



# AMEU NEWS

THE ASSOCIATION OF MUNICIPAL  
ELECTRICITY UTILITIES OF SOUTHERN AFRICA



## A MESSAGE FROM OUR AMEU PRESIDENT...

With three-quarters of my term of office now behind me I write this message with a great awareness of the privilege it has been for me to lead this important association. It has been a hectic period for our industry..... and for our Association, and I am glad that through it I have been able to contribute to the efforts to solve some of the problems.

My personal efforts have been directed at trying to assist our members to keep abreast of the many challenges that have been - and still are being - experienced, in the interests of our huge customer base and our municipalities. With the many issues affecting our daily operations ranging from load shedding to price increases and much more, it has not always been easy.

Our Executive and its various sub-committees have met regularly to assess the various challenges, and have had regular contact and discussions with the relevant Government Departments to try to find solutions to the matters brought to our attention.

I hope that the members of our Association have been helped directly and indirectly in some way by the activities that we have carried out in both our local Branches and at a National level.

With our 2020 Convention due in a

few short months we will again create a platform for our members and colleagues to take yet another look at the issues facing us. There will be opportunities for debating them and seeking solutions that will best serve our constituents.

It is no secret that the on-going load-shedding program and the general lack of energy security, coupled with the spiralling costs of energy, is placing a huge burden on our customers and on the nation as a whole. The trend of more and more companies looking for redress in the courts - and even Organs of State facing off because of non-payment and related matters - do not bode well for our industry. Or for that matter, our nation as a whole.

But there are always rays of hope to be found in the most difficult circumstances and I urge you all to seek these out, spread whatever good news you can find as widely as you can, and encourage your colleagues to strive even harder to provide a service of which your communities can be proud.

Perhaps it is a good omen to read that the new CEO of Eskom has said "Eskom can be fixed...." and that he has plans in hand to do just so, including implementing effective procedures for the maintenance of plant and equipment and the procurement of fuel.



Our Executive team of the AMEU will certainly pursue every avenue and opportunity that can be found to solve the many problems that confront us, and will do everything in our power to assist members at local and national level.

As this issue of AMEU News is the 100<sup>th</sup> since its inception in 1987, I would like to record my appreciation of the efforts of all the people who have been involved over these past 33 years in keeping the AMEU flag flying through the newsletter, and helping to make our industry and our organisation something of which we can all be proud.

Thank you for your ongoing support,  
Sincere greetings,

*Refilwe Mokogosi*

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## GOOD HOPE

The 210<sup>th</sup> meeting of the Branch took place on 14<sup>th</sup> February, 2020, and was held in the Arniston Hotel, Arniston, Western Cape. A total of 11 municipal utilities and 33 affiliate companies were represented. There were over 70 attendees including the retired members and delegates from Government and sisters organisations.

They were welcomed to Arniston by Abdul Aziz Jacobs, Director: Infrastructure Services, Cape Agulhas Municipality, and the Deputy Mayor Clr. Zukiswi Tonisi.

After completion of formalities the first presentation was by Leon Reynders of Optron. He spoke on new technologies and software that is now available for use with GIS. He explained what “smart mapping” is in relation to the capture of data on infrastructure components, and the advantages and uses of this for future planning and development of the environment. Details of new equipment and the software used to process the data was presented.

GLS Consulting’s Hilton Baartman then discussed the replacement prioritisation of electrical assets and gave an overview of asset management and how asset data is used for the management of replacement, renewal or refurbishment of assets to ensure reliable infrastructure operations.

The AMEU Strategic Adviser, Vally Padayachee, gave an overview of recent committee meetings and other developments including those on the impact of NERSA’s proposals for licensing distribution areas of supply. In this regard he reported that NERSA will be holding public hearings in Pretoria on 5<sup>th</sup> March 2020.

A discussion on solar PV and the retention/loss of customers as a result of these installations in municipal areas was also held.

SARPA’s Rens Bindeman reported that the organisation has been focussing on helping smaller municipalities implement revenue prevention initiatives. Also, Buffalo City has highlighted the problem being encountered with meter tampering by criminal syndicates and the installation of rogue meters associated with these activities.

The SARPA Annual Convention will be held on the 20-21



August 2020 at the Swartland Municipality.

Abdul Aziz Jacobs of Agulhas Municipality reported on a recent 2-day audit of their electricity operations by a NERSA inspection team. He outlined the sequence of events leading up to the inspection and reminded the utility representatives of the importance of good documentation, amongst other things, being available during these inspections. The need to ensure that substations and networks were well maintained, and the ability to prove compliance with the various license requirements was essential. **(NERSA carried out inspections in 15 local authorities during 2019).**

The South Cape Karoo Electricity Forum have engaged Joe Renney of CVW Consulting Engineers to assist with their proposed presentation to NERSA at the Public Hearing on “Draft NERSA Rules for Licensable Distribution Areas of Supply”. He gave an overview of the formation of the South Cape Karoo Electricity Forum and did a presentation on various aspects of problems associated with the draft rules and their likely adverse effects on municipalities.

The final technical presentation for the day was by Anthony Hamlyn of the company Dromex. The company manufactures protective clothing and in particular, that required for arc flash protection. This is an ever present potential hazard faced by operators of distribution network switchgear and the importance of having risk analysis of situations done and suits rating checked was explained.

Dates and places of the next meetings are;	
15 May 2020	Bellville (City of Cape Town)
14 August 2020	Robertson (Langeberg)
5/6 November 2020	Stellenbosch (Stellenbosch Municipality)





# HIGHVELD

The 292<sup>nd</sup> meeting of the branch took place on 20<sup>th</sup> February 2020, and was held at the CPI offices in Midrand.

This was the first joint AMEU/SARPA meeting and was attended by over 84 delegates. After the opening formalities the program was launched with a report by Rens Bindeman, SARPA's Technical Adviser.

He updated delegates on the progress of work being undertaken on revenue protection projects which includes special training being given in smaller municipalities. Also, positive interaction is taking place with the Municipal Law Enforcement Association.

Various standards directly applicable to revenue protection projects (NRS-055; Code of Practice for Revenue Protection, NRS-101; Guideline for the Reduction of Theft, and SANS 1741; Conductor Marking Systems) which all have a direct bearing on revenue protection activities have now been finalised. He reminded delegates that NERSA has approved a 2% component in electricity tariffs and that this must be used to fund revenue protection projects undertaken by municipalities.

A disturbing development has been reported from East London where criminal elements have installed "rogue meters" to divert funds directly to "rogue" bank accounts. There is

concern that this criminal activity could spread because of the entry of crime syndicates onto the scene.

The Namibia branch will be holding a joint meeting in July 2020.

The AMEU's Strategic adviser, Vally Padayachee, gave an update on matters being considered by the various AMEU Exco committees. Amongst others there are ongoing discussions with senior Eskom staff on load shedding, tariff-related changes with NMD and other items. Also, as technical advisers to SALGA, they are assisting with the investigations relating to the possible effects on municipal utilities of the restructuring of Eskom.

Other important matters being looked into are NERSA's methodology for the licensing of areas of supply and the negative effect this has on Municipal Utilities, the non-compliance of many utilities with the grid-code requirements, and the 2024 TID roll-over problem of earlier-model pre-payment meters.

The report-back on WiE developments included news that the Highveld Branch had been successfully launched in 2019 and that mentorship and leadership programs are being developed to assist women in the industry, with most branches now active.

Stephen Delpont, Ekurhuleni Electricity, gave a presentation of proposed changes that are being considered by Eskom to their ToU tariffs. One of these is the introduction of a "standard" period on Sundays. This will

result in higher costs for Utilities which could amount to as much as a 2% increase or more, under certain conditions.

Johannesburg Water's Siphindile Sikhosana discussed the processes and challenges of revenue protection in the City. She pointed out that Jo"burg has about 4,4 m people living in the city and that there are some 1,4m households. The utility has about 485 000 water meters of which some 1/3rd are the pre-payment



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type. Efforts to combat the illegal tapping of water from the network are hampered by the ageing infrastructure and technical faults. About 20% of the connections are estimated to be illegal, and the numbers are growing. Also, the Department lacks advanced investigative technology and data analytics, and has a low capacity to increase visibility “on the streets”. These, coupled with the slow and cumbersome process for prosecutions of defaulters, mean that their revenue protection efforts are losing ground.

Some 40% of Soweto’s water usage is “unaccounted for”. *(Depending on what reports one believes, Soweto residents also owe Eskom anything from R14bn to R18bn for electricity. Ed).*

Jabu Mkhize – Senior Engineer Revenue Services – City of Ekurhuleni, gave a presentation on their fight against illegal connections to their network. He showed photographs of illegal

overhead conductors running on their utility poles, and an illegal “re-sellers” distribution board connected to the network, used to sell electricity to multiple individual shack dwellers. In many areas illegal connections removed by the Utility one day, are found to be replaced by the next. Many parts of the townships are “no go” areas for municipal staff, with armed syndicates posing real life-threatening situations. He also indicated that prosecution processes are slow and not very effective. **(See also the report on page 21. Ed)**

A presentation by DFR Kwaduku showed a unique “secure-pole” designed to minimise the effects of vandalism on street lights. The company also supplies engineering support and advice on project funding.

