



SOCIO-ECONOMIC IMPACT ASSESSMENT

Summary Report

**FOR THE PROPOSED DEVELOPMENT OF THE GROMIS-
NAMA-AGGENEIS 400 KV IPP INTEGRATION, SPRINGBOK,
NORTHERN CAPE PROVINCE**

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Today's Impact | Tomorrow's Legacy

Table of Contents

1. Introduction	2
2. Background	2
3. Objective of specialist study.....	5
4. Locality	6
5. Alternatives	8
6. Key Social Impact Assessment Findings – Enviroworks	9
7. Key Economic Impact Assessment Findings - CES	13
8. Conclusion.....	16
9. Recommendations.....	18
10. Impact Statement	20
Appendix 1 – Economic Impact Assessment.....	21
Appendix 2 - Social Impact Assessment	22

List of Figures

Figure 1: The Final Electricity Grid Infrastructure (EGI) Power Corridors Assessed as Part of the 2016 EGI Strategic Environmental Assessment	3
Figure 2: Locality Map which depicts the three (3) substations which the proposed power line will connect.	7
Figure 3: The four route alternatives assessed during preliminary investigations.	8
Figure 4: The three route alternatives assessed following preliminary investigations.....	8
Figure 5: Feasible and no-go sections along alternative 1. Sensitive areas are depicted in ‘orange’..	11
Figure 6: Areas to be avoided along Alternative 5 due to several farmsteads in the area. Sensitive areas are depicted in “orange’.	12
Figure 7: Recommended route alternative to be followed as per the Social Impact Assessment report.....	16
Figure 8: Recommended route alternative to be followed as per the Economic Impact Assessment report.....	17

1. Introduction

Enviroworks was appointed by Eskom Holdings SOC Ltd (The Proponent), to undertake a Socio-Economic Impact Assessment (SEIA) for the proposed development of the Gromis-Nama-Aggeneis 400 kilovolt (kV) Independent Power Producer (IPP) integration in Springbok in the Northern Cape Province.

This SEIA consists of two separate reports namely a Social Impact Assessment (SIA) and an Economic Impact Assessment (EIA). The findings of these two reports have been combined and summarised into the SEIA Report.

The Socio-Economic Impact Assessment thus consist of the following:

- Appendix 1 - Social Impacts Assessment- Compiled by Enviroworks
- Appendix 2 - Economic Impacts Assessment – Compiled by Coastal Environmental Services (CES)

2. Background

The Proponent proposes to develop a new power line from Gromis substation via Nama substation towards Aggeneis¹ substation in the Northern Cape Province.

In order to ensure that the Namaqualand network is compliant and that there is sufficient line capacity to accommodate potential Independent Power Producers (IPPs) within the Namaqualand area, the construction of the new Gromis-Nama-Aggeneis 400 kV line and establishment of a 400/132 kV yard at Nama substation is proposed. The Screening Assessment aims to assess possible route alternatives for the proposed new power line.

Strategic Environmental Assessment for Strategic Electrical Grid Infrastructure Corridors

In 2016 a Strategic Environmental Assessment (SEA) was undertaken by the Council for Scientific and Industrial Research (CSIR). The purpose of the SEA was to identify strategic Electricity Grid Infrastructure (EGI) Corridors to support electricity transmission up to 2040. The vision for the Strategic EGI was to expand in an environmentally responsible and efficient manner that effectively meets the country's economic and social development needs.

The final EGI Power Corridors assessed as part of the 2016 EGI Strategic SEA were gazetted for implementation on 16 February 2018 in Government Gazette 41445, Government Notice R.113. One

¹ The spelling "Aggeneis" refers to the substation, whereas the spelling "Aggeneys" refers to the town. Aggeneis substation is situated approximately seven kilometres (7km) south-west of the town of Aggeneys.

of these corridors, was the Northern Corridor – Please see Figure 1 for the Gazetted Corridors. The proposed new power line will be constructed within the Northern Corridor.

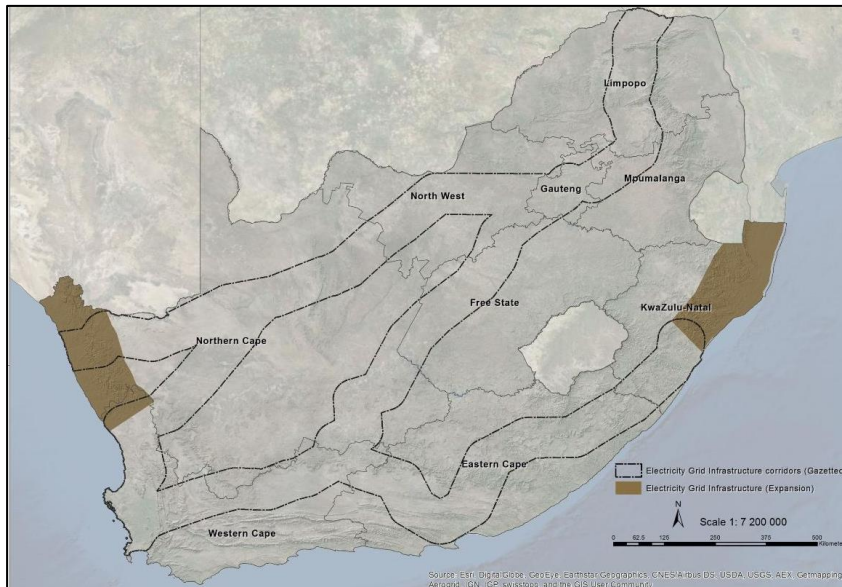


Figure 1: The Final Electricity Grid Infrastructure (EGI) Power Corridors Assessed as Part of the 2016 EGI Strategic Environmental Assessment

Alternative Environmental Authorisation procedure to be followed

The above mentioned Gazette provided an alternative procedure to be followed when applying for Environmental Authorisation for the development of large scale electricity transmission and distribution infrastructure (identified in terms of section 24(2)(a) of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA)) when these activities fall within the identified Strategic Transmission Corridors, such as the Northern Corridor.

The development of large scale electricity transmission infrastructure triggers Listed Activity 9 of Listing Notice 2 of the 2014 Environmental Impact Assessment (EIA) Regulations (as amended), which usually would require a full Scoping and Environmental Impact Assessment. However, when such a development is to take place within a Strategic Transmission Corridor, a Basic Assessment (BA) Process in terms of the 2014 EIA Regulations (as amended) is to be followed. This new regulation fast tracks the Environmental Authorisation process for EGI developments within any of the five Strategic Transmission Corridors. A pre-requisite for the BA process to be followed is however the obtaining of a servitude prior to application for environmental authorisation.

