

# SOCIO-ECONOMIC BASIC ASSESSMENT FOR THE PROPOSED AMENDMENTS:

GRID CONNECTION INFRASTRUCTURE FOR THE  
ZONNEQUA WIND FARM NEAR KLEINSEE IN THE  
NORTHERN CAPE

**May 2021**

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## SPECIALIST EXPERTISE

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**Profession:** Senior Development Economist

**Experience:** 14 years

**Key Skills:** Local Economic Development Planning, Economic Property Market Analysis and Socio-Economic and Economic Impact Assessments

**Brief Profile:** **Matthew Keeley** is the Eastern Cape Regional Manager of Urban-Econ Development Economists and oversees all the company's provincial research projects. He has served in this position since 2010, and in this time managed in excess of 250 economic planning and research studies. Matthew obtained his Bachelor's degree majoring in Geography and Economics from Rhodes University; this was followed by an Honours degree in Economic Geography (Spatial Development), part of which was studied at University West, Sweden. He holds a Master of Science (MSc) through dissertation in Geography, with a focus on human settlement socio-economic planning.

Matthew's professional experience has involved the project management of a number of high-profile economic planning projects in the province, these include studies such as the Eastern Cape Provincial Industrial Strategy Implementation Plan, Nelson Mandela Bay Iconic Landmark Precinct Business Plan, Nelson Mandela Bay Stadium Property Precinct Plan, Kingdom of Lesotho Renewable Energy Master Plan Impact Analysis & NMBM Integrated Public Transport System (IPTS) SMME Strategy, to name just a few.

**Education:**

Rhodes University	Bachelor Degree in Geography and Economics
Rhodes University & University West (Sweden)	Honours Degree in Economic Geography (Spatial Development)
University of South Africa (UNISA)	Master of Science (MSc) in Geography

## MODERATOR

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Elena Broughton

**Profession:** Unit Manager: Innovation and Sustainable Development; Senior Development Economist

**Experience:** 17 years

**Professional Registration:** SAPOA Urban-Econ Development Economists

**Key Skills:** Socio-Economic Impact Assessments; Economic Impact Assessments; Economic Modelling; Project Management

**Brief Profile:** Elena Broughton is a senior professional and the manager of the Innovation & Sustainable Development Unit at Urban-Econ. She has extensive knowledge in various fields of economic development that includes 16 years of experience in undertaking socio-economic impact assessment studies for a variety of private clients spanning the mining, manufacturing, energy, infrastructure, and retail sectors. She also acted as a peer reviewer in several socio-economic impact assessment studies and completed a few strategic socio-economic impact assessments. Her involvement in the field allowed her to develop a sound understanding of the South African environmental legislation and developmental policies and equipped her with a widespread knowledge of socio-economic implications and benefits of various new developments.

### Education:

University of Pretoria - 2011	MSc (Technology Management)
University of Pretoria - 2007	BScHons (Technology Management) ( <i>cum laude</i> )
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## EXECUTIVE SUMMARY

In 2019, Urban-Econ Development Economists was appointed by Savannah Environmental (Pty) Ltd (Savannah Environmental) to undertake a Socio-Economic Basic Assessment for the proposed grid connection infrastructure for the Zonnequa Wind Farm, near Kleinsee, in the Northern Cape to the national grid. That basic assessment report addressed the assessment of impacts as set out in the guidelines in terms of the Environmental Impact Assessment Regulations of 2014. Subsequent to receiving environmental authorisation for the project, the client (Atlantic Energy Partners) wishes to make certain material changes to the proposed project in terms of location, corridor width and size of the development envelope.

The proposed amendments as detailed in this report are not expected to result in any changes to previously identified impacts in terms of extent, duration, magnitude, probability, or significance. In addition, the management and mitigations as recommended previously in the BA report would remain applicable. Thus, from a socio-economic perspective, there is no reason why the proposed additions should not be authorised.

**Concluding statement** – It is thus concluded that the proposed amendments will not materially alter any of the previously qualified socio-economic impacts identified in previous BA reporting for this study, nor introduce any new impacts that will present any fatal flaws from a socio-economic impact perspective.

This document serves as an amendment to the previous basic assessment socio-economic impact study for the proposed grid connection infrastructure for the Zonnequa Wind Farm, which was compiled in March 2019. This report should be read in conjunction with the previous BA report. This document serves only to corroborate and expand upon the previous BA findings and how they pertain to the proposed changes. Efforts are made to not repeat any unnecessary information.

## 1. INTRODUCTION

In 2019, Urban-Econ Development Economists was appointed by Savannah Environmental (Pty) Ltd (Savannah Environmental) to undertake a Socio-Economic Basic Assessment for the proposed grid connection infrastructure for the Zonnequa Wind Farm, near Kleinsee, in the Northern Cape to the national grid. That basic assessment report addressed the assessment of impacts as set out in the guidelines in terms of the Environmental Impact Assessment Regulations of 2014. Subsequent to receiving environmental authorisation for the project, the client (Atlantic Energy Partners) wishes to make certain material changes to the proposed project in terms of location, corridor width and size of the development envelope.