RWW Engineering’s Jeremy Wood presented details of an auto-recloser that can be used in Smart Grids

The next meeting will take place in May 2020, at a venue still to be decided.

## PRESS RELEASE



# CELEBRATING 10 YEARS OF LED LUMINAIRE MANUFACTURE

BEKA Schröder is pleased to reflect on the early days of professional LED lighting, when we recognised and predicted the success of LED as the light source of the future, leading the way in product innovation and local manufacture in Africa and beyond.

The technical and commercial benefits of LED lighting were presented in numerous LED workshops at the time, which have taken us to all major cities of Southern Africa, to alert the professional users and engineers of the imminent “revolution”, which would change the technology of “Lighting” forever.

In our prediction, we foresaw the increase of the LED’s efficacy, which would result in its triumphant path in all lighting segments, in the domestic and professional sphere.

In order to keep pace with this technology, BEKA Schröder had the vision to be the first to locally design and manufacture a wide range of technical luminaires, ranging from streetlights, urban decorative, commercial, industrial and floodlights.

In keeping with our company’s philosophy, we developed LED luminaires in recognition of Africa’s climatic and operational conditions, which made them globally unique and accepted by many international markets.

We pride ourselves on being a pioneer and part of this journey, since the first solid state light sources were available. As we reflect over the past ten years, we can pride ourselves in five key areas:

### 1. QUALITY

Being based in South Africa with a comprehensive African footprint, we have a full understanding of the continent’s harsh thermal environments. We design for local conditions, ensuring a high-quality and performing product.

Our success can be attributed to the local research and development of our luminaire ranges, sourcing of high-quality components that match our standards, and ensuring the appropriate mechanical and thermal product integrity for the environmental conditions of the African and other continents.

We stand by our product warranties of our LED luminaires, providing peace-of-mind for our customers over many years of operation. Our after-sales-service will outdo your expectations with regards to the LED product that you have purchased from us. BEKA Schröder became South Africa’s first lighting company to be awarded ISO9001 certification. This commitment to



# BEKA Schröder

Experts in lightability™

# 10th

# years

Proudly celebrating 10 years of manufacturing LED luminaires in South Africa



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**LOCALLY**  
manufactured

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quality became the company's hallmark, enabling us to become Africa's largest lighting manufacturer and market leader in exterior lighting.

### 2. EFFICACY

With significant developments over the years, LED chip and luminaire manufacturers, like ourselves, have pushed all the boundaries to give the end-user the most efficient high-performing technology. A lot of Research & Development is invested in the right combinations of components and considering all the external factors to achieve the optimized LED luminaire efficacy. It has been mentioned as the "race to the highest efficacy" amongst some, but current trends are leaning towards quality of light with higher colour rendering to be considered alongside the high performing LED chip and luminaire efficacy, adding another aspect to this ever-evolving technology.

### 3. PRODUCTS

Continuous product improvements over the last ten years have led to several generations of luminaires to continuously adapt to the technology available.

Our LED luminaires set themselves apart by the following features:

- **Specialised optics:** Schröder has developed several photometric engines to provide the best solution for every application and project in terms of performance, comfort and return on investment. These different concepts have been designed to build a versatile state-of-the-art LED product portfolio.
- **Luminaire design:** Since LED technology is significantly different from traditional light source technology, continuous design changes are necessary to optimise the performance. Specific heatsink designs are now an integral part of any high-quality LED luminaire.
- All our outdoor luminaire housings consist of **marine grade high-pressure die-cast aluminium** (EN 1706 AC-

44300), ensuring corrosion resistance even if exposed to the harshest environments.

- Our products are supplied with an inline **10kA surge protection** to sustain and endure our significant high lightning strike rate within parts of the country.
- **Electronic temperature monitoring** prevents overheating of the LEDs and power supply, prolonging the lifetime of the LEDs (ThermiX\*), even in cases where the luminaires are operating during daytime.
- Part of our product range incorporates an **integrated pressure equalisation valve** to maintain the ingress protection rating (IP) over the lifetime of the product.
- The **FutureProof** concept allows for easy technology upgrades by being able to access the electronic components easily and upgrade/replace where required.

By combining the best of LED technology with a wide range of control systems, our solutions can offer huge energy savings of up to 85% and radically reduce the payback time of a new installation.

### 4. PROJECTS

Our sales team, in conjunction with our in-house lighting design team, provides the right LED lighting solution for your project, ensuring the lowest power-consumption, least amount of luminaires and best use of photometry

to give you the most affordable and standard-compliant installation possible. We are proud to have been involved in many prestigious LED lighting projects. We are one of the few lighting manufacturers globally that can supply LED lighting technology solutions across all indoor and outdoor segments.

### 5. INNOVATION

We are proud to be at the forefront of being able to incorporate Smart City enablers into our luminaires.

Imagine a lighting network that can adapt itself to the real needs of the space being lit. Consider how a real-time reporting system could improve the efficiency of your network. Think of what you could achieve with a network that interacts with IoT devices. Envisage precise analytical data to help you make the right decisions. Owllet is the ideal tool to help you achieve your Smart City vision.

### CONCLUSION

*"BEKA Schröder has been the leader in various lighting and other technologies since we started more than 40 years ago. We believe in innovation, local manufacturing, in-house design, our people, our country, sustainability and, most of all, our customers. We continually change and innovate to ensure we stay true to our ethos and give our customers the highest quality and value in everything we do."*

*We look forward to continuing our partnerships with our customers in innovation and state-of-the-art lighting technology."*

Wimpie Ludwick  
(General Manager, BEKA Schröder)





# 100 !..... QUO VADIS ?

This Latin expression is commonly interpreted as “Where are you going... ?”  
.....and when asked in relation to the number “100” it highlights some interesting facts.

In science, pure water “goes to” steam at 100 deg. Celsius at sea level. Also, an imaginary sphere located 100km above the earth’s mean sea level is defined as the boundary between space and the earth’s atmosphere. This is known as the “Karman line”, named after the Hungarian-American scientist who calculated that this is the highest altitude at which normal “winged” aircraft could fly. It is generally accepted as the legal limit of a nation’s airspace.... from “atmosphere” we go to “space” !

Another curiosity of the number in science is that the “heavy metal” fermium - made by the bombardment of plutonium with neutrons and discovered in the debris from the first controlled atomic explosion in 1952 - has an Atomic Number of 100. It “goes” to 101 in the atomic series, which is a material called Mendelevium, a synthetic element used in scientific research.

Perhaps one of its most common uses is for describing “portions” where *per cent* is the Latin for “per hundred” and 100% is a “full” amount or quantity. ( On the 31<sup>st</sup> January 2020, Vaal Dam was 57% “full” of water !)

**So what does the number mean in the context of the newsletter you are now reading ?**

“Going” implies that one has “....come from... somewhere..”, which seemed an appropriate question to consider when starting to compile this issue of AMEU News...

The question was asked of Past Presidents of the AMEU and other persons who have had an interest and involvement along the journey of the newsletter. They were asked... “*When we launched AMEU News in March 1987 the then President of the Association, Jan Loubser, said “... it would spread the word of our activities and objectives ... and be a voice for our activities and interests...”*”

**Have we achieved this ?”**

The invitation included a request for “..a few words on how you are doing...” .... here are **extracts** from some of their responses...

Past President **HOWARD WHITEHEAD (1993-95)** retired from his position of CEE of Durban Electricity in 2006. For more than 10 years after his retirement he undertook training of Municipal staff on Infrastructure Asset management under the auspices of IMESA. He has now “wound down a bit” and concentrates on hobbies and DIY. He writes.....

*“I would venture to suggest that in March 1987 few if anyone envisaged that after 100 issues the AMEU News would be still going strong and would*

*still be one of the respected publications in our industry and the Electrical Industry in general.*

*It has not only kept us informed as to the activities in the AMEU but has kept pace and kept us up to date with technical and engineering developments in our fields both locally and internationally. Max has kept his finger on the pulse of the Electricity supply industry as well as dead ducks such as the Electricity Distribution Industry restructuring proposals as well as the shenanigans particularly in regard to Eskom in the last decade or more.*

*It is sad to see the deterioration of Municipal electricity utilities but in my observation, this has not been as serious as the breakdown of Municipal Civil engineering services such as roads and water purification as well as refuse removal and sanitation in general.*

*As far as the future goes, I have no doubt that Max will continue with this good work and hopefully we will read reports on how Eskom problems have been rectified and load shedding will be a thing of the past. No one person wants to see load shedding become the embedded norm in our wonderful country as has happened north of our borders.*

*Also, I hope to read reports on improvements with Municipalities and I hope this is not wishful thinking. Global warming will continue to have a focus on carbon emissions from power stations in particular, but will we again see movement towards nuclear solutions? I am sure we will continue to read more and more about off grid developments and renewables. Will we see a significant roll out of charging stations for electric vehicles and if so when?”*

**Howard Whitehead**

Past President **JOHN EHRLICH (2001-03)** writes...

