

**APPENDIX E
ISSUES REPORT**

OMEGA SUBSTATION PUBLIC PARTICIPATION PROCESS

Issues Gathered From Public Meeting held in Melbosstrand on the 7th October 2004 and consultation with IAP's.

No	Question
1	What is the visual impact of the proposed substation?
2	What is the impact of the proposed substation on agriculture?
3	What is the impact of the proposed substation on cultural heritage resources?
4	What is the impact of the proposed substation on the ecology of the study area?
5	What is the impact of construction on the social environment? <ul style="list-style-type: none"> - Health, - Safety, - Security and - Housing and other infrastructure.
6	What is the impact of the operation and maintenance on the social environment? <ul style="list-style-type: none"> - Health, - Safety, - Security, - Housing and - Provision of electricity (local & regional)
7	What is the impact of the proposed substation on employment and socio-economic status?
8	What is the impact of the proposed substation on land tenure and vice versa?
9	What alternatives are being considered for the proposed project? What are the costs and benefits of each? <ul style="list-style-type: none"> - Alternative sites. - Alternative designs. - Alternative power sources.
10	Strategic planning issues outside of EIA process.
11	EIA process. <ul style="list-style-type: none"> - Technical - Public participation
12	General.

NAME AND ORGANISATION	ISSUES RAISED	RESPONSE
1. What is the visual impact of the proposed substation?		
Public Open Day Melkbosstrand	<p>Is it possible to “beautify” the substation with the use of hedges etc?</p> <p>Can the botanical specialist for the project be asked for suggestions on good screening plants?</p> <p>Will there be light pollution from the substation?</p> <p>Concern that the rural character of the area will be destroyed.</p>	<p>Plants could be used for visual screening but this would be dependant on the water supply for the maintenance of the plants. There are no staff members present on site during the operational life of the substation except for security staff, making upkeep of vegetation difficult. Powerlines entering and leaving the site cannot have trees planted underneath them so possible vegetative screening will be limited at these points.</p> <p>Yes. This will be recommended in the scoping report.</p> <p>There will be no upward projection of light on the site. There will be downlighting on approximately six or seven masts. Should there be a breach in the perimeter fence, security lights will come on at that section of the fence, but will not be permanently on.</p> <p>The visual impact of the proposed substation is being looked at by a specialist. Mitigation measures to minimise visual impact will be proposed. The visual impact however needs to be considered along with other types of impacts, as well as the need and justification for the project.</p>
Wildlife and Environment Society of SA (WESSA) – Ms S.Ralston	Concern that the proposed substation may negatively impact on the aesthetics and sense of place of the area, especially from Blaauwberg Hill. A request that the visual assessment needs to assess viewpoints from all areas of the BCA. BCA is significant as a biodiversity hotspot, from a cultural-historical aspect, for its scenic splendour and iconic views of Table Mountain, Robben Island and Table Bay. It is also an important recreational area and has potential to become a tourist destination of international significance.	The visual impact of the proposed substation is being looked at by a specialist. Mitigation measures to minimise visual impact will be proposed. The visual impact however needs to be considered along with other types of impacts, as well as the need and justification for the project. The visual impact assessment in Appendix D has considered views from conservation areas.

