



CEDA CONFERENCE

Power in a new Era: Climate Change policy implications for Australia's energy market

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Power

Power (electricity) is;

- taken for granted
- an essential service
- relied upon 24hrs day
- a life saver

Reliability

- Australian standards are high
- Most faults at distribution level
- Peak usage is on the increase (A/C)
- **Currently coal provides ~80% of energy, reliable, safe and cheap**

Expanded Renewable Energy Target & CPRS

- Current renewable target ~ 2% energy
- Expanded to 20% of energy to be renewable by 2020
- CPRS will add cost to coal generation
- CPRS may force some generators to close prematurely (coal)

Note: Targets exclude generation from facilities built prior to 2001, ~16,000 GWh



Impact of CPRS on existing plant

- Low or no investment in current plant
- Maintenance kept at minimum
- Increased wear & tear from high Load cycling
- **Reliability a critical issue over the next 5-10yrs**

Replacement Technology Options

- Carbon Capture & Storage (CCS)
- Geothermal
- Solar
- Gas – CCGT (technology commercially available today)
- Nuclear

Economic Environment

- Costs rising
- Growing consumer demand
- Reduced appetite for private investment
- Availability of capital funds is tightening

CPRS Outcomes

- Technological developments – need massive financial injection
- Trading systems / mechanisms yet to be commercialised
- Commands new cash
- Higher electricity prices – impact of higher costs on Australian economy
- Wealth transferred overseas??

Summary

- Can't stand still
- Power system is becoming more vulnerable - reduced margins of capacity
- Gap in targets and technology for 2020 outcome
- New technologies are expensive
- The markets will need time to adjust & provide certainty
- DSM/DSR will be an integral part of the solution
- Alternative uses for fossil fuel will emerge
- Energy costs will rise

Thankyou

