AMEU Strategic Adviser’s Presentation

AMEU Good Hope Branch Meeting

presented by

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AMEU (LEGAL AND STATUTORY)(1)

1. ELECTRICITY REGULATION ACT (“ERA”) 2006 - SCHEDULE 2, LICENCING EXEMPTION & REGISTRATION NOTICE was initially gazetted on Fri, 10 November 2017

2. In this regard NERSA issued set of rules for implementing these rules for public on 26 April 2018

3. However NERSA withdrew these rules after the DOE re-gazetted a revised SCHEDULE 2, LICENCING EXEMPTION & REGISTRATION NOTICE on 8 June 2018

4. NERSA will now issue a new set of rules following due process of DOE and NERSA

5. The issue of the areas of supply between Eskom and municipalities still remain a problem in spite of the previously involved process of settling such disputes which Eskom had outlined. This does not work.

6. SALGA reported that it is not making progress wrt negotiations with Eskom on Service Delivery Agreements (“SDA”) between Eskom and local government. The matter is now being addressed by the Inter ministerial Task Team (“IMTT”)
1. Although its been reported that the IRP2016 was approved yet still not released SALGA has still to be consulted on the IRP2016

2. NERSA will give favourable consideration to municipalities wanting to recover their costs for actioning a Cost of Supply study.

3. NERSA has just clarified that municipalities can recover these costs through the tariff recovery process only after the munic has incurred the costs for the said cost-of-supply study

4. The **overdue debt** owed to Eskom by the municipalities was reported at approximately R15,027 billion. Total debt inclusive of current account was R20,06 billion also end June 2018. Total interest was R1,67 billion
1. NERSA did a presentation on the status of the GIS AoS project and started with the TOR or project brief i.e.

2. Areas of Supply were never verified when licences were first issued (i.e. the licence might reflect areas that the licensee does not supply or area of supply name might be incorrect or not covering whole area where licensee supplies)

3. Challenge of overlapping areas of supply between municipalities and Eskom.

4. Some Distribution Licences reflects TLC or TRC which no longer exist.

5. Demarcation of the municipal boundaries by the Demarcation Board under the Demarcation Board Act adds areas of supply to municipalities and the licence is left un-updated.

6. Other areas were electrified using INEP funding but were never applied for and licence Schedule1 was never updated.

7. Disputes between Eskom and Municipalities over areas of supply cannot be resolved base on the above challenge.

8. NERSA want to visualize and position facilities it has licensed Dx RAB
Project name:
Review and update Schedule 1 (List of supply areas) of electricity distribution licenses (174 Licenced Munics and Eskom Dx) including confirming, by way of consensus, the supply area(s) with corresponding polygons.

Project Scope:
1. Pre-prepare GIS polygons for AoS where there is LV reticulations.
2. Consensus between Eskom and Municipalities on pre-prepare GIS polygons;
3. Compilation of submission to Energy Regulator with records i.e. minutes of consensus meeting;
4. Issuing of approved Schedule 1 of electricity distribution licences to all verified licensees; and
5. Uploading all approved Schedule 1’s with corresponding polygons and NERSA area identifier (i.e. NED number) for electricity distribution licensees on NERSA’s website and Geographic Information System (GIS).
Consensus meeting:

1. Purpose of meeting and project explanations

2. Presentation of pre-prepared polygons of areas (with existing network) for agreement between Eskom and Municipality

3. Compile minutes of the session and signed by Eskom and Municipality representative as record of consensus.

4. Noting of additional issues e.g. Disputes, Wheeling agreements, Reseller bulk supplies.

5. Issues of future discussion between Eskom and municipality.

6. Licence amendment application process for future electrification and area(s) not covered e.g. Green fields, Brown Fields etc. by the GIS process.
Consensus principles applicable:

1. This exercise is to map out current areas of supply (i.e. with existing network) excluding customers (i.e. farms, bulk customer etc.)

2. This meeting is not about Service Level Agreements and Bulk Account Payments

3. Both Eskom & Municipality are NERSA licensees with equal right to provide electricity within municipal boundaries

4. None (Eskom and Municipality) has universal right to supply (NERSA process apply)

5. It is NERSA’s preference that Municipality and Eskom agree on new areas before an application is send to NERSA.

6. Any other issues to be discussed at the session end.
Third party transportation (wheeling) of power across a utility’s grid

1. As a follow-up to an AMEU Executive Council meeting action item discussions were held with NERSA who are in the process of reviving the Advisory Committee that dealt with the Third Party Transportation (Wheeling).

