grid australia
BACKBONE OF THE NEM

# AEMC Public Forum on Transmission Frameworks Review

## Transmission Planning

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TRANSEND
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# Are existing planning arrangements working as intended?

- Existing arrangements are delivering…
  - Investment to meet customer reliability standards and connect generation
  - Significant commitment from TNSPs to investigate the need for more inter-regional investment including RIT-T assessments (e.g. SA to Victoria interconnector)
  - A high degree of transparency through Annual Planning Reports, the National Transmission Network Development Plan (NTNDP) and applications of the RIT-T
- Has been no need to exercise Last Resort Planning Power (LRPP) related to inter-regional transmission investment

"The Commission has decided not to exercise the LRPP in 2011. In making this decision, the Commission considered the response of the various JPBs to any inter-regional congestion issues or opportunities… as outlined by AEMO in the 2009 NTS and 2010 NTNDP" (AEMC Report, 3 Nov 2011)

# Potential enhancement options

| AEMC option for reform | Grid Australia comments |
|---|---|
| **National framework for transmission network reliability standards** – reliability standards set by an independent body, economically derived and expressed deterministically | Implementation of AEMC Final Report (September 2008) recommendations are supported and long overdue |
| **Improving consistency of APRs** – aimed at improving transparency of planning processes | Option is supported – TNSPs and AEMO have already held informal discussions to achieve this outcome |
| **Improving transparency of the RIT-T** – aimed at separate identification of wealth transfers | Open to this option if limited to interconnector investments requiring full scale market modelling provided no impact on timely delivery |

# Potential enhancement options

| AEMC option for reform | Grid Australia comments |
|---|---|
| **Aligning revenue resets of TNSPs** – aimed at improving coordination of inter-regional investments | • Open to exploring this option<br>• Need to weigh up benefits against coordination of investment proposals between transmission and distribution within a region<br>• Also note that contingent projects provide a mechanism for coordinating funding of interconnector investments and related works |
| **Reliability standards for interconnectors** – aimed at maintaining the capability of interconnectors over time | Open to exploring this option but note that detailed design and implementation may be complex |

# Options for more significant reform

| AEMC option for reform | | Description |
|---|---|---|
| 1 | Enhanced coordination of the NTNDP and APRs | Require AEMO to endorse TNSP APRs and TNSPs to endorse AEMO's NTNDP |
| 2 | Harmonised NEM-wide regime based on the South Australian arrangements | Refer to the following slide |
| 3 | A single NEM-wide not for profit transmission planner and procurer | Extend AEMO's Victorian planning and procurement role across the NEM |
| 4 | A single NEM-wide for profit joint-venture planning body established by TNSPs | Existing TNSPs establish a JV body to assume all rights and obligations of a TNSP in the NEM including NEM-wide planning and investment decision making |

# Option 2 – SA Arrangements

- Key features of the transmission planning arrangements currently applied in South Australia include…
  - Accountability for investment decision making is with the TNSP responsible for service delivery
  - The investment decision maker is a “for profit” TNSP capable of responding to financial incentives to deliver efficient outcomes
  - Reliability standards are set independently of the TNSP on an economic basis and expressed deterministically (thereby promoting both efficiency and transparency)
  - Independent oversight of demand forecasts used for transmission planning via the SASDO
  - AEMO provides independent planning oversight via the NTNDP and its involvement in revenue reset and RIT-T processes

# Grid Australia policy positions

- Transmission businesses retain responsibility for investment decision making and service outcomes
- Transmission frameworks enable and facilitate timely delivery of network developments to meet customer needs
- Maintain clear delineation between AEMO's longer-term strategic planning role and the role of transmission owners undertaking investment planning and decision making
- Transmission reliability standards should be determined economically but expressed deterministically
- Achieving efficient outcomes requires regulatory certainty and appropriate risk allocation

Policy on Transmission Arrangements in the NEM adopted June 2010, www.gridaustralia.com.au

# Grid Australia policy positions

- Any changes to the transmission framework must be well justified, evidence based and proportionate so as to maintain market stability
- Incentive based arrangements lead to better outcomes than imposing obligations
- Transmission frameworks should be consistent across the National Electricity Market

Policy on Transmission Arrangements in the NEM adopted June 2010, www.gridaustralia.com.au

