

5 October 2015

Lidwala Consulting Engineers (SA)  
P.O. Box 32497  
Waverley  
0135

**Attention: Mr Frank van der Kooy/ Ms Bongki Mhlanga**

[e-mail: weskusfleur@lidwala.com]  
Tel: 0861 543 9252  
Fax: 086 766 2829

Dear Sir/Madam

**CAPE FARM 34 DUYNEFONTEIN: DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT PERTAINING TO THE PROPOSED WESKUSFLEUR SUBSTATION**

[DEA Reference: 14/12/16/3/3/2/508 and NEAS Reference: DEA/EIA/0001780/2013]

The attached City of Cape Town comment, dd 6 July 2015, on the Final Scoping report was not included in the draft EIR nor responded to at all. It is recorded that Lidwala acknowledged, dd 2 October 2015, the City comment on the FSR was received but not mislaid and thus not addressed. It is therefore problematic to provide positive and/or informed comment if the City's previous comment was not addressed. The comment must be addressed in the final EIR.

In addition to the City comment, dd 6 July 2015, the following additional comment is made, in the interim, on the specialist reports and draft EIR:

**Fauna & Flora Specialist Study**

Site 1 supports Endangered Cape Flats Dune Strandveld (CFDS) vegetation and was described as disturbed, probably dating from construction of the power station, but a significant amount of natural vegetation has returned to the area, albeit with some invasion by alien grasses such as *Bromus* sp. that colonise disturbed ground. No species of conservation concern were noted and the area is not considered highly sensitive.

Site 4 supports Critically Endangered (CR) Atlantis Sand Fynbos vegetation and was described as densely invaded by alien *Acacia saligna*, with an understorey of indigenous species except where the alien density was very high as in most of the proposed development footprint area. Some species of conservation concern were noted close to, but not inside the proposed development footprint area.

In terms of broad-scale ecological processes (including migration and gene flow in flora and fauna) Site 4 presents a greater risk than Site 1 because in addition to being a CR vegetation type it is also important for landscape connectivity (an important ecological corridor in the Cape West Coast Biosphere Reserve between Blaauwberg Nature Reserve and the Dassenberg Coastal Catchment Partnership Area). The substation would occupy a significant proportion of this corridor and potentially result in loss of landscape connectivity through the area. The specialist contends that it would be very difficult to mitigate the negative impacts on Site 4. For Site 1, mitigation for negative impacts on fauna are presented, yet no mitigation is presented for the loss of >6ha of Endangered CFDS habitat.

The ecological specialist noted in the Comments and Responses Report that the Biodiversity Network information used is the latest, yet it is noted that in the specialist report the same has not been updated.

E.g. For the vegetation mapping source, the authors (rather than editors) should be referenced (Rebello et al. 2006, Fynbos Biome). Note that the City of Cape Town has a finer-scale vegetation map which is available on request. Some of this mapping is now incorporated into the national vegetation map by SANBI and is available through BGIS. The 2009 Biodiversity Network referenced is out of date: the latest terrestrial BioNet and detailed wetland shapefiles now can be downloaded directly from the City open data portal: <https://web1.capetown.gov.za/web1/opendataportal/>. In addition, it is important to consult the City Local Biodiversity Strategy and Action Plan for protected area expansion priorities within the city area.

#### **Draft EIR**

The overall findings of the report are supported from a purely biodiversity perspective, in that development of Site 1 has lower negative biodiversity impact than development of Site 4. However, no mitigation measure is proposed for the loss of over six hectares of Endangered CFDS habitat at Site 1, with mitigation proposed only for the construction disturbance to fauna.

The specialist and consultant should acknowledge the omission of mitigation for Endangered habitat loss and amend this in the final EIR.

Appendix E. Comments & Responses Report (CRR): Corrections listed for the ecological report still need to be updated (2009 BioNet and Endangered status of CFD Strandveld).

All of the comments raised in this letter must be addressed in the final Environmental Impact Report and submitted to this office in the form of 1 x hard copy and 1 x CD version.