One of the objectives of this SEA process was also to provide developers with the flexibility to consider a range of route alternatives within the strategic corridors to avoid land negotiation issues and to submit a pre-negotiated route to the Competent Authority.

As noted above, this has been achieved for the development of EGI within any of the five Strategic Transmission Corridors gazetted in February 2018 (GN 113 in Government Gazette 41445), for which:

(a) a pre-negotiated route must be submitted to the Department of Environmental Affairs (DEA); and,

(b) a BA procedure needs to be followed in compliance with the 2014 EIA Regulations (as amended) instead of a full Scoping and EIA process previously triggered by such activities.

Screening of Alternative Routes

The purpose of the current Screening Assessment is to evaluate alternative routes within the Northern Corridor. As part of the Screening Assessment, a group of specialists evaluated the alternative routes according to potential sensitive environmental, social and economic issues. The findings of all the specialists will be integrated to make an informed decision on the best route alternative for the proposed power line.

This study will thus be undertaken in terms of Regulation 15 of the Environmental Impact Assessment Regulations, 2014 (Government Notice No. R 982, In the Gazette No. 38282 of 4 December 2014), that provides for the procedure to be followed in applying for environmental authorisation for large scale electricity transmission and distribution development activities identified in terms of section 24(2)(a) of the National Environmental Management Act, 1998.

Enviroworks was appointed by the Proponent to conduct the screening assessment of the alternative route options. Several specialist studies will be conducted as part of the screening process. These studies include:

- Heritage Impact Assessment
- Socio-Economic Impact Assessment
- Botanical Impact Assessment
- Fauna Impact Assessment
- Avifaunal Impact Assessment
- Visual Impact Assessment
- Agricultural Impact Assessment
- Geohydrological Impact Assessment

The specialist findings will be used to produce a Screening Report that will provide the best route alternative based upon NEMA Principles, the Best Available Technology principle and consultation

with stakeholders such as Landowners, Organs of State , NGOs and any other Interested and Affected Parties (I&APs).

The Screening Report will then be used by the Proponent to negotiate a servitude with landowners. These negotiations will take place after the Screening Assessment and will not form part of the current study. After negotiations with landowners the Proponent will proceed with the next stage which is to conduct a Basic Assessment in order to obtain an Environmental Authorisation from the competent authority for the pre-negotiated route. Stakeholder consultation will be done again during this phase. Ample time will be provided for the public to comment. All information gathered during the screening process will be used in the BA process and application for authorisation.

Need and Desirability

Electricity Grid Infrastructure (EGI) is required to provide grid access to electricity producers, in order to be able to distribute the electricity they generate to users. Independent Power Producers (IPPs) have rapidly become key electricity producers and this has increased the demand for grid access and hence the need to construct more EGI.

3. Objective of specialist study

The purpose this SEIA is to identify, describe and assess impacts of a socio-economic nature, that that may arise as a result of the proposed Gromis-Nama-Aggeneis power line. The Terms of Reference for this SEIA require the following:

- Conduct an assessment of all potentially significant socio-economic impacts;
- A description of the environment surrounding the proposed power line that may be affected by the development as well as the manner in which the surrounding environment may be affected.
- Assess the impacts (direct, indirect and cumulative) in terms of their significance;
- Consider time boundaries, including short to long-term implications of impacts for project life-cycle (i.e. pre-construction, construction, operation and decommissioning);
- Consider spatial boundaries, including:
 - Broad context of the proposed project (i.e. beyond the boundaries of the specific site);
 - Off-site impacts; and
 - Local, regional, national or global context.
- Assess the alternative route options as well as the No-Go option;
- Recommended mitigation and management measures;

- Take into account the relevant policies, plans and legislation;
- Identification of enhancement and mitigation measures aimed at maximising opportunities and avoiding and or reducing negative impacts associated with the proposed power line and associated activities;
- Provide an Impact Statement which states the expected impact posed by the development and whether or not these impacts are within acceptable levels and/or if there are any impacts which present a fatal flaw to the project; and,
- Present the findings to the Proponent and specialist team to discuss the key points regarding route alternatives in order to determine the best route alternative to be followed.

4. Locality

The proposed development area is located within the Namakwa District Municipality, Northern Cape Province. The Namakwa District Municipality is one of the five (5) districts constituting the province. The Nama Khoi Local Municipality in which the proposed project falls is one of the six (6) Local Municipalities that comprise the Namakwa District Municipality. The proposed route alternatives currently being assessed are situated within the Northern Corridor, as identified in the SEA conducted by CSIR in 2016. The route alternative routes can be seen in Figure 2. The identification of these routes was preceded by a rigorous process of investigation, consultation and specialist input.

Coordinates of the starting point

Longitude: -29° 35' 58.50" S

Latitude: 17° 10' 45.85" E

Coordinates of the end point

Longitude: -29° 17' 48.28" S

Latitude: 18° 48' 11.06" E

The proposed power line would start at the Gromis substation, approximately 14km east of the town of Klienzee. The power line will then proceed eastwards to the Nama substation, approximately 4km north of Springbok, and will end at the Aggeneis substation, approximately 9km west of the town of Aggeneys. Several towns are situated between the start and end points, including Buffelsrivier, Nababeep, OKiep, Springbok, Carolusburg and Concordia. The land situated in between the substations is predominantly used for farming. Other land uses include renewable energy farms, guest houses, nature reserves and urban development.