*“The strategic vision of the President Jan Loubser in 1987 has certainly been fulfilled and the success of the NEWS has literally surpassed his wildest dreams. I have been on the mailing list of THE NEWS since its inception and have read every copy mostly the hard copy, but the e-version during the Post Office Strikes.*

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So, AMEU NEWS turns 100 !. What an achievement. I can only pay my respects to the editor Max Clarke and his team and the many contributors who have kept the flag flying, and kept the members and affiliates in the NEWS and up to date on matters relevant to our industry.

On an historical note, when the first issue of AMEU NEWS was published I was an engineer member of the Highveld branch and the Town electrical engineer of Standerton.

When the 11<sup>th</sup> issue arrived on our desks I was a Deputy Director of City Power.

The 23<sup>rd</sup> edition was published a month before I became the City Electrical Engineer of Pretoria and when the 47<sup>th</sup> edition appeared I was the General Manager of Tshwane Electricity.

The 62 edition heralded my retirement from municipal electrical engineering, and the beginning of my involvement as a consulting engineer. I still practice today for specific clients and in between I am involved in a family business of buying and selling antique, vintage and used household furniture and appliances.

I look forward to the 100<sup>th</sup> edition of the AMEU NEWS and those to follow !".

**John Ehrich**

**Editors footnote:** If history is your interest then read on..... On 15<sup>th</sup> and 16<sup>th</sup> February 2006 Exco met for its start-of-the-year series of meetings at an hotel in Magoebaskloof, near Tzaneen. It coincided with my 80<sup>th</sup> birthday and John, one of the attendees, was designated by the Exco of that time - under the Presidency of the late Danie Potgieter - to make the congratulatory speech. The wrist watch presented is still in daily use. Max Clarke.



Past President **PETER FOWLES (2003-04)** is known to many in our industry for his active participation in AMEU affairs. It started while he was CEE of Pietermaritzburg, but after retiring early from that position he became Strategic Adviser to the AMEU Exco, initially on a part time basis (2005-08) and then full-time until his move to the USA in 2016. He has often sent stories of interest in his travels, which have been published in AMEU News from time to time, and he now writes...

*"We are all aware that the past 30 odd years have probably been the most turbulent and exciting in the history of the electricity supply industry in South Africa. Through all these years AMEU News has contributed to, and recorded, much of the discussion and change that has taken place over this period. While giving space to the many challenges faced by members of the municipal electricity industry, much of the content of the issues has focused on 'good news', bringing*

*wonderful stories of projects and other successes of the organisation's members, large and small.*

*While I believe I have read every edition from cover to cover, including the very valuable and informative advertorials they contained, one of my personal favourites was to read the Branch News reports, as well as the individual stories about many of the personal triumphs and accomplishments of members themselves.*

*There are not too many publications that I know of that cover, for me, the same level of human interest.*

*Marilyn and I left the shores of South Africa in 2016 to be closer to our three children and their families in Florida, USA. Settling into a very different environment and culture raised many challenges for us which we have now, thankfully, largely surmounted. A huge personal loss for me was to no longer be part of the wonderful organisation that is the AMEU which has so successfully managed to adapt to the industry and country challenges and still remain so relevant.*

*AMEU News thus constitutes a tremendously important link to the people and industry that I miss and value so much".*

**Peter Fowles**

Past President **SY GOURRAH ( 2008-10)** was the first lady to have been elected to the Presidency of the AMEU. At the time of her election she was the CEE of East London – also the first lady to hold that post. She writes.....

*"Congratulations to the AMEU News on its 100<sup>th</sup> newsletter publication – what a momentous achievement and colossal credit goes out to Max Clarke who has been the anchor of the newsletter for 33 years. The newsletter has achieved updating the members of the current news with the activities in the different utilities, the affiliates, branch news, the latest with regard to policy and changes in legislation. The pictures are often treasured by many of us as it often captures momentous memories. The newsletter has started what the then President, Jan Loubser, in 1987 intended to use it as the voice of the AMEU's activities and interests.*

*Having served as a President of the AMEU, I believe the newsletter has showcased our objectives, the activities and our contributions to the Industry.*

*I wish it another 100 issues and may it continue to spread the Industry news and activities of the AMEU."*

**Sy Gourrah**

**(Footnote:** Sy left municipal service in 2011 and moved into the private sector, first in a consulting practice and then later into a role in the well-known company Actom. She now occupies a senior position, General Manager in the Power Systems Division.





MAINTENANCE



SERVICE & REPAIRS



PROJECTS



MANUFACTURING



DISTRIBUTION

#### Key sectors served by ACTOM's equipment supply and solutions offering include:

Power Generation  
Transmission  
Distribution  
Utilities

Construction  
Energy  
Environmental  
Food & Beverage

Healthcare  
Industrial Processing  
Mining  
Oil & Gas

Paper & Pulp  
Petro-chemical  
Rail Transport  
Signalling

Renewable Energy  
Sugar  
Textile  
Water & Sanitation

ACTOM, offering a winning and balanced combination of manufacturing, service, repairs, maintenance, projects and distribution of electro-mechanical equipment through its 35 outlets throughout Sub-Saharan Africa.

# ACTOM

# A LITTLE BIT OF HISTORY ..... AND THEN THERE WAS ACTOM !

It has been common practice for many years for engineering graduates from South African Universities, and other younger professionals, to proceed overseas to undertake post-graduate training in the various large international companies.

For historical reasons the largest numbers of young engineers, a few years back, went to British companies where the then household names like BTH, Bruce Peebles, Brush, English Electric, GEC, Metropolitan Vickers, Parsons, Reyrolle and others, all had large manufacturing and related facilities. (*I spent 2 years at the BTH works in Rugby! Ed.*)

On completion of the usual 2-year stint most returned home and joined South African companies and organizations. In some cases these were the local branches of the companies with which they had done their post-graduate training. Others joined various para-statal and industrial organisations that played significant roles in the country's economy.

One way or another all made significant contributions to the pool of expertise and knowledge that was required to develop and maintain South Africa's industrial infrastructure and capabilities.

One, English Electric, built its first new factory outside the UK in Benoni in 1948.

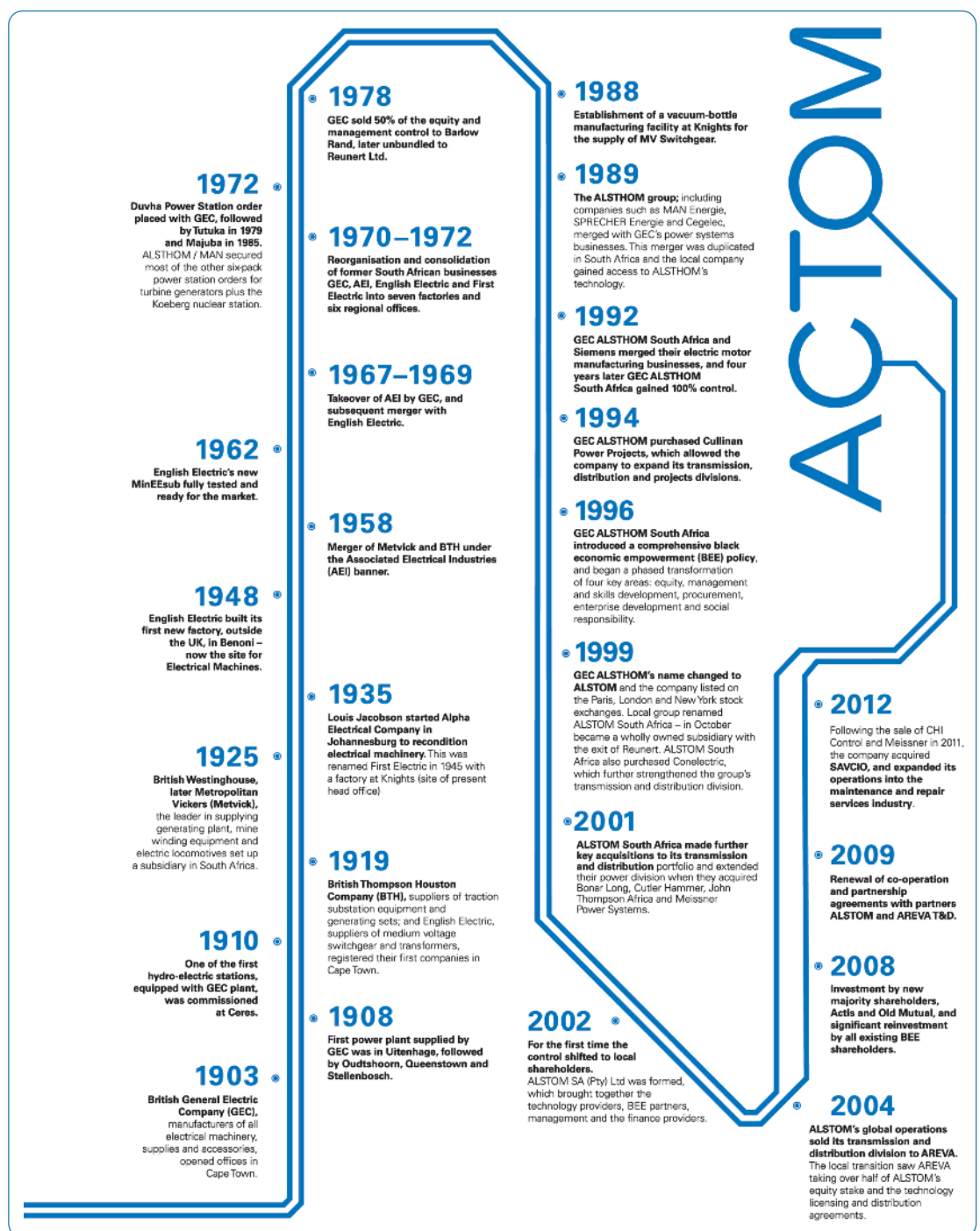
The current ACTOM Head Office and major manufacturing facility at Knights, in Gauteng, started life when Louis Jacobsen's Alpha Electrical began reconditioning electrical machinery on the site in 1935. The company was later named First Electric, and after various take-overs and amalgamations it became GEC Alsthom.