Yours faithfully



**PAT TITMUSS**

**REGIONAL MANAGER: ENVIRONMENTAL & HERITAGE MANAGEMENT: Blaauwberg & Northern Districts**



6 July 2015

Lidwala Consulting Engineers (SA)  
P.O. Box 32497  
Waverley  
0135

**Attention: Mr Frank van der Kooy**

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Dear Sir

**CAPE FARM 34 DUYNEFONTEIN: FINAL SCOPING REPORT PERTAINING TO THE PROPOSED WESKUSFLEUR SUBSTATION**

[DEA Reference: 14/12/16/3/3/2/508 and NEAS Reference: DEA/EIA/0001780/2013]

The abovementioned document, dated September 2013, re-circulated under your cover letter, dated 26 May 2015, refers.

It is noted that the final scoping report (FSR), and proposed Plan of Study for the EIR phase, is identical to that contained in the FSR which was circulated in 2013. The only addition to the latest scoping report is the confirmation that Eskom has ensured compliance with condition 1.45 (i.e. removal of the condition) and condition 1.46 (i.e. conclusion of a Stewardship Agreement and conservation management plan with Cape Nature) in response to the Environmental Authorization (DEA reference: 12/12/20/997) dated 23 November 2010 that was applicable to the subject site (Cape Farm 34).

In light of the above the previous comment raised in the City of Cape Town's letter, dd 29 October 2013, remains relevant as follows:

City of Cape Town: Safety & Security Directorate: Disaster Risk Management Centre:

The application for the final environmental scoping report (FSR) for the proposed Weskusfleure Substations in the vicinity of the Koeberg Nuclear Power Station and is situated within the 0 – 10km Urgent Protective Action Planning Zone (UPZ) boundary of Koeberg Nuclear Power Station (KNPS). Attached please find a map indicating the location of the Proposed Sites (5) for the Weskusfleure Substations (refer to Figure 1).

The Disaster Risk Management Centre (DRMC) is the custodian (on behalf of the City of Cape Town) for the execution of the Koeberg Nuclear Emergency Plan (KNEP) and is tasked with the responsibility of ensuring that the public safety arrangements are in place in the case of a nuclear emergency and that individual citizens are not endangered with particular emphasis on the population residing in the UPZ of the 0 – 16km area from the KNPS.

The DRMC will only be able to consider the proposed locations for substation options 1, 2 and 3 as it will qualify as "place-bound", due to the fact that it relates to the operations of the KNPS. However, the DRMC can only consider the positions of substation options 4 and 5 once the proposed increase in population relating to the construction / operational phase has been tested by the Traffic Evacuation

Model (TEM). To this extent the anticipated population increase of each alternative must be stipulated in the proforma table below and included in the next EIA report.

PLEASE SPECIFY TYPE OF LAND USES: (DWELLINGS (LOW COST, GAP, MARKET RELATED), INDUSTRIAL, RETAIL, OFFICE, SCHOOL, COMMUNITY, ETC. -	SG CODE OR X, Y - COORDINATES	(GLA M <sup>2</sup> ) / NR OF DWELLING UNITS / HOUSEHOLDS	INCOME GROUP (LOW/ MIDDLE/ HIGH FOR TYPE OF LAND USE):	POP INCREASE FROM INSIDE UPZ (Residents / Workers/ Other occupants)	POP INCREASE FROM OUTSIDE UPZ (Residents / workers / Other occupants)

City of Cape Town: Land Use Management

Council approved the rezoning of the Koeberg Nuclear Power Station (KNPS) to Noxious Industrial (Power Station Buildings), Commercial and General Industrial for the ancillary buildings and infrastructure on 29/10/2010 (PAT 167489) converted to the Risk Industry zone (RI) where the remaining area of the land unit is zoned Agriculture (AG). In terms of the CoCT Zoning Scheme regulations within the Precautionary Action Zone (PAZ):

*(i) no development application shall be approved, except development by the Koeberg nuclear operator ancillary to the siting, design, construction, operation and decommissioning of the Koeberg Nuclear power station in terms of its operating licence;*

Therefore, any infrastructure essential to the functioning of the KNPS in relation to the generation of electric power may therefore be allowed (i.e. place-bound) where a "utility service" is permitted as a consent use in both the RI and AG zones.

Utility service' means a use or infrastructure that is required to provide engineering and associated services for the proper functioning of urban development and includes a water reservoir and purification works, electricity substation and transmission lines, stormwater retention facilities, and a waste-water pump station and treatment works, but does not include road, wind turbine infrastructure or transport use.

