

## Asia-Pacific Energy Leaders' Summit Workshop

Wellington, New Zealand, 16.03.2016 2:00- 3:30 pm  
InterContinental, 2 Grey Street, Wellington, New Zealand

### Building and Operating a Resilient Renewable Electricity System

#### Day Chair

- Toby Stevenson (Director, Sapere Research)

At the heart of resilience within the electricity sector is the fact that global power generation from renewable energy is rising by around one percentage point per year and reached 23% in 2014. The power sector transformation is ongoing. The transition pace and ambition level varies from country to country and measures need to be adapted to the specific conditions of the power system.

Some of the specifics include the size of the power system; interconnections with neighbouring systems; whether generators are connected to transmission or distributions systems; characteristics of conventional generators; geographical distribution of variable renewable energy generators; energy policies; power market size; established operational practices; and the institutional frameworks allowing for both flexible generation and demand.

Irrespective of their geographical boundaries, a large number of the power systems undergoing significant growth are what can be considered "islanded" networks; such systems can be vulnerable from both supply and operational standpoints. This apparent vulnerability heightens the concerns about the introduction of renewable resources, base load or intermittent, into such networks.

Over the last 25 years New Zealand has established a world recognised, renewable dominated, power sector managed through an effective wholesale market with well proven commercial and operational protocols.

#### Power Sector Transformation – Sharing Experiences

The Workshop is designed to provide a forum for experiences to be shared amongst those who are responsible for the design, construction and operation of these networks as they grow.

#### Building and Operating a Resilient Renewable Electricity System

Discussion will be directed at identifying and highlighting the issues, canvassing experience within the Asia-Pacific region and exploring the potential to continue the exchange of practical operating experience to catalyse and reinforce the transition to resilient systems as renewable resources contribute a growing portion of generation.

Wednesday, 16 March 2016

2.00 pm

#### Welcome and Introduction

The workshop will open with a brief overview of the global power sector transformation, the technical and commercial challenges faced in countries developing resilient systems while expanding renewable energy capacity and the key experiences of such countries.

**Toby Stevenson** (Director, Sapere Research, NZ)

2.15 pm

#### Panel I

Senior industry representatives from the Asia-Pacific region will highlight the particular issues that they face and areas where exchange of experience could be of most value. New Zealand will outline its learnings from the establishment of its power industry.

**Ray Brown** (Manager Transmission, Distribution, Renewable AECOM, NZ)

**Jojo Reyes** (Assistant Vice President, Meralco, Philippines)

**Andrew Daka** (Executive Director, Pacific Power Association, Fiji)

**Neha Mukhi** (Climate Change Specialist, World Bank, US)

#### Facilitator:

**Dr Brent Layton** (Chair, Electricity Authority)

2.55 pm

#### Panel II

A chaired discussion

Speakers will seek to:

- Summarise key issues facing countries building resilient power systems with increasing renewable generation
- Identify how current and evolving experience in these markets can most effectively be shared amongst interested parties
- Ensure support for collaboration amongst interested organisations going forward

**Alison Andrew** (CEO, Transpower, NZ)

**Greg Skelton** (Chief Executive, Wellington Electricity Lines)

**Ngo Son Hai** (Vice President, Vietnam Electricity)

#### Facilitator:

**Toby Stevenson** (Director, Sapere Research, NZ)

3.25 pm

#### Closing Remarks

**Toby Stevenson** (Director, Sapere Research, NZ)