of the relevant advertisements and notices in [Appendix E1](#).

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

ACTIONS UNDERTAKEN DURING THE PUBLIC PARTICIPATION PROCESS

Notification of the project and Distribution of the BAR

- ❖ ***Landowner, Government Departments, Municipalities and other IAPs***
An I&AP List was compiled which includes the landowner, adjacent landowners, municipalities, government departments and other applicable organisations. The Draft BAR was distributed to everyone on this list during June 2017. A 30-day commenting period applied.
- ❖ ***Onsite notification***
One English and Afrikaans onsite notice was placed on 9 June 2017 adjacent to the R44 provincial road where the new line will be constructed. The notification was A3 in size and laminated.
- ❖ ***Newspaper advertisement***
A newspaper advertisement was placed in Die Courant, a local newspaper, on 21 June 2017.
- ***Distribution of the Draft Basic Assessment Report (this document) for comment***
The Draft BAR is being distributed as follows (a 30-day commenting period applies):
 - ❖ Hard copies were delivered to the
 - National Department of Environmental Affairs: Environmental Authorisation
 - National Department of Environmental Affairs: Biodiversity Section
 - Western Cape Department of Environmental Affairs & Development Planning
 - Drakenstein Local Municipality
 - Cape Nature Scientific Services

BASIC ASSESSMENT REPORT

- ❖ All registered Interested and Affected Parties received an electronic copy of the Draft BAR via email or notification of its availability via post.
- ❖ The Notification of Intent to Develop was submitted to Heritage Western Cape for their comment.

Public participation to continue

- Based on comment received on the Draft BAR, it will be determined if any further public participation measures (i.e. a public meeting) are deemed necessary;
- Comment received will be responded to in the Final BAR;
- The Final BAR will be submitted to DEA for approval / refusal of the project.
- IAPs will be informed of the DEA's decision and their right to appeal.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Please refer to Appendix E for the contact details of below mentioned IAPs

LANDOWNER

J H Smuts, Rooihoogte Trust, Portion 38 of the Farm Rondeheuwel 25, Paarl

ADJACENT LANDOWNERS

C J Gerber (GM) & J H du Preez, Pioneer Food (Pty)Ltd, Portion 3 of the Farm Belleveu 993

J E van der Merwe, Warterbron Trust, Portion 12 of of the Farm Botmaskloof 661 Malmesbury & Riebeek Tafeldruifprodusente (Pty) Ltd, portion 16 of the Farm Botmaskloof 661, Malmesbury

P L Bester, Portion 6 of the Farm Botmaskloof 661, Malmesbury

H J Bruwer, Dagbreek Trust, Portion 6 of the Farm Botmaskloof 661, Malmesbury – retired
please send to his son: Mr K Bruwer

GENERAL STAKEHOLDER

Hermon Landbouvereiniging, for attention: Mr Nelius van Santen

Include proof that the key stakeholder received written notification of the proposed activities as **Appendix E2**. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;

BASIC ASSESSMENT REPORT

- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

3.1 Comment received on the Draft BAR *(to be included in the Final BAR)*

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as [Appendix E3](#).

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Please refer to [Appendix E](#) for the contact details of below mentioned IAPs

GOVERNMENT DEPARTMENTS

National Department of Environmental Affairs: Biodiversity Conservation: Deputy-Director: Mr Seoka Lekota
Department of Environmental Affairs & Development Planning: Directorate: Development Management (Region 2): Head of Component: Environmental Impact Management Services: For attention Ms Arabel McClelland
Department of Environmental Affairs & Development Planning: The Head of Component, Mr Henri Fortuin (Region 2)
Transnet Freight Rail: The Senior Manager: - Environmental Management: For attention: Mr Ezekiel Monyamane and Livhuwani Ndou and Zanele Manyathi
Department of Agriculture and Land Affairs: The Deputy Director: Agriculture Development & Support Services (Acting): For attention Mr Darryl Jacobs
Department of Water Affairs & Sanitation: The Chief Director - Western Cape Region: For attention Mr Rasheed Khan
Department of Water and Sanitation: Breede-Gouritz Catchment Management Agency, Manager of Water Resources Management (WRM) For attention: Mr Jan van Staden
Heritage West Cape: Heritage Officer: For attention: Mr Troy Smuts
Department Roads and Public Works: The Head of the Department: For attention: Miss Jacqui Gooch, Head of Office: Ms Sharonette Webb-Olivier and Head of Office: Sharonette Webb-Olivier

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SA National Roads Agency: Western Region - Statutory Control: For attention Ms C Runkel & Ms R de Kock and the Environmental Co-ordinator: Ms Nicole Abrahams
SA National Roads Agency: Environmental Specialist, For attention: Miss Nicole Abrahams
Cape Nature: The Manager – Scientific Services: For attention Mr Rhett Smart
Eskom, Environmental Management, Megawatt Park, EIA COE Manager, For attention: Mr Tobele Bokwe
Eskom Western Cape Operating Unit: Land Development, Senior Clerk Land & Rights, for attention: Ms Rochelle Mc Pherson
Eskom Holdings Ltd: The Chief Advisor - Land and Rights: For attention Ms Bronwyn Stolp and/or Ms Tinkie Holl