On 17<sup>th</sup> May, 1989, the GEC Switchgear Company opened the first South African

production facility for vacuum interrupters for circuit-breaker at the Knights factory. This was only the 6<sup>th</sup> such manufacturing facility for these products world-wide, and cost R10m, a significant investment amount at that time.

Further changes in company holdings and other refinements took place and the name ACTOM was adopted in 2012 for the "new" establishment.

The time-line diagram below makes fascinating reading....enjoy !





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For some years she has held dual membership of both the AMEU and the SAIEE, and in 2012 was elected to the SAIEE Council. She progressed through the Office-bearers ranks and soon became President-elect of the Institute, and will be inducted as President at the 2020 Annual General Meeting of the Institute. She will become the first lady to have ever occupied both Presidencies in the 100++ years history of both organisations. Congratulations Sy, well done..... may it go well for you in the future !. Ed.)

Past President **MICHAEL JOHN RHODE (2010-2012)** is now the Director; Infrastructure at Bitou, centred on Plettenberg Bay, and his responsibilities include both electrical and civil infrastructure. He writes.....

*"I believe that the objectives of the late past President, Jan Loubser, with the AMEU News have been achieved and that it is still playing a valuable role in the industry. Topics that I have enjoyed are the many projects that the various municipalities have embarked upon, especially the innovative ones where others have not trodden before.*

*These articles give you an idea who the various players are and provides you with the opportunity to make contact with them.*

*Keep up the GOOD work Max."*

### Michael Rhode

Michael says that he has learned that the efforts we've put in to standardise many aspects in the electricity's space have paid off tremendously and that on the Civil side there are many opportunities to follow suit. He adds...

*"I have also assumed the role of mentoring young engineers across municipalities who are in regular contact with me for guidance and advice. This I really enjoy and see it as my way of ploughing back into the industry."*

Past President **HANNES ROOS (2012-2014)** started his municipal career in Edenvale Gauteng, in 1986 and became active in the Highveld Branch. He served as Hon. Secretary and Vice Chairman, and then in 1994 became Chairman of the Branch. He writes...

*... "It is my privilege not only to be part of the celebration of the 100<sup>th</sup> addition of the AMEU News, but also to be part of the AMEU since the launch of the newsletter in 1987. I can without any doubt confirm that the newsletter has achieved exactly what the late President Jan Loubser had in mind when it was launched !*

*During all these years and up to my current involvement with all the AMEU and Affiliate members, I have never received any negative comment from any member. Everybody*

*appreciates the platform that has been created not only to give exposure to products, projects and news, but for the members to learn and initiate ideas to implement in their respective environments. I personally enjoy browsing through all the news, and always made sure that I receive my copy of the AMEU News, and feel privileged to celebrate this 100<sup>th</sup> addition with all our members."*

Hannes is passionate about the AMEU and the role it plays to support the membership. He continues as follows...

*".. During my years of municipal service I was supported and motivated as a young engineer by so many heavyweights in the industry. Some are still with us but most of them have passed on... people like Jan Loubser, Al Fortmann, Jules von Alfton, Piet Botes, Eugene Pretorius, Jan Malan, Koos Algera. And those still with us like Max Clarke, John Erich, At van der Merwe, Mark Wilson, Silas Zimu and Sicelo Xulu. Their example has guided and helped me. to try to provide the same kind of support for others in our AMEU structures. Equally important has been the good friendships over the years and which I still enjoy to this day.*

*"I am looking forward to 2020, and my involvement with Combined Private Investigations (CPI), the AMEU, Affiliates and SARPA. May 2020 be a year of progress and achievements. I am looking forward to read all about this in the upcoming additions of the AMEU News !!"*

### Hannes Roos

(Since January 2018 Hannes has represented Combined Private Investigations (CPI) as an Affiliate member and attended all Branch meeting across the country. He currently serves on the Affiliates Committee and as an alternate with the Affiliate Chairperson on the AMEU Executive Council and Committees. From January 2020 he will also represent the SARPA Affiliates on the SARPA Executive Council. Ed.)

The first period of Past President **SICELO XULU (2014-16)** year's in his Presidential term coincided with the celebration of the AMEU's Centenary year. His election to office took place at a Johannesburg Convention. This was a unique "twin" celebration as the inaugural meeting of the Association was also held in Johannesburg 100 years earlier. He writes.....

*"As the 100<sup>th</sup> issue of the AMEU newsletter is being sent out, I am pleased to see the progress made by the Association and all our members. I am humbled to have been a part of the journey and to have made it in history to have served as one of the AMEU presidents. It is always a very fulfilling feeling to see something grow and continue to grow; and all efforts towards growing the AMEU by the different Presidents since its launch just over 100 years ago have made great strides in strengthening the work of the Association and*

enhancing efforts to support members in their professional roles, and responsibilities across the different industries within the municipal space.

As we celebrate this 100<sup>th</sup> issue, I would like to also celebrate the President who was influential in the launch of the AMEU Newsletter, because this Newsletter has been a great resource and tool to members. It is worthwhile that I reflect on the objective of the launch of this Newsletter. Today as we look at what has been achieved since 1987, I am pleased to note that the objective has been achieved. Together we have managed to create awareness of our work and really be a voice for our activities and interests.

This Newsletter has been critical in the collation of information and in tracing and tracking the work being done across the different municipalities. It has been a critical part of the history of the AMEU and the work of our members; and a significant resource in observing history and the transformation that has taken place in our country and the industry as a whole. It has served as a key witness in ensuring that members are aware of what is happening in the industry and without a doubt has met its objective of spreading the word of our activities and objectives.

I know for a fact that while I was at City Power, our work and activities were reflected in this publication, and the work of various other municipalities continues to be reflected in it.

Over the years, I have enjoyed reading about industry challenges reflected by others in the publication, as well as success stories. I have keenly followed stories around collaborative efforts across municipalities and the insights provided by others on some of the strategies that they implemented in their municipalities.

When I was at City Power and we implemented the electrification of Lawley informal settlement in the South of Johannesburg, in efforts to create safe electrification of 1 500 households in the sprawling community; part of what we wanted to do was to show that this can be done. We can create safe electrification even in informal settlements, we can change lives; and having read about what others were doing, we were able to provide the community with an energy mix of solutions comprising of pre-paid electricity, solar panels and gas cooking.

I believe the narratives in this Newsletter have not only provided news to read but also motivation for more to be done for our members to improve in the different areas in which they work and continue efforts towards contributing in making a difference in the lives of the people we serve; and in turn address some of the social and economic challenges that communities face.

My desire is that this publication continues to grow from strength to strength and that professionals in 2087 will one day read back on all

that was done in our time, and be inspired to do more. Let's continue to work together to make sure that this very valuable tool, continues to do what it was established to do, "spread the word of our activities and objectives....and be a voice for our activities and interests."

