

**THE ASSOCIATION OF MUNICIPAL ELECTRICITY UTILITIES
(SOUTHERN AFRICA)**

GOOD HOPE BRANCH / GOEIE HOOP TAK

MINUTES OF THE 194th GENERAL MEETING OF THE AMEU AFFILIATES/GOOD HOPE BRANCH OF THE ASSOCIATION OF MUNICIPAL ELECTRICITY UTILITIES (SOUTHERN AFRICA) HELD AT THE RIVER BREEZE RESTAURANT AND CONVENTION CENTRE, WITSAND ON FRIDAY, 19 FEBRUARY 2016 AT 08:30.

NOTULE VAN DIE 194^{ste} ALGEMENE VERGADERING VAN DIE VMEU-GEAFFILLIEERDES/GOEIE HOOP-TAK VAN DIE VERENIGING VAN MUNISIPALE ELEKTRISITEITSONDERNEMINGS (SUIDELIKE AFRIKA) WAT OP VRYDAG, 19 FEBRUARIE 2016 OM 08:30 BY DIE RIVER BREEZE RESTAURANT AND CONVENTION CENTRE, WITSAND GEHOU IS.

ATTENDANCE / BYWONING

MEMBERS / LEDE

R van Staden (Roelof)	- Beaufort West (roelof@beaufortwestmun.co.za)
N Rossouw (Neels)	- Bergrivier (rossouwn@bergmun.org.za)
HJ Benecke (Henk)	- Breede Valley (hbenecke@bvm.gov.za)
SA Cooper	- Cape Agulhas
GS Stopford (Greg)	- Cape Town (greg.stopford@capetown.gov.za)
K Stober (Keith)	- Cape Town (keith.stober@capetown.gov.za)
S Gqwede (Siyabulela)	- Cape Town (siyabulela.gqwede@capetown.gov.za)
JJ van Zyl (Jac)	- Cederberg (vanzylj@cederbergraad.co.za)
M Fredericks (Marahwaan)	- Drakenstein (marahwaan@drakenstein.gov.za)
M Verhoeven (Martin)	- Drakenstein (martinv@drakenstein.gov.za)
PG de Vries (Paul) Chairman	- Drakenstein (paul@drakenstein.gov.za)
W Albertyn (Willem)	- Drakenstein (willie.albertyn@drakenstein.gov.za)
M McDonald (Manon)	- George
WT Harris (Wilbert)	- George (gmharrisw@gmail.com)
J Sinden (John)	- George (johns@george.org.za)
KD Grunewald (Kevin)	- George (kevin@george.org.za)
K Wilken	- George (kobusw@george.org.za)
P van Niekerk (Paul)	- George (Retired Member - ex Johannesburg)
H Thesner (Heinrich)	- Hessequa (heinrich@hessequa.gov.za)
M Botha (Michael)	- Institute of Municipal Engineers of Southern Africa (S Cape Branch) (mabotha@lantic.net)
D Engelbrecht (Deon)	- Matzikama (Vredendal) (engelbrechtd@matzikamamun.co.za)
D Maree (Danie)	- Overstrand (dmaree@overstrand.gov.za)
JH du Plessis (Kobus)	- Overstrand (kduplessis@overstrand.gov.za)
N Dube (Njabulo)	- PGWC/LG (njabulo.dube@westerncape.gov.za)
C du Preez (Cassie)	- Saldanha Bay (Cassie.Dupreez@sbm.gov.za)
J du Plessis (Johan) Chairman	- Saldanha Bay (johan.duplessis@sbm.gov.za)
R Bindeman (Rens)	- SARPA (rens@mweb.co.za)
FJC Koegelenberg (Floris)	- Stellenbosch (floris.koegelenberg@stellenbosch.gov.za)
T F Rossouw (Tom)	- Swartland (rossouwt@swartland.org.za)
S Herbst (Salman)	- Swellendam (sherbst@swellenmun.co.za)
R Haywood (Raymond)	- Witzenberg (rhaywood@witzenberg.gov.za)

