

Transmission network owners perspective



Gordon Jardine

on behalf of Electricity Transmission Network Owners

Forum

Overview



- What is the real issue ?
- Observations with existing clause
- Option - major revamp
- Option - tinker with existing clause

What is the real issue ?



- How to manage transmission network congestion/constraints in the NEM despatch
- Underlying cause network limitations - need to treat the disease rather than just the symptoms, need to facilitate transmission investment to remove troublesome constraints

Observations on the existing clause

- Lists 7 criteria for new regions, in descending order of importance
- Not based on market impact and economic considerations
- One criterion is existence of a binding constraint - appropriate
- But ... is 50 hours a material binding constraint? In some locations, 10 hours could be economically material; in other locations, 100 hours may not be

Observations with existing clause



- There are 3 criteria about loss factors - and inter-related
- NEMMCO proposed to apply (arbitrary) descending linear weights to the criteria
- No basis for linear weights
- Because of the multiple criteria addressing loss factors, this approach substantially over-weighted loss factors
- Could deliver new regions even if no binding constraint

Observations with existing clause



- One way model - could only create more regions, more fragmentation
- NO alignment between the criteria for creating regions and the criteria for transmission investment to address the underlying cause
- NO consideration of financial markets ability to manage additional regions
- A positive - did require analysis of whether the condition (eg constraint) was likely to persist into the future

Another observation



- Customers presently have to contend with TUOS prices and marginal loss factors, both of which change unpredictably once a year
- Customers report difficulty with budgeting for these, and explaining them
- How would customers cope with models which change these more frequently and possibly in larger quantum?

Option - Major re-vamp



- Use economic “market impact” criterion rather than 50 hours binding constraint and loss factors
- Economic “market impact” should be same as used in Regulatory test for transmission investment (and in service standards for TNSPs)
- Retain the requirement to “look forward” to assess if the condition is likely to persist
- Actively consider market power potential and trading needs

Option - tinker with existing clause



- Consolidate the multiple loss factor criteria into a single criterion for loss factors
- Test must be “binary” - MUST be binding constraint first, before loss factors considered
- Any new region must be able to address potential market power eg. contain multiple generation centres (not just a load centre)
- Make it 2 way - enable consolidation of regions as well as fragmentation

Caveat



- Should not create more regions unless and until the reforms to the Regulatory test and related matters are in place to the satisfaction of the MCE

Possible short term action



- NEMMCO has determined that Option 4 constraint formulation is best - minimises risk of settlement deficits and negative bidding wars
- BUT....has interim policy which says that a constraint must bind for 10 hours (arbitrary) before it will go to Option 4 formulation
- Perhaps the MCE could suggest that NEMMCO drop the arbitrary 10 hours trigger?