THE PRESENTERS

DAY1 – Domestic Electric Loads: Consumption, Demand and Profiles

12 November 2014

Name	Bio	Photo
Mr Barry MacColl - General Manager,	Mr MacColl is General Manager – Research, Testing and Development (RT&D), Eskom.	
Research Testing and Development,		
Eskom.	His focus for RT&D is on finding practical solutions to the operational and strategic challenges in Africa's largest power utility. He leads a team of over 400 people at RT&D in	
BSc. Elec Eng, MBA.	applied research, testing and consulting in specialist energy technology-related disciplines, organised as teams structured around centres of excellence.	
	Two of these centres have particular resonance with the work relating to load research and data mining – Demand Management and Energy Analytics.	
	He has been working in the power industry in South Africa for over 23 years. Before this position he spent most of his time in Eskom's Distribution Division as an engineer, manager and strategic planner.	
	Mr MacColl also holds a variety of industry-leadership positions:	
	Chairman of the US-based Electric Power Research Institute (EPRI) Research Advisory Board ◆ Vice Chair International Energy Agency Clean Coal Centre (IEA CCC) ◆ Board member SA Centre for Carbon Capture and Storage (SACCCS) ◆ Board member International Energy Research Exchange ◆ Exco member National Science and Technology Forum ◆ Member Large Infrastructure Investment Committee of the DST ◆ Member of the National Intellectual Property Advisory Panel, and participation on several academic bodies.	

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Dr Vincent Micali -	Dr Micali is founder of Centre of Expertise in Energy Analytics dealing in Energy Economics,	
Corporate Specialist (Business	Statistics and Decision Sciences at Eskom, RT&D.	
Sciences), Eskom.	He holds a PhD (UFS) in Extreme Value Theory (Stats) and is a Chartered Statistician.	
PhD Stats (UFS).	He was actively involved in modelling the transformation of energy generating utilities (generating companies' configurations, Energy generating units performance enhancement, Risk management strategies, led Energy Derivatives task force). Leading specialist in following projects: Maximizing Benefit From Orange River Water supply, Risk and Financial Impacts of the HIV/AIDS Pandemic in Industry, Forecasting Availability of New Plant and Predicting Energy Losses due to Wet Coal.	
	Dr Micali serves on various Boards of Directors or ExCo's (ICCSSA, SASA, SAQA, NMMU) and represented South Africa at the World Energy Council. He speaks seven languages.	
Mr Lloyd Setlhogo - Senior Advisor Engineering, Research Testing and Development, Eskom.	Mr Setlhogo is currently managing the Domestic and other Load Research Projects in Eskom Research (Demand Management Section). He started his career at Technology Services International (TSI) a Division of Eskom Enterprises	
ND ElecEng HC, B. Tech Power Eng (Unisa).	in 2000 as a Senior Technician. In 2005 he became the Load Research Project Leader and was promoted to Senior Advisor Engineering at Eskom Research, Testing and Development in 2012.	

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Mr Marcus Dekenah – Load Research specialist, Contracting to Enerweb EOH. NHD Elec Eng HC, M. Dip. Tech. Eng, BSc. Elec Eng (1st Cl Hons), MBL II.	Mr Dekenah has been technical lead of the NRS 034 domestic load research project, and has lead research in support of Eskom's Geo-based Load forecast tool since inception. He has conducted contract load research (domestic, and non-domestic) both inside and outside South Africa with multi-disciplinary teams of specialists from industry, private, and the academic sector, and has He has authored and co-authored over 40 international and local journal and conference papers and articles on the work. He started his career at the Electricity department at Cape Town City Council involved in a wide range of distribution operations (1980-1988). From 1991-1995 Marcus was doing contract research in HV testing, Energy management and Load research at Electric Power programme, Division of Energy Technology, CSIR. In 1996 he formed his own company and has since conducted a wide range of Load research studies. Through his work, Mr Dekenah has contributed to several standards, and won awards for project work and publications.	
Dr Schalk Heunis – Load research specialist/modeller, Contracting to Enerweb EOH. BSc. Elec Eng, MSc. Elec Eng, PhD Eng.	Dr Heunis holds a PhD (probabilistic modelling of power systems). He has been a member of the domestic load research team since 1998. His current area of interest is analytics for the internet of things. In 2003 he joined Enerweb, where his responsibilities included load research, software architecting and system design. During this time, he headed the design team for the implementation of the Virtual Power Station for Eskom. In 2011 he co-founded House4Hack with the purpose to promote innovation through open hardware and software. House4Hack has produced winners in the first and third Gauteng innovation competition, Rorotika innovation to change the world and the Gada prize for interim personal manufacturing.	