2. This process is now at an advanced stage and the AMEU (together with other significant stakeholders) will also be represented on this Advisory Committee.
1. Further meeting was held very recently at SALGA head office in Pretoria between SALGA, AMEU and DoL to further progress the issuing of a Directive by the DoL relating to the inspection of infrastructure and the establishment of an associated inspection function at a munic

2. The DoL will produce a draft Directive very soon for the AMEU Exco to comment before the DoL will finalise same

3. The AMEU L &S committee cautioned that the said Directive must not make it too ONEROUS for a munic to undertake its inspection mandate in terms of OSHA
AMEU (Legal & Statutory) (7)
Proposed amendment of the designation of power Gx, Tx and Dx as an essential service

1. As reported previously and at the request of NUMSA the Essential Services Committee (“ESC”) is in the process of either amending or cancelling the said designation making power generation, transmission and distribution as an essential service.

2. The AMEU together with SALGA has objected in writing to the ESC in respect to the aforementioned proposal by NUMSA.

3. The AMEU is still awaiting for a date to be set by the ESC to present oral arguments.
1. Preparations for the 2018 Convention were progressing well with the deposit for the venues already paid as is proposed to be at CSIR.

2. Approx 68 paper abstracts were received – however only about 30% of these papers can be accommodated in the final AMEU Convention 2018 Programme

3. The final AMEU Convention 2018 programme has now been posted on the AMEU website

4. The AMEU is giving favourable consideration to making annual award(s) for various categories related to the performance of various munic utilities as part of the AMEU President’s Legacy Project
AMEU (PAPERS & PUBLICITY)(2)
AMEU President’s 2018 Legacy project

1. The AMEU Executive Council approved subject to certain conditions the launch and subsequent implementation of the AMEU President’s 2018 Legacy project. This project is planned to be launched at the AMEU Convention to be held in Pretoria in October 2018.

2. The proposed four (4) award categories are envisaged as follows:

   I. Top performing metropolitan municipality (Category A municipality)

   II. Top performing local municipality (Category B municipality)

   III. Top performing Woman in Electricity (in utility municipalities only)

   IV. Top supporting Affiliate (2 sub categories)(above and below R50 million)
AMEU (TARIFFS)(1)

1. NERSA

   a. Network or wheeling or use of systems charges discussions to be revived with NERSA

   b. Electricity resellers conditions included in the re-gazetted Sch 2 amended licencing condition from the DOE

   c. NMD rules.

      I. NERSA was still working on these rules.

      II. The development of these rules is also being addressed by the recently established Eskom-SALGA Task Team
1. **Eskom tariff issues – MYPD3**

I. NERSA made a decision to only allow R32.69 bn of the application of R67bn

II. NERSA have not yet published the Reasons for Decision - no indication when it will happen

III. Eskom will analyse the RfD once published and only then decide on their response

IV. The increase will definitely not be 1 increase, but will most probably phased in over 3-5 years with effect from 1 April 2019 - NERSA to determine the phasing by 30 September 2018

V. Year 5 RCA to be submitted within 1 month of the publication of the Eskom Annual Financial Statements (AFS), which will take place before the end July 18
1. Eskom tariff issues – MYPD4 (1)
   I. Eskom aims to submit to SALGA and NT as soon as possible and to NERSA by end August 2018 – Eskom Exco and Board to finalise the price path
   II. One year price application
      a. NERSA approved 5.23% implemented
      b. NERSA Reasons for Decision was analysed and court application was filed to take NERSA on review – NERSA has until end July 2018 to respond to the Eskom Heads of Argument
      c. MFMA submission tabled in Parliament on 15 May 2018
1. Eskom tariff issues – MYPD4 (2) (continued)

I. Short Term Incentive Pricing Framework

a. DOE Minister is has approved the framework on 22 June 2018 and sent a letter to this effect to NERSA

b. Eskom workgroup put together to develop the solutions and submit proposals once DOE has communicated the approval

c. Customers behind municipal boundaries do qualify, but Munics will be revenue neutral (rebated)

d. Have a number of previous applications – need to be reviewed to align with the new framework and resubmitted
1. An MOU/Cooperative Agreement is being considered to between Eskom and the AMEU to enable the municipalities to access the Eskom training programmes

2. A cable jointing qualification is in the process of being developed

3. The Dept of Higher Education has identified “open learning” as a means to upskill certain select trades. The electrical trade was identified as a start

4. Wrt artisans and technicians prior learning is about to be piloted

5. Wrt renewables NMBM has been accredited for photovoltaics

6. The working group is also investigating PV greencard training
7. Accreditation of the various training centres with OCTQ is ongoing and going well

8. The working group is also investigating how they could assist in respect of increasing GCC examinations preparedness

9. The various training centres has also embarked on introducing e-learning programmes

10. The CoCTN has implemented HV regulations programmes through e-learning i.e. the theoretical aspects

11. The working group is also on a drive to assist the smaller municipalities with training and development
1. It was agreed that the AMEU will also adopt the use of the Solar PV Green Card as part of its quality assurance and SHER standards for solar PV rooftop installations within its respective municipality boundaries subject to the Department of Labour (“DoL”) also recognising and accepting the use of solar PV Green Card

