



ROUTE EVALUATION AND ENVIRONMENTAL IMPACT
ASSESSMENT
PROPOSED 132kV POWER TRANSMISSION LINE
FROM KEETMANSHOOP TO LÜDERITZ
STUDY UPDATE

NamPower commissioned Enviro Dynamics in February 2004 to conduct the above study. This document is an update of the latest work done and findings made.

Public Consultation

- A background document was distributed to key stakeholders requesting comments on the proposed project.
- Public meetings were held in Lüderitz and Keetmanshoop on 16 March 2004.
- Key stakeholders (mainly directly affected people) were interviewed to obtain their comments and issues about the proposed project..

Key issues

The key issues identified during the above process were:

- Due consideration to alternatives to and within the project.
- The use of local knowledge during the study
- Reliability of power supply should be optimised, especially to Lüderitz
- Respect for farmers and their property during construction and maintenance of the power line.
- Protection of important habitats, biodiversity hotspots, and archaeologically significant sites.
- Avoid or minimize bird strikes and electrocutions
- Optimum job creation for the local population.

Other issues identified:

- Integration of the project with regional planning
- Visual impact

- Cost recovery (the users of the project should pay)
- Attention to corrosion near the coast
- Avoid crossings with the main road and other infrastructure

Key findings of the field investigations

Field investigations were conducted during the first half of April 2004.

Socio-economic assessment: Mr Ernst Simon, the team's sociologist, visited directly affected farm owners. He interviewed them about their experience with the construction and operation of the existing power lines already crossing their property. Most farmers re-iterated a need to be respected during the construction and maintenance of the lines. Strict operational procedures need to be put in place for contractors and maintenance personnel to achieve this. Many farmers were disappointed that they have to accommodate yet another power line without the option to be connected to the supply grid. No tourism projects, towns, homes, or cultivated areas are likely to be affected negatively by the proposed project.

General ecology: John Pallet, the ecologist on the team, studied the general ecology, and fauna of the area. The power line route crosses two main types of ecosystems, namely the dwarf shrub savanna found from Keetmanshoop to approximately halfway between Goageb and Aus and the Southern Namib Desert further to the west to Lüderitz. The various important landscapes and habitats sensitive to disturbance from the power line have been identified. These include rock outcrops, riverbeds, and inselbergs (isolated mountains or koppies). The power line route and its construction activities need to avoid these features. Other important elements of the area include the scenic beauty of the landscapes, particularly the section crossing the Namib Dessert; the wild horses at Garub and the two Kokerboom forests (of which one is less well-known). No or little threats to amphibians and reptiles are expected. Threats to larger mammals may increase during the construction period. To minimise these ecological impacts, unwanted activities such as littering, poaching, going to the toilet in the veld, uncontrolled movement of vehicles, etc. must be properly managed, especially during construction.

Birds: The Ornithologists (Christian Boix Hinzen and Chris van Rooyen) have advised that potential bird impacts may result from collisions, electrocutions, disturbance of breeding areas and habitat destruction. A few highly sensitive bird areas along the route where these impacts are the most likely, have been identified. These areas include: • the Tsauchaib Mountains (support an important breeding population of Ludwig's Bustards; • the Garub area (Lappetfaced vultures expected to hunt here for horse

carcasses; feeding grounds for Ludwig's Bustards); • the Eureka Farm near Aus through granite koppies (Bustard and Korhaan presence expected); • the Koichab, Konkieb, Fish, Schnepfen and Bree Rivers (flight paths of several birds, presence of Lapetfaced Vultures); • and the Highlands between Aus and Goageb (ideal habitat of Ludwig's Bustards, waders and ducks). A number of kloofs and ravines have also been identified as areas important for birdlife. Where the route cannot be deviated to avoid these sensitive sites, mitigating measures are recommended, including bird flappers to make the line more visible, raptor perches to prevent perching on insulators, and avoidance of sensitive breeding grounds during construction activities.

Plants: The Botanical specialist (Coleen Mannheimer) identified seven different broad plant zones along the route. She proposed alternative alignment options at Tsaukaib and Kovis Mountains to avoid destruction of plant species of high conservation importance occurring there. Plant rescue operations and relocation efforts are recommended in the Aus Townlands area (the granite koppies in this vicinity carry a highly diverse plant population including many endemics and restricted range species). Recommendations are also made so as to avoid damage to plants, such as restricting roads and banning the harvesting of firewood during construction.

Archaeological and historical sites: Dr John Kinahan conducted the archaeological survey at a sampling intensity of 25%, concentrating in areas where potential archaeological significance is expected to be high. Ten archaeological and historical sites were identified in the vicinity of the route. Only one of the sites, part of the World War I German defences of Lüderitz was considered vulnerable and will require mitigation unless the route is re-aligned. The survey located two new archaeological sites with rock painting and sealed deposits, both of these provide valuable research materials for future studies, although not threatened by this project.

Geological and geotechnical issues: Mr Henk Labuschagne of Geologic Solutions studied the geology of the area from available maps. The proposed power line is neither expected to significantly affect the geology of the area, nor do geological conditions pose significant challenges for stable and safe founding conditions. Rough terrain in ravines and riverbanks need to be avoided as they present difficult and more expensive founding conditions for pylons, and constructing pylons at these locations normally causes more damage to the landscape and ecology than in other areas.

Route Evaluation

All the sensitive aspects of the environment identified by the various specialists have been marked on a map. Buffers indicating distances to be maintained from these areas have been recommended. Conflict points along the route were subsequently identified and changes proposed to avoid them. Most of the sensitive point features can be avoided. Linear features, such as riverbeds, however, cannot be avoided because the power line needs to cross them. Therefore, specific attention to mitigation measures will be required at these points. NamPower staff have accepted the final proposed route, which will be flown again by helicopter to confirm the detailed turning points.

The way forward

The team is presently integrating all the specialist inputs, and compiling the draft Environmental Assessment Report and Environmental Management Plan (EMP). These documents will give details of all issues considered, including alternatives to and within the project, and other details such as job creation, and integration with economic development in the region. The mitigation strategy will be captured in the EMP. These draft documents will be submitted to NamPower by mid-May 2004.

Where can documents be viewed?

The scoping report of this study is available on NamPower's website, namely www.nampower.com.na. All other documents, including specialist reports will also be available on this website towards the end of May 2004. Hard copies of the scoping report are also available at the MET Resource Centre, Windhoek, the Public Library, Eugene Marais Street, Windhoek, and the community libraries in Keetmanshoop and Lüderitz. Hard copies of the Draft Environmental Assessment and EMP Reports will also be available at these venues once they have been finalised.

Stakeholders are encouraged to contact the address below if they want to comment on the documents.

**For more information, please contact:
Ms Stephanie van Zyl, Tel 061 223336, Fax 061 240309,
E-mail envirod@africaonline.com.na**