Alternatives 1, 2 and 3 are the preferred options as they are located on the subject land unit. There is therefore no objection from a planning perspective to the proposed substation subject to the siting of the substation being clearly reflected and demarcated in respect of the allocated zonings as designated to the land unit. Should any additional administrative land use application be required, these must be identified.

City of Cape Town: Environmental Resource Management

Environmental specialist findings

Alternative 1 falls within the Endangered Cape Flats Dune Strandveld vegetation type and Alternative 4 falls within the Critically Endangered Atlantis Sand Fynbos (refer to the attached Figure 2).

The specialist conducted a desktop assessment therefore no detailed studies were conducted apart from brief site visits. Alternative 4, although invaded by alien acacias has good potential for restoration from the seed bank, and is likely to harbour several Species of Conservation Concern. From a biodiversity perspective this site is not supported for development.

Impacts associated with the development were identified, including the loss of Endangered and Critically Endangered vegetation types, intact vegetation and listed plant species, the disruption of landscape connectivity and ecological functionality; the negative impacts of construction on fauna; habitat loss for avifauna and increased risk of collisions with power lines.



No wetlands were found within the affected areas; however the preliminary site visit was done during the dry season. The Biodiversity Network indicates several wetlands either on or close to Alternative 1; therefore the results from the Wetland Assessment during the EIA phase is awaited.

#### *Concerns addressed in the DSR and comments thereof*

It was recommended that a detailed botanical and freshwater study be conducted on all proposed sites to identify potential negative impacts on threatened ecosystems (including wetlands), Species of Conservation Concern and disruption of regional ecological connectivity and functioning. A groundwater assessment was also requested to be done to identify any possible impacts on the surrounding aquifers and hence wetlands. These assessments were confirmed, and will be conducted during the EIA phase.

All alternatives with their power line arrangements should be clarified and new proposed power lines needed should also be presented. Bird activity should be properly evaluated where these new power lines are required. Presence of fire-requiring vegetation (fynbos and renosterveld) should also be evaluated under new power line routes in order to assess impacts of power line management on vegetation. This concern was noted and will be addressed during the EIA reports.

It is re-iterated that Alternative 4 is considered highly undesirable from a biodiversity perspective as it represents the last available north-south ecological corridor between Blaauwberg Nature Reserve and the Dassenberg Coastal Catchment Corridor to the north. It is considered essential to conserve for ecological connectivity into the future as Koeberg cannot be considered as a perpetuity conservation area. To this extent be advised that the Environmental Management Framework, that for part of the Blaauwberg District Plan, promotes the establishment of north south 'green' corridor. As such Alternative 4 would not be consistent with the said spatial development framework.

#### *Terms of Reference*

It was requested that the Terms of Reference specify that the biodiversity specialists consider local biodiversity pattern as well as regional biodiversity pattern and processes in their assessment. Mitigation for potential loss of biodiversity should be presented in order to strive for no net loss of biodiversity. This was done and included the request of referral to studies done on the training centre/facility, as this has essential information about the potential footprint and impacts thereof for future developments. As Alternative 4 is the preferred option, but is considered a "fatal flaw" from a biodiversity perspective, it is strongly recommended that alternative additional sites are considered in the EIA.

#### *Conclusion*

Alternative 5 (from the DSR) remains as the Branch's preferred alternative as it has the least ecological risk, and direct biodiversity impacts. However, it is acknowledged that this alternative is deemed technically unviable, and therefore disregarded. The Branch did request more alternatives to be presented in the FSR which was not done.

At this stage of the EIA process and of the alternatives presented in the FSR, the Branch would favour Alternative 1 GIS as it has lesser impact on the natural environment.

#### General

1. *Executive Summary, Conclusions and Recommendations (page xiv and xv):* A table by Eskom regarding all Environmental Assessments in this area (past, current, and future possible developments) and progress of the past and present environmental assessments was requested. The inclusion of *Table 2: Past, Current and Future Eskom EIA within the vicinity of Koeberg Power Station* is acknowledged.

However is the questioned why the high voltage line projects have been excluded as the new transmission lines are significant contributors to the loss of indigenous vegetation? The transmission line route EIAs must also be listed as it informed the cumulative impact that Eskom Holdings projects have on the Cape Floristic Region located within the City of Cape Town's jurisdiction. It is reiterated that the Cape Floristic Region (CFR) is one of only six global plant kingdoms, yet covers only 4% of South Africa. It is by far the most threatened of these kingdoms in the world and any further unnecessary loss of this biodiversity must be avoided. Unfortunately

ESKOM power line infrastructure is NOT compatible with conserving biodiversity in the CFR's dominant ecosystems such as strandveld, fynbos and renosterveld.