AFFILIATES / AFFILIATE

L Barry Martin (Lorraine)	- Barry's Holiday Accommodation - Witsand
A de Jager (André)	- Aggreko (andre.dejager@aggreko.co.za)
G Julius (Gavin)	- Aggreko (gavin.julius@aggreko.co.za)
DB Greeff (Danie)	- BDE Consult (dgreeff@bdeconsult.co.za)
MJ Benson (Mark)	- Bigen Africa (mark.benson@bigenafrica.com)
S Wilson (Stewart)	- CBI Electric (stewart.wilson@cbi-electric.com)
J de Villiers (Johan)	- Clinkscales Mayham-Brown
JP Lourens	- CVW Consulting Engineers
D Turton (Dave)	- Edgeline Engineering (dave@edgeline.co.za)
I Nongogo (Innocent)	- Electro Inductive Industries
P van der Hoek	- Element Consulting Engineers
D Cackett	- Emerald Infrastructure Solutions
CG Hampshire	- Emerald Infrastructure Solutions
H Piek (Herman)	- Eya Bantu Professional Services (herman@eya-bantu.co.za)
N Randall (Neville)	- Eya Bantu Professional Services (neville@eya-bantu.co.za)
JH Carne (Jack)	- Genlux Lighting (jack.carne@actom.co.za)
A Gabier (Ayesha)	- Gibb (agabier@gibb.co.za)
T Phillips (Tom)	- Inspred Interfaces (tom@interfaces.co.za)
I Kilian (Ivar)	- Itron (ivar.kilian@itron.com)
H Erwin (Hein)	- Kocos Measurement & Control Pty Ltd (herwin@kocos.co.za)
C van der Westhuizen (Colin)	- LH Marthinusen (colinv@lhmct.co.za)
D Sullivan (David)	- LH Marthinusen (davids@lhm.co.za)
L Lerm (Leon)	- LL Energy (leon@llenergy.co.za)
B Bosch (Benjamin)	- Lucy Electric (benjamin.bosch@lucyswitchgear.com)
A Bedeker (Attie)	- Lyners (attie@lyners.co.za)
OCT Potgieter (Theo)	- Lyners (theo@lyners.co.za)
G Lotter (George)	- Motla (georgel@motla.co.za)
J Mtimkulu (Joyce)	- Motla (joycem@motla.co.za)
M Tyszowiecki (Mike)	- Patch Industrial Supplies - Masterlock (patch@worldonline.co.za)
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P Harries (Peter)	- PM&D (peterh@powermeasurement.co.za)
P Willers (Peter)	- Poly Box (peter@polybox.co.za)
P Brink (Pierre)	- Poly Box (pierre@polybox.co.za)
G Scriven (Grant)	- Power Process Systems (grant@ppspower.co.za)
G Ferguson (Greg)	- Power Process Systems (greg@ppspower.co.za)
M Jason (Michael)	- Powertec Transformers
L Schultz (Leon)	- Powertech T4 (leon.schultz@pttransformers.co.za)
C van der Toorn (Billy)	- Schneider Electric (billy.van-der-toorn@schneider-electric.com)
CG Scheepers (Carel)	- Schneider Electric (carel.scheepers@schneider-electric.com)
JS Visser (Jacques)	- Schneider Electric (jacques.visser@schneider-electric.com)
D Pieters (Dürr)	- WorleyParsons (durr.pieters@worleyparsons.com)
G Smit (Gareth)	- Zest (Gareth.Smit@zest.co.za)

RETIRED MEMBERS

P van Niekerk (Paul)	- Honorary member
J Renney (Joe)	- Honorary member (joerenney151@gmail.com)
J Pereira (Jorge)	- Honorary member (jorgepereira43@yahoo.co.za)
N Ballantyne (Neil) Secretary	- Honorary member (nballantyne@cybersmart.co.za)

- | | |
|---------------------|---|
| JJG Nel (Johan) | - Honorary member (neljig@gmail.com) |
| LR Richardson (Len) | - Honorary member (richardsonlr@telkomsa.net) |

1. OPENING AND WELCOME / OPENING EN VERWELKOMING

The Chairman welcomed all to the meeting and introduced the Deputy Mayor of Hessequa Municipality, Councillor Julian Merkeur, who apologised for the absence of Mayor Nel who had another engagement. Councillor Merkeur then addressed the meeting, after which he opened the meeting with a prayer.