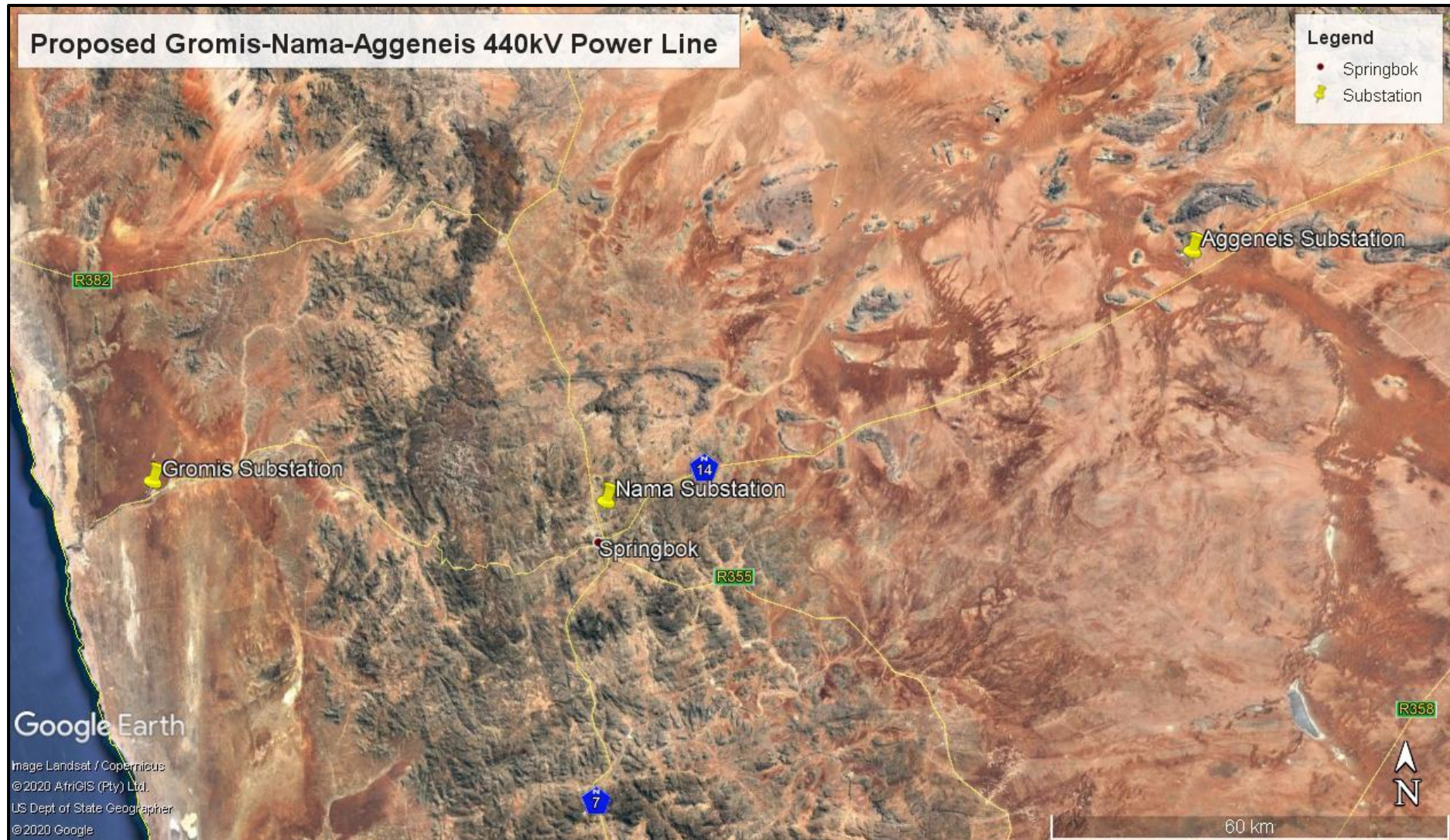


Figure 2: Locality Map which depicts the three (3) substations which the proposed power line will connect.

5. Alternatives

Four different corridor Alternatives were assessed during the site visit. The Alternatives are illustrated below.

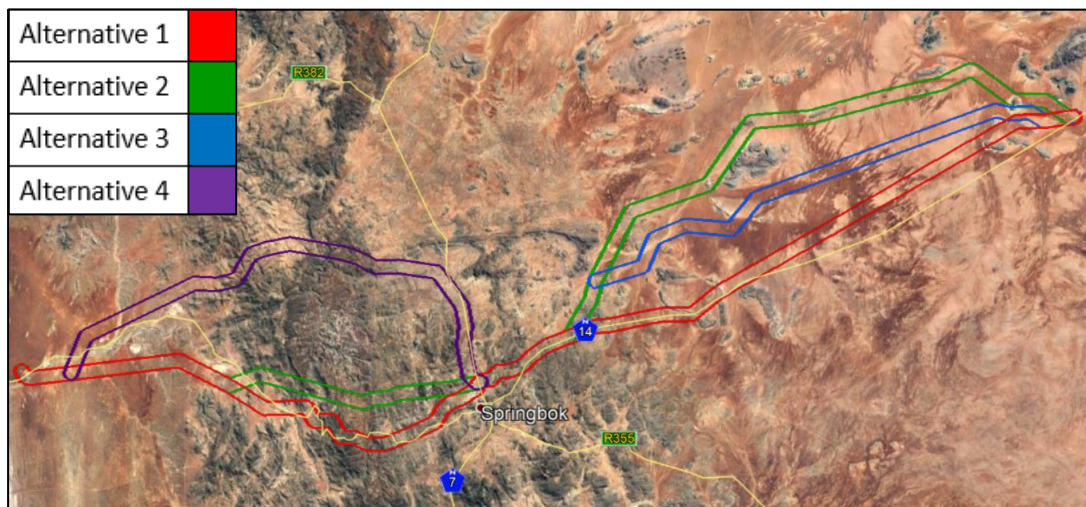


Figure 3: The four route alternatives assessed during preliminary investigations.

Following preliminary investigations, by various specialists during the site visit, the alternatives were narrowed down to the most feasible options. Alternatives 2 and 3 were excluded from further investigations and Alternative 5 was added as another alternative.

As the area east of Nama substation had fewer sensitive areas than the western section, the longer distance of Alternative 2 would result in unnecessary costs. Likewise, Alternative 3 was also excluded and Alternative 5 proposed, as it avoided sensitive areas and traversed the shortest distance. This report thus only assessed route Alternatives 1, 4 and 5 as depicted below in Figure 4.