The list is therefore incomplete as evident from the Table A below that list Eskom EIA projects that the City had to comment on since 2006 and which was not reflected in the final Scoping Report Table 2: Past, Current and Future Eskom EIA within the vicinity of Koeberg Power Station:

**TABLE A**

No	ERF/AREA	PROJECT	DEAT / DEEA REFERENCE	DECISION/STATUS	LOSS of INDIGENOUS VEGETATION
1	Cape Farm 34, Duynefontein	Koeberg: Admin & Training Complex	E12/12/20/997	Approved by DEAT without biodiversity offset	8ha
2	Erf 1395, Atlantis	Ankerlig: OCGT Phase I & II		Approved without a biodiversity offset	69,9ha
3	Erf 1395, Atlantis	Relocation of 3 x Gas turbine units from Acacia, Goodwood to Ankerlig	E12/12/20/1155	Approved without a biodiversity offset	None
4	Cape Farm 34, Duynefontein	Koeberg: New Nuclear Power Station	E12/12/20/944	Application mooted	265ha
5	Erf 1395, Atlantis	Ankerlig: CCGT (Power Conversion) and Transmission line	E12/12/20/1014 E12/12/20/1037	Approved by DEA with biodiversity offset (225ha)	17,5ha
6	Atlantis Area Pipeline – Various erven	Milnerton Refinery to Atlantis Industria Fuels Transport Infrastructure to supply Ankerlig Site	E12/12/20/955	Approved by DEA without offset, dd 20/2/2009.	Eskom to clarify
7	Atlantis Area Pipeline – Various erven	Koeberg – Omega Transmission Powerline	E12/12/20/1218	Eskom to clarify	Eskom to clarify
8	Atlantis Area Pipeline – Various erven	Koeberg – Stikland Transmission Powerline	E12/12/20/1219	Approved by DEA without offset, dd 28/6/2013	Eskom to clarify
9	Atlantis Area Pipeline – Various erven	Acacia-In Lines to Omega & Koeberg 2 HV Yard Transmission Powerline	E12/12/20/1525	Eskom to clarify	Eskom to clarify
10	Atlantis Area Pipeline – Various erven	Kappa - Omega Powerline & Substation Upgrade	14/12/16/3/3/2/352	EIA Application in progress	Eskom to clarify (Note: this route traverse critical endangered strandveld, fynbos and renosterveld remnants)

A complete, updated table must be included in the draft Environmental Impact Report in order to inform the cumulative impact that Eskom Holdings' projects have on the Cape Floristic Region located within the City of Cape Town's jurisdiction.

2. *Section 5.4, Legislative Context, Regulatory Hierarchy:* should list applicable local municipal spatial development frameworks and assess the compatibility of the proposed substation locations and auxiliary powerlines to the strategies, and / or guidelines of the said spatial development frameworks. In this regard source the approved City of Cape Town Spatial Development Framework (2012), as well as the Blaauwberg District Plans (2012) and the Environmental Management Framework (2012) from the City of Cape Town website ([www.capetown.gov.za/environment](http://www.capetown.gov.za/environment)). The need and desirability of the proposed project in relation to the said three (3) approved frameworks must be accessed.
3. *Appendix C: Stakeholder Database:* Be advised that Mr David Shepard and David Bettsworth are no longer in the employment of the City of Cape Town. Kindly remove their names from your database as representatives of the City of Cape Town.
4. *Appendix E6: Organs of State Database:* Be advised that Mr David Shepard and David Bettsworth are no longer in the employment of the City of Cape Town. Kindly remove their names from your database as representatives of the City of Cape Town. Be further advised that Ms Susan Matthysen (CCT: Planning and BDM) has been redeployed beyond the Blaauwberg District. Kindly substitute her contact detail with that of Mr Dewaldt Smit Tel: 021 444 0560; [dewaldt.smit@capetown.gov.za](mailto:dewaldt.smit@capetown.gov.za))

Be advised that all other City comment raised in the draft scoping report phase have been adequately reflected in the FSR.

All of the comments raised in this letter must be addressed in the draft Environmental Impact Report and submitted to this office in the form of 1 x hard copy and 1 x CD version.

