The IEEE PES and the EPECentre presents:

SmartGrids and Demand Side Management

by Dr Bruno Meyer

WORKSHOP DATES

Friday, 09 July	Brisbane	– University of Queensland
Monday, 12 July	Auckland	– University of Auckland
Wednesday, 14 July	Wellington	– Transpower NZ
Friday, 16 July	Christchurch	– EPECentre / University of Canterbury

^{*}please contact individual workshop hosts for details

Presenter: Dr Bruno Meyer

Deputy Director Key Accounts, RTE (France), IEEE Fellow / IEEE Distinguished Lecturer

TOPICS:

Part I: SmartGrids (and are they so dumb today anyhow?)

Part II: SmartGrids Demand Side Management and Distribution, where it all started

Part III: SmartGrids, Demand Side Management and Transmission

Part IV: What will the future be like?

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WORKSHOP OUTLINE:

SmartGrids and Demand Side Management by Dr Bruno Meyer

PART I: SMARTGRIDS (AND ARE THEY SO DUMB TODAY ANYHOW?)

- SmartGrids: Why the catchphrase caught?
- Why upgrade the grid?
- The economical values at stake;
- How to determine which technology is ripe, and which to develop?
- New technology coming along. The right window of opportunity
- Mapping of the different players worldwide
- Transmission and Distribution? Different needs? Different paths?

PART II: SMARTGRIDS DEMAND SIDE MANAGEMENT AND DISTRIBUTION, WHERE IT ALL STARTED

- Dispersed generation: How the world went upside down
- Opening of energy markets: necessity to give access to information to all players.
- Electricity meters: the revolution on its way: Automatic Meter Management (AMM)
- Examples of successful deployments and new ones coming along. Which technology for AMM?
- How to improve fault location? And how to improve power restoration?
- How Distribution Operation could change in a Smart Grid?
- How network development should change? How to optimize losses?
- Examples of experiments being done at a wide scale in Europe.

PART III: SMARTGRIDS, DEMAND SIDE MANAGEMENT AND TRANSMISSION

- Intelligence is widely spread already. Why it is not enough?
- Demand Side Management: why in some cases, the capacity has dramatically diminished? Market issues and Demand Side Management
- How to deal with the increased share of renewable energy? Intermittency requires new ways to operate the grid
- How is investment done on the grid done today? How should it change?
- Face peak demand: Clever load shedding, use the flexibility of industry
- Prepare and facilitate the arrival of new players (aggregators).

PART IV: WHAT WILL THE FUTURE BE LIKE?

- SmartGrids: toward a better use of fossil fuels and less CO2 emissions
- Electric vehicles: coming along or stranded? Which standards? How to deal with them? How to plan for the introduction? How to operate their reloading?
- Evermore Renewables: how to use "smartness" to deal with its uncertainty?
- Demand Side Management: How to combine "keep the lights on" with "keep the customer satisfied"?
- Transmission & Distribution: worlds apart?





Workshop Dates & Venues*

Friday, 09 July, Brisbane – University of Queensland

Time: 1400-1600

Venue: Room N201-Hawken Bldg. (#50),

The University of Queensland, St Lucia Campus (Staff House Road)

C/- Tapan Saha: saha@itee.ug.edu.au

Monday, 12 July, Auckland – University of Auckland

Time: 1300-1630

Venue: Lecture Theatre MLT1/303-G23

Building 303, Science Centre,

38 Princes Street

The University of Auckland

C/- Nirmal Nair: n.nair@auckland.ac.nz

Wednesday, 14 July, Wellington – Transpower NZ

Time: 1000-1300

Venue: the Seminar Room, Transpower House,

96 The Terrace, Wellington

C/- Ramesh Rayudu: R.K.Rayudu@massey.ac.nz

Friday, 16 July Christchurch – EPECentre / University of Canterbury

Time: 1300-1630

Venue: Lecture Theatre E8, College of Engineering,

Creyke Road, University of Canterbury

C/- Joseph Lawrence: joseph.lawrence@epecentre.ac.nz





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^{*}Please contact individual contacts above for confirmed workshop times and further information