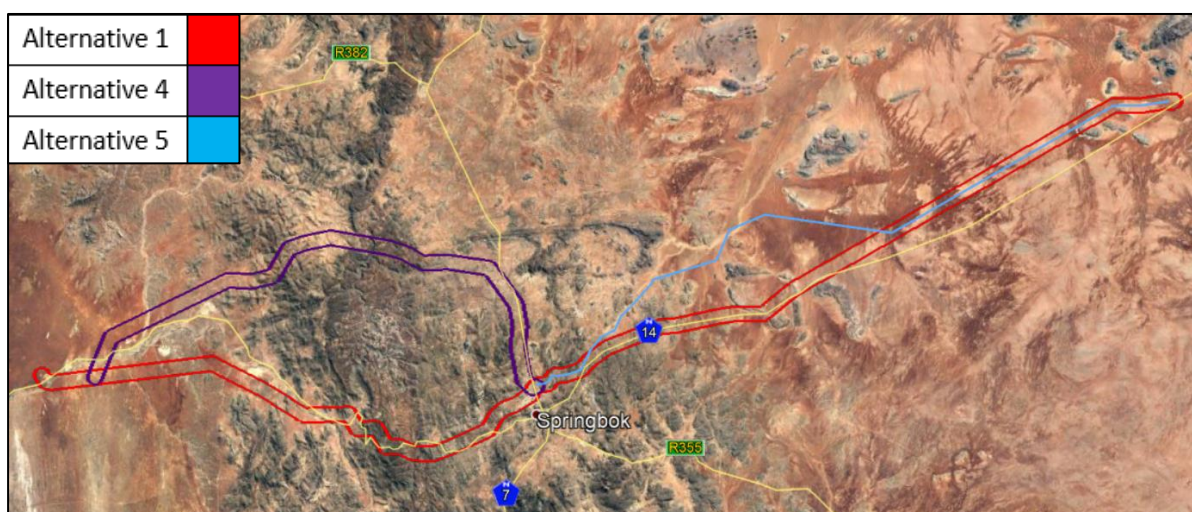


Figure 4: The three route alternatives assessed following preliminary investigations.

No-go Alternative

As per the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) the alternative of not proceeding with the proposed project must be assessed as an alternative. The No-Go Alternative would mean not constructing the proposed power line. The impacts, both positive and negative, will not be realised for the construction and operational phases.

6. Key Social Impact Assessment Findings – Enviroworks**Policy and Planning Findings**

Within the National Development Plan job creation is noted as an important factor for future development; this is key to eradicating poverty which is also one of the aims of the Northern Cape's PSDF. The proposed power line will create jobs during the construction phase. Once operational, the power line will aid job creation indirectly by providing the necessary infrastructure to support the development of further IPP projects. The power line will increase the electricity supply to the area, supporting further industrial development.

Renewable energy developments play an important role in supporting the energy requirements of South Africa's fast-growing economy in a sustainable manner. These developments are key for the Department of Energy to achieve their goal of an energy mix with 30% clean energy sources by 2025. The proposed power line is situated in a Renewable Energy Development Zone, as per the Northern Cape Provincial Spatial Development Framework (PSDF), and will be situated in close proximity to solar and wind corridors as per the Nama Khoi Local Municipality Integrated Development Plan (IDP).

With a decline in the mining industry and the looming threat of Climate Change, diversifying the economy and capitalising on the Northern Cape's comparative advantages needs to be considered in order to strengthen the economy and reduce poverty. Tourism is noted as an important economic contributor in the Nama Khoi IDP and the proposed power line needs to be located in such a way so as to avoid impacting the tourism industry. The Nama Khoi Local Municipality IDP also identifies important ecological corridors which the proposed power line will traverse. Both the Department of Energy's Strategic Plan and the PSDF speak to the protection and sustainable use of natural resources.

Overall the reviewed planning documentation supports the development of the proposed power line as it will provide the necessary infrastructure to support future IPP developments and is situated within a Renewable Energy Development Zone. Future IPP developments will benefit the area's economy through job creation and the increased supply of electricity. The development will support the Department of Energy's vision to improve the energy mix to 30% clean energy sources by 2025.

As an important economic contributor to the economy, the viability of tourism needs to be protected by buffering key tourist attractions/routes from developments that may detract from their appeal. The power line needs to be located and constructed in such way so as not to compromise the ability to exploit existing and potential tourism opportunities.

Furthermore, natural resources and sensitive ecological areas need to be protected. While it will not be possible to completely avoid important ecological areas as depicted by the Nama Khoi Local Municipality IDP, placement and construction of the power line needs to be done in such way that the integrity and functionality of these areas is not compromised.

Site Visit and Public Participation

During the one-week site visit none of the parties consulted were opposed the proposed power line. In general, the farmers consulted with were in favor of the power line as they welcomed the extra income that compensation could provide. From discussions at the meeting held with the Namakwaland Farmers Association, it was noted that the farmers were very wary of trespassers on their land. This was considered when assessing the potential for an increase in crime during the construction phase.

No comments were received from the guesthouses that were informed; however it was noted in discussion with the secretary at Naries Namakwa Retreat that they had recently constructed a viewing deck, the Gemsbok Lapa, which overlooks the Schaap Rivier valley.

Discussion with the representatives from Namakwa District Municipality and Nama Khoi Local Municipality revealed that there is a plan to place piping infrastructure for linking housing developments near OKiep. At the time they were unable to state exactly where the piping would be placed. As it is unlikely that the power line will pass nearby residential developments in Okiep, the piping is unlikely to be an issue. Access to the power line was noted as an issue that needed to be considered. It is difficult to access sections of the existing power line between Gromis and Nama substation which hampers repair and maintenance work on the line.

The Goegap Nature Reserve should be avoided as the power line would have negative impacts on large terrestrial birds should it pass through the reserve.

Evaluation of Alternatives

From a practical perspective Alternative 1 is the more feasible option, providing the shortest distance between substations and roughly following the existing power line with its existing access roads. However, the western section of Alternative 1 passes by numerous sensitive receptors, including

several guest resorts and farmhouses. Construction and decommissioning phase impacts are expected to be higher along this stretch, see Table 3. Following the existing power line also creates the risk of cumulating visual impacts. Due to the number of sensitive receptors along the section the western section of Alternative 1 is not recommend.

The eastern section of Alternative 1, spanning Nama and Aggeneis substations, passes through the Goegap Nature Reserve and other conservation areas. As a provincial nature reserve, Goegap is valuable for conservation and tourism. This section of Alternative 1 is not recommend as negative visual impacts, affecting ‘sense of place’ would be significantly high. The section of Alternative 1, further east of the protected areas, is feasible. This section passes through sparsely populated areas of low importance for tourism. If the other specialist studies propose the eastern section of Alternative 1 as a feasible option the power line would need to follow the National Route 14 (N14) highway closely, remaining on the extreme edges of Goegap Nature Reserve. Feasible and No-Go sections along Alternative 1 are depicted in Figure 21.