NAME AND ORGANISATION	ISSUES RAISED	RESPONSE
Mr S.C.J Currie - Landowner	The need for alternatives to be considered in less exposed/less visible areas.	The previous environmental assessment investigated 5 sites within the area (apart from the 3 sites identified on Groot Oliphantskop), one site lay adjacent to Koeberg nuclear power station and a second to the west of the N7 & just north of the M19. Of the two sites the first was unsuitable as it would pose a visual barrier to the gateway views of Table Mountain when travelling south towards Cape Town on the N7. The second is unsuitable due to the corrosion risks associated with this site as it is situated too close to the ocean.
Mr H. Graf – Landowner Mr S.C.J.Currie – Landowner Mr R.Smith- Garden Cities	Concern that the rural character of the area will be destroyed by the substation as it will present an overpowering sight, which will result in the lost of rural character of the area. The need to define the negative effect such a substation will have on the rural character of the area with respect to future development of the surrounding land. The need for the quantification of the visual impact of the substation on the neighbouring properties. Concern of substation and its visual impact.	The visual impact of the proposed substation is being looked at by a specialist. Mitigation measures to minimise visual impact will be proposed. The visual impact however needs to be considered along with other types of impacts, as well as the need and justification for the project.
2. What is the impact of the proposed substation on agriculture?		
Public Open Day Melkbosstrand	What will happen to the farm Groot Oliphantskop after the substation has been built? Farmers are concerned that the additional run-off from the substation would negatively affect their land and farming activities. The Department of Water Affairs and Forestry (DWAF) are planning a water pipeline in the area, which will be beneficial to agriculture. How will this be impacted by the proposed substation?	Eskom Transmission will give Mr Stoffberg the option to buy back the remaining portion of the farm at the amount offered by the highest bidder. Comment noted. The substation design will incorporate stormwater management and this would need to be mitigated so that any additional run-off is properly managed. DWAF have been contacted by the EIA team however, there is no pipeline proposed by DWAF for this area. The Cape Town Municipality has been contacted to ascertain whether it pertains to their projects for the area. Both the Bulk water Infrastructure and Reticulation Section have no existing or planned infrastructure affected by the proposal.

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Mr S.C.J. Currie - Landowner	<p>The need to define and quantify the physical threat that a substation will have on his property due to the risk of veld fires.</p> <p>The need to quantify the potential surface and groundwater pollution from the substation and its impact this would have on his farmland.</p>	<p>No known physical veld fire threats associated with the substation are expected since the substation has several built in fire protection measures, and no vegetation exists within the substation boundary fence.</p> <p>This will be localised and is not expected to be of large significance. The threat of pollution to groundwater will be minimised by the design of the substation, which allows for catchment of all polluted water into a closed system.</p>
Mr H. Graf - Landowner	Concern over future on his smallholding.	Comment noted.
3. What is the impact of the proposed substation on cultural resources?		
Public Open Day Melkbosstrand	Sections of Groot Oliphantskop are archaeologically important.	Comment noted. The scoping process has included a specialist archaeological investigation that recommended mitigation measures.
Heritage Western Cape (Archaeology, Palaeontology and Meteorites Committee)	<p>Heritage Western Cape (APM Committee) supports the recommendations of the archaeology specialist report. Alternative B is preferred.</p> <p>A Heritage Conservation Management Plan should be drawn to deal with the direct and indirect impacts that cultural resources (particularly site A2 and C2 if not directly impacted upon by construction, and historical structures) would sustain during the implementation of the construction of the Omega substation. The pre-historic quarry (C1) and Cemetery (A4) fall within the development footprint and are considered No-Go Areas.</p>	Comment noted.
Heritage Western Cape (Built Environment Landscape Committee)	Heritage Western Cape (BEL Committee) supports the recommendations made in the specialist report and therefore requests that Alternative A be avoided and that Alternative C, or preferably Alternative B be selected for placement of the substation.	Comment noted.
4. What is the impact of the proposed substation on the ecology of the study area?		
Public Open Day Melkbosstrand	Are the conservation areas in the vicinity being considered?	Yes, these have been addressed in the visual scoping report and can be found in Appendix D.