These changes, however, fall outside the ambit of the existing approved authorisation. The result of this is a Part 2 Amendment in terms of Regulation 31 of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations (GN R 982).

## 2. SCOPE OF STUDY

The changes proposed by the developer require that Urban-Econ Development Economists provide an Amendment Report to the previous Socio-Economic Basic Assessment (BA) for the proposed grid connection infrastructure for the Zonnequa Wind Farm.

This Amendment Report to the Socio-Economic Basic Assessment forms an integral part of the supporting documentation required for the Amendment application to the Department of Environment, Forestry and Fisheries (DEFF).

Specific objectives for this amendment are as follows:

1. An assessment of all impacts related to the proposed change, including a comparison with those impacts predicted in the EIA.
2. Advantages and disadvantages associated with the proposed change
3. Measures to ensure avoidance, management and mitigation of impacts associated with the proposed change
4. Any changes to the EMPr

## 3. PROPOSED AMENDMENTS

The details of the proposed amendments to the grid connection infrastructure for the Zonnequa Wind Farm are provided in Table 3-1 below.

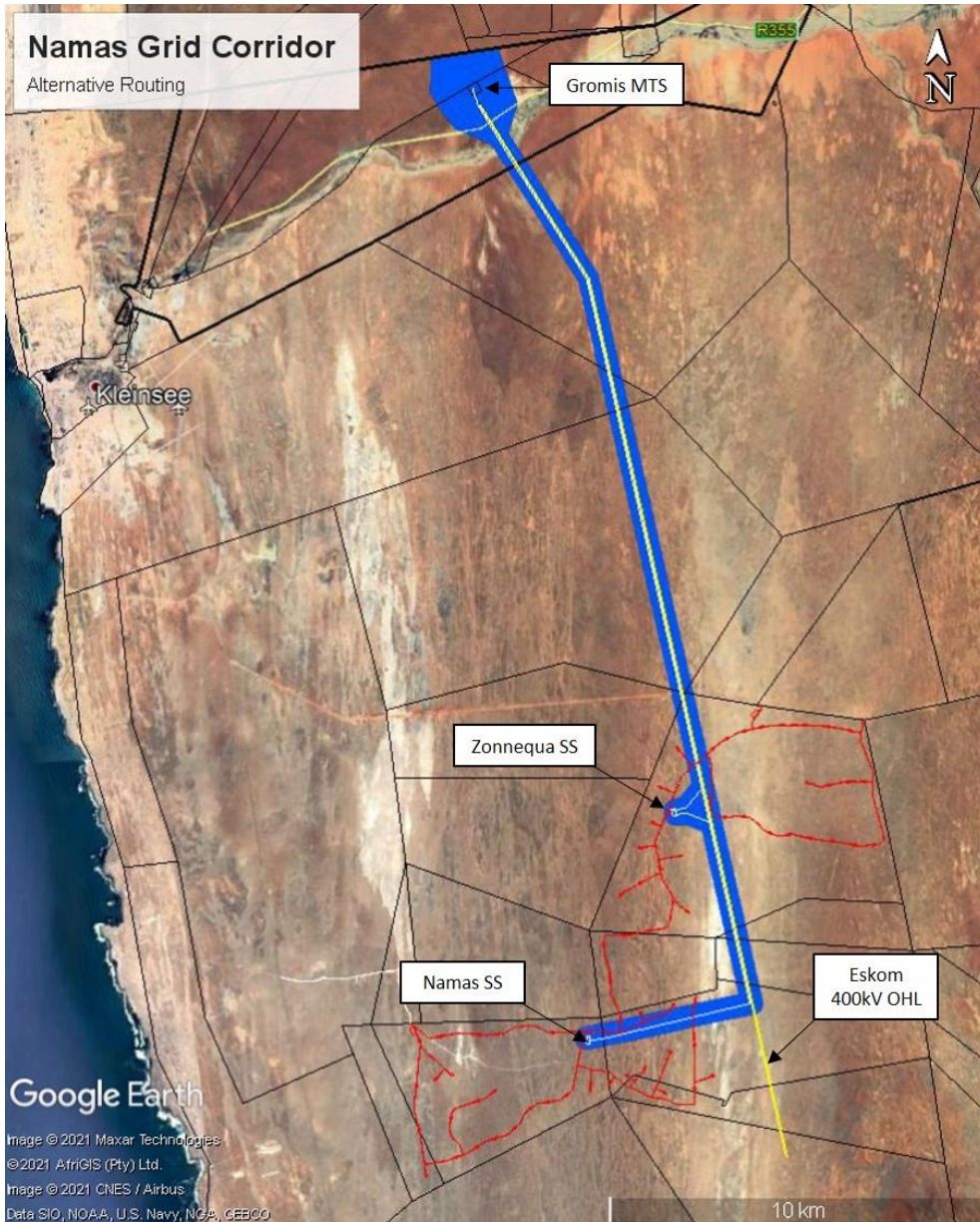
**Table 3-1: Proposed amendments to application**