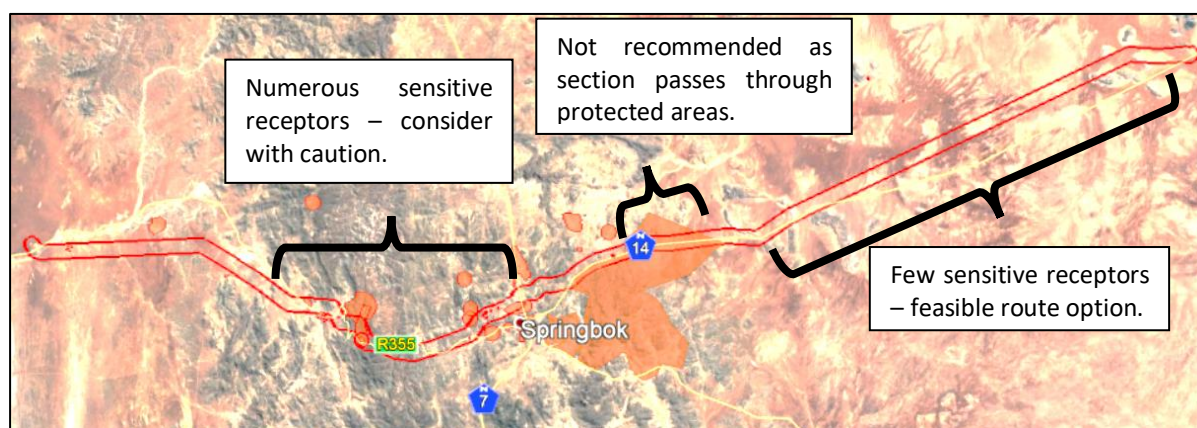


Figure 5: Feasible and no-go sections along alternative 1. Sensitive areas are depicted in ‘orange’.

- Alternative 4

Due to the remoteness of route Alternative 4 the potential for negative social impacts during construction will be significantly lower than the western section of Alternative 1. Alternative 4 avoids Spektakel Pass and the numerous guesthouses and farmsteads along it.

Alternative 4 does present significant practical challenges as the mountainous topography would complicate the construction process and make the power line difficult to access once operational. The Nama Khoi Local Municipality noted that the existing power line is already challenging to access, affecting the turnaround time of repairs. Cost is another factor, as Alternative 4 spans a longer distance, approximately fifteen kilometres (15km) more than Alternative 1. This carries significant financial implications as each kilometre of power line costs the Proponent several million. This money could potentially be better spent on social upliftment projects.

- Alternative 5

The section between Nama substation and Aggeneis substation that Alternative 5 traverses consists predominantly of farmland and is generally of low tourism importance. Alternative 5 presents a feasible option as it avoids Goegap Nature Reserve and other protected areas. A section of Alternative 5, depicted in Figure 6, passes by the Appolis Guest House and several farmsteads. This section of the power line would need to be routed around these areas to avoid them. As Alternative 5 moves east it runs parallel with the existing line through an area of low sensitivity.

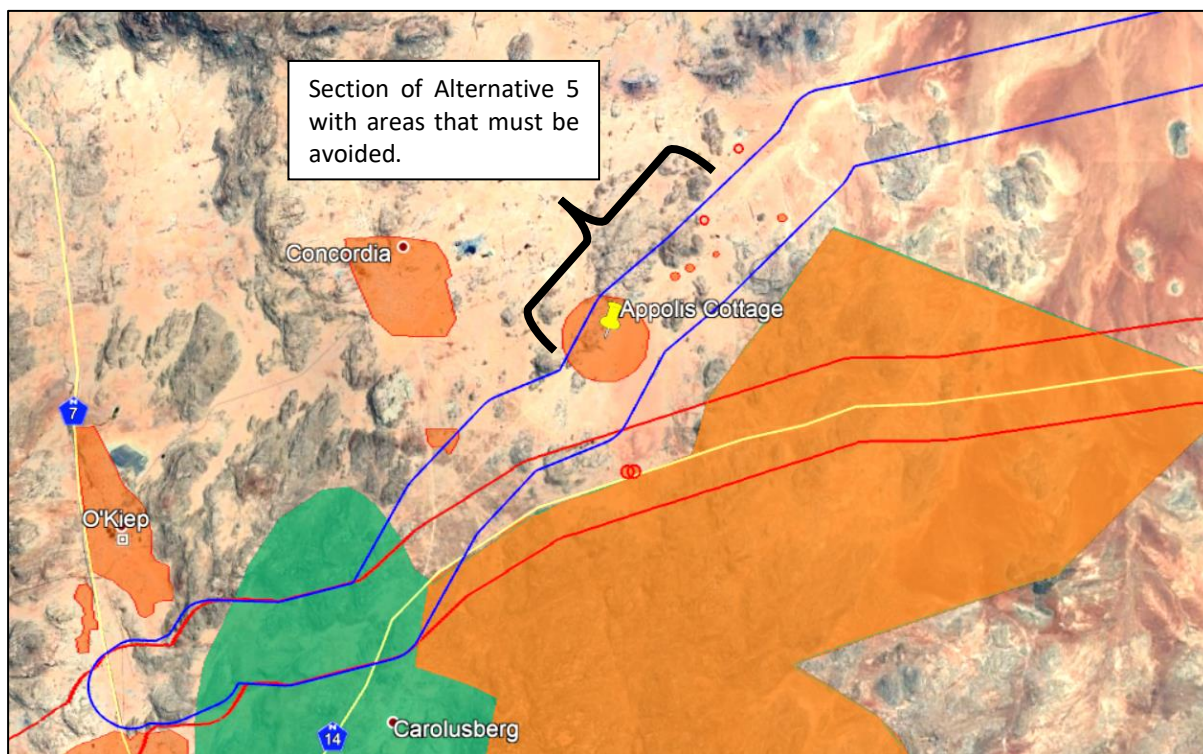


Figure 6: Areas to be avoided along Alternative 5 due to several farmsteads in the area. Sensitive areas are depicted in 'orange'.

Developing a 400 kV power line from Gromis via Nama to Aggeneis substation and expanding Nama substation will result in several positive spin-offs through facilitating IPP projects in the area, supporting the national electricity grid and energy development goals. National and municipal planning documents are in support of the proposed development so long as the power line does not adversely impact the local tourism industry.

