



Comprehensive Reliability Review: NGF Position

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NGF Reliability Standards Sub-group

Submission 3 parts:

- General Responses to Issues Paper questions
- MMA consultancy into:
 - Appropriate form of standard
 - Optimal level of standard
- ROAM Consulting 2004 report into NEMMCO reserve level portrayal
- NGF is also working on the general question of economic sustainability of an energy-only market in the presence of non-market constraints (e.g. Reliability)
 - Watch this space

NGF has been active

- NEMMCO reserve margins
- Portrayals of reliability
- Accuracy of forced outage rates
- Demand forecasting

Why does NGF care?

- NGF recognises there is an optimal balance:
 - customer value of reliability versus
 - cost of its supply
- NGF has concerns re implementation:
 - Technical errors
 - Balance erred toward excessive supply cost
- NGF fears this because:
 - Greater risk of NEMMCO intervention, e.g. directions
 - Portrayal leads to poor image upon our industry
 - Potentially distorted investments, e.g. regulated investments

General Responses

- Reliability good now, but maybe not in long-term.
 - Govt-driven investment can paradoxically cause trouble over the long-term.
 - Reliability interventions = market failure
- Price caps & target must be consistent
- NGF backs work on all modelling scenarios
 - Except 3 (Comp. Contracting), 4 (Net Pool)
- CPT should have physical & financial trigger
- DSR good, needs same investment signal as gens
 - & same transparency!
- Intervention should be seen as exceptional
 - Reserve Trader operation problematic: discontinu^{Page 5}e

MMA Report

- Unserved energy target is best
 - Generally, operationalisation techniques OK
 - More technical work on demand diversity required
- Derive target from the economic optimum
 - The point at which extra supply cost $>$ VCR
 - Economically optimal target varies 0.001-0.006%
 - Varies with VCR (which varies with load shed priorities)
 - Average 0.0037%

(Note: NGF does not support varied targets)
- Security events & distribution should be separately categorised as irrelevant to Reliability Target

NEMMCO Operationalisation

- NGF concerned by 2003 SOO
 - Unrealistic alarmism. NGF engaged ROAM
 - Analysis showed 0.002% threshold crossed 2-6 years later than 2003 SOO claimed
- NEMMCO since improved
 - N-1 gone, most load diversity now included, but
 - Generator forced outage data still doubled
- JPB demand data doubtful
 - NGF suggests NEMMCO should take over

Other ROAM report suggestions

- More use of probabilistic forecasting
 - SOO, MTPASA reliability forecasting can be done without MW reserve margins!
 - Just forecast USE directly using simulation techniques
 - Less room for judgement, error, alarmism
 - 10% POE demand forecasts less critical
- SOO should not forecast reserves at all
 - Revert to an investment guide only
 - Panel should review & forecast reserves directly

Key Messages

- Reliability good now: but some fears held
- USE best: 0.002% or slightly higher
- Problems in implementation
 - Conservative, different demand forecasters
- SOO to be an investor guide only