Presentation to Reliability Panel: Comp Reliability Review 2nd Interim Report

"Sharing the pain" issue

13 Sep 2007

TRUenergy General Views

- TRUenergy supports presentations by ERAA and NGF
  - Strongly supports single USE form of standard at 0.002% √
  - Appreciates steps forward in NEMMCO MRL calculations and 10% POE demand forecasting √
    - Greatly reduces previous alarmist biases: Results sustainable
  - RERM= incremental improvements on reserve trader √

- TRUenergy submissions support current energy-only market design and raising price caps.
  - Looking forward to such conclusions in November

- RERM 4 year extension
  - Confused: Isn't this dependent upon November recommendations on market design?
    - E.g. "Standing reserve" option would conflict
    - Energy-only market need for RERM affected by price cap decision

Technical issue: Sharing the pain and inter-regional allocation of USE

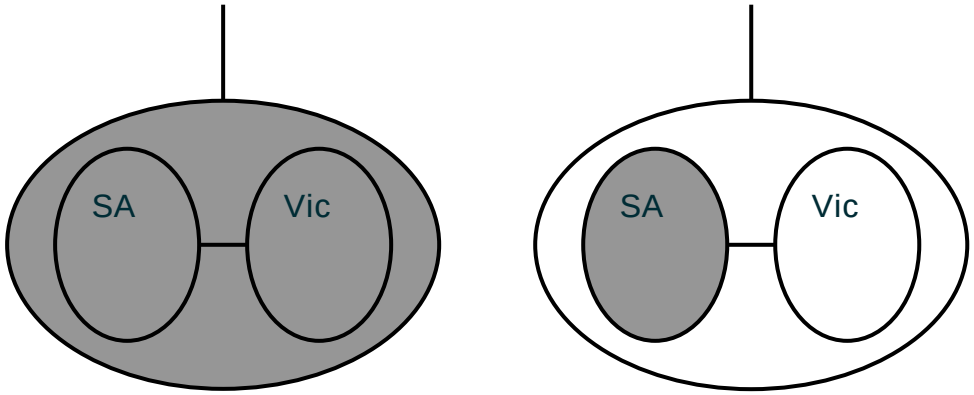
- TRUenergy raised an issue that was misunderstood in 1st interim report and not mentioned in 2nd
  - The following attempts to explain the issue and why the panel should address it

- The Panel promulgates an instruction to NEMMCO to “share the pain” during load shedding events

  “*Guidelines for Management of Electricity Supply Shortfall Events*”
  - Requires that when multiple regions are in shortfall, NEMMCO should share the loadshedding pro-rata

- NEMMCO interpret this in a real-time sense, i.e. they make no reference to previous incidents

Vic/SA load shedding simulations

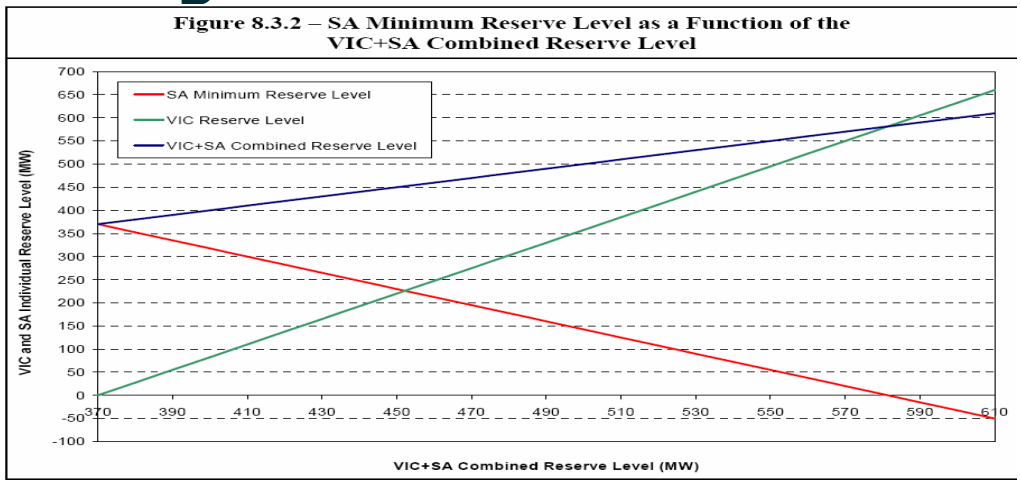


Scenario 1: Load Shed across Vic/SA
Snowy-Vic constrained

Scenario 2: Load Shed in SA only
Vic-SA constrained

- MRL simulation studies show SA USE occurring in either of the 2 above scenarios
  - Vic alone USE is very rare (in modelling-if not in real life!)
- This means you can't set MRL's that result in exactly 0.002% in both regions
  - i.e. You can't optimise USE regional allocation

Sacrificing South Australia



- MRL calculation document "ROAM Min Reserve Level Calculation 2006" recognised there is no discrete solution to Vic & SA min reserve level.
  - "This outcomes shows that the SA region is expected to closely target the Reliability Standard when its reserve level is 50MW below the 10% POE demand forecast (-50MW reserve level). However this must be matched by an oversupply in the adjoining VIC region such that the VIC reserve level is 665MW."
  - Best MRL's yield SA: 0.00192% vs Vic: 0.00097% (ROAM MRL Calc 2006)
- SA given very tough "SA alone" MRL
  - Arguably impossible for market to sustain

Achieving optimal allocation is simple

- The MRL's could be set so as to achieve 0.002% USE in every region by allowing the load shedding to be "optimised"
  - This means allowing the model to accumulate load shedding unevenly so that the total is even
  - But that would contradict the panel's guideline

    "any reductions must occur in proportion to the aggregate demand"
  - Required change to guideline is very simple: just add "over time"
    - Which is a better implementation of "sharing the pain"

- What are the impacts of this change?
  - Beyond the modelling improvement, effectively nothing
    - Load shedding is so rare that there would be no need to equalise in practice

- This is very much a matter for the panel
  - Not NEMMCO's role. Too technical for jurisdictions