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FIRST PHASE ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT OF THE PROPOSED CONSTRUCTION AND REFURBISHMENT OF THE EXISTING POWER NETWORK BETWEEN GARIEP DAM AND REDDERSBURG, FREE STATE

EXECUTIVE SUMMARY

Eskom intends to refurbish 137km of the existing power line from Ruigtevallei Sub-station (Gariep Dam) to Reddersburg with single steel pole structures. The new power transmission link will be placed close to the existing line.

The total distance from Gariep Dam via Springfontein, Trompsburg and Edenburg to Reddersburg was investigated at regular intervals for the occurrence of archaeological, historical and other cultural material.

The line will follow the existing route through low-lying grassy plains and no major obstacles occur along the route.

The power line developments will have an insignificant effect on the cultural heritage and historical environment of the area.

Further planning of the proposed project could continue, and no mitigation measures are anticipated for the proposed power transmission line.

INTRODUCTION AND DESCRIPTION

Scope and Limitations

The investigation provided the opportunity to examine the total corridor at intervals and to consider the route proposed for the transmission power line. No limitations were experienced during site visits.

Methodology

1. Specific points were inspected at regular intervals.
2. Features were plotted by GPS and recorded on camera.

INVESTIGATION

Eskom North Western Region intends to refurbish the existing 66kV power network between Ruigtevallei near Gariep Dam to Reddersburg, Free State (Map 1).

The route was examined on 2 and 3 June 2008 in the company of Christine Fouché from Enviroworks Environmental Consultants, Bloemfontein.

The total distance of the route was examined at regular intervals and investigated for the occurrence of archaeological, historical and other cultural material.

The area was examined for possible archaeological and historical material and to establish the potential impact on any cultural material that might be found. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

LOCALITY

Eskom intends to refurbish about 137km of the existing 66kV power network between Ruigtevallei (Fig.1), on the Eastern Cape side of the Orange River at Gariep Dam (Fig.2) to Reddersburg with single steel pole structures in close proximity to the existing power line. The power line will follow a route from Gariep Dam (Fig.3) via Springfontein (Fig.13), Trompsburg (Fig.17) and Edenburg (Fig.20) to Reddersburg (Fig.24).

The following GPS (Cape scale) coordinates were taken. The numerical order of the sites was taken from the existing pylons to indicate fixed points.

Ruigtevallei Sub	30°38'24"S 025°30'06"E	Altitude 1381m (Fig.1).
Pylon 14	30°27'29"S 025°29'17"E	Altitude 1308m (Fig.).
Oranjekrag Sub	30°37'18"S 025°28'50"E	Altitude 1339m (Fig.).

Pylon 32	30°35'13"S 025°29'30"E	Altitude 1263m (Fig.).
Pylon 55 (R701)	30°33'18"S 025°30'39"E	Altitude 1274m (Fig.).
N1	30°32'07"S 025°31'35"E	Altitude 1338m (Fig.).
Pylon 128	30°28'47"S 025°36'13"E	Altitude 1381m (Fig.).
Pylon 153	30°26'55"S 025°37'44"E	Altitude 1377m (Fig.).
Pylon 222	30°21'45"S 025°41'14"E	Altitude 1467m (Fig.).
Pylon 235 (N1)	30°20'40"S 025°41'40"E	Altitude 1473m (Fig.).
Pylon 271	30°17'29"S 025°42'51"E	Altitude 1487m (Fig.).
Springfontein Sub	30°14'44"S 025°42'50"E	Altitude 1525m (Fig.).
Pylon 17	30°13'07"S 025°43'06"E	Altitude 1521m (Fig.).
Pylon 53	30°09'37"S 025°43'27"E	Altitude 1493m (Fig.).
Pylon 101	30°05'03"S 025°44'29"E	Altitude 1444m (Fig.).
Trompsburg Sub	30°02'09"S 025°47'08"E	Altitude 1414m (Fig.).
Pylon 148	30°01'18"S 025°47'32"E	Altitude 1400m (Fig.).
Pylon 151	30°01'33"S 025°47'28"E	Altitude 139m (Fig.).
Pompie Sub	29°48'32"S 025°53'21"E	Altitude 1418m (Fig.).
Edenburg		(Fig.).
Edenburg P 19	29°43'57"S 025°58'23"E	Altitude 1373m (Fig.).
Riet River	29°43'22"S 026°00'57"E	Altitude 1338m (Fig.).
Pylon 101	29°41'42"S 026°06'40"E	Altitude 1413m (Fig.).
Reddersburg Sub	29°38'45"S 026°10'14"E	Altitude 1408m (Fig.).

