Regulatory and Institutional Framework for Transmission

A presentation by Jamie Carstairs

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Agenda

- Scope of Work
- Regulation and Markets
- Regional Structure
- Reliability and Service Standards
- Planning and Investment
- Financial Markets
- Implications
### Scope of work

#### Purpose of review

- To assist Ministers to determine the appropriate way forward for transmission regulation, and
- To provide specific recommendations, based on qualitative analysis, on institutional and regulatory changes to:
  - improve the investment climate
  - lower the cost and complexity of regulation
  - improve the planning and development of transmission networks

Recommendations were required to support the original intent of the NEM: an effective transmission system, supporting competition relying overwhelmingly on regulated investments.
Regulation and markets

Investment against price differentials

“Two merchant lines supported by differences in spot prices in the two market areas they connect have been placed in operation under this arrangement [that is, MNSP provisions] in Australia…..Neither merchant link appears to be profitable. As far as we can tell, these are the only two merchant transmission lines operating anywhere in the world that have been built in anticipation of recovering their costs entirely from congestion rents arising from the difference in nodal prices” Joskow and Tirole, 2003

Future directions

Continued interaction of markets and regulation

Firecone recommendations:

• Two broadly separate approaches: regulated networks and wholesale and retail markets;

• Firm and inevitably somewhat arbitrary separation;

• Regulated sector should provide a transparent predictable base against which market participants can respond

Simplified regulation based on price differentials

“Assessments relating to new regulated transmission investments need to be rationalised, with regulatory assessment linked to measurable and transparent commercial benefits, as signalled through movements in firm FTR prices …..Additional regions will allow the FTRs to provide a market signal for the need for augmentation, rather than relying on regulatory discretion” Energy Markets Review, 2002
### Regional Structure

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<tr>
<th>Findings</th>
<th>The Code criteria have been met but change has stalled</th>
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| Recommendation | Firecone recommended a change to the criteria to make them more economic and less technical  
| | Possible criteria included:  
| | – transparent and effective processes for maintenance of power system security  
| | – static, dynamic and allocative efficiency  
| | – ability to manage and price risks |
| Outcome | A study is being undertaken by CRA/NECG to determine the criteria |
### Reliability and service standards

| Findings | • Effective regulation requires clear and appropriate reliability and service standards; however:  
|          |   – Code reliability requirements are open to interpretation  
|          |   – State-based instruments use widely differing forms of planning criteria, and their underlying rationale is not always clear  
|          |   – Service incentives that had been proposed by NEMMCO were technically focussed (hours of constraints) not market focussed (cost of constraints) |
| Recommendation | • A working group (Reliability Panel + TNSP representatives) should make recommendations to AEMC on a transparent and consistent framework for setting appropriate and consistent reliability obligations  
|          | • Service standard incentives should move towards congestion costs and unserved energy attributable to transmission outage, with the level of incentive calibrated to TNSP controllable costs |
| Outcome | • ACCC has established working group to consider how to incorporate market based performance incentives within the service standard incentive scheme |
## Planning and investment

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<th>Findings</th>
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<td>• There may be reason for concern that TNSPs do not prioritise projects that primarily benefit other regions</td>
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<td>• Inefficient underinvestment may occur as a result of problems with project identification, prioritisation and investment</td>
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<td>• Reliance on an e-post review of prudency of investment reduces the incentive effects of TNSP regulation</td>
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<th>Recommendations</th>
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<td>• Develop a power for the AEMC to direct TNSPs to take potentially economic projects through the appraisal processes in the Code</td>
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<td>• Amend Code to require NEMMCO to prepare an annual ‘transmission statement’, and to require TNSP cooperation</td>
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<td>• Consider greater use of within-period approval or ex-ante price cap</td>
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<td>• Continued reliance primarily on “for-profit” TNSPs.</td>
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<td>• MCE agreed to give AEMC a last resort power to direct that inter-connection projects be subject to the regulatory test</td>
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<td>• 2004 SOO will contain 1st Annual National Transmission Statement</td>
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<td>• ACCC revising framework for capital expenditure</td>
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# Financial Markets

## Findings
- SRAs are non-firm, but can support firm hedges
- Under-recovery from settlement residues auctions suggests participants face difficulties in pricing SRAs

## Recommendations
- No evidence that a new financial instrument needs to be created, and no case for requiring NEMMCO or a TNSP to underwrite a firmer instrument
- Steps to increase ability to price SRAs would include:
  - Improved incentives for TNSPs related to the market impact of availability
  - Greater certainty on despatch arrangements in the event of interconnector constraints.

## Outcome
- No further action
- Issue may get revisited in the context of future arrangements for regional boundaries
Implications

• Focus on effective regulation – not alternatives to regulation

• Develop the “regulatory contract”, through:
  – Increased specification of outputs
  – Stronger and better designed price signals

• Strengthen incentive effects, but recognise that:
  – Ex-ante price cap for capital investment will increase incentives and risks borne by TNSPs
  – Ex-ante price caps will also reduce role for independent scrutiny of investment decisions during the regulatory period

• Take forward work on the practical implementation of a “beneficiary pays” approach to transmission pricing