**Sicelo Xulu**

**Footnote:** Sicelo was recently appointed CEO of the AMEU's "older" sister organisation, the SAIEE. There is already a formal MoU between the two organisations and this new development augurs well for closer relations between the organisations, in the best interest of their members and the industry a whole. ED

Past President **MOFEREFERE (TSHABI) TSHABALALA (2016-18)** writes to say that

"..he is pleased with the newsletter to date..."

.....and he goes on to say that in his view certain details pertaining to the Conventions could be improved to promote growth of the AMEU. He says..

"To improve on the growth of AMEU, the following, need to be included in the future AMEU conventions.

Allow the exhibitors to form part of the convention whenever they want to. Some of the exhibitors are technical personnel and wish to sit in for one or two presentation. In the last convention held in Cape October 2019, the setup was easy for exhibitors to sneak in the convention.

The AMEU should allow students and industry representatives (not only affiliates) that are willing to participate in the Convention, we should consider a day pass out. Student's rates should be discounted. SAIEE has student chapters at universities, they should be encouraged to write papers and attend conventions."

**Moferefere Tshabalala**

The General Secretary of the AMEU, **JEAN VENTER**, whose company VDW & CO have been supporting the Association for more than 47 years, was asked to comment on the mission of AMEU News and writes.....

"We at VdW&Co are proud to have been with the AMEU at the centre of the electricity industry and its stakeholders since 1973. I am personally proud to have served as the General Secretary of the AMEU for the past 25 years, assisting twelve of its presidents. From Cape Town to Tshwane, from Durban to Upington, Marshalltown to Bryanston, from snail-mail to digital everything..... You are a great organisation, with great people, and with a great mission.



continued from page 12

*The ways people now consume news and knowledge are digital and immediate. Training and information is something you get on demand, when you need it, and mostly at no charge. Influence, lobby and advocacy moves at the speed of light, direct and broad based. I believe the associations of tomorrow will be very different from what they now are or were.*

*This will no doubt also impact on the niche market served by AMEU News, ...what is read and when.*

*The need for publishing with integrity will however remain and I am sure that the AMEU News will go forward, perhaps in a new form or format, but serving the same industry and newer generation of engineer with pride, purpose and dedication."*

Jean goes on to highlight some of the problems facing the Association and the industry it serves and says...

*"As we move forward, we know that there are serious challenges. The culture of corruption in local government being one of the most insidious. The AMEU must stand its ground and speak out. It cannot be that every local government contract is negotiated around corrupt partners and processes. This is not sustainable for any country. This is also impacting on the way marketing revenue is directed in the industry including printed media such as the AMEU News.*

*My company, VdW&Co is one of the oldest full-service association management companies in the world and the only one based in Africa. Associations come to us to provide them with a national or international secretariat, often for reasons of cost and flexible resources required. We will endeavour to adapt to changing circumstance and continue proving quality services wherever and whenever we are able."*

Jean Venter

(Footnote: In January 1973 Bennie van der Walt of the company "van der Watt & Co" commenced duty as General Secretary of the AMEU. He was joined by Jean Venter in mid-1995, who took over the reins later in that year when Bennie formally retired. Thanks to their expertise the secretarial and financial management of the AMEU improved and stabilised creating the platform from which it has been able to play a significant role in industry affairs. Ed)

The **Affiliate Companies** have been involved with the AMEU from the very beginning..... Initially it was on an informal basis with representative attending Conventions.....and, it must be said, jostling for lunch appointments with key customer representatives at every opportunity!

In 1974 a special meeting of representatives of the companies agreed on a formally constituted Committee and "rules". Terence Marsh, a representative for Reunert and Lenz,

who had been a delegate at Conventions since 1951, was elected Chairman. He held the position for 36 years until his retirement 1987.

**Brian Madeley** attended his first Convention in 1981. He was active in AMEU affairs and was elected chairman of the Affiliates when Terence retired. He held the position until his retirement in 2011.

Brian worked for a company Bowthorpe-Hellerman-Deutsch (Pty) Ltd where he had started as a Rep. and worked his way up to Sales Director. He has been an enthusiastic supporter of AMEU News - even in retirement - and when the first issue was being planned he booked a ¼ page advert for the front page. The material was set up by their agent and approved by management, and sent to the publishers for printing. Lo and behold, when the newsletter arrived in the post the little "Outjie" that formed the centre-piece of the advert had no colour in his jacket!

Brian recalls..

*"There was our "Outjie" ....Orange jacket, Stetson, arms behind his back.... walking into the future oblivious of the error!"*

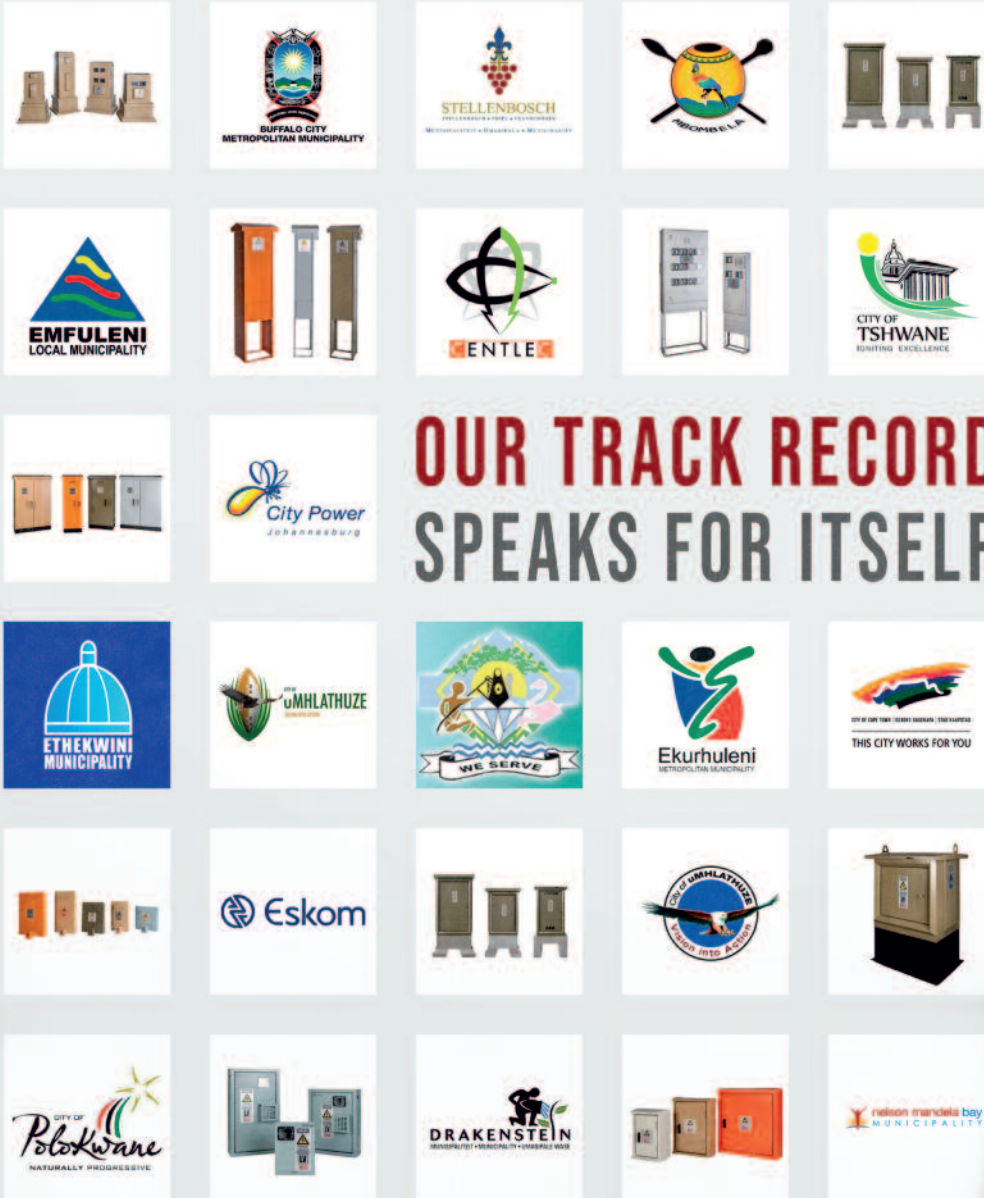


In spite of the error, Brian has supported AMEU News ever since and still regularly receives, and enjoys, his copy in the mail!

(Footnote 1: Brian was awarded Hon. Membership of the AMEU in 1995 in recognition of the sterling work he did for the Association during his many years of involvement. Ed.).