1.2 Arrangements/Reëlings

Gareth Smit gave details of the arrangements for the tea break at 10:15 and a lunch which will be held at 13:00.

1.3 Acknowledgments/Bedankings

The Chairman welcomed all Councillors present and thanked the Hessequa Municipality for their support for the meeting and the River Breeze Restaurant and Conference Centre for the use of their facilities, Gareth Smit and the Municipality's staff for the arrangements, and the Affiliates for their sponsorship.

1.4 Announcements/Aankondigings

None

2. APOLOGIES / VERSKONINGS

- | | |
|---------------------------|---|
| HM Hendriks (Hilton) | - Breede Valley (hhendriks@bvm.gov.za) |
| L Muller (Louise) | - Cape Town (louise.muller@capetown.gov.za) |
| E M Mzalisi (Mhlangabezi) | - Dept of Energy (mhlangabezi.mzalisi@energy.gov.za) |
| D Louw (Deon) | - Drakenstein (deon.louw@drakenstein.gov.za) |
| A Makan (Athena) | - Eskom (MakanA@eskom.co.za) |
| CJ Greeff (Corrie) | - Oudsthoorn (corrie@oudtmun.co.za) |
| J Coetzee (Jan) | - Stellenbosch (Johannes.Coetzee@stellenbosch.gov.za) |
| L de Lange (Lourens) | - Stellenbosch (Lourens.DeLange@stellenbosch.gov.za) |
| B Marais (Belinda) | - Swartland (maraisb@swartland.org.za) |
| R du Toit (Roelof) | - Swartland (roelof@swartland.org.za) |
| FH du Toit (Francois) | - Theewaterskloof (francoisdu@twk.org.za) |
| S Sabatti | - Actom (tory.Sabatti@actom.co.za) |
| M van Staden (Martin) | - AECOM (Martin.VanStaden@aecom.com) |
| AJ de Swardt (Braam) | - Itron (braam.deswardt@itron.com) |
| C Kühn (Curren-David) | - Motla (currenk@motla.co.za) |
| JH Götze (Hugo) | - Motla (hugog@motla.co.za) |
| W Snyman (Wietsché) | - WorleyParsons (wietsche.snyman@WorleyParsons.com) |

3. CHANGE OF ADDRESS / ADRESVERANDERING

None

4. CONFIRMATION OF THE MINUTES OF THE AMEU AFFILIATES / GOOD HOPE BRANCH'S 193RD GENERAL MEETING HELD AT THE WESKUS SCHOOL, SALDANHA BAY ON THURSDAY 12 NOVEMBER AT 14:00 AND FRIDAY 13 NOVEMBER 2015 AT 08:30.

**BEKRAGTIGING VAN DIE NOTULE VAN DIE VMEO-GEAFFILLIEERDES / GOEIE HOOP-TAK,
193^{STE} ALGEMENE VERGADERING GEHOU OP DONDERDAG, 12 NOVEMBER OM 14:00 EN
VRYDAG 13 NOVEMBER 2015 OM 08:30 BY DIE WESKUS SKOOL, SALDANHABAAI.**

4.1 Copies of the minutes of meeting had been circulated to all members.

4.2 The adoption of the minutes was accepted by the meeting.

**5. MATTERS ARISING FROM THE MINUTES AND NOT ON THE AGENDA
SAKE VOORTSPRUITEND UIT DIE NOTULE EN NIE OP DIE AGENDA NIE**

None

**6. ADDITIONAL ITEMS TO BE DISCUSSED UNDER ITEM 17
BYKOMENDE ITEMS VIR BESPREKING UNDER ITEM 17**

None

7. CORRESPONDENCE / KORRESPONDENSIE

None

8. PRESENTATIONS BY AFFILIATES / AANBIEDINGS DEUR GEAFFILIEERDES

1. “Transformer Maintenance Capabilities” - David Sullivan- LH Marthinusen

(See presentation 8-1)