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Cape Nature – Ms V.Bowie	<p>Comments given relate to the specialist botanical and avifaunal reports and not to further specialist components of the Omega Substation.</p> <p>Cape Nature supports all conclusions and recommendations made by the specialist botanist and specialist ornithologist. It is strongly advised that these are incorporated into the scoping report and implemented by Eskom should this application be approved.</p> <p>The natural remnants and wetland sites (that can be rehabilitated) on this property are of high conservation value, as both the Cape Flats Sand Fynbos and the Swartland Shale Renosterveld are considered critically endangered ecosystems). Eskom is required to take reasonable measures to minimise damage from occurring, continuing or recurring on their land.</p>	<p>Comment noted.</p> <p>Comment noted.</p> <p>Comment noted.</p>
WESSA – Ms S.Ralston	<p>The large area that will be hardened if the proposed substation is built will result in significant amounts of stormwater run-off, and this may alter surface water flow patterns. The impact of this increased flow on surrounding areas must be considered and a hydrological assessment is therefore considered necessary.</p> <p>Concern for resident Blue Crane population listed as critically endangered in the IUCN Red Data Book occur on the property, as specie population is declining, prevent any activities that reduces their habitat, creates a disturbance or increases their stress levels. Avian study should include the potential impact of the proposed development on their flight paths, breeding success, and the long-term viability of the local population.</p>	<p>A hydrological study has been compiled for this purpose. The substation design will take these factors into consideration.</p> <p>This is addressed in the avifaunal assessment report Recommendations for mitigation will form part of the scoping report.</p>
<p>5. What is the impact of construction on the social environment?</p> <ul style="list-style-type: none"> - Health, - Safety, - Security and - Housing and other infrastructure. 		
Public Open Day Melkbosstrand	Safety and security concerns over the presence of migrants labourers during the construction of the substation.	This will be addressed in the Environmental Management Plan developed for the project.

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	<p>What is the impact of Electro Magnetic Fields (EMF's) and radiation on people's health.</p> <p>What is the predicted radiation and EMF range and quantity expected from the site? How is this measured?</p> <p>Dust during construction is a concern. The strength of the south-easter wind needs to be taken into account. Exposed soil blowing onto neighbouring areas and creating a nuisance is also a concern.</p>	<p>Considerations such as these are looked at in the social environment section of the scoping report. There is currently no evidence to show that EMF's at this level are harmful to humans / animals. However Eskom adopts the precautionary principle, hence the presence of servitudes. The proposed substation is to have a double electric barrier fence and a boundary fence. There are no EMF's from the substation outside of this buffer zone.</p> <p>The only area where EMFs occur are in the high voltage yard. Outside the substation boundary fence EMF and radiation will not change from what the levels currently are.</p> <p>Comment noted. Dust suppression will be addressed in the project-specific EMP.</p>
	<p>How many workers will there be on site?</p> <p>Is it possible to use local labour so that they can return home in the evenings and not stay on site?</p> <p>In the previous EIA it was agreed that no workers would stay overnight on site.</p> <p>Concerned about noise pollution during construction – please address this in the scoping report.</p>	<p>± 300 workers will be employed for the project but they will not be on site at one given time. All site work is highly specialised. Different teams will be brought in at different phases of the construction.</p> <p>It is difficult to use local labour as the work is highly specialised and the contractor will bring his own staff to complete most of the construction activities. Local housing options for the site staff can be investigated for the construction period.</p> <p>This was noted and will be looked into by Eskom Transmission. If this scoping process shows that staff staying overnight on site is totally unacceptable to IAPs then the contractor will need to make alternative arrangements. This is more expensive and the social impacts are then more difficult to control.</p> <p>This issue has been noted and will be addressed in the scoping report as well as the EMP that is drawn up for the project.</p>