MUNICIPALITIES

Cape Winelands District Municipality, The Municipal Manager, for attention: Mr M Mgajo
Drakenstein Local Municipality, The Municipal Manager, for attention: Dr Johan Leibrandt PA: Melany
Drakenstein Local Municipality, Executive Manager for Planning and Economic Development, for attention: Ms Lauren Waring
Drakenstein Local Municipality, Executive Manager: Infrastructure Services, for attention: Mr Dirk Hattingh
Drakenstein Local Municipality, Environmental Management, for attention: Ms Ilse Fielies
Drakenstein Local Municipality, for attention: Ward Councillor for Ward 31: Mr Geoffrey Harry Ford (Hermon)
Drakenstein Local Municipality, for attention Ward Councillor for Ward 31: Ms Aletta van Santen (Hermon)

Include proof that the Authorities and Organs of State received written notification of the proposed activities as Appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as [Appendix E5](#).

Copies of any correspondence and minutes of any meetings held must be included in [Appendix E6](#).

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Please note that a comprehensive Impact Assessment (with detailed mitigation measures) is supplied in Appendix F where the impacts are assessed in terms of the following criteria:

- Nature of the impact (what is being affected and how, is it positive or negative);
- Extent (site specific / local / regional / national / global);
- Duration (short / medium / long / permanent);
- Magnitude or intensity of the impact (would the impact be destructive or benign and rated as low / moderate / severe);
- Probability of impact occurring (unlikely / possible / probable / definite)

The mitigation measures as supplied in this Impact Assessment are also included in the Environmental Management Plan.

The Significance Rating of an impact is assessed before and after mitigation measures has been applied and refers to the following:

Significance of impact	Explanation of Significance
None	There is no impact at all
Low	Impact is negligible or is of a low order and is likely to have little real effect
Medium	Impact is real but not substantial
High	Impact is substantial
Very high	Impact is very high and can therefore influence the viability of the project

Please note that detail impact descriptions and mitigation measures are supplied in the Impact Assessment (Appendix F). All mitigation measures are also included in the Environmental Management Plan (Appendix G).

Alternative 1

Short impact description	Significance before mitigation	Significance after mitigation
<p>Botanical Impact (Fauna & Flora) Disturbance to and/or destruction of habitat due to insensitive construction methods and illegal placement of snares could impact on the <i>Fauna & Flora</i> on site and within the macro study area. However, the ecologist confirmed the following:</p> <p><i>Flora</i> The project will not impact on any natural vegetation at all, being fully within cultivated or fallow lands. The likelihood of there being any plant Species of Conservation Concern within the study area is very low, and the botanical impact of the proposed project will be Negligible before and after mitigation.</p> <p><i>Fauna</i> The terrestrial fauna in the area is unremarkable and unlikely to be impacted by the proposed project. Overall terrestrial faunal impacts are likely to be Negligible before and after mitigation.</p> <p>Standard mitigation measures are supplied in the EMP</p>	Low / Very Low	Very Low
<p>Aquatic Ecosystems (surface water) There are no aquatic ecosystems on site or in close proximity to the site.</p>	None	None
<p>Cultural / Heritage Impacts No sites of heritage resources have been identified or are likely to be found within the proposed development area (the short powerline will cross a railway line and cultivated / fallow agricultural lands).</p>	Low to Very Low	Very Low
<p>Groundwater Potential for groundwater pollution always exists as a result of oil spills, etc. during the construction period. The short power line and subsequent short construction period however reduces the pollution risk considerably.</p>	Medium / Low	Very Low
<p>Soils / Erosion The soil erosion potential on this site is very low (it is a flat surface within cultivated / fallow agricultural fields).</p>	Low to Very Low	Very Low
<p>Community An influx of workers could result in an increased risk for crime and general safety. The small scale of this project however means a short construction period with limited workers and the impact would therefore be low to very low.</p>	Low / Very Low	Very Low

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<p>Air quality Dust created by construction vehicles could impact on air quality during the construction period. The small scale of this project however means a short construction period and the impact would therefore be low to very low.</p>	<p>Low / Very Low</p>	<p>Very Low</p>
<p>Noise Labourers and machinery could result in noise pollution during the construction period. The small scale of this project however means a short construction period with limited construction workers and the impact would therefore be low to very low.</p>	<p>Low / Very Low</p>	<p>Very Low</p>

Alternative 2		
Short impact description	Significance before mitigation	Significance after mitigation

Alternative 3		
Short impact description	Significance before mitigation	Significance after mitigation

Conclusion of Impact Significant Rating
All identified impacts that this Eskom project could have on the environment can be easily and reasonably mitigated to acceptable levels. There are no negative impacts that could influence the feasibility and viability of this project.

A complete impact assessment in terms of Regulation 19(3) of GN 733 must be included as [Appendix F](#).

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Please note that a comprehensive Impact Assessment (with detailed mitigation measures) is supplied in Appendix F. The Impact Statement below is a summary of the conclusion of this Impact Assessment. All mitigation measures are also included in the Environmental Management Plan (Appendix G).