While the power line will facilitate several positive economic impacts, it would pass through a scenic landscape with a rich cultural heritage, an important tourism industry and a large marginal population. These factors make the area particularly susceptible to potential negative impacts, especially any impacts that will affect the 'sense of place'.

Assessing these potential impacts found that negative impacts were typically expected to be higher near farmsteads/residential areas and important tourism or historic attractions. Positive impacts are expected to be less dependent on distance from social features.

Visual intrusion will be one of the main negative impacts as it will impact the 'sense of place' throughout the operational life of the power line. This is expected to increase the closer the power line is situated to residential areas, farmsteads and tourism related facilities. Poor location of the power line would threaten the viability of existing tourism related features such as guest resorts and nature reserves. Such impacts can be mitigated by avoiding 'No-Go' areas, ensuring the power line is not placed near sensitive receptors.

Although declining, mining activities remain a key economic contributor to Namakwaland and the possible sterilisation of minerals needs to be prevented. While the public participation process of the Screening Assessment endeavoured to consult all relevant mining companies, the consultation was limited relative to the number of mining rights held within the area. A more in-depth consultation process should be pursued upon assessing the finalised route, during the Basic Assessment phase.

Given that construction related impacts will be temporary and can be mitigated or avoided, selecting the route with the lowest operational phase impacts is preferable.

Cumulative Impacts

The construction of an additional power line near the existing line would likely cumulate existing visual impacts. It is typically desirable to cluster industrial infrastructure, keeping other areas free from industrial clutter. Given the area's current 'sense of place' following the route of the existing power line could significantly cumulate visual impacts. Cumulative impacts would be particularly high were the power line to pass through the Goegap Nature Reserve and other protected areas. Should the new power line follow sections of the existing line, it should be plotted in a way that avoids cumulating visual impacts.

7. Key Economic Impact Assessment Findings - CES

The key findings of this report are:

- Alternative 1 (the westerly section between Gromis and Nama substations) is the least preferred from a potential tourism impact perspective;
- The same section is also the only alternative that stands to impact on agricultural activity in the construction phase, and could potentially impose a minimal level of impact in the operational phase of the powerline;

- Similarly, although physical resettlement is not a necessary requirement for the project and can be easily avoided in its entirety, this alternative holds the most potential to impact on residential or suburban areas and result in potential economic displacement (loss of income, temporary or permanent disturbances to their properties etc.) for landholders in this corridor. Alternative 5 also passes in close proximity to several residences and farmsteads as it turns northwards (to the east of Concordia) and is likely to result in construction phase disturbances to these residents and their agricultural activities. It will also be very visually imposing for these residents due to its proximity;
- Should the above considerations be borne in mind when selecting the preferred route alignment for further assessment it is unlikely that the powerline would lead to notable declines in property value. As stated previously, one of the potential cumulative impacts of the powerline from a property value perspective is that as more renewable energy projects come into development in the Nama Khoi Local Municipality it is likely to spur an increase in the price of residential properties. It is also not unrealistic to expect agricultural land prices to escalate for those properties that are suited to renewable energy project development;
- All of the alternatives will have similar beneficial and direct economic implications for the regional Growth Development Plan, however, those alternatives (such as Alternative 4) that can prioritise and optimise the wage and goods and services expenditure on the more remote economically marginalised communities along their respective routings will have a much more beneficial impact at this micro/local level;
- Alternative 4 is also assumed to be the least likely to impact on existing and future mining activities as per the information at CES' disposal, and Alternative 5 should be avoided as it is the most likely to do so in the future. However, this assumption must be tested for all corridors going forward, especially the preferred route that will be subject to the Basic Assessment process required for environmental authorisation through the further interrogation of available data and requesting comments from prospecting rightsholders during the respective public participation stages of these respective processes; and
- Potential impacts on tourism attractions and operations, as well strategic development initiatives in this regard identified in the Spatial Development Framework and Integrated Development Plan documents, are likely to be minimal should the western section (the Kleinzee - Springbok leg only) be ruled out as a preferred option.

The need and desirability for the project is beyond question as it is apparent that future economic growth - both in the Nama Khoi Local Municipality and at a regional level - and ensuring security of local electricity supply, urgently requires the construction thereof. While this high level economic

impact assessment has identified issues and areas of concern as it relates to the various corridor alternatives under assessment, it is not apparent to the authors of this report that any of these permutations are fatally flawed from an economic perspective, but they will have varying levels of benefit or negative impact at the local level. The potential job creation and skills development potential of the project, while short lived (construction phase), will be of significant benefit to local economically marginalised communities if they are prioritised to receive and participate in these benefits.

The direct and indirect economic benefits arising from the project will also be notable, but mostly limited to the powerline's construction phase. However, the real benefits are likely to be cumulative in nature in that the powerline and substation network will enable the development of the energy sector projects planned for the study area, which in turn will stimulate the local economy whose GDP has been in decline for some time.

Impacts on existing and potential mining operations are likely to be relatively insignificant provided the eventual alignment follows existing powerline servitudes and road reserves as far as possible. Some impacts on current agricultural can be anticipated, however, these are also expected to be of low significance should due consideration be taken of these activities in the final design phase of the preferred and selected route.

Tourism impacts are likely to be of low significance at the regional level, but do stand the risk of impacting more significantly on a few individual establishments or operations. For this reason, and by applying the precautionary principle, the section of the corridor from Gromis to Nama substation along Alternative 1 should be avoided, despite the existence of a powerline and servitude along its entire length.

There is no reason why the project would require the physical resettlement of people or households, and the potential for economic displacement of landowners or users will be low provided that all income generating or economic activities occurring on affected land portions are noted in subsequent phases of the assessment process, and disruptions to these avoided or minimised. Land use impacts will be negligible provided the appropriate impact avoidance, mitigation and management principles are adhered to.

In summary, the project will have far more beneficial economic impacts for the residents of the Nama Khoi Local Municipality and its economy than any anticipated negative ones, and where these do eventuate it will be in highly localised or individual situations where it is assumed that affected persons

will have recourse for financial and or legal remedy to compensate for any losses that are demonstrated to be the result of the proposed project's activities.

8. Conclusion

Based on the findings of the SIA and EIA reports, both reports are in agreement that the western section of Alternative 1 is the least preferred route for connecting Gromis substation to Nama Substation. The two reports differ regarding the section between Nama substation and Aggeneis substation.