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	<p>Access during construction and operation is a concern. Are existing roads sufficient to carry the weight of machinery and equipment required?</p> <p>Who will be responsible for damage to existing infrastructure?</p> <p>What will be the impact on traffic?</p>	<p>Roads from the main road to the site will be constructed by Eskom according to Eskom design specifications.</p> <p>Costs will be carried by Eskom in the case of private infrastructure. The transport of equipment on national roads will not be more than the load that the road was designed for. Multi-wheeled vehicles are thus used to spread out the weight of the load.</p> <p>Traffic impact will be minimal once equipment is on site. Concrete mixing etc is to be carried out on site. The only traffic will be vehicles removing waste from the site, transporting labour, or from supervisors visiting the site.</p>
	<p>Will the site be fenced before construction begins?</p>	<p>Yes.</p>
<p>Western Cape Provincial Department of Transport – Ms S. Strydom</p>	<p>Concern expressed for impact of heavy duty vehicles such as construction trucks on the road network and costs incurred for the maintenance of the affected roads. These costs need to be determined for duration of construction period and a responsible party needs to be identified.</p> <p>Further comments were received expressing concern with regards to the access to any proposed alternative sites from the main Road 215 and the suggestion that the effects on the road infrastructure be factored into a compensation agreement for damages and the future maintenance of the road by Eskom was made.</p> <p>It was further suggested that future implications of the future powerline connecting to the substation site should be considered during the scoping and planning stages of the site identification when comment is offered.</p>	<p>Normal maintenance of the road will take place.</p> <p>Comment noted.</p> <p>Comment noted.</p>
<p>Mr H.Graf - Landowner</p>	<p>Concern over possible problems associated with the building operation such as noise.</p>	<p>To be addressed in the EMP.</p>

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6. What is the impact of construction on the social environment? <ul style="list-style-type: none"> - Health, - Safety, - Security and - Housing and other infrastructure. 		
WESSA – Ms S.Ralston Mr H.Graf- Landowner	Concern with regards health risks that are associated with the substation, especially with respect to radiation. The need for a buffer zone around the substation as a mitigatory measure. Concern with regards to potential risks to wildlife. Concern over close proximity to proposed substation and the health risks associated residing near to such a powerful construction (share a common boundary of 1km).	Considerations such as these are looked at in the social environment section of the scoping report. There is currently no evidence to show that EMF's at this level are harmful to humans / animals. However Eskom adopts the precautionary principle, hence the presence of servitudes. The proposed substation is to have a double electric barrier fence and boundary fence. There are no EMF's from the substation outside of this buffer zone.
7. Technical Issues		
Public Open Day Melkbosstrand	How long does construction take? When would Eskom like to begin construction? Does Eskom have an EMP in place? Is there an independent Environmental Control Officer? Is there an environmental management system in place to ensure ongoing auditing of site? Why was a GIS (Gas Insulated Substation) proposed in the previous EIA and now a larger, open-air structure is being proposed? How many times more expensive is the Gas Insulated Substation than an open-air equivalent structure?	Approximately one year. Sometime in 2005. Eskom transmission has a generic EMP for construction activities. A specific EMP will be drawn up for the Omega substation once the extended scoping process is completed. Yes. Yes. Eskom is ISO 140001 certified. All management of the site e.g. waste disposal / rehabilitation of site –must be tendered for by the contractor and is included in the contract. In 1996 an indoor structure was proposed due to concerns over salt corrosion because of the proximity of the site to the coast. Although smaller in size, this structure is more expensive than a larger, open-air structure. Technological advances in the past years have resulted in an open air design whereby corrosion can be managed. The indoor structure is considered cost prohibitive in today's economic climate. The cost of a Gas Insulated substation...(Eskom to determine)

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	Which is the preferred site?	Proposed site A is the preferred site from a visual and avi-fauna point of view. It also appears the most technically feasible of the three alternatives and would require the least disruption to existing infrastructure. Should Alternative B be chosen, additional land would need to be purchased by Eskom and roads would need to be re-aligned.
	What is the size of the proposed site?	At this stage 550m x 550m is required (this would accommodate one 765kV transmission line). Should further lines be necessary in the future, the site could be extended up to a size of 150 hectares in total. The size of the substation will be kept as small as possible but is dependant on the amount of power demanded by the region.
	Has the site been surveyed yet?	No, it will be surveyed once a Record of Decision has been given.
	It is felt that run off will be a problem on site A, and that Site A would also have the most impact on animals due to the adjacent location of a dairy.	Comments noted.
8. Strategic Planning Issues outside of the EIA process		
Planning and Environment: Blaauwberg of the City of Cape Town (Mr David Bettesworth)	The Scoping Report must provide full details of the site layout, access arrangements and building footprints as well as building elevations in order for the Council to assess the scale and impact of the substation development. The need for rezoning as the site is currently zoned for rural use. This will involve the necessary planning processes in addition to the EIA. The City of Cape Town needs to be registered as a key stakeholder in the EIA process and receive detailed correspondence of all environmental reports including specialist studies. Need to take into account the Council's time frames for decision making and need to provide adequate time for comment in this regard.	Comments noted.
Waste Water Department of the City of Cape Town (Mr P.King)	Large portions of the proposed sites "A" and "C" are used for the disposal of wastewater sludge by land application. Only a small northern portion of site "B" has been used for this purpose. Concern due to potential loss of sites A and C since these sites are closest to the sludge source and therefore transport costs are minimised.	Comments noted.