- Life of a transformer – a discussion of what determines its lifespan
 - Oil tests and its measure of water in the insulation – which causes ageing
 - Corrosive acids – sulphur – and its effects mentioned. Deterioration works from the inner paper layers to the outside layers
 - Photos of the effect of this shown
- LHM Transformer Division facilities and services explained
- Fluidex oil filtration plant mentioned and photos shown
- Transformer field services are available throughout the country.
- Logistics explained and capabilities mentioned
- LHM have a niche market for supplying power transformers with a very short delivery time
- Corrosive sulphur comes from the crude oil from which the transformer oil is manufactured. It is also created by overheating of the transformer oil.
- Web based site for data results is being developed for history of transformer condition.
- A generic set of specifications for transformers are available and can be made available for information and use. Contact David Sullivan for this – email address: davids@lhm.co.za

2. “Power Process Systems” – Greg Ferguson – Power Process Systems (PPS)

(See presentations 8-2)

- Company overview, nature of business and capacities of plant at different locations was explained
- Accreditations mentioned
- History of PPS covered
- Scope of work and countries covered was mentioned
- Photos of facilities was shown
- Powder coating done in-house
- Chemical process applied to metals in preparation for powder coating explained
- Electrical assembly discussed – challenges regarding this was mentioned
- Examples of product range shown
- Technical overview – “iControl” of locking system explained (a web based system)
- Programmed key system explained

- Fault finding support is available if required
- Closing remarks and summary given
- A video of the company profile was shown

Discussion:

Johan du Plessis asked if the specification of the powder coating on kiosks is available.

Greg advised that he will enquire and get back on this matter.

Dave Turton stated that the Eskom specification can be used for this.

9. REPORTS / VERSLAE

9.1 **Feedback from Local Area Working Groups** **Vordering van Plaaslike Gebied Werkgroepe**

- **Overberg** - Nothing to report
- **Wynland** - No matters to report
- **Eden** - A meeting was held in November. Training is being looked into.
- **West Coast** – No matters to report
- **Central Karoo** – No matters to report

The need for this item on the agenda was discussed and it was decided to take this off future agendas. Any issue that needs to be discussed or reported on can be done under the “General” item.

9.2 **Report from the Representatives on the Executive Council** **Verslag van Verteenwoordigers op die Uitvoerende Raad**

Johan du Plessis reported on the meeting held in Port Elizabeth on 10 – 11 February 2016.

(See presentation 9-2)

Highlights:

- Electrical Inspectors – Municipalities should not take this on again due to the current legal framework.
- Department of Labour is still to convene a workshop for discussing the registration of electrical contractors.
- Tariff Committee looks at a peak day tariff proposal from Eskom – this will be revenue neutral
 - o Might try pilot site with large customers
- Streamlining of NERSA non-financial information manual discussed
- SSEG – no response on regulatory framework from NERSA
 - o Can use GreenCape guideline in the meantime, or
 - o City of Cape Town guideline which are available at <https://www.capetown.gov.za/en/electricity/Pages/ServiceApplicationForms.aspx>

Application form and supplemental contract for installation of Small Scale Embedded Generation (SSEG)

[Application for connection of embedded generation \(5 June 2015\)](#)

- [SSEG Supplemental Contract \(3 March 2016\)](#)
 - o [Safe and Legal PV Installation Requirements](#)
- Waiting for tariff increase decision from NERSA – should be by 25 February.
- Eskom virtual wheeling explained
 - o Customer will pay generator directly at tariff agreed upon. Metering at generator and at municipality intake point
- Training and education – concentrate on artisan training. More artisans need to be trained. System needs to be rationalised – back to the old trade test system.
- Women in Electricity – Yolanda Ngalwana (Eskom) to represent Good Hope Branch. (Needs to be clarified)
- Athena Makan to take over the role played by Joe Coelho as the representative for Eskom at the Good Hope Branch
- Max Clarke asked for information from the municipalities for inclusion into the AMEU News
- No load shedding is expected this summer. It may be necessary in April and May.
- Electrification 5% levy – DoE still needs to clarify this.
- Peter Fowles’ vacancy still needs to be filled.