# Options for more significant reform – assessment criteria

| Criterion | | Description |
|---|---|---|
| 1 | **Promotes efficient investment decisions** | • Investment planner/ decision maker is subject to financial incentives<br>• Capacity constraints "built out" in a timely way when congestion costs are inefficient<br>• Existing transmission capacity maximised though operational measures and financial incentives |
| 2 | **Facilitates competition in construction and financing** | • All TNSPs tender for construction, and so competition exists in this area<br>• More efficient (and better for customers) for regulator to determine efficient financing costs where competition is ineffective |
| 3 | **Facilitates co-optimised transmission augmentation and renewal decisions** | Only a single entity with well-designed financial incentives is able to co-optimise transmission augmentation and asset renewal decisions |

# Options for more significant reform – assessment criteria

| Criterion | | Description |
|---|---|---|
| 4 | **Allows efficient trade-offs between transmission investment and O&M** | Only a single entity with well-designed financial incentives is able to make efficient trade-offs between capital investment and operating and maintenance decisions |
| 5 | **Allows connection and related shared network investment to be considered together efficiently** | Coordination of connection and related augmentation requirements by a single party facilitates timely and efficient connections |
| 6 | **Takes a national view of transmission investment needs** | • Sufficient focus on interconnector needs<br>• Facilitation of co-optimised generation and transmission |
| 7 | **Timely investment approval and delivery** | • Framework changes should at worst not slow down current regulatory investment approvals<br>• Must not impede investment in response to urgent needs |

# Options for more significant reform – assessment criteria

| Criterion | | Description |
|---|---|---|
| 8 | **Accountability for investment decision making** | • TNSPs remain accountable for investment decision making and service delivery (consistent with COAG agreement 2007)<br>• No uncertainty on accountability (e.g. through third party involvement) |
| 9 | **Minimise transition costs and uncertainty impacts** | • Transition (implementation) costs are an important consideration in comparing reform options<br>• Complexity should not be introduced to pursue incremental and/ or theoretical benefits<br>• Uncertainty itself also imposes a cost (e.g. impact on generation investment) |

# Options for more significant reform – preliminary assessment

| Assessment criteria | | Option 1 – Enhanced coordination of NTNDP and APRs | Option 2 – Harmonised regime based on SA arrangements | Option 3 – Single NEM-wide not for profit planner/ procurer | Option 4 – Single for profit JV planning body set up by TNSPs |
|---|---|---|---|---|---|
| 1 | **Promotes efficient investment decisions** | **3** – individual for profit entities can respond to incentives in most regions (interconnectors require coordination) | **3.5** – individual for profit entities can respond to incentives in all regions (interconnectors require coordination) | **1** – limited to detailed design of new assets | **4** – national, for-profit entity can fully respond to incentives |
| 2 | **Facilitates competition in construction and financing** | **3** – construction can be tendered, regulator sets efficient WACC in most regions | **4** – construction can be tendered, regulator sets efficient WACC in all regions | **2** – construction can be tendered, competition for financing is ineffective | **4** – construction can be tendered, regulator sets efficient WACC |

**Note:** Assessment of Option 1 is essentially the same as assessment of current arrangements

**Key:** 4 – fully meets criteria; 3 – mostly meets criteria; 2 – partly meets criteria; 1 – meets criteria in limited way; 0 – does not meet criteria (assessment scores are indicative only)

# Options for more significant reform – preliminary assessment

| Assessment criteria | | Option 1 – Enhanced coordination of NTNDP and APRs | Option 2 – Harmonised regime based on SA arrangements | Option 3 – Single NEM-wide not for profit planner/ procurer | Option 4 – For profit JV planning body set up by TNSPs |
|---|---|---|---|---|---|
| 3 | **Facilitates co-optimised transmission augmentation and renewal decisions** | **3** – meets in most regions | **4** – meets in all regions | **1** – split responsibility effectively precludes this | **3.5** – if well set up |
| 4 | **Allows efficient trade-offs between transmission investment and O&M** | **3** – meets in most regions | **4** – meets in all regions | **1** – split responsibility effectively precludes this | **3.5** – if well set up |
| 5 | **Allows connection and related shared network access to be considered together efficiently** | **3** – meets in most regions | **4** – meets in all regions | **0** – split responsibility effectively precludes this | **4** – if well set up |

