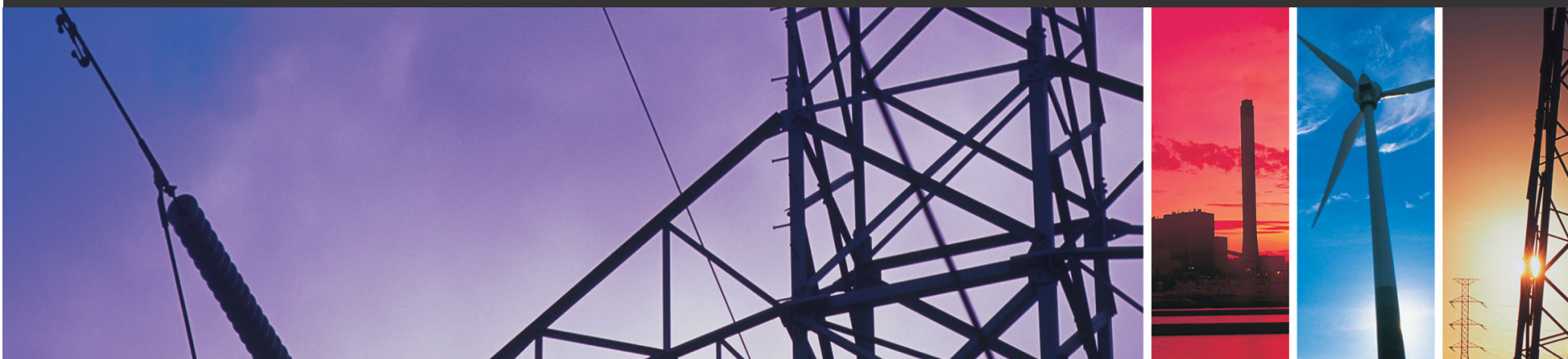


Session 2: Update following 1st Interim Report Public Forum 1 May 2009

Review of Energy Market Frameworks in light of Climate Change Policies



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Update following 1st Interim Report

Eight issues identified for the Review:

1. Convergence of gas and electricity markets
2. Generation capacity in the short term
3. Investing to meet reliability standards with increased use of renewables
4. System operation and intermittent generation
5. Connecting new generators to energy networks
6. Augmenting networks and managing congestion
7. Retailing
8. Financing new energy investments

Short term management of reliability (1)

Rationale for 1st Interim position

- CPRS is likely to:
 - reduce profitability for high emission generators
 - change operating behaviour
- Inherited tight demand/supply balance projected in some regions
- Tools available to system operator may not be appropriate in the event of an unlikely but credible contingency of a large reserve shortfall
- Existing intervention mechanisms for managing reliability - not designed to be used on a frequent basis and/or deliver large amounts of capacity to the market

Short term management of reliability (2)

Submissions

- Stakeholders considered this a significant issue to progress
- Range of views on possible options for change

Updated position

- Remains a material issue – intend to provide recommendations for change to MCE

Current focus of work

- Developing a package of options that would aim to supplement/support existing tools/mechanisms

Connecting remote generation (1)

Rationale for 1st Interim position

- Expanded RET is likely to stimulate investment in new generation capacity, which may be:
 - clustered in similar geographical areas; and
 - likely to be remote from grid
- Existing framework based on bilateral negotiation, which is not likely to facilitate coordination of applications and allow consideration of future connections and efficient sizing.
- Likely to result in increased costs and reveal timing issues.

Connecting remote generation (2)

Submissions

- Stakeholders supported position in 1st Interim noting:
 - confidentiality & information provisions require further consideration
 - merit in addressing ‘under-sizing risk’
 - caution for creating incentives that inefficiently ‘over-size’
- Some stakeholders considered that issues for distribution networks have not received adequate attention in the Review

Updated position

- Remains a material issue – intend to provide recommendations for change to MCE

Current focus of work

- Progressing work on developing detail behind preferred option

Efficient provision and utilisation of the transmission network (1)

Rationale for 1st Interim position

- CPRS and expanded RET likely to influence economics of being a generator:
 - can result in dispatch and location entry/exit decisions
 - affects patterns of flow on transmission network
- Question the ability of existing frameworks to deliver efficient, co-optimised decision making by:
 - transmission network service providers; and
 - generators (and load)
- Possible increases in materiality of congestion?
- Also considering options to improve inter-regional transmission charging arrangements.

Efficient provision and utilisation of the transmission network (2)

Submissions

- Stakeholders noted:
 - a general expectation that congestion will increase under CPRS and expanded RET
 - importance of certainty around network access for existing generators
 - managing costs imposed on existing generators
 - Importance of interactions with other elements of this and other Reviews, e.g. DSP.
- Varying views on existing framework providing sufficient incentives for network businesses to respond

Updated position

- Determining materiality of issue – intend to canvass packages of options for change

Current focus of work

- Progressing in parallel:
 - Assessment of materiality of the issues (analytical & quantitative)
 - Identifying options that are proportionate to issues being addressed

Retail price regulation (1)

Rationale for 1st Interim position

- CPRS is likely to result in large and unpredictable cost increases for retailers in early years
- Existing price regulation mechanisms may not be flexible enough to cope with these large and volatile cost changes
- Note:
 - pricing frameworks are a matter for individual jurisdictions
 - MCE and COAG processes on this issue

Retail price regulation (2)

Submissions

- Retailers identified this as a significant issue

Updated position

- Remains a material issue for further analysis

Current focus of work

- Detailed analysis of why CPRS might be different type of cost
- Developing, in consultation with jurisdictional regulators, guiding principles for more flexible retail pricing.

