SIP 10: National DEA Electricity Grid Infrastructure SEA

SANBI Biodiversity Planning Forum
June 2015
Electricity Grid Infrastructure (EGI) Strategic Environmental Assessment (SEA)

• **Problem:** long lead times for grid expansion
  1. Protracted Environmental Authorisation and permitting process
  2. Servitude negotiation and acquisition

• **Solution:**
  1. Start grid development earlier i.e. undertake strategic grid planning to identify priority expansion corridors/areas; and
  2. Allow for streamlined environmental authorisation and permitting processes within strategic areas

• DEA undertaking the SEA to assist Eskom with identifying priority corridors and to improve regulatory processes inside corridors in support of SIP 10

“We need to identify innovative approaches to fast-track delivery by government in the energy sector”

President Jacob Zuma
SONA 2014
Vision for the SEA: Strategic Electrical Grid Infrastructure is expanded in an environmentally responsible and efficient manner that responds effectively to the country’s economic and social development needs.

Objectives of the SEA:

- Identify strategic corridors to support backbone of electricity transmission up to 2040.
- Refine the corridors based high level suitability from an environmental, economic and social perspective.
- Undertake scoping level environmental pre-assessment of the corridors
- Facilitate streamlined environmental authorisation of EGI (Tx and Dx) development inside of corridors
- Promote integrated decision-making between authorising authorities
- Gazette the corridors under the SIP programme (Infrastructure Development Act)
- Enable Eskom greater flexibility when negotiating servitudes
- Support upfront strategic investment
EGI SEA

- **Project Timeframe:** January 2014 – December 2015

- **Project Steering Committee (PSC)**
  - DAFF
  - DENC
  - GDARD
  - LEDET
  - SAAF
  - WC DEADP… etc.

- **Expert Reference Group (ERG)**
  - Birdlife South Africa
  - Cape Nature
  - EWT
  - SAHRA
  - SAWEA… etc.
The starting point

- **Eskom’s Strategic Grid Plan Study 2040**
- **Three Scenarios**
  - IRP 2010-2030
  - Increased renewables
  - Increased imports
- **5x 100km wide corridors**
Phase Ia: Negative Mapping

- Impact of EGI on Environment
- Impact of Environment on EGI
Phase Ia: Negative Mapping

- Steep Slope
- Dolomitic Area
- Mining Activity
- Dense Settlements
- Pivot Agriculture
- Thicket Vegetation
- IBA
- Protected Areas
- Battlefields
- SKA
Phase Ib: Positive Mapping

AIM:
Ensure the final corridors are positioned to support areas where future transmission infrastructure will be best utilised

- Review of
  - national economic policies & strategies
  - regional and local development plans
  - Consultation with provincial and local government
  - renewable energy EIA applications

- Input from private sector and state enterprise on development plans
Phase Ib: Positive Mapping
Phase II: Corridor Refinement

- Corridors refined based on outputs of Phase Ia & Ib
- Details of analysis to follow in presentation by Fahiema Daniels
Phase III: Environmental Assessment
Phase III: Environmental Assessment

- Terrestrial and Aquatic Biodiversity Assessment
- Agricultural Assessment
- Avifaunal Assessment
- Heritage Assessment
- Visual Impact Assessment
- Socio-Economic

Site Specific Development Protocol

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<td>Landscape Compliance Statement</td>
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Final Outputs:
Thank you

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