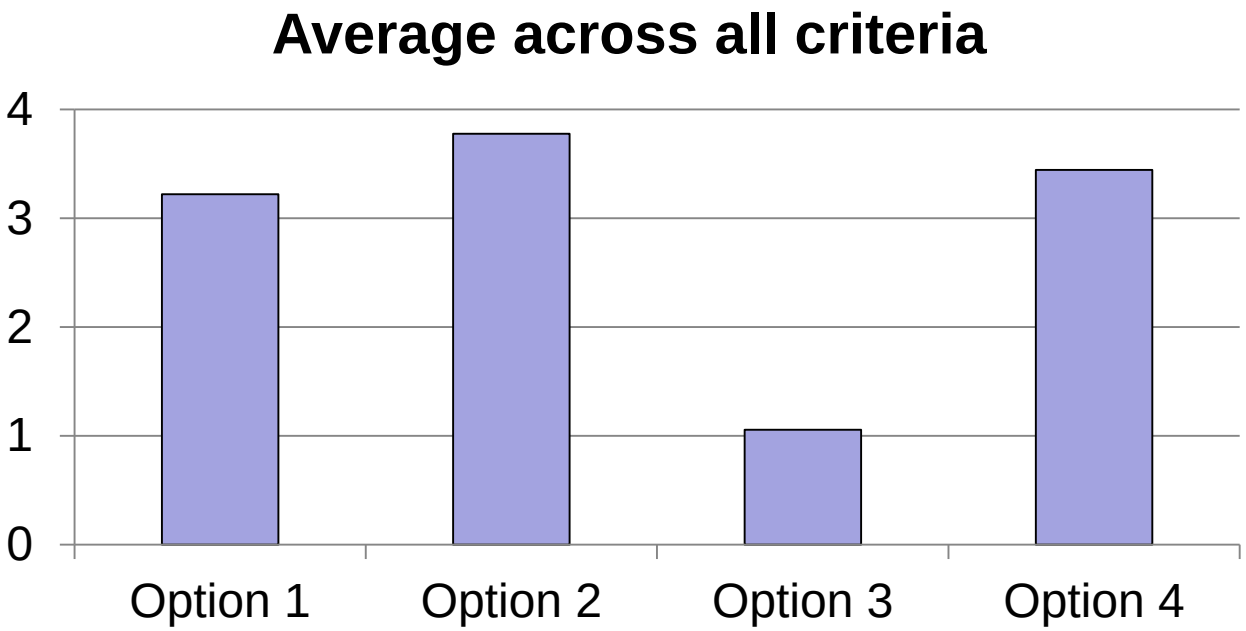
**Key:** 4 – fully meets criteria; 3 – mostly meets criteria; 2 – partly meets criteria; 1 – meets criteria in limited way; 0 – does not meet criteria (assessment scores are indicative only)

# Options for more significant reform – preliminary assessment

| Assessment criteria | | Option 1 – Enhanced coordination of NTNDP and APRs | Option 2 – Harmonised regime based on SA arrangements | Option 3 – Single NEM-wide not for profit planner/ procurer | Option 4 – For profit JV planning body set up by TNSPs |
|---|---|---|---|---|---|
| 6 | **Takes a national view of transmission investments needs** | **3.5** – coordination of interconnector planning required | **3.5** – coordination of interconnector planning required | **3.5** – likely but absence of local knowledge also likely | **4** – full national view |
| 7 | **Timely investment approval and delivery** | **3.5** – meets in most regions | **4** – meets in all regions | **1** – tender processes known to introduce delays in Victoria | **4** – if well set up |
| 8 | **Accountability for investment decision making** | **3** – meets in most regions | **4** – meets in all regions | **0** – inconsistent with COAG | **4** – meets |
| 9 | **Minimise transition costs and uncertainty impacts** | **4** – minimal change required | **3** – only modest change | **0** – significant cost & complexity | **0** – significant cost and very complex |

**Key:** 4 – fully meets criteria; 3 – mostly meets criteria; 2 – partly meets criteria; 1 – meets criteria in limited way; 0 – does not meet criteria (assessment scores are indicative only)

# Options for more significant reform – preliminary assessment




**Note:** Assessment of Option 1 is essentially the same as assessment of current arrangements

**Key:** 4 – fully meets criteria; 3 – mostly meets criteria; 2 – partly meets criteria; 1 – meets criteria in limited way; 0 – does not meet criteria (assessment scores are indicative only)

**Note:** Option 2 provides a step towards and keeps options open for moving to Option 4 in the future (should this be desirable)

# Conclusions

- Overall existing planning arrangements are working as intended but enhancements are possible
- Grid Australia also supports a consistent transmission planning framework across the NEM
- Of the harmonised NEM-wide options for reform Option 2 (based on SA arrangements) and Option 4 (single for profit JV planning body) best meet key assessment criteria
- Option 4 would involve significant transition (implementation) costs and uncertainty impacts which likely outweigh any additional benefits over Option 2
- Option 2 also provides a step towards and keeps options open for moving to Option 4 in the future (should this be desirable)