2. Subsequent meeting was held with DoL/SALGA – discussions still ongoing in respect of finalising the adoption of the Green Card
1. DOE Solar Water Heater Programme seem to be back on track
2. Twenty (20) municipalities were selected to participate in this programme
3. A DOE inception meeting took place on 31 May 2018 regarding the roll out of this programme in the 20 selected municipalities
4. Since 2015/2016 FY about 87000 SWH units were purchased for rollout amongst these 20 munics
The following is the latest status as received from the DOE in May 2018

1. Still work in progress

2. The following issues needs to be addressed or resolved before the joint paper can be finalised:
   a. The DoHS wants to include the INEP grant in the USDG. The DOE still has to approve this
   b. The new DoHS standard includes a SWH and would like the DOE to fund the SWH inclusion – the current DOE funding does not include the funding of a SWH. Hence this needs to be resolved
   c. The funding of mixed development also needs to be resolved between the DOE and DoHS before it can be included in the joint paper
**AMEU Technical (4)**

**Eskom new build programme**

1. **Medupi Power Station**
   a. 1st unit commissioned in Aug 2015
   b. Last unit expected to be commissioned in May 2020
   c. Costs to date +-R145 billion

2. **Kusile Power Station**
   a. 1st unit commissioned in Aug 2017
   b. Last unit expected to be commissioned in Sept 2022
   c. Costs to date +- R 161,4 billion

3. **Ingula Pump Storage Scheme**
   a. 1st unit commissioned in June 2016
   b. Last unit expected to be commissioned in Jan 2017
   c. Costs to date +- R 63 billion
AMEU Technical (5)
Grid Code Advisory Committee ("GCAC") feedback

1. The GCAC is concerned that the majority of municipalities are not undertaking grid code compliance self assessments.

2. These self assessments would reveal gaps (if any) in the compliance requirements.

3. If there are gaps then municipalities are required to apply to NERSA for exemption(s)

4. This far only eThekwini Metro and CoCTN had applied for such exemption

5. AMEU is also giving favourable to exploring ways as to how to assist municipalities to comply with the grid code

6. Eskom is also concerned because some of their infrastructure is installed in munic areas for which grid code compliance is required

7. A meeting is being arranged by the AMEU (includes Eskom) to take the above forward
1. Given the June 2018 planned load shedding that occurred initially due to a strike by organised labour the AMEU Exco requested that Eskom explain how inter alia municipalities are load shed.

2. Robert Koch from Eskom’s Corporate Risk Department did an excellent informative presentation in reasonable detail at the Technical Committee on the reasons for and the process that gets followed during planes load shedding.

3. There are two key reasons why we load shed (1):
   
   a. Inadequate capacity to meet the demand
      
      I. In winter this is normally only over the evening peaks
      II. In summer this can be for up to 16 hours per day
4. There are two key reasons why we load shed (2):

b. To enable the restoration of dam levels at Palmiet and Drakensberg (pumped storage) and recovery of OCGT levels at Ankerlig and Gourikwa

   I. The OCGTs are being run at extremely high load factors
   II. Commonly during the weekend

5. If Eskom does not load shed (planned basis) there could be as a worst case scenario a national blackout

6. The AMEU Technical Committee was happy with Eskom’s presentation and reasons for load shedding

7. Now Eskom may have to load shed again due to action by organised labour
AMEU Technical (8)
Critical notice affecting all STS meters
Token ID rollover event in 2024 (1)

1. Don Taylor, Chairman of the STS Association did a presentation on the “Token ID rollover event in 2024”

2. What is the TID?
   a. A unique token identifier (TID) is calculated and coded into the token every time a token is created at the Point of Sale (“POS”)
   b. The TID is calculated as the number of minutes that have elapsed since a base date of 1993
   c. The meter records the TID when it is entered into the meter to prevent token replay

3. Limitations of the TID
   a. The TID is encoded into the token as a 24-bit binary number
   b. It has a limited range of 31.9 years
   c. In November 2024 the TID will reset (roll over) to zero
   d. Any new tokens after this date will not be accepted by the meter as the meter will consider these as being “OLD”
The remedy:

The remedy is to clear the meter’s memory of previously accepted TIDs and to change the meter’s cryptographic key at the same time in order to prevent token replay.
AMEU Technical (10)
Token ID rollover event in 2024 (2)
-the enforced PRISM licensing fee issue

1. This matter or issue was extensively discussed at the AMEU Hogsback committee meeting and the AMEU KZN branch meeting in the last few weeks.

