Summary of 2010 Convention Proceedings

Peter Fowles

29 September 2010
2010 Champions???
Affiliates Sports Day

• Golf, Bowls and a hike
• Much fun
• Sports prize giving and dinner at Moyo’s, Spier
• Many thanks to Affiliates
Opening Session

• Scene set by the lovely rendition of our anthem and the music of the Cape Choir
• Welcome by our President
  – Stressed the many issues being addressed
• Mr Ompi Aphane, DoE - keynote address
  – Issues raised during 2009 address
  – Disparities in service levels (bad debt, tariffs etc)
  – Well managed during 2010 – why not always?
  – Infrastructure maintenance – critical issue
  – Lack of regulatory enforcement
Opening Session

• Warm welcome by Ald Cyril Jooste
  – Leave with a ‘sense of returning’
• 23rd Technical Convention 2011 – invitation from Ald Justus of the City of Cape Town
• Honorary membership conferred on Robert Wallis, Jan Coetzee and Ockert Bothma
• Induction of new President, Michael Rhode
• Support from Drakenstein, Clr Sishuba
Opening Session

• Induction of President Elect, Silas Zimu
• Nomination of new Vice-President Elect, Vincent Kobuwe from Tshwane
• Hand over of social contribution to Mr Ndlebi, Headmaster of Makupula High School
1st Session – Day 1: Asset Management

- Anton Booyzen - Asset Management

Regulatory Compliance Challenges

- AM is not about single assets – it is a function
- Process of providing the public with a cost-effective service through certain actions
- Many legislative drivers but munics focus on compliance rather than performing the work
- Recommended establishment of AMEU workgroup
The Association of Municipal Electricity Undertakings (Southern Africa)

1st Session – Day 1: Asset Management

- Mark Damm - International Practices and Trends for managing and Utility Infrastructure
  - RSA challenges similar to other countries
  - AM aims to improve performance and reduce life cycle cost
  - Smart metering driving change in a number of regions
  - Innovation driven by funding shortages, growth, ageing infrastructure, changing demographics
Willem de Beer - Asset Management: An Executive Perspective

- `Other peoples troubles do not get me out of trouble`
- Dealt with components of AM – not holistic
- Leadership needed – issues with procurement, installation then maintenance
- Leaders who understand their business find solutions to the effective AM constraints
2nd Session – Day 1: New Technology

• Harold Hayes - Smart Meters
  – Migration of current technologies to smart metering
  – Use of Remote Access Terminal (RAT)
    • Report of meter or RAT events (tamper or failure)
    • STS compliant
  – 2-way communication to assist with load management and revenue protection
  – AMEU user group for local user group for common communication standards
2\textsuperscript{nd} Session – Day 1: New Technology

• Leon de Nysschen - Metering in various aspects of Municipal Distribution
  – Overview of metering in a municipal environment
  – No one technology is the answer
  – Services offered include load profiles, TOU tariffs, monitoring and service information, SCADA and control systems
  – NRS057 guideline
2nd Session – Day 1: New Technology

• Vic Lawrence - Utility Load Manager (ULM)
  – Supply constraints until generation capacity increases
  – System control will control
    • Real time and bi-directional
    • Not in home but change customer behaviour
    • TOU capability
    • Potentially no load shedding or black outs
  – National implementation – 6750 MW
Final Session – Day 1: Safety

• Ron Millard - More Regulation! But what price Safety?
  – Munic engineers to safeguard safety of staff and public in significant risk environment (old assets)
  – Hide behind shortage of skills and funding
  – Example of Australian safety regulator and audit of 5 distributors
  – Move from prescriptive legislation to safety management schemes (ESMS – process based regulation)
Final Session – Day 1: System Performance

• Barry Gass – Substation Explosion (Case Study)
  – Details of serious substation explosion
  – One thing to identify the hazard, another thing is what to do about it
  – Risk assessment did not take into account all possible hazards (arc flash but not force of explosion)
Social Activities – Day 1

• Ladies treated to a most enjoyable day on the Easy Ride Wine Tour – thanks to Powertech
  – Wine and cheese tasting at Delheim & Boschendal
  – Lunch at Essence Restaurant and a Chocolate Factory demonstration at Franschhoek Town Hall

• Well attended Civic Reception at the Stellenbosch Town Hall
  – Welcome from Ald Jooste
  – Entertainment
1st Session – Day 2: Management Challenges in a Municipal Environment

- Visvin Reddy – Political impact on Municipal Electrical Services Delivery
  - NGC – renewed passion to drive service delivery
  - Political objective to achieve universal access
  - Service delivery protests becoming violent
  - Councillors receiving backlash
  - Illegal connections resulting in deaths
  - eThekwini losses – R120m per year
1\textsuperscript{st} Session – Day 2: Management Challenges in a Municipal Environment

- Adrian Vermaak - Effective Leadership and Skills Development
  - Singapore leadership – next generation?
  - Statistics – emigrants want prof environment
  - NMBM strategy to reverse trend
    - Organisation structure for skills development
    - Professional development (contracted mentors)
    - Increase trainees
  - Leadership to create a learning culture
1st Session – Day 2: Management Challenges in a Municipal Environment

- Dennis Mokoala - Skills Development and Retention
  - National problem – talk about, doing what?
  - Skills Development Act - Legislation to increase investment in education and training
  - Polokwane loss of 22 artisans in 5 year period
  - What can be done to retain staff?
1st Session – Day 2: Management Challenges in a Municipal Environment