**(Footnote 2: In all their responses the P.P.'s have included congratulations and compliments to me on the work done over the years as Editor. These have not generally been included because of practical space considerations but are acknowledged with sincere appreciation. Max Clarke)**

## 27 YEARS AND COUNTING



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Assemblies manufactured to SABS 1765 for the safety of distribution boards





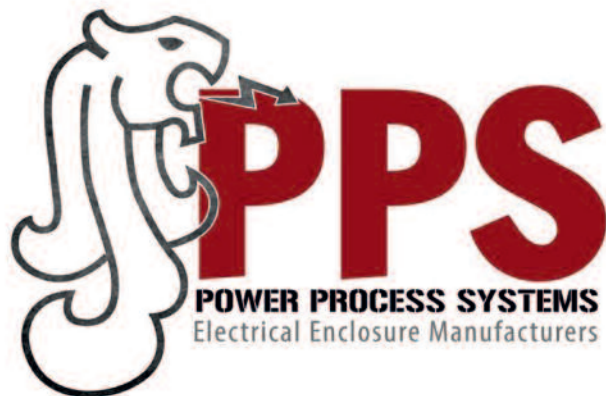
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## 67th AMEU Convention 2020

**25 – 28 October 2020**

**IMPLEMENTING SUSTAINABLE CUSTOMER  
CENTRIC ELECTRICITY UTILITIES IN THE 4IR**

**Durban International Convention Centre**



### **NEWS**

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### **THIS & THAT**

According to a recent news item, carbon output from international aviation has more than doubled since 1990 and the United Nations has said the industry is set to overtake power generation as the single biggest CO<sub>2</sub> producer within three decades.

At the same time, a report says that a so-called “sustainable” aviation fuel, or SAF, is now available. According to a website of groups representing business jet operators, manufacturers and fuel suppliers it is a 30% blend of a “greener” fuel with conventional jet fuel and can lower CO<sub>2</sub> emissions by about 18% on a comparable 1,000-nautical-mile flight. The blend is now being used mainly by operators of private jets who are significant world-wide consumers of jet fuel.

This interesting news item caught my eye..... The majority of plastic bags are not recycled and end up in landfill or polluting the environment where they take up to 1,000 years to degrade. (We have all realised that...!)

But did you know that according to the UK Environment Agency, if you are looking at an alternative to plastic bags to carry groceries or other shopping items, consider the following. Opting for paper or cotton bags will reduce litter and waste but they have other significant environmental effects.

For example, a paper bag has to be used three times to be as environmentally friendly as a plastic bag that is recycled. Also, making paper bags uses more energy and water and they are also heavier, which makes them more expensive to transport and therefore result in more vehicle emissions. Bags made of cotton – a crop which requires huge amounts of water to grow – need to be used at least 131 times to be as good as a recycled plastic bag.

.....talk about being on the horns of a dilemma !!!! Ed.



# AFFILIATES

The first general meeting of the 2020 year of our Affiliate Member representatives took place on the 28<sup>th</sup> January at a venue provided by CPI (Combined Private Investigations), in Midrand, Gauteng. More than 20 companies were represented.

The attendees were given an update on various matters including progress with arrangements for the 2020 Affiliates Golf Day, and the Convention.

The Affiliate's Golf Day will be held at the Copperleaf Golf and Country Estate, located on the Ernie Else Boulevard in Centurion, Gauteng. The formal notice has been issued and further information can be obtained from the Affiliate's Secretary Nisha Chetty. Her contact details are ..... 'phone 012 645 3117 or ..... e-mail, [NishaChetty@Landisgyr.com](mailto:NishaChetty@Landisgyr.com)

With regard to activities at the eThekweni Convention it was confirmed that the sports day for this event would include a hike and beach volley-ball. Golf will not be arranged for various reasons including the fall-off in numbers evident in recent years and the high costs involved. An alternative is under consideration and will be communicated to members when the matter has been finalised.

The venue for the prize-giving and the "getting-to-know-you" evening function will be the Barnyard Theatre.

The committee is looking into details of the layout and arrangements for the exhibition. An 80-100 stand layout with +/- 6-8 refreshment points, is under review. Details will be communicated to all members when finality has been reached.

Arrangements are in hand for the annual Business Leaders Breakfast. This will be held on 17<sup>th</sup> September at the usual venue – the Johannesburg Country Club, Woodmead.

AMEU General Secretary, Jean Venter informed the meeting that the AMEU is now a full member of PIESA (The Power Institute of East and Southern Africa) and that marketing opportunities exist for member companies. He also informed members that because of the changes in communications techniques now available the "e-bulletin" has been replaced by a "watts-app" news and message service.

General information of interest to members is that there are now 164 Affiliate companies and, that the dates of meetings for the Affiliates Standing Committee and the general meetings of members has been published and will be adhered to. Also, that WiE (Women in Electricity) now have representatives in each Branch of the AMEU.

It was also reported that the combined AMEU Branch and SARPA meetings are working well in most areas. SARPA have reported that NERSA have agreed to allow municipalities to impose a 2% levy on their tariffs for the purpose of funding revenue protection operations. SARPA are now offering quarterly training courses for staff involved in revenue protection programs.





## GOOD HOPE

More than ninety people descended into the Plettenberg Bay area on the 7<sup>th</sup> and 8<sup>th</sup> November 2019 to attend the 209<sup>th</sup> General Meeting of the Good Hope Branch. The Dunes Resort in Keurboomstrand was the actual venue.

The delegates included 30 representatives from 13 Local Authorities and 57 from no less than 37 Affiliate companies, with some Hon. Members and representatives from State and para-statal organisations.

Clr. Sandiso Gcabayi the Deputy Executive Mayor of Bitou, the host municipality, welcomed the delegates to the area and addressed the members.

A full program of presentations followed the completion of the meetings formalities, starting with one from Willem Venter, the Channel Development Director of Opplé Lighting South Africa. He spoke on "Opplé-See Beyond" and described the background of the company, the product range and other matters relating to their services in the lighting field..

This was followed by a talk "Wheeling Frameworks within Municipal Networks" by Sandiswa Sotashe of the Energy Exchange of South Africa. He made the point that wheeling was not about "electrons" but rather the financial transactions representing the transportation of third party electrical energy (kWh) over the distribution network when a supplier sells electrical energy to a customer at that customer's point of supply.

Tank Industries' Paul Casalvolone addressed delegates on "Putting the "R" back in Raychem" and covered various

aspects of the company and the wide range of Raychem products and services available.

The "Owlet IOT/ Smart City" lighting management system, that is now available from Beka Schreder, was described by Danie van der Nest. Amongst other features the system allows for the better overall management of lighting projects and facilitates reduced energy bills through advanced dimming profiles.

Willie van Wyk - CTLab - gave details of an integrated monitoring system for smart grids using new type CTs and VTs that employ low power resistive chain technology. These differ from the conventional magnetic type. Retro fitting is possible and there are benefits to be obtained from so doing. The equipment is available from numerous manufacturers.

SARPA feed-back was given by Rens Bindeman who reported on recent developments including the following;

- SARPA and AMEU are working well together and an MOU has been signed.
- Jemaine Cupido from Bitou Municipality has been elected as the SARPA Good Hope Branch Vice Chairman.
- A task team is looking into the worrying problem of "rogue" meters.
- NERSA has approved a once-off 2% tariff increase to fund the creation of Revenue Protection units within municipalities.
- Law enforcement agencies are continuing to act against the problem of Infrastructure theft.
- Revenue protection operations are active in many parts of Africa.
- An Advanced Revenue Protection training course will be held every 3 month in 2020.

The AMEU Strategic Adviser, Vally Padayachee, presented a detailed report on activities of the Exco committees under various headings, which included the following...

- The SALGA-Eskom task tem is focussing on a number of issue including the proposed Service Delivery Agreement, and credit-control arrangements, surcharges and public lighting.
- Amongst other things the SALGA Energy Reference Group is looking into various aspects relating to the proposed Unbundling of Eskom, and the possible impacts on municipalities. The directive from the DoL regarding the inspection of new installations by Municipalities has been signed.
- Actions being taken with regard to the TID 2024 roll-over and the many challenges / problems.
- The migration of INEP funding to USTG that affects Metros.
- Various matters relating to tariffs and cost of supply affecting municipalities.
- Concerns with the non-compliance with Grid Code and the lack of appropriate actions.
- Eskom's various tariff initiatives including MYPD, "Notified Maximum Demand" and related problems.
- NERSA's "Area of Supply" licensing actions and various other NERSA-related matters.
- Problems relating to the use of " Framework Contracts" by municipalities.
- Trade Test certificates and interactions with the LG-SETA.
- The DoE solar water-heating program.





## continued from page 17

Optron's Leon Reynders discussed "Unpacking New Technologies & Equipment for GIS" and described the new products and systems that are now available to ensure accuracy in this important tool for managing assets.

Changes in consumer behavior that are taking place as a result of electricity price increases, load shedding and demand side management requires that utilities re-look at their methods of forecasting, according to Anrich Steyn of GLS Consulting. He gave details of the help that is now available to engineers with this aspect of their work.

Stewart Heynes and Marius Geyser of Global Spec. discussed "Safety, Inspection & Maintenance of Structures at Height" with particular reference to the use of drones to assist with this work.