2. The AMEU members present were very unhappy that they would have to incur the costs of this enforced licensing fee reportedly at R100 000-00 per contract.

3. It’s also reported that this fee will be passed onto the end use customer eg a munic even in the middle of the contract.

4. This fee maybe legally and commercially correct but it does not make it right.

5. The AMEU members present have indicated that both the STS Association and the respective prepayment supplier must address this matter or issue directly with PRISM noting that PRISM would be a sub-
1. **MISA Framework contracts for electrical distribution equipment and Capacity Building within the municipal environment.**
   - This Project was initiated by the PICC in September 2012
   - MISA mandated to coordinate the Project under regulation 32 of the MSCMR (GG 27636 of 30 May 2005)
   - The challenges faced:
     - Perception that prevailing legislation would prevent this from being viable
     - Potential resistance by municipalities relating to issues of their Supply Chain process
     - The question of **compulsory** vs. **optional** participation by municipalities
     - Identification of a particular “Organ Of State” that can participate positively in the process of Framework Contracts

2. **Status update:**
   - Letters of appointment issued for pole mounted transformers and mini subs
   - NT to allocate space on website for managing the FC
   - MISA to monitor placement of orders and supply and delivery of goods
   - MISA to assist with price adjustments
1. **MISA will do Framework Contracts for:**
   
   I. Electricity Distribution Equipment
   
   II. Water and Sanitation
   
   III. Roads and Storm Water
   
   IV. Solid Waste
   
   V. Professional services

2. **Electricity Distribution Equipment**
   
   I. Pole and Ground Mounted Transformers
   
   II. MV and LT Cables
   
   III. Mini-substations
   
   IV. MV switches
   
   V. Metering
   
   VI. ± 35 other components
1. As part of its Declaration at the conclusion of its ENERGY SUMMIT SALGA RESOLVED as follows (1):

a. The SALGA National Leadership seek an audience with the President of the Republic of South Africa to sensitise him about the imperative of urgently assisting in resolution of the Energy Policy complex;

b. the President of South Africa appoints an Energy Reform Commission to review the current structure, evaluate the reform work done to date, define a more sustainable structure and implement the structural changes required;

c. that in conjunction with CoGTA & SALGA, a team of experts be appointed to provide the required strategic direction and support to municipalities;

d. to ensure that the electricity supply industry reform becomes a reality, municipal service delivery improves as well as becomes financially sustainable, the outcomes of this Energy Summit be captured in a detailed action plan;
1. As part of its Declaration at the conclusion of its ENERGY SUMMIT SALGA RESOLVED as follows (2):

e. SALGA ensures that such an action plan is developed, implemented;

f. To establish a multi-sector and multi-stakeholder Energy Transition Leadership structure, led by SALGA President, the Minister of CoGTA, the Minister of Energy, the Minister of Finance and the Minister of Public Enterprises, to lead the implementation and monitoring of the action plan.
Summit outcomes - summary

**Enabling environment**
- Constitutional and legislative clarity
- Industry structure and market review/unbundling
- Redesigned Policy framework
- Funding
- Tariff determination

**Customer centricity**
- Cost reflective service
- Social compact
- Municipal decision authority
- Services for the poor
- Small scale embedded generation

**Operational resilience**
- Benchmarking and reliable data
- Changing business model
- Revenue realization
- Asset management
- Cost containment

**New Opportunities deployment**
- Renewable energy services
- Power trading
- Surcharge energy
- Mini-grids Charging stations for EV
- Smart and Prepaid meters (SSEG)
- Etc.

**Collaborative Leadership**
- COGTA, DoE, DPE and Finance/NT
- Eskom and Municipalities
- SMME
- Municipalities / Eskom /decision makers/ NERSA
- Black industrialists, entrepreneurs and small businesses
New opportunity deployment

1. Renewable energy services
2. Power trading
3. Surcharge energy related activities in municipal area of jurisdiction
4. Mini-grids – Solar PV/Wind
5. Charging stations for electric vehicles (EV)
6. Smart and Prepaid meters for all customers – selection of meter type to best address specific requirement
7. Small scale embedded generation (SSEG)
8. Waste to Energy (WtE)
9. Using infrastructure (such as street lights) to pursue other revenue opportunities e.g. data and telecommunication
10. Servitudes and wayleaves (payment to municipalities)
General

1. For obvious reasons the level of awareness is being significantly increased wrt mitigating cyber attacks on especially smart grid infrastructure.

2. Together with SALGA and other key stakeholders the AMEU is also investigating and addressing challenges and difficulties being experienced by metros/munics to improve service delivery mitigate revenue erosion, revenue protection, etc. The mitigation may include a change in the business models.
Thank you