Convergence of electricity and gas markets (1)

Rationale for 1st Interim position

- CPRS may drive increases in gas for power generation
- May result in inefficiencies between gas and electricity markets
- Considered existing frameworks to be robust as:
 - appear to facilitate and sustain efficient trading
 - support efficient development of network infrastructure – no material impediments
 - allow for allocation of available resources to most appropriate

Convergence of electricity and gas markets (2)

Submissions

- Stakeholders, particularly AEMO, questioned specific elements of our position. It was noted that there are some specific issues to consider:
 - relevant maximum prices in each market and how these are set; and
 - ability of system operator (AEMO) to have regard to relevant gas or electricity market if intervening.

Updated position

- Reconsidering specific issues raised by stakeholders on this issue

Current focus of work

- Examining materiality of the specific issues raised and will present findings in the 2nd Interim Report

Investment in capacity to meet reliability standards (1)

Rationale for 1st Interim position

- Expanded RET likely to bring forward larger proportion of intermittent generation
- Ability of existing frameworks to support ongoing investment in capacity to meet reliability standard (0.002% USE)
- Broad view that there are appropriate market signals under the existing framework:
 - energy-only market design
 - spot price/forward contracts
- Consider NEM has robust, evidence-based processes for reviewing and updating the key market parameters
- Removal of policy uncertainty in respect of carbon pricing may alleviate potential issues with operation of existing investment signals

Investment in capacity to meet reliability standards (2)

Submissions

- Majority of stakeholders generally support position
- Some stakeholders raised concerns about economic costs of price volatility under existing NEM design (large users)

Updated position

- We continue to think that the existing frameworks are capable of managing identified risks once CPRS and expanded RET introduced

Current focus of work

- Exploring further concerns of some stakeholders

System operation with intermittent generation (1)

Rationale for 1st Interim position

- Expanded RET will stimulate investment in renewables, predominately wind
- Creates challenges for system operator:
 - wind has rapid variations in output; and
 - differences in technical features of wind compared to thermal generators
- Ability of the existing frameworks to manage the electricity system with increased intermittent generation
- Broadly considered that the existing framework should be able to cope with the changes:
 - existing NEMMCO dispatch systems are robust
 - range of relevant ongoing reforms
(changes in anticipation of the issue have already been made)

System operation with intermittent generation (2)

Submissions

- Broad support from stakeholders, however specific issue raised with respect to:
 - ancillary services markets. Do they need to be extended as the need to procure additional services increases?

Updated position

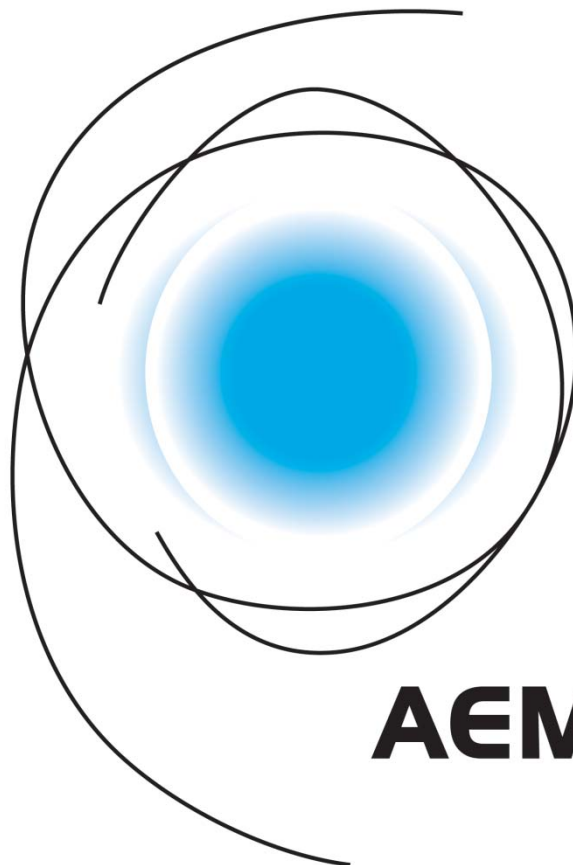
- Consider that the specific issue of ancillary service markets relevant to assess

Current focus of work

- Undertaking analysis on this specific issue, particularly with respect to determining need for extension of ancillary services markets
- Outcomes will be presented in 2nd Interim Report

Other Issues for Consideration

- Stakeholders highlighted issues for electricity distribution networks as gap in the analysis
- Concerns raised:
 - CPRS likely promote use and connection of embedded/micro generation and demand management
 - May increase requirements for distribution businesses to manage more actively their networks as variability of flows increase
- Potential for impacts to be handled through existing obligations and framework for economic regulation
- May be challenges for innovation and research – required due to rapid changes for distribution businesses
- We are analysing issues raised with findings provided in 2nd Interim Report



AEMC