A feedback talk on operating experiences and issues being experienced in the Host Municipality Electricity Utility was delivered by Jemaine Cupido. He pointed out that there are two Eskom intake points (one 66kV and the other 11kV) and that while "normal" demand is in the region of 17MVA, this rises to about 27 MVA with the December influx of holiday-makers. They have a staff complement of 52 covering planning, distribution and revenue protection.

The three year performance of Western Cape municipalities with

their INEP funding and the challenges being experienced was presented by Mhlangabezi Mzalisi of the DoE. Discussions highlighted supply chain and related problems that affected these figures.

Discussions on the NERSA rules for licensing areas of supply again took place and Pierre van den Heever gave feed-back on the meeting with NERSA in Cape Town in September 2019. The need for NERSA to amend their rules became apparent in the reports from other municipalities that are also being adversely affected.

Joe Coelho of Eskom reported the electrocution of a child who had climber a 132kV tower.

Under "Affiliate Matters" Dave Turton (Edgeline) reported that combining the Branch meetings of the AMEU and SARPA has been working well country-wide. There has been better attendance at all meetings. Most meet regularly and use the Good Hope Branch "model". He reported that "Tender entrepreneurs" in the supply chain are an issue.

Hannes Roos (Combined Private Investigations) reported that the Affiliates have raised the issue of some electricity utility managers in municipalities not being qualified and registered in term of the Regulations under the Occupational Health and Safety Act. Also that there is concern in the decrease in the pass rate for the Certificate of Competence exams. The Department of Labour has been requested to follow up on these matters.

Discussions are also under way with Exco on the question of allowing all industry representations into the Exhibition on the Wednesday of our annual Convention. The need for the presentations given at Branch meetings to be put onto the AMEU website under separate folders - one for each meeting - so they can easily be located for reference, is also under discussion.

It was also reported that the registration for stands at next year's Convention will be open from 1 April to 31 August 2020.

The next meetings of the Branch will take place as follows;

14 February 2020	Arniston (Cape Agulhas Municipality)
15 May 2020	Bellville (City of Cape Town)
14 August 2020	Robertson (Langeberg Municipality)
5/6 November 2020	Stellenbosch (Stellenbosch Municipality)

This was a well attended meeting that provided much useful information for the attendees.





# NEW CONTROL CENTRE FOR CAPE TOWN ELECTRICITY

The safety of operators and the continuity of power supply to consumers are primary considerations for operating all electricity utilities.

To this end, the City of Cape Town Electricity Generation and Distribution Department has just completed the construction of a new Network Control Centre situated at the Bloemhof Electricity Complex in Bellville. It is the product of the amalgamation of two legacy Control Centres (Bloemhof and Newlands System Control) that have served the City and surrounding areas for a number of years.

Project was necessitated by the changes in the local government structures over the years and the resulting amalgamation of the smaller municipal networks into the Greater Cape Town utility.

Historically, a system control centre

was established in Newlands in 1960 for Cape Town Electricity. In 1988 eleven smaller Municipalities took over electricity supply from Eskom and the first official Control Centre for these Municipalities was established in 1992 and located in Bloemhof, Bellville.

Post-1994 changes in local government in South Africa resulted in a number of smaller municipalities - each with its own Electricity Department - amalgamating to form the City of Cape Town Metropolitan Municipality as it is known today. The consolidation of the City's Electricity Department in its current form was completed in 2005.

With these changes it was necessary for the various legacy structures to be rationalized, and this motivated the establishment of a consolidated Network Control Centre. This, to facilitate uniform

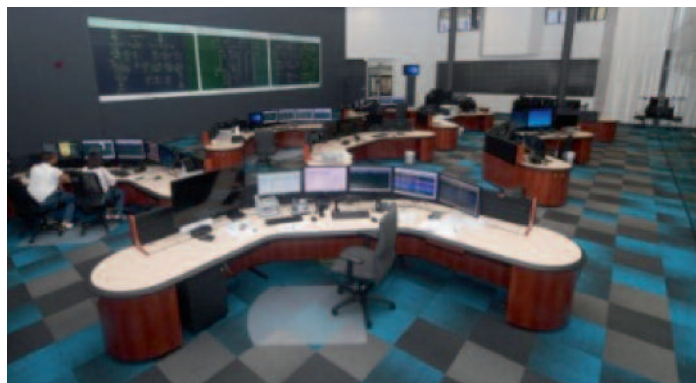
service delivery across the Metro and further leverage institutional knowledge and modern standardized technology.

The process was commenced initially by consolidating the smaller Network Control Centres and recently finalized, in 2019, by the establishment of the Network Control Centre located at Bloemhof.

The use of modern technology in the new control centre enhances the process of issuing instructions for network operating activities and ensures accurate and digital records of the time and details of network operations carried out. The state of the network is indicated at all times.

The old Newlands Network Control Centre systems are currently configured in standby mode as a contingency in case of system or structural failure of the main Network Control Centre at Bloemhof.

The multi million rand investment into the new facility ensures the efficient utilisation of available resources while making use of technology to manage the operations of the electricity network with maximum effectiveness.



## THYS MOLLER RETIRES

Load shedding is an ugly word for most South Africans. Sadly, it is the step of last resort in any electrical network. The reasons for having to take this step in Eskom's case are many and varied, and we have been told that the pain coming from this phenomenon these past few years is likely to continue for some time yet.

As is often the case with any bad news, the messengers have to handle the fury and the fall-out from the recipients.

Whatever adjectives come to mind to describe our national utility, very few will be flattering. Invariably "the staff" will be included in the list of "problems" that are cited as having led to the debacle as we know it.

While much of the criticism can be justified, the real heartbreak in the whole tragic Eskom scenario is that buried inside the disintegrating monolith are many good and competent, faithful, talented and caring people who have dedicated their lives to serving their country through working in the utility.

One such person is Thys Moller. He has had a career of some 35 years of unbroken service in Eskom, starting as a Pupil Technician and proceeding through the ranks to Engineering Manager in



Polokwane, General Manager for the Eastern Cape Operating, Unit General Manager Operations Support (Distribution) and Corporate roles in Distribution. For the past four years he has been Eskom's representative on AMEU Exco Committees.

Most recently he has been the bearer of bad tidings as he has been the designated person who has had to convey load-shedding news to our municipal utility managers, and the nation.

His handling has been as open as it is possible to be under the circumstances, and he has always displayed the utmost courtesy when dealing with this highly emotionally charged subject.

*On behalf of all our AMEU News readers, we offer our sincere thanks to you Thys, and wish your well in your retirement. Ed.*



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# MORE ABOUT REVENUE PROTECTION....

To the ordinary law-abiding resident of towns and cities throughout the world the reports about “revenue protection” that they read in the daily media from time to time generally only raise interest when cable has been stolen and their electricity or telephone isn’t working any more !

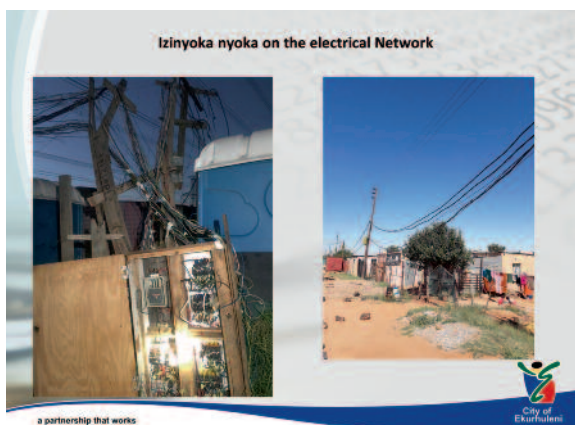
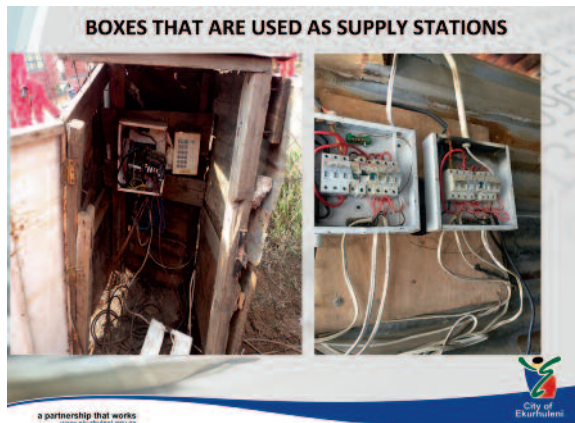
Occasionally a report of a fire or electrocution arising from these illegal activities raises an eyebrow, and little - if anything - is known about the efforts put into trying to stop this nefarious practice.

A presentation at the recent Highveld Branch meeting of the AMEU and SARPA (see page 4) put this work into graphic detail and deserves a wider audience.