The eastern section of Alternative 1 and Alternative 5 are likely to have similar impacts in terms of tourism and social impacts. However, if the No-Go areas within the corridor are avoided, Alternative 5 is expected to have significantly lower impacts than Alternative 1. The SIA recommends that Alternative 5 be followed for the eastern section of the power line, with adjustments. The section of the route passing east of Concordia would need to avoid the No-Go areas, such as the guesthouses and farmsteads within the corridor. The eastern section of Alternative 1 is not recommended as it would pass through the Goegap Nature Reserve and other protected areas, likely impacting their 'sense of place'. However, if the eastern section of Alternative 1 is selected, the power line would be situated close to the N14, i.e. on the extreme northern boundary of Goegap. If the northern boundary of Goegap is an area not frequented by visitors, this route could be considered.

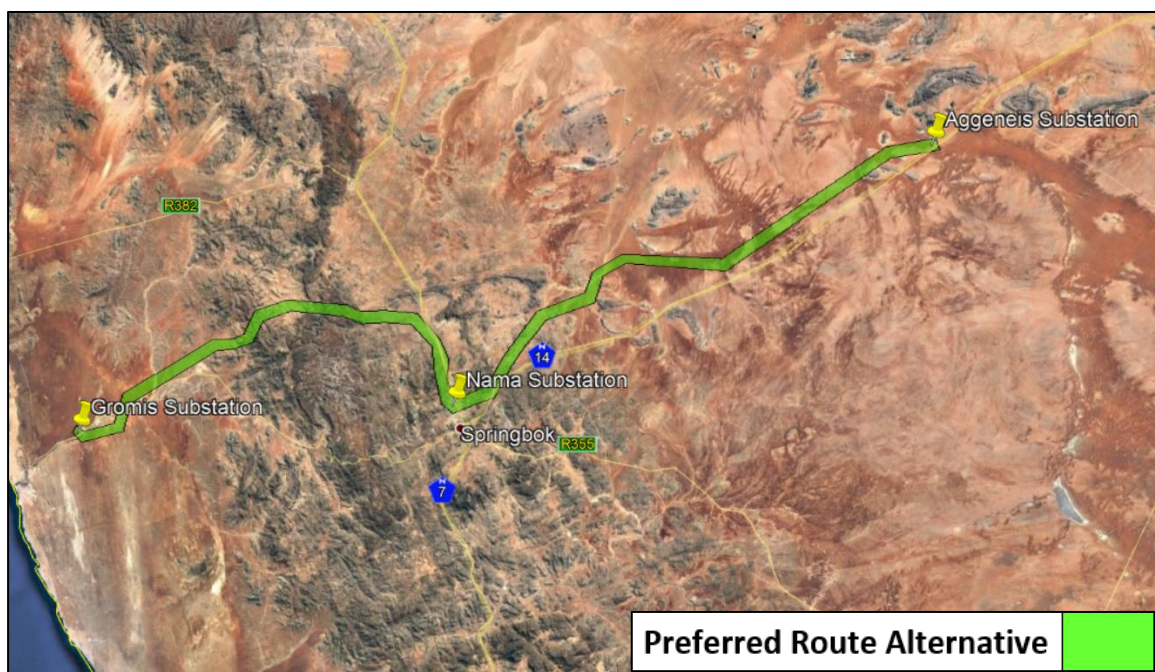


Figure 7: Recommended route alternative to be followed as per the Social Impact Assessment report.

The EIA recommends that the eastern section of Alternative 1 be followed as opposed to Alternative 5. Of the route alternatives, Alternative 5 has the greatest potential to restrict future mining activities.

Furthermore, Alternative 5 passes close by several farmsteads, east of Concordia and is likely to impact the residents.

On the other hand, the eastern section of Alternative 1 would follow an existing power line and road reserves which have effectively already prevented any mining along the route. Expanding these existing reserves/servitudes in order to accommodate the proposed power line would pose the lowest impact on future mining activities.

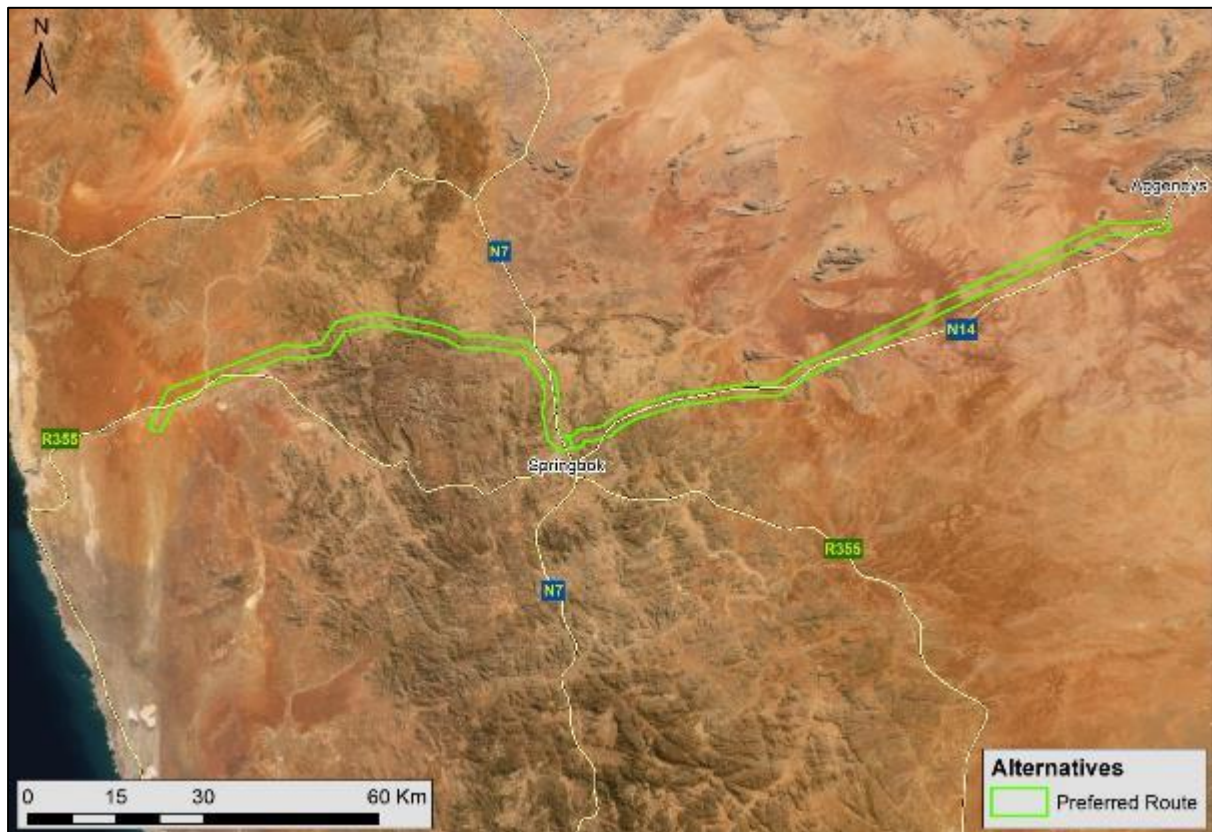


Figure 8: Recommended route alternative to be followed as per the Economic Impact Assessment report.

