



Green Cape Presentation
23 July 2014

Dr Barbara van Geems

Land Development Manager
Eskom <u>Distribution</u>

greencape

Overview



- Planning brief overview & help
- Land and Rights- Barbara van Geems
- Environmental Justine Wyngaardt
- General Questions ??

Focus of presentation is built on 2012 presentation

left out more obvious, highlight concerns / issues / queries

First Port of Call in Eskom Distribution



For Eskom Distribution (Dx) – WC and western side of NC

- Are van Zyl
 - 021 915 2570
 - vZylAW@eskom.co.za
- Bradley Box
 - 021 915 2776
 - BoxB@eskom.co.za

- Ekom Transmission (Tx) separate unit to Dx
 - Apply separately to them
 - Check with Are or Bradley

Land Development

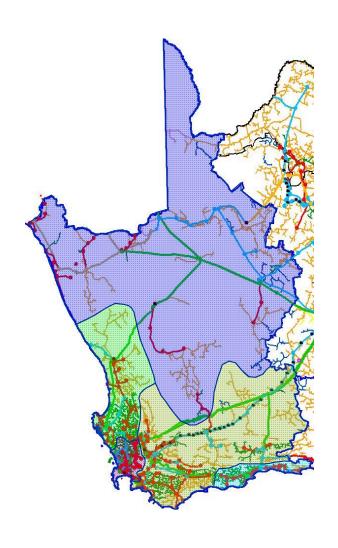


General Land Development no: 021 980 3129

- Barbara van Geems Land Development
 - 021 980 3242
 - vgeemsb@eskom.co.za
- Justine Wyngaardt Environmental
 - 021 980 3112
 - WyngaaJO@eskom.co.za
- Henk Landman Lands and Rights
 - 021 980 3412
 - LandmaHJ@eskom.co.za

Planning Contacts in Dx





- Muzafar Ebrahim 021 980 3593
 - EbrahiM@eskom.co.za
 - Oversees group & George,
 Somerset West, Vryheid areas
- Robin Buske 021 980 3012
 - BuskeR@eskom.co.za
 - NC / Upington areas
- Prabha Raghavan 021 980 3954
 - RaghavP@eskom.co.za
 - Prieska areas
- Zoe Lincoln 021 980 7541
 - LincolZ@eskom.co.za
 - Vredendal area





Planning



- Dx Distribution
 - HV or MV Selfbuild, else Eskom quotes with constraints redeadlines

- Some issues/advice re Planning
 - Talk to Planning <u>early</u>, <u>in between</u> and <u>when a preferred bidder</u>
 - Cost estimate letter is not a commitment from Eskom no of them
 - the grid has only so much capacity and DOE does the awards
 - Plan in relation to <u>existing</u> infrastructure in Eskom
 - Planned / future Eskom infrastructure alters no guarantees re timelines, so don't plan based on future infrastructure

Planning issues to consider



- If aiming to build on existing Eskom servitude with Eskom line
 - Can line be taken out and <u>for what period</u>, <u>what time of year</u> for a rebuild on same footprint – network restrictions
 - Check servitudes old lines are not always registered, rights by prescription
 - Recheck this as grid environment changes other builds, issues
 - Voltage, age of infrastructure, servitude still vacant at time of award?
- If can't take line out or miss Outage Window
 - Need to rebuild alongside new servitude
 - Need negotiation, options, servitudes registered
 - Min separation between lines
 - 132kV 21m, 66kV 14m, 11/22kv 12m

Planning issues to consider



- Constructability / Maintenance Issues
 - If can't take line out or miss Window, constructability issues of building alongside
 - Also if new Line if constructability issue to build, issue re later maintenance?
 - Is there existing Fibre / Coms on the line take into account when rebuilding as Comms need to be maintained

Planning when tying into Grid



- Grid Connection things to consider:
 - Voltage, Conductor, carrying capacity of line now and future – no of cost estimates and can't reserve
 - Communication fibre optic etc?
 - Not all lines have suitable comms for IPPs
 - Please <u>check</u> this early on with Eskom engineers!!
 - Length from substation and voltage issues
 - Outage issues windows for outage !!