Comment on presentation:

- Siya Gwede mentioned that we are the most active branch in the country. We need to keep this up.
- Paul van Niekerk advised about the mentoring of new engineers. Funds are available from the Integrated Skills Grant from government. SAIEE are compiling a list of retired engineers who can assist with the mentoring.
- Johan du Plessis quote from his analysis of attendees at Good Hope Branch meetings. There are more affiliate members attending than Engineer members, but attendance at the Good Hope Branch is still very good.
- Johan Nel proposed that a communication be sent to Peter Fowles to express the Good Hope Branch's sincere thanks for Peter's services to the Branch over many years and wish him and his wife well for their future in the USA.

**9.3 Sub-Committee: Wiring Code Revisions and Standard Electricity Supply By-Law
Subkomitee: Bedradingskodehersienings en standaardelektrisiteitsvoorsieningsverordening**

Apologies were received from Deon Louw so there was no report.

10. FEEDBACK FROM SARPA / TERUGVOERING VAN SARPA

Rens Bindeman reported on:

- Rens welcomed all to his home town of Witsand
- Reported on the promulgation of the new Infrastructure Amendment Act, which will deal with infrastructure theft.
- Theft of cable in the Southern Cape is a problem – be on the lookout for this in your areas and report incidents as soon as possible.
- SARPA is being integrated into Africa. New branches are being set up in Zambia, Namibia and Lesotho.
- The Good Hope Branch is the best in South Africa!

11. REPORTS FROM GOVERNMENT DEPARTMENTS / TERUGVOERING VAN STAATS DEPARTEMENTE

**11.1 Department of Local Government / Departement van Plaaslike Owerhede
(Leon Eksteen / Njabulo Dube)**

Njabulo Dube expressed Leon Eksteen's apologies and advised that the courses for the PV installer training that is to be rolled out has been fully booked out.

**11.2 Department of Energy / Departement van Energie
(Mhlangebesi Mzalisi)**

Mhlangebesi Mzalisi sent apologies and therefore there is no report.

12 COMPLIANCE / LEGISLATION

12.1 Presentation by Jorge Pereira - (AMEU) Honorary Member: The Government Certificate of Competency

(See presentation 12.1)

- As an introduction, Jorge sketched his background and experience.
- Jorge still gives GCC classes to those registered to write the exams
- Who is a Certificated Engineer? Definition given and explained
- Where are certificated engineers found? Mines and factories where more than 3000 kW of power is used. The General Machinery Regulations of the Occupational Health and Safety Act set out this requirement. This requirement started in law from 1911.
- What the certificate is and how it is obtained was explained. There are three routes to obtain the qualification. A person needs to be accepted as a candidate by the Department of Labour's Chief Inspector. This requirement is unique to South Africa.

- The subjects that need to be passed are Plant and Law. Both have to be passed within a period of three years.
- The Department of Labour has issued an informative booklet
- The Certificated Engineer is a registered category by the Engineering Council of South Africa (ECSA). This registration is now called "Professional Certificated Engineer"
- Means to gain this professional status from a trade qualification is possible. Jorge gives part-time classes to achieve this
- Exams are held in June and November each year.
- Jorge has prepared an extensive series of questions and answers for previous exam papers.
- The Plant syllabus cover a huge span of electrical and mechanical aspects to be found in industry. This is therefore a difficult exam to pass.
- Jorge's classes run twice a week, Mondays and Wednesdays, from 17:00 to 20:00 for 8 weeks.
- Past exam papers from the Law exam are given to candidates to assist them to learn the Act and Regulations.
- It is recommended that the Plant exam is done first and then the Law exam.
- The cost of the course is R8000.
- A person with a B.Sc degree qualification and the Law exam can qualify as a competent person in terms of the Act.
- Jorge cautioned that one must be careful to take the correct subjects when studying in order to be accepted as a candidate to write the Plant and Law exams.