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City of Cape Town Directorate: Transport, Roads & Stormwater (Mr Chris Atkins)	<p>Need to take cognisance of existing and proposed roads. Need to ensure that adequate vertical clearance to all overhead structures and powerlines be provided. Placement of pylons appropriately so as not to jeopardize route selection alignment options.</p> <p>Alternative Site A identified as carrying a future high order arterial road to be aligned on the north-east section of the site and then join further north with the Old Mamre Road.</p> <p>Need to retain tree-lined route along the Old Mamre Road due to its value as a tourist route.</p> <p>Need to address impact that heavy abnormal loads would have on the Old Mamre Road.</p>	<p>Comments noted.</p> <p>Eskom in the process of follow-up with the relevant authorities.</p>
Department of Transport and Public Works (Transport Branch) (Director General)	<p>Concern was expressed with regards the impact of the construction vehicles used during construction of the substation, on the access of any of the proposed alternative sites from Main Road 215, especially as the substation will be phased over a number of years.</p> <p>A further concern was raised of the impact of the additional construction traffic on the road network within the area. In this regard a compensation agreement for damages and future maintenance of the road between Eskom and the Roads Department needs to be negotiated.</p> <p>The future 765kV powerline (with a 80m wide servitude) from the north that would also be crossing a number of provincial roads to enable it to end at the substation was an additional concern raised. It was suggested that future implications of this powerline connecting to the substation site should be considered during the scoping and planning stages of the site identification.</p>	<p>Comments noted.</p>
9. Issues relating to the EIA Process		
Public Open Day Melkbosstrand	<p>Why were the 765kV transmission line and the Omega Substation separate EIA's?</p> <p>Is there a separate EIA for the construction camp?</p> <p>There appear to be differences between what the previous EIA and this EIA are saying. E.g. The size of the site has increased.</p>	<p>The timeframes required for negotiating a linear project are much longer than those required for a substation. The EIA for the Gamma Omega 765kV line thus had to begin significantly earlier than work on the substation, in order that servitudes could be obtained timeously.</p> <p>No, the construction camp will be on site so it forms part of this scoping report. Specific considerations relating to the construction camp are addressed in the project-specific EMP.</p> <p>The terms of reference for this EIA are different from the previous EIA. Technological and social changes need to be taken into account and will be addressed in the scoping report. The negotiation process is separate from the EIA process.</p>