Taking the above findings into account, the following route is recommended:

- **Gromis to Nama:** The power line should be constructed along Alternative 4.
- **Nama to Aggeneis:** The power line should be constructed along Alternative 1. The route should be placed as close to the National Route 14 highway as possible, remaining on the extreme edges of Goegap Nature Reserve.
 - o Goegap Nature Reserve and the managers of adjacent protected areas should be further consulted to better gauge the significance of expected impacts. Based on the outcome of this, if the eastern section of Alternative 1 is deemed unfeasible

Alternative 5 will need to be further considered. The final power line route would need to avoid the No-Go areas to minimise negative impacts.

9. Recommendations

The Proponent must adhere to all the mitigation measures stipulated in the Generic Environmental Management Programme (EMPr) for the Development and Expansion of Substation Infrastructure for the Transmission and Distribution of Electricity, gazetted on 22 March 2019. In addition to this the follow is recommended:

- Should Alternative 1 in its entirety be selected as the preferred corridor it is essential that the powerline route be shielded as far as is possible from those accommodation and tourism establishments that are along this route. In the Naries Namakwa Retreat situation it is better that the powerline run south of this and the Springbok Kleinzee road (R355) and remain as close as possible to it in its approach to Springbok;
- Given the vast areas and farm portions under mineral prospecting applications for which rights have either been issued, are in process, dormant or have lapsed, it is recommended that the potential for any viable future mining projects within the confines of any of the alternatives be a dedicated objective of the public participation process for the Screening Report. Similarly, the preferred alignment that will be subject to its own participation process in the Basic Assessment Report should make this a priority. Although it is the authors opinion that Alternative 4 is unlikely to impact on future mining activities by virtue of it being removed from existing or historical operations, it will be necessary that the forthcoming Basic Assessment process confirm this; and
- The Proponent should pre-emptively engage with the Nama Khoi Local Municipality and representatives of the economically marginalised communities within the study area as to how maximise potential employment opportunities locally, what sorts of skills development is in fact possible, and what would best serve these employees in terms of future energy sector or related work opportunities. Any Small, Medium and Micro Enterprise (SMME) development opportunities that can be identified in collaboration with stakeholders needs to be undertaken prior to the commencement of construction activities.

Upon commencing construction, the following 'phase specific' mitigation measures are recommended:

Construction and Decommissioning

- Notify residents prior to conducting activities that may cause excessive noise;
- Use attenuation for machinery where possible;
- Contractors to strictly monitor for any non-employees on site and to report any immediately;
- All employees are required to have a form of identification;
- No farm gates to be left open;
- Farmers to report cases of livestock theft to the Contractor to investigate internally;
- Contractors to work closely with farm watch groups;
- Monitor dust levels and ensure dust mitigation measures are in place;
- All employees to be supplied with appropriate PPE;
- HIV/AIDS Awareness talks to be incorporated into induction talks;
- No non-employees to be allowed on the construction site/construction camp;
- Minimise disturbance to landowners/inhabitants through proper planning and notify them in good time of when access will be needed;
- Ensure noise is kept to a minimum;
- Do not block access roads;
- Do not remove fences prior to consent of landowner;
- Keep noise and dust generating activities to a minimum and time such activities between 08:00 – 17:00 during weekdays;
- Keep construction sites/camps neat and tidy, screen with inconspicuous netting, paint reflective materials a matt colour and minimise lighting at night;
- Employees to conduct themselves in an appropriate manner;
- Screen construction site/camp and keep neat;
- Clear as little vegetation as possible;
- Strictly adhere to working hours 08:00-17:00;
- Avoid construction over weekends, holidays and the flower season (September/October).
- As far as possible, hire staff from the surrounding areas and make use of local service providers for accommodation, sustenance, equipment hire, construction materials etc.;
- Avoid construction over weekends; and,
- Maintain contact with farmers in the surrounding area and keep them updated regarding planned construction activities.

Operational

- Avoid placing the power line within or near No-Go areas. Do not locate the power line near farmsteads and residential areas, within 500m, and guesthouses and tourist attractions, within 1 km. Based on consultation with individual landowners, distances could be reduced;
- Route of power line should place the line in such a position that potential for visual intrusion is minimised;
- Shiny sections on structures should be painted a matt non-reflective colour;

- Where the power line passes through communal ground make meaningful compensation that will aid in the long-term upliftment of communities, e.g. through the provision of infrastructure or facilities;
- Route of power line should place the line in such a position that potential for visual intrusion is minimised; and,
- Consult with the relevant authorities with regards to mineral deposits and mining rights and ensure the line does not cross areas of known mineral deposits and/or where existing mining rights exist.

10. Impact Statement

Based on the findings of this SEIA it is clear that the proposed development of the 400 kV power line is highly desirable and necessary for future economic growth at a local and regional scale. By ensuring mitigation measures are implemented, the proposed power line will bring more beneficial impacts than negative ones. Negative impacts are expected to be either at a localised or individual level and thus it is expected that these impacts can be mitigated or compensated with relative ease. It is recommended that the power line should be constructed along Alternative 4 between Gromis substation and Nama substation. The section between Nama substation and Aggeneis substation should follow Alternative 1.

Appendix 1 – Social Impact Assessment

Social Impact Assessment - For the Proposed Development of the Gromis-Nama-Aggeneis 400 kV IPP Integration, Springbok, Northern Cape Province (Enviroworks).

Appendix 2 - Economic Impact Assessment

Proposed Eskom Gromis-Nama-Aggeneis 400kV Power Line, Northern Cape Province - Environmental Screening Report Economic Assessment (CES).