

Saving Electricity in a Hurry

Victoria's Experience



Outline

- Victoria's electricity emergency arrangements.
- Meeting the summer peak.
- The past two summers.
- Issues.



Victoria's Emergency Arrangements

Reflect:

- Legal and regulatory arrangements of NEM.
- Lessons learnt as a result of supply shortfall in February 2000.
- Key role of VENCorp.



Emergency Arrangements

Options to meet supply shortfalls that reflect a trade-off between speed and selectivity:

- Load shedding options that can be implemented immediately or within a few minutes to protect system security.
- Calls for voluntary load reductions or mandatory restrictions to deal with prolonged shortfalls.



Emergency Arrangements

Fully documented contingency plans:

- Role clarity.
- Whole of Government emergency arrangements.
- Necessary legal documentation.
- Media strategy.



Meeting the Summer Peak

- Supply adequacy measured against one in ten peak (Combined Vic/SA).
- Highly temperature dependant demand.
- Produces short sharp peaks.
- Peak demand growing more rapidly than total demand.



Meeting the Summer Peak

Critical issues:

- Peak inherently difficult to predict.
- Ongoing need for investment in peak capacity.
- Limited opportunity for this investment to achieve commercial return.
- However, substantial spare capacity during most of year .



Summer 2004/05

Situation:

- July 2004. Supply shortfall of approx. 170MW.
- Impact of drought on hydro capacity increased this shortfall to about 350MW.



Summer 2004/05

Response to shortfall:

- Reserve Trader Tender produced an additional 84MW, leaving shortfall of approx 270MW.
- Any actual shortfall to be met by calls for voluntary restraint or if that failed load shedding.
- Public sector demand restraint mechanism put in place.



2005/06 Summer

Situation:

- Initial outlook strong. Additional 910MW from scheduled completion of Basslink and Laverton North.
- By July 2005 neither expected to be available, projected shortfall of up to 500MW.



Summer 2005/06

Response to shortfall:

- Reserve Trader produced 375MW.
- As for 2004/05 the shortfall was to be made up through calls for voluntary restraint and public sector response.
- Early completion of Basslink provided 300MW



Issues

Voluntary demand restraint arrangements not tested as weather patterns in both summers did not produced extreme demands.



Issues

- Reserve Trading can produce potentially valuable additions to capacity but it is costly, mostly demand side response, and subject to limited availability.
- It would be better to have this capacity in the market.
- NEMMCO's Reserve Trader powers due to expire



Issues

Summer peak demand problems appear structural.

Demand measures:

- Roll-out of interval meters and more cost-reflective tariffs so that consumers have better incentives.
- Encourage demand side response.



Issues

Supply measures:

- Adequacy of incentives for timely new investment
- AEMC Reliability Panel Comprehensive Reliability Review