Some of the essential details are;

- The City of Ekurhuleni estimates that there are something like 90 000 illegal connections to their electricity network.
- The work to remove these and educate residents is ongoing.
- In 13 days during the October-December 2019 period 31 429 illegal connections were removed, at a cost of R4,15m to the municipality. (NB. most are found to be replaced within days of their removal !)
- The repair / replacement costs to restore the network as a result of overload and other factors, including replacement of equipment and security operations, totalled R25,8m
- Typically 32 municipal and SAPS officers plus an excess of 100 contractor staff are employed to combat the scourge.
- In the six months July-Dec. 2019 some R60 000 was spent on customer education and awareness sessions in the “eastern” region alone.
- The legal processes are cumbersome and slow to apply and recent cases involving 15 suspects were unsuccessful in court !

The photographs below will give some idea of the magnitude of the task and the sort of equipment that is removed daily.



## AND THE GOOD NEWS IS.....

Relating directly to this is the news that there are some successes in the struggle...

One of the private companies that assists municipalities and other organisations and companies, CPI

(Combined Private Investigations), is actively involved in most parts of South Africa and has achieved considerable success in their efforts to combat this tsunami. Recent reports show that over a +/- 3-year period no less than 28

criminals were arrested, and following the respective court cases, were sentenced to a total of 3091 years of imprisonment!

This company uses a full complement of sophisticated equipment and highly skilled and trained personnel. They are backed up by a forensic laboratory, 24 hour surveillance facilities, a specially equipped helicopter and more....

## PEOPLE...

From time to time AMEU News has included “snapshots” of the activities and hobbies of our members and people directly related to our industry. Here is a selection of recent reports,

### REFILWE MOKGOSI

Most readers will know that our current President of the AMEU has run marathons and ridden road races with great success. Her runs have included one on the Great Wall of China and her cycling has included the Free State's Golden Gate National Park.

Her first cycle race of 2020 was at the Midvaal Raceway in the Meyerton area of Gauteng.... This was a 97km ride and she completed it in 3hr 30min. Her plan is to do at least 10 cycling races and 10 running races including the Comrades in 2020.

Good luck....GO Refilwe GO !!!!!



### HONONARY MEMBER BRIAN MADELEY

prefers 4 wheels to 2, and internal combustion engines instead of pedal power !

Brian retired in 2011. He and his wife Lyn moved from the Highveld to Plettenburg Bay and quickly settled into a less stressful life style. Besides golf and giving a helping hand at the offices of the local Sea Rescue team they enjoy rallying in their MG .....and look who goes along for the ride !

### HOWARD WHITEHEAD retired as CEE of Durban in 2006 writes;

Having been retired for 13 years it is great to sit on the side-line and watch... and to have time to pursue other activities. I undertook training of Municipal staff on Infrastructure Asset Management all over SA for more than 10 years under the auspices of IMESA but have wound that down now. I am kept busy with all manner of hobbies particularly DIY and woodwork and keep myself fit by rowing in the harbour at the Durban Rowing Club twice a week at 5:30 am. Amongst others we have won a bronze medal in the SA Championships and rowed in a regatta at the V&A in Cape Town !

Regards, Howard





(Athens)



## JACQUI - 41578 – BURN has been busy.....!!!

Our "long running" Comrades 41578 holder, and double Midmar Mile swimmer, has done it again...!!

Yes, Jacqui Burn has recently completed a run that finished at the original Olympic stadium in Greece! How special is THAT ...!

Congratulations and well done ...

And it doesn't end there..

She writes.....

*"It had been a dream of mine ever since I started running marathons that one day I would participate in the Athens marathon which is known as the original authentic marathon and where the name marathon comes from! There were a number of runners from the Bobbies running club who said they were planning to do the marathon in 2019 and I was welcome to join them (none of them ever did). A lot of people also expressed interest when I said I was doing the marathon (apart from Angie Danster, who runs for Ace, none of them ended up doing it either), so I decided I wasn't waiting around for people to join me, I was going overseas on my own, I met Angie in Athens (we shared accommodation). The Athens marathon took place on 10 November 2019 and I can say it is a tough marathon, (I had not really trained for it), four seasons in a day, but the euphoria finishing in the Olympic stadium took my breath away.*

*"I had also decided while I was going overseas, I looked for another marathon to do the following week. I had a choice of Cyprus or Palermo, I have never been to Europe before, so in between I spent a few days in Rome, did a day trip to Pompeii and Naples, then flew to Palermo on the Friday, what an incredible place, the marathon was totally different to Athena, I ended up 4th last in the race although my time was better than my Athens time but that didn't matter, I had both medals and wonderful travel adventures to remember."*

(Palermo)



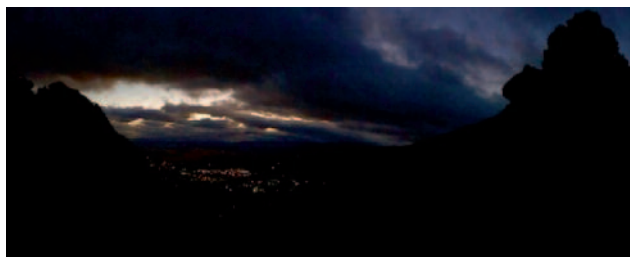
**PIERRE VAN DEN HEEVER** is the Senior Manager of Electrical Services in Ceres, Western Cape. Not surprisingly when considering the beauty of the Western Cape mountains he has now taken to hiking .. And some of our readers will recall that not long ago AMEU News carried pictures of Pierre on Mt. Kilimanjaro!

He writes to say that this past year he and a friend have walked 480 km (some 130hours) in what he describes as some of the most beautiful mountain scenery in the country. Here are some scenes from one of their recent walks...

But going further back some will remember that heights of a different kind were his passion..... he is a qualified instructor in sky-diving !

In 2003 we carried a picture of him reading AMEU News during a free-fall from 12 000ft.

And in 2005 we had a picture of him doing his 1000<sup>th</sup> jump!



# NRS NEWS...

## 1. NRS 049 – ADVANCED METERING INFRASTRUCTURE REQUIREMENTS FOR SMART METERING SYSTEMS

The NRS 049 specification covers the functional requirements of a smart metering system including smart meters and associated field devices (e.g. data concentrators, kiosk controllers, appliance control devices, etc.). The first version of NRS 049 was published in 2008. While the NRS 049:2008 version had most of the functional requirements that the current version (NRS 049: 2016) covers, the NRS 049:2008 version lacked the following:

- DLMS/Cosem was not mandatory.
- It did not specify a mandatory companion specification to ensure that field devices are interchangeable and interoperable.
- It lacked smart prepayment requirements.
- It did not contain requirements for kiosk controllers.
- The version focused mainly on post-paid metering functional requirements.

Based on the above stated shortcomings, the NRS 049 workgroup revised NRS 049:2008 to align with current requirements of South African utilities leading to the 2016 edition of NRS 049. The NRS 049:2016 document consists of over 200 pages. This is quite cumbersome as it covers all smart metering system requirements in one document. For the next edition, the work group has resolved to split the specification into different parts and is currently busy with the development of the different parts viz. Part 1: Smart Metering Framework; Part 2: Requirements for Smart Meters; Part 3: Functionality requirements for head-end systems; Part 4: Requirements for auxiliary equipment and Part 5: Companion specification.

## 2. NRS 055 - GUIDELINES FOR REVENUE PROTECTION

The scope of these guidelines is to provide best practices in the field of revenue protection and credit control for electricity utilities. It can also be adapted for use by other service providers. In addition, the guidelines outline the basic procedures, resources and training for utilities and their contractors and customers, which should be in place to ensure good revenue protection.

These guidelines outline the duties and required conduct of revenue protection personnel to ensure sound revenue protection processes and to maintain good customer relations and an acceptable service level.

NRS 055 addresses non-technical/commercial losses and the management thereof. The effective management of revenue losses should include KPAs or KPIs that have been agreed upon between the utility's management and relevant personnel.

Revenue protection and credit control should be on-going processes and not regarded as once-off actions. It is recommended that the revenue protection department should work closely with the utility's treasury, metering, financial department and law enforcement agencies (LEAs).

In terms of a licenced Electricity Supplier's agreement with NERSA, approximately 6% of the utility's operational income from electricity sales must be allocated to reduce technical losses.

The Guidelines further recommends that a nominal percentage of at least 2% of the utility's operational income should be allocated to fund revenue protection staff requirements and operational activities, until such time as the supply authority's non-technical losses are under control and below the national standard of 9% (i.e. total for both technical and non-technical losses).

The next revision of NRS 055 is expected to be released during the first quarter of 2020.

Anyone requiring more information should contact  
Jayson Naicher at 011 651 684.

*(Footnote; The November 2019 issue of AMEU News carried updated information on NRS 109: Arc flash hot oil resistant suits. ED )*

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