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	Why is Eskom re-doing the EIA process?	The previous EIA was not required by South African law but was a "best practice" exercise carried out by Eskom in conjunction with the rezoning application. The Environmental Conservation Act now requires that an EIA be carried out before a project such as this can go ahead. The current EIA has been commissioned in terms of current environmental legislation. All new issues and comments need to be captured and addressed in the scoping report. In addition the design for the substation has been changed from an indoor to an outdoor substation.
	There was a request that the EIA process includes liaison with surrounding residents in order that local knowledge is incorporated into the report.	Comment noted.
	Has the municipal planning process been taken into account in the EIA?	Yes, various policy documents have been sourced from the Municipality and have been used in the compilation of the Draft Scoping Report.
Cape Nature – Ms V. Bowie Western Cape Provincial Department of Transport – Ms S. Strydom	Acknowledgement of alternative sites that have been presented within the Groot Oliphantskop Farm, but alternative sites should also be considered within the landscape to ensure that the most appropriate area is selected for the substation. Request motivation for Groot Oliphantskop Farm as general location for the substation. Concern that more alternatives are needed in a different locality to Groot Oliphantskop.	The previous environmental assessment investigated 5 sites within the area (apart from the 3 sites identified on Groot Oliphantskop, one site was lay adjacent to Koeberg nuclear power station and a second to the west of the N7 & just north of the M19. Of the two sites the first was unsuitable as it would pose a visual barrier to the gateway views of Table Mountain when travelling south towards Cape Town on the N7. The second is unsuitable due to the corrosion risks associated with this site as it is situated too close to the ocean. All existing lines need to be turned into the substation. The use of Groot Olifantskop as a site would require the minimum amount of diversion of lines from their existing alignment.

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WESSA – Ms S. Ralston	<p>Explanation requested for identification of site as termination point and why Koeberg, which has substantial negative impacts associated with it was not deemed suitable.</p> <p>Concern that process of conducting separate EIAs for the proposed Omega substation and the 765kV line was inappropriate as they should be part of the same project.</p> <p>Need for a more comprehensive public participation as this was considered lacking at time of public meeting.</p>	<p>A site near Koeberg would be too close to the coast for an outdoor substation due to corrosion.</p> <p>The timeframes required for negotiating a linear project are much longer than those required for a substation. The EIA for the Gamma Omega 765kV line thus had to begin significantly earlier than work on the substation, in order that servitudes could be obtained timeously.</p> <p>It was agreed at a pre-application meeting with DEAT that a limited public participation would be necessary, however, with further investigation it became necessary to have further consultation, which has been done to date. A feedback meeting for early 2005 was agreed to.</p>
10. General		
Public Open Day Melkbosstrand	<p>It is my experience that whatever Eskom wants, it does.</p> <p>A feedback meeting on the scoping report was requested.</p> <p>Has the 765kV Record of Decision been given yet?</p>	<p>Comment noted.</p> <p>This was agreed to – the project team will hold a “workshop” on the scoping report at the Melkbosstrand County club once I&APs have had a chance to review it.</p> <p>No, but Eskom is going to request it now as it was stipulated by DEAT that at least 80% of the line should be negotiated before an ROD could be given. 86% of the line has now been negotiated.</p>
Mr S.C.J.Currie- Landowner	<p>What is the link between this substation and the proposed Wind Farm on the farm Oliphantskop. Could it be that if this substation is approved, the approval of a wind farm could conceivably be easier to push through?</p> <p>The need to define and quantify the reduction in value of his farm as an adjacent landowner due to essential industrial development next to his property.</p>	<p>There is no link with any proposed wind farm.</p> <p>This could be determined before by carrying out before and after valuations by an independent valuator.</p>
WESSA – Ms S.Ralston	<p>The need for the issue of sustainability to be addressed, namely the consideration of energy saving measures as an alternative. Need to focus on energy demand management, rather than increasing supply. In this manner, negative impacts associated with proposal could be avoided.</p>	<p>Comment noted.</p>

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Mr H.Graf - Landowner	<p>Concern over future of smallholding and need to understand his position in this regard. Concern over property value reduction due to close proximity to substation.</p> <p>Concern over possible sabotage and associated risks to landowners.</p>	<p>Comment noted. This could be determined before by carrying out before and after valuations by an independent valuator.</p> <p>Security risks are low as substations have security fencing, lights and alarm systems that are monitored 24 hours.</p>
Mr Riaan Smit (Eskom Distribution)	<p>Construction supply can be provided but size required is requested. Eskom Distribution can check network capacity on Klipheuwel Farmers Scheme. The closest 132/11 kV infeed point is a few kilometres away, but is not yet connected to Klipheuwel network.</p>	<p>Comments noted.</p>