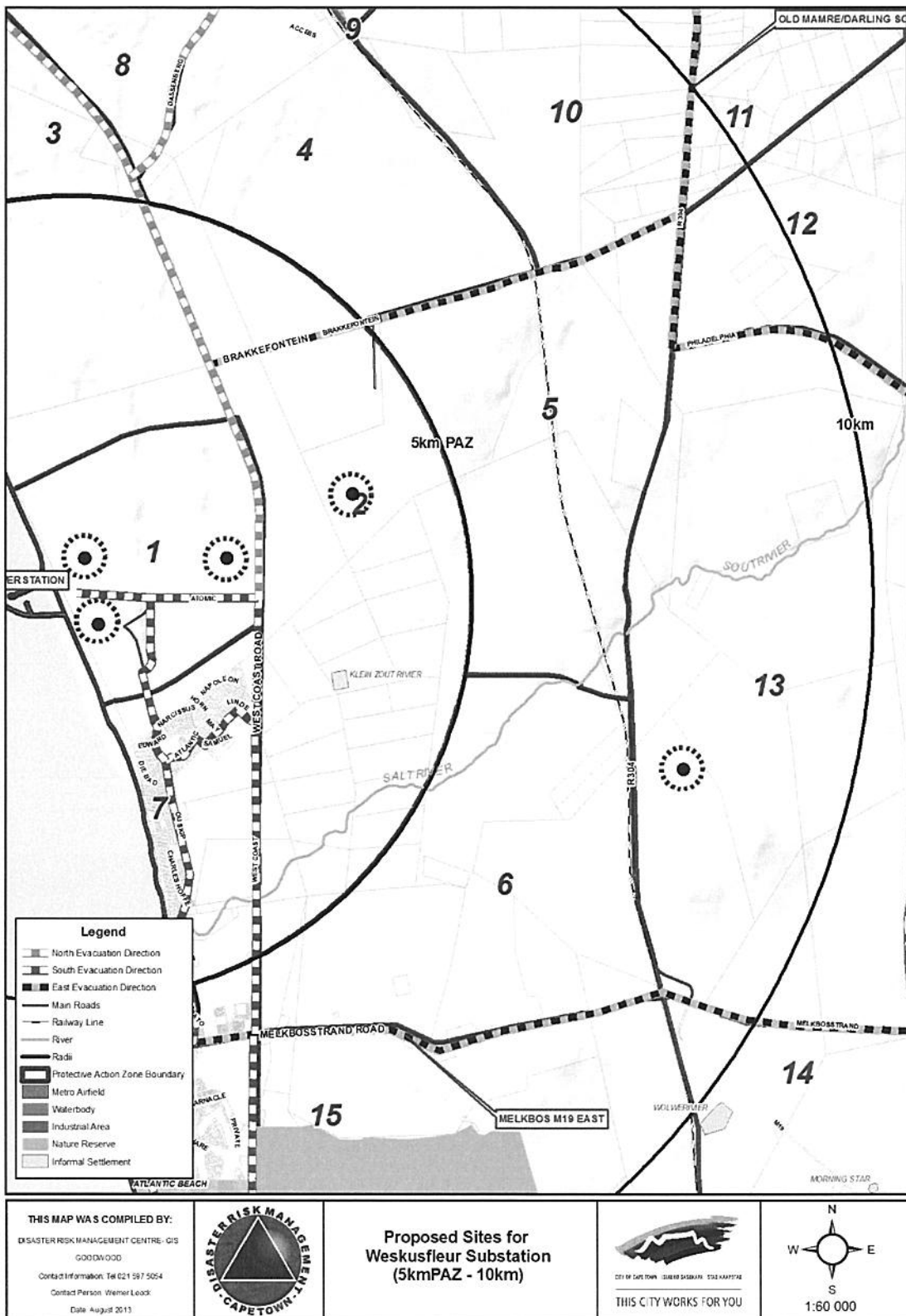
Yours faithfully



**PAT TITMUSS**

**REGIONAL MANAGER: ENVIRONMENTAL & HERITAGE MANAGEMENT: Blaauwberg & Northern Districts**

FIGURE 1





**FIGURE 2**



Figure 2: Diagram indicating the two alternatives being taken through into the EIA phase and its relation to the BioNet Critical Biodiversity Area (CBA) layer.