- Rob Zietsman - Provision of Bulk Municipal Infrastructure by Developers
  - Service contributions by developer towards cost of shared bulk infrastructure (shared external services, HV lines, substations etc)
    - Required in advance of IDP + no munic finding
  - Special funding model required (NRS 069 not suitable for primary infrastructure)
    - 3 models analysed
1st Session – Day 2: Management Challenges in a Municipal Environment

• Stephen Delport - Metering Spreadsheet to compare Metropolitan Municipality’s Tariffs
  – Complexity of tariffs not understood
  – Higher emphasis on energy charges since 2009
  – Should municipalities follow this bulk price trend
  – Need ‘energy specialists’, not ‘account specialists’
  – Developed spreadsheet – import data for proper tariff comparisons
1st Session – Day 2: Management Challenges in a Municipal Environment

- Hendrik Barnard - An Analysis of Municipal Tariff Determination
  - Scary!!!!
  - Impact on over recovery by munics on surplus
  - Low increase to poor means higher increases to larger customers
  - Munics not replicating price signals inherent in Eskom tariffs
  - IBT should not be applied to all domestic customers
Leon Kritzinger - Municipal Tariff Challenges

- Incorrect design and application of tariffs could lead to municipal collapse
  - Cash flow implications of payment of Eskom account
  - Average 34% Eskom increase resulted in 48% increase in Centlec account – July 2009. Structural change not announced

- Require fair tariffs to cover costs
  - Residential customer base 98% produces 48% of income
2\textsuperscript{nd} Session – Day 2: Management Challenges in a Municipal Environment

- Sandile Maphumulo – Measures to Address Skills Shortages - an eThekwini Perspective
  - Centralization of functions – one set policies, strategies, procedures for elec, water, civil
    - Electricity performance – hours; HR in years!
  - Made critical skills a strategic priority
    - Create attraction (salaries, conditions, training)
    - Aggressively advertise
    - Increase training pool
    - Employer/employee relationship
• Rob Ferrier - Challenge to City Growth due to area of supply disputes
  – Problem arises – areas rezoned to become integral part of City
  – Need for municipal services in these areas to be equitable and sustainable (consolidated bill)
    • consolidated bill, common service centre, BCM network standards
  – Examples of disputes with Eskom on rights of supply
Final Session – Day 2: Energy loss management & theft of materials

• At van der Merwe/Louis Fourie – Energy Loss Management - utility financial sustainability
  – Financial sustainability – cash returns ≥ expenses
  – Losses value chain – need to determine quantum and value of losses (estimated 20 to 25%)
  – Can save R4.5bn per year – fund ADAM?
  – Tariffs will be higher than necessary if not addressed.

  – Losses management an holistic approach
Final Session – Day 2: Energy loss management & theft of materials

• Maboe Maphaka – Overview of the Eskom Energy Losses Management Programme
  – Introduction of Operation Khanyisa
    • dealing with deep rooted societal issues
    • Need to change perceptions by addressing moral fibre
  – Losses increase 4 – 6% from 2002 – 2005
  – Want to assure customers they are acting on the issue before tariff increases
Final Session – Day 2: Energy loss management & theft of materials

- Silas Zimu – Combating Conductor Theft in the City Power Areas
  - Big increase in incidents since 2004
  - Pilot project measures to combat
    - Cable safe, monitoring, touch sensors, joint operations with SAPS, cable identification
  - Gangs – strong, armed and mobile (employee involvement)
  - Partnerships – ADT, JMPD, SAPA etc
Social Activities – Day 2

• Ladies started their day with a light breakfast
  – thanks to CBI Electric
  – Took part in activities involving Olives, Arts & Crafts, Pottery
  – Picnic lunch followed by an Isa Carstens reflexology demonstration at Delvera’s Hall

• Gala Evening at Bloemhof School Hall
  – Speech from Michelle
  – Conrad Koch, Michael and Louis Blom
1st Session – Day 3: System performance

- Willem de Beer - Benchmarking in the South African EDI Context
  - Measure performance against comparable utilities
  - Used to enhance business performance
  - Establish baseline performance – balanced scorecard
  - Municipalities willing to participate in a pilot programme
1st Session – Day 3: System performance

- Claudio Pierini - System Performance (Quality of supply, load shedding challenges)
  - Issues to improve the utilities SAIDI, SAIFI, CAIFI, CAIDI indices
  - Power system performance influenced by many factors
    - Load density. Environmental, geography, weather
  - Suggest - back to basics to improve performance
    - Protection and reducing outage times
1st Session – Day 3: System performance

• Corrie Visagie – Scenarios for Supply/ demand balance
  – Everyone needs to contribute to energy efficiency
  – No clear industry acceptance of problem
  – Energy problem – demand side solutions

• Amal Khatri - Eskom Research into future energy sources for South Africa
  – Operations and strategic research
  – 18 research areas
  – R230 m spend
2nd Session – Success stories

- Clinton Carter-Brown - Electricity Supply Challenges and Lessons Learnt from the 2010 Soccer World Cup
  - Highlights/lowlights
  - Key lessons learned
    - Use of independent stadium operators worked well
    - Ban construction work
    - Cooperation between Eskom and municipalities
  - Legacy – industry wide collaboration effort
2nd Session – Success stories

• Deon Kallis - Removing Obstacles for Emerging Contractors
  – Electrification contract in Langrup informal settlement, Franschhoek
  – Main contractor required sub-contractor with good project management skills – problem
  – Breakeven point assessment critical for performance of sub-contractor
  – No understanding of cash flow/no access to capital
Thank you

• Thank you to all the presenters
• Thank you to the Affiliates for the Sports Day, sponsorships and Exhibition
• Thanks to the AMEU Secretariat
• Thank you to the team from Stellenbosch Electricity and all who have contributed to an enjoyable and very interesting Convention