Alternative 1

Considerations of alternatives

- The layout of the route close to existing powerlines of similar nature is a logical route and is the shortest possible route which is cost effective and will result in the least visual intrusion in an already disturbed micro environment. From this perspective it would therefore serve no purpose to consider an additional layout/route.
- The only alternative that could potentially have been considered is the pylon structure to use. However, the Eskom Planning Engineers can only confirm the final pylon structure during the design phase – this will be based on technical considerations. All indications are that similar pylons (monopole steel structures) would be utilised.
- The site does not reflect any environmental sensitivities which could influence viable alternatives.
- The scale of the project is relatively small (\pm 380m of power line); therefore insignificant in context with the macro area.

Based on the above, it is the EAP's recommendation that no additional alternatives, apart from the No Go Alternative should be considered during this application.

Further to the above, it was confirmed by the ecologist that the impact on the fauna & flora will be Negligible before and after mitigation. There are no surface water within the immediate vicinity of the site and no impacts on heritage resources are anticipated.

This Dagbreek Bypass project is of a very small scale and the associated impacts are minimal and very easily mitigatable.

The project as presented are therefore recommended for environmental authorisation

Alternative 2

Alternative 3

No-go alternative (compulsory)

The Gouda 135.2MW Windfarm was announced as a preferred bidder in 2012. The grid connection was going to be with a 132kV line from the LaBonne Substation to the Windmill Substation. As the condition and capacity of Eskom's existing 66kV lines was not favourable at that time, Eskom negotiated with the Independent Power Producer (IPP) to build a double circuit line: the 132kV line will be used by the IPP and the 66kV line will be operated by Eskom. Eskom also needed to refurbish the Gouda substation and had already initiated a project to rebuild it on an adjacent site called Nuwekloof. The windfarm's substation, LaBonne is \pm 5km from Gouda/Nuwekloof substation.

The full scope could not be implemented as the Nuwekloof Substation was not available in time for the commissioning of the LaBonne 132kV line for the IPP. The scope that was not completed was to connect one circuit of the new line into Dagbreek and Nuwekloof substations.

The current construction contract does not include tying-in the new 66kV line into Gouda/Nuweekloof and Dagbreek. If the old Dagbreek-Gouda line is turned into Nuweekloof now, more work will be required in future to connect the new line. This is because 66kV feeder bay swops will be required due to the line crossing. Practically, this will require a full substation outage and likely cost at least R2m .

Carrying on using the old 66kV line could impact network performance due to line condition. It also limits the transfer capabilities on the 66kV network between Gouda, Moorreesburg, Romansrivier and Windmill under contingency.

Costly rework at a later stage will be avoided if the Dagbreek Bypass which will connect the Dagbreek and Windmill – Labonne power lines are now constructed.

It is clear that if the status quo remains, Eskom will have to carry considerable costs to provide appropriate transfer capabilities on the 66kV network between Gouda, Moorreesburg, Romansrivier and Windmill. The maintaining of the status quo, in other words the application of the no-go option, is definitely not recommended for this project.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

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If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

<p>Environmental Management Plan The Environmental Management Plan contains, amongst other, the mitigation measures as supplied in this report. It is therefore recommended that the implementation of the Environmental Management Plan must be a condition in the authorisation of the project.</p> <p>Approval of route corridor A 140m wide route corridor is being investigated (70m on both sides of the proposed bypass power line). This route corridor must be approved by the Department of Environmental Affairs, which will allow for slight deviations of the power line within the approved corridor. Please note that Eskom will however only register the required servitude within the route corridor and <i>not</i> the entire corridor. The approval of the route corridor should be included in the Environmental Authorisation.</p>
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Is an EMPr attached?

YES	NO
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The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Susanna Nel

NAME OF EAP

SIGNATURE OF EAP

2017
DATE

SECTION F: APPENDIXES

Appendix A: Maps

- Locality Map
- Route Map
- SANBI: Critical Biodiversity Areas

Appendix B: Photographs

- Photo Report

Appendix C: Facility illustration(s)

- None

Appendix D: Specialist reports (including terms of reference)

- Specialist Fauna & Flora Input – Nick Helme Botanical Surveys
- Notification of Intent to Develop (Heritage Assessment) – ACO Associates

Appendix E: Public Participation

- E1a – Proof of Placement of Advertisements: Newspaper
- E1b – Proof of Placement of Advertisements: Onsite Notice
- E2a – Proof of Notification of project and of availability of the Draft BAR to all IAPs
(to be included in the Final BAR)
- E3 – Comments & Responses Report *(to be included in the Final BAR)*
- E4 – Complete register of Interested & Affected Parties
- E5 – Copies of Correspondence, notes and minutes of meetings
 - E5.1 Written comment received on the Draft BAR *(to be included in the Final BAR)*

Appendix F: Impact Assessment

- Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

- Environmental Management Plan

Appendix H: Details of EAP and expertise

- Landscape Dynamics Company Profile and Condensed CVs of EAPs

Appendix I: Specialist's declaration of interest

- Nick Helme and Tim Hart

Appendix J: Additional Information

- Not applicable