FINDS

None of the sites produced any archaeological, cultural or historical material.

ASSESSMENT OF IMPACT

The upgrading of the power line from Ruigtevallei (Gariiep Dam) to Reddersburg will have no impact on any archaeological, cultural or historical remains along the power line.

MITIGATION

No mitigation measures will be required during the upgrading of the Ruigtevallei – Reddersburg power line.

RECOMMENDATIONS

I recommend that the planning and construction of the Ruigtevallei – Reddersburg power line could continue.

ACKNOWLEDGEMENTS

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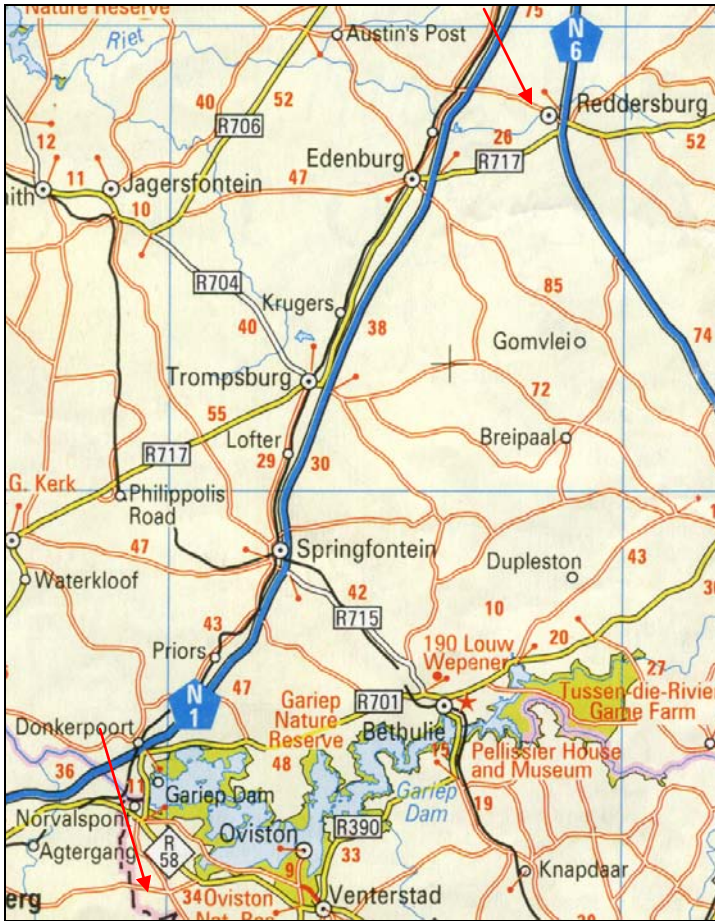
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LIST OF ILLUSTRATIONS



Map 1 Proposed route for the 66 kV transmission power line from the Ruigtevallei Sub-Station near Gariep Dam to Reddersburg.



Fig.1 River crossing at Ruigtevallei Sub-station near Gariep Dam.



Fig.2 Pylon 14 near Oranjekrag Sub-station.



Fig.3 Environment at Oranjekrag Sub-station.



Fig.4 View from Pylon 32 on the Oranjekrag – Springfontein line.



Fig.5 Pylon 55 at crossing with R701 road to Bethulie.



Fig.6 Power line on the Oranjekrag – Springfontein sector along the N1.



Fig.7 Pylon 128 on the Oranjekrag – Springfontein line.



Fig.8 Pylon 153 on the Oranjekrag – Springfontein line.



Fig.9 Pylon 222 on the Oranjekrag – Springfontein line.



Fig.10 Oranjekrag – Springfontein line – N1 crossing.



Fig.11 At Pylon 271 on the Oranjekrag – Springfontein line facing south.



Fig.12 Pylon 271 on the Oranjekrag – Springfontein line facing east.



Fig.13 Area around Springfontein Sub-station.



Fig.14 Pylon 17 on the Springfontein – Reddersburg line.



Fig.15 Pylon 53 on the Springfontein – Reddersburg line.



Fig.16 Pylon 101 on the Springfontein – Reddersburg line.



Fig.17 Trompsburg Sub-station.



Fig.18 Pylon 148 on the Trompsburg – Reddersburg line.



Fig.19 Pompie Sub-station on the Trompsburg – Reddersburg line.



Fig.20 Edenburg Sub-station on the Edenburg – Reddersburg line.



Fig.21 Pylon 19 on the Edenburg – Reddersburg line.



Fig.22 Riet River on the Edenburg – Reddersburg line.



Fig.23 Pylon 101 on the Edenburg – Reddersburg line.



Fig.24 Reddersburg Sub-station.