Planning – to be noted



- Can't hang IPP owned and Eskom lines on same infrastructure - issues re outages, live line work, etc
- Eskom underground cable maintenance only in urban areas
- Can't legally run an IPP cable in Eskom servitude,
 - IPP if running own cable require cable servitude
 - even if running just inside Eskom servitude check with Eskom
- Auxillary Power required temp, permanent ?
 - separate Eskom application apply early
 - 90 days if short span & trsfr, 120 days +, +++ if longer line issues

Planning – line routes / substations



- Send us preferred line route and substation as soon as EA approved
- Resend when preferred bidder "Reserved sticker"
- That is <u>Coordinates</u> of center line of preferred route and sub
- Will enter into Eskom GIS system as possible /proposed
 - Can't keep corridors open if we don't know exactly where they are
- You as IPP are dealing in one area with one or few projects / alternatives
- Eskom is dealing in hundreds of prospective IPPs

Play Nice – Play Green



- This is Green Energy
- Land to be traversed by powerline?
 - Owners & attitudes ? Don't leave victims !!! Don't lock down land rights
 - Especially not to other IPPs feedback to DOE

Eskom and other IPPs have to traverse – and that may be you in future

First Court Interdict re IPP

<u>– issue re land owner !!!</u>

Planning - Environmental



- Justine will cover Environmental
 - She is the expert
 - Get early advice instead of rework

Land and Rights



- Servitudes to be registered lines, substation, part of substation 2 ways to tackle – <u>for Protection of Electricity Delivery</u>
 - IPP / Land owner / Eskom 3 party option rights registered in Eskom's name at time of registration
 - Eskom only 3rd party not enforce if legal issues
 - Please note Options to not be altered, check for latest version
 - unless discussed with Eskom <u>results in delays for IPP</u>
 - 2. IPP / Land owner agreement & cede rights to Eskom after registration
 - Issue re Consent then required under Act 70 of 70

Planning and Land Use Acts



Please not Eskom exemptions fall away with SPLUMA

Date – now in 2nd half of 2014 ??

LUPO will cease or has ceased to a greater extent

replaced by LUPA

SPLUMA / LUPA will require that "LUPO" applications now go to the individual Municipalities and no one is exempt

Note: both now Acts, but not in force yet

- SPLUMA regulations out for comment due 3 Sept 2014
- Awaiting LUPA regulations

Land and Rights



- Eskom registration
 - first in General terms if powerline not built yet, and if no Survey General (SG) diagram for line or substation
 - If SG diagram
 - then register in specific terms straight away or define General Terms servitude deed

- Under HV selfbuild
 - IPP add needs to address all Legal issues
 - Eskom won't intervene/take legalaction or expropriate on behalf of IPP

Towards Sign off



Things that are frustrating IPPs and Eskom to reach final closure to get operational currently

Please note NO provisional sign from Land Development without:

- Copies of the registered deeds with the deeds no stamped on it
 - Eskom can't accept if not complete, as Eskom is then committed without legal security
 - Don't underestimate time this takes seeing no of IPPs getting caught in this
- All legal requirements stat approvals, permits, EA, WULA etc
- As-builts drawings and data

HV selfbuild – legal requirements for handover



- Checking all legal requirements listed some -but are not limited to:
 - Landowners' contracts / registration in Deeds Office
 - Environmental Authorisations DEA
 - DEA&DP (Province)
 - Local and Provincial Authorities
 - SAHRA and any provincial Heritage Authorities such as
 - HWC
 - Telkom, Neotel
 - Roads national (SANRAL), provincial and local road
 - agencies
 - DWA
 - Transnet
 - Other approvals / permits as may be required by legislation such as water use licences, tree-cutting permits, borrow pits, etc.