12.2 Presentation by Joe Renney - (AMEU) Honorary Member:

- **NRS098 : 2008 GUIDELINES FOR THE SAFE USE OF STANDBY/PORTABLE GENERATORS ON UTILITIES' NETWORKS**
- **Comment on booklet issued by AMEU**

(See presentation 12.2)

- Opinions expressed are those of Joe Renney!
- The purpose is to clear up confusion between the two standards – SANS 10142-1 and NRS098
- Ideally there should only be one standard
- Joe uses SANS 10142-1
- One needs to understand the definitions
- There is confusion regarding the understanding of requirements for the installation of generators
- Portable versus fixed standby generators was mentioned
- Any more standby generators are now being used
- How should these be managed?
- AMEU's standby/portable generator booklet needs to be analysed
 - o Revision 10 – May 2015 has been published in Energise magazine
- Many regulations need to be compiled with when installing a fixed generator. This is fully covered in SANS 10142-1 clause 7.12 and Annexure 5
- The big problem is portable generators!
 - o How are these connected?
 - This can be very dangerous
 - They are designed to be used stand-alone with portable appliances and power tools
 - Actually needs to be set up by a qualified electrical contractor
 - V-0-V generators should not be connected to a fixed installation
- Why is the AMEU specification written for non-qualified persons?
 - o Scope of booklet was listed
 - o Shortcomings of NRS098 listed and connection diagram was discussed
- Proposal given:
 - o AMEU needs to withdraw or amend their booklet.
 - o Rather use SANS 10142-1 clause 7.12.2.5
 - o Application needs to be made to local municipality for permission to install portable generators
- A solution was presented. A request was made for the Branch Chairman to take this to the AMEU Executive Council.
- Conclusion given – It is dangerous to have a technical specification for non-technical people.

13. INCIDENTS / ACCIDENTS

No incident to report.

14. PRESENTATIONS BY AFFILIATES / AANBIEDINGS DEUR GEAFFILIEERDES

3. "IEC61850 GOOSE" - Andrej Sepcic - H.V. Test (Pty) Ltd

(See presentation 14-3)

- Communication specification standards protocol
- Covers communication between relays from different manufacturers
- Can be used in distribution or transmission networks
- Using 61850 is much faster than using copper connections
- Protocol is very flexible and super fast
- GOOSE = Generic Object Oriented Substation Event
- Concept of structure was explained
 - o Use of analog to digital converters to transfer signals
- Different relay presented
- Hierarchical data model explained
- Logical node example given
- Explanation given of how this is used to test relays
- Software of test set shown
- Functionality of test procedure explained.

4. "Metering Training" - Hein Erwin - KoCoS Measurement & Control (Pty) Ltd

(See presentation 14-4)

- Metering school exists in Eskom Brackenfell
- This needs to carry on. Contractors are also trained at this course
- Cost of energy is escalating – needs to be measured accurately
- Standards are important – SANS 474-2009
- What is covered in the specification was presented
- Typical metering installation was shown
- Every meter and instrument transformer standard listed
- It is important to manage volt drops in cables
- Meter reading intervals given
- Intervals for billing explained
- Training of staff:
 - o Meter worker levels set out
- Meter course content presented and explained
- 3 Day course – 10 students each, held in Eskom's Brackenfell offices
- Cost of course is R8 000
- CPD credits will be applied for.

**15. ITEMS HELD OVER FOR DISCUSSION FROM 191st GENERAL MEETING
ITEMS WAT OORSTAAN VIR BESPREKING VAN 191^{ste} ALGEMENE VERGADERING**

None

16. ADDITIONAL ITEMS FOR DISCUSSION / BESPREKING VAN BYKOMENDE ITEMS

None

17. MATTERS FROM OTHER BRANCHES / AANGELEENTHEDE VAN ANDER TAK

None

18. GENERAL / ALGEMEEN

The start time of future meetings was discussed and it was agreed that in future meetings would start at 09:00.

19. SPONSORSHIP

Gareth Smit thanked all the firms who had provided generous sponsorship for the meetings and evening function, and also thanked the Hessequa Municipality and their Witsand staff for all the support for the meeting, and the River Breeze Conference Centre for the use of their facilities and catering.

**20. DATES AND PLACES OF AMEU MEETINGS
DATUMS EN PLEKKE VAN VMEO VERGADERINGS**

- 20.1 13 May 2016 - Bellville, Cape Town
- 20.2 12 August 2016 - Lamberts Bay
- 20.3 10/11 November 2016 - George

**21. CLOSING OF MEETING BY THE CHAIRMAN
SLUITING VAN VERGADERING DEUR DIE VOORSITTER**

The Chairman thanked all for attending and gave a special word of thanks to Rens Bindeman for sponsoring the ladies boat trip. The meeting was closed at 12:40.

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