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Dr Gerhard Botha - Chief Engineer,	Dr Botha's experience includes research and training in Quality of Supply and power system	
Eskom.	reliability. Recent work is focussed on the QOS impacts of renewable generators connected to the grid, especially harmonics and resonance.	
B. Elec Eng, MSc Elec Eng, Phd(Elec Eng)	He has been with the research department of Eskom since 2002, and was appointed Chief Engineer in 2010. He is a member of the SAIEE, senior member of the IEEE and a registered Professional Engineer with ECSA.	
Johannes C Jordaan – Chief Economist, Economic Modelling Solutions.	Dr Jordaan manages his own economic consultancy company where he focuses on economic modelling, forecasting and research.	
BS&S Town and Regional Planning, BCom (Hons) Econ, MCom Econ, PhD Econ.	He has extensive experience in economics, including socio-economic impact assessment studies, economic impact modelling, cost escalation modelling, macroeconomic modelling, policy analysis, economic forecasting and economic research.	
	He lectured at the University of Pretoria 2001-2006 and was a senior economist and manager at KPMG 2007-2009.	
	He is Research Fellow at the Personal Finance Research Unit (PFRU) at UNISA and an associate at Econometrix Pty (Ltd). Dr Jordaan has participated in the Fin24 economist of the year competition since 2012.	

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Mr Monde Soni - Senior Engineer in	Mr Soni leads the development of Geo-based load forecasting for Distribution master	
Master Planning, Eskom.	planning in Eskom, is member of Eskom's Integrated forecasting committee (IFC) and chairman of Planning Geo-based load forecast working group.	
BSc. Elec Eng, MSAIEE	He is also a manager within Network Planning Department that deals with Spatial Planning, Electrical Forecasting, GIS and Planning Software Tools.	
	He ensures that Master Planning constantly has a 20 year horizon plan within Eskom. He achieves this by working with specialists to study: Environmental constraints, Regional socio-economics, Electrical load forecasting and Regional strategic projects.	
	Mr Soni is passionate about research and information sharing. Previous experiences include lecturing and power generation system engineer. He is a part-time MSc Eng. Student.	
Mr Hennie Mostert - Chief Engineer, Western cape Operating Unit, Distribution, Eskom.	Mr Mostert has been involved in the development and implementation of Quality of Supply assessment methods and reporting systems in Eskom since the mid 90's.	
BSc. Eng, MBA.	He started his career within Eskom in 1986 and worked for a number of years as a District Engineer and Distribution Planning Engineer in the Distribution business before he became involved in the Quality of Supply field in the mid 90's. Since then he has been actively involved in establishing and developing this speciality field in Eskom. His areas of interest include the measurement of power Quality and customer service fields.	
	Mr Mostert is a registered Professional Engineer with ECSA.	

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Ms Vashna Singh - Senior Tariff Design and Policy Advisor, Eskom. BComm	Ms Singh is a Senior Tariff Design and Policy Advisor for Electricity Pricing at Eskom. She has a 20 year career at Eskom, predominantly as a subject matter expert, managing the development of electricity pricing strategies/new products and dynamic tariffs to achieve demand response. Her range of expertise covers the entire value chain from research, testing, business case to national implementation of new pricing products. She is an Electricity Pricing subject matter expert and advisor to various Demand Response, Research and Technology Committees.	
Dr Gerard Van Harmelen - Utility Analytics Manager, Enerweb EOH. BSc Elec Eng (Cum Laude), MSc Elec Eng (Cum Laude), PhD Eng.	Dr Van Harmelen is currently specialising in Utility Analytics. He coordinates Demand Intelligence group, and is a practising data scientist where his daily activities include Big Data management, stochastic modelling and simulation, optimisation and decision support infrastructures in the descriptive, diagnostic, predictive and prescriptive areas He has authored and co-authored over 40 international and local journal and conference papers, and was responsible for the development and delivery of the world's first Virtual Power Station as well as an business internet-based system for metering profile distribution. Dr Van Harmelen co-founded Enerweb in 1999, and has won many awards in the areas of modelling and analysis of utility data. He won first prize in an EPRI electrical load forecasting competition and has been the recipient of two National Eskom Manager's Awards.	