As-builts drawings and data



Land Development are the gate keepers
re asbuilt surveyed data
Don't live in a flat earth – both XY and Z
See HV selfbuild policy re Asbuilt guideline

- Asbuilts Consulting engineer who has authority and ticket signing off that what was planned, was built as such XY and Z
- If IPP / IPP contractors can't sign, so can't Eskom
- Electricity Regulations Act one of the few Acts where:
 - Guilty until proven Innocent

Electricity Regulation Act 4 of 2006



Preamble

To establish a national regulatory framework for the electricity supply industry; to make the National Energy Regulator the custodian and enforcer of the national electricity regulatory framework; to provide for licences and registration as the manner in which generation, transmission, distribution, trading and the import and export of electricity are regulated; and to provide for matters connected therewith.

26. In any civil proceedings against a licensee arising out of damage or injury caused by induction or electrolysis or in any other manner by means of electricity generated, transmitted or distributed by a licensee, such damage or injury is deemed to have been caused by the negligence of the licensee, unless there is credible evidence to the contrary.

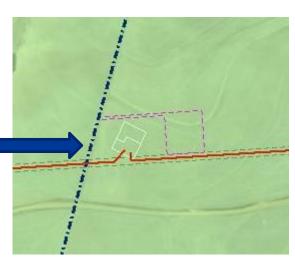
Asbuilt drawings and data - XY



 This includes the geographical correctness – line is built in servitude on correct property, coordinates of line, pole positions etc

Example of what can go wrong

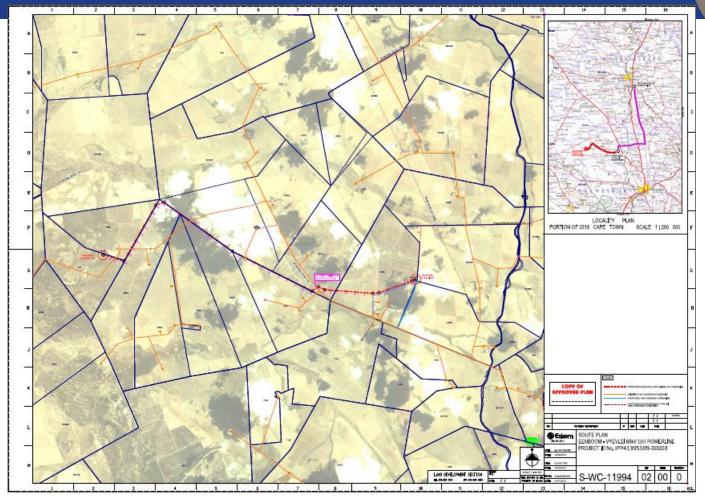
- Sub outside cadastral area
- Creates land owner and legal problems



- Are you on the right property / correct side of the boundary?
- Are you on the boundary dose your servitude overlap?
 - i.e. 2 options for same segment of power line
- Are all the properties covered is one missing?

Asbuilt drawings and data - XY



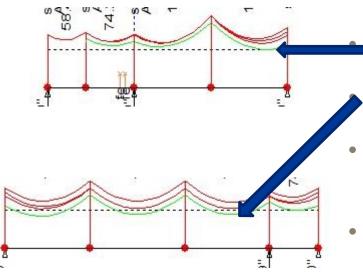


- Are for example all road and rail crossings been accounted for –
 surveyed with clearancs / stat approvals ?
- River crossings WULAs in place ?

Asbuilts Z



- Includes clearances to ground of line, clearances to infrastructure – over roads, rail, other powerlines,
- Includes clearances of fibre optic/comms on structure



Fibre Optic – is it clearing or is it not?

Fibre Optic – not clearing !!!

- If combine harvester at R x mil plus goes into this and pulls down the line?
- Damage to combine harvester
- If someone injured / dies ??

Would you sign off if you are NOT sure?

If unsure rather Ask



- Eskom and ourselves would like to see your project built and you getting sign off
- We understand the time, money and effort that went into it and your risks
- Help us to help you
- Ask early
- Understand we are overloaded so if it keeps coming in incomplete we have less and less time to help
- To those in the IPP game or those going to bid
 - all the best to Green Energy
 - As they say in Afrikaans Sterkte