Technical Aspects to be Amended	Previously Authorised	Proposed Amendment
Location of the substation/ switching station position	See original BA report	See Map 3-1 below
Amendment of the corridor width	300m grid corridor to the west of the planned	600m corridor width, i.e., 300m east and west of the 400 kV line

	400kV line	
Expansion of the corridor/ envelope size around Gromis MTS	See original BA report	See Map 3-1 below, note allowance of allow entry to the 132 kV yard from the north

See below Map 3-1, providing for the location of the proposed development changes relative to surrounding spatial context. These can be directly compared with Map 4-1 in the original socio-economic basic assessment report.

**Map 3-1: Zonnequa Amended Grid EA**



Map 3-2 presents the changes in corridor width, location of the substation/ switching station position, and expansion of the corridor/ envelope size around Gromis MTS.

**Map 3-2: Zonnequa Facility EA (Amended) vs Grid EA**



#### **4. EFFECT OF THE PROPOSED AMENDMENTS**

The following section presents an assessment of all impacts related to the proposed change.

##### **4.1 ASSUMPTIONS**

According to the developer, the above stated changes are not expected to significantly increase the original estimated capital and operational costs of the planned facility and will thus remain largely unchanged from the estimates presented in the previous BA report.

Consequently, all the direct and indirect impacts identified in the previous BA linked to the estimated costs associated with the construction and operational phases of the project will remain largely unchanged.

The revision of the assumptions (as a result of the proposed changes) as outlined above have thus resulted in limited changes to the quantified construction phase and operational phase impacts for the proposed development.

## 4.2 ASSESSMENT OF PROPOSED CHANGES ON IMPACTS

The revision of the assumptions as outlined above have thus, resulted in no tangible changes to the construction phase impacts for the proposed development identified in the previous BA report.

Likewise, there are no changes to the cumulative impacts as a result of the amendment.

Table 4-1 below outlines the impacts previously identified and highlights that no changes have taken place.

**Table 4-1: Summary of Impacts per Phase**

BA Ref.	Previous Report	Amendment Report
<b>Construction Phase Impacts</b>		
5.2.1	Increase in production and GDP-R	Unchanged
5.2.2	Creation of temporary employment	Unchanged
<b>Operational Phase Impacts</b>		
5.3	Seasonal employment for maintenance of the servitude	Unchanged
<b>Decommissioning Phase Impacts</b>		
5.4	Production and earnings due to recycling	Unchanged
<b>Cumulative Impacts</b>		
5.5	Influx of migrant labour and job seekers potentially increasing social ills	Unchanged

As previously stated in the BA socio-economic impact report, the broader study area was considered in terms of the project's potential contribution to cumulative impacts. These were found to include both positive and negative socio-economic impacts as follows:

**» Negative:**

- Potential increase in crime
- Influx of migrant labour and job seekers

**» Positive:**

- Job creation
- Economic stimulus and GDP growth

The proposed changes to the project will not have any influence on the above-mentioned impacts to the broader study area.

## 5. MANAGEMENT AND MITIGATION OF IMPACTS

It is important to note that the management and mitigations as recommended previously in the BA report would remain applicable. The recommendations in terms of the authorised grid connection infrastructure for the Zonnequa Wind Farm, and the proposed location changes would not warrant a change in the approach.



## 6. ADVANTAGES AND DISADVANTAGES ASSOCIATED WITH THE PROPOSED CHANGE

This section considers potential advantages and disadvantages of the proposed changes to the grid connection infrastructure for the Zonnequa Wind Farm.

Advantages	Disadvantages
The developer has indicated that the proposed changes allow for construction of the power line in relation to the 400kv power line to be met and to ensure that the collector substation is aligned with the onsite switching station for the wind farm. These proposed changes will ensure that the positive impacts identified in Table 4-1 can be sustained without interruption.	None identified

## 7. CONCLUSIONS AND RECOMMENDATIONS

As was determined in the original BA socio-economic report, the overall grid connection project will be associated with medium significance positive socio-economic impacts during construction, operation and decommissioning. Negative impacts are only envisaged to be associated with the cumulative effects due to the likelihood of attraction of migrant labour to the area as a result of development of other renewable energy projects in the REDZ.

The proposed amendments as detailed in Table 3-1 are not expected to result in impact changes to any of the previous indicators identified in terms of extent, duration, magnitude, probability, or significance. In addition, the management and mitigations as recommended previously in the BA report would remain applicable. Thus, from a socio-economic perspective, there is no reason why the proposed additions should not be authorised.

**Concluding statement** – It is thus concluded that the proposed amendments will not materially alter any of the previously qualified socio-economic impacts identified in previous BA reporting for this study, nor introduce any new impacts that will present any fatal flaws from a socio-economic impact perspective.