

## DEMAND MANAGEMENT SCREENING TEST

### Woy Woy & West Gosford Feeders Zone Development

#### Short form DMST criteria

1. Supply side project cost less than \$5m Yes  No

AND

2. Demand forecast > 110% of *system normal* limit within 12 months Yes  No

OR

3. Demand forecast > 110% of *n-1 contingency* limit within 12 months Yes  No

#### Definitions

The system under consideration consists of urban feeders. The “*system normal*” limit is 80% of the thermal rating of the feeders. The “*n-1 contingency*” limit is the combined capacity of the feeders with one element out of service.

#### Summary of Capacity and Demand Forecast

Forecast demand will exceed 110% of the system normal limit for two of the feeders within 12 months. Details of forecast demand versus capacity limits under normal conditions are summarised below. These feeders will also exceed 110% of the limit under n-1 contingency conditions.

Panel	Scenario	80% of thermal capacity of limiting section (MVA)	2010/11 Summer Load forecast (MVA)	% of system normal limit
8 – Woy Woy	System normal	6.1	7.8	128%
13 – Woy Woy	System normal	6.1	7.1	117%
12L – West Gosford	System normal	5.3	3.5	66%
17R – West Gosford	System normal	5.6	3.9	70%

#### Supply Strategy Option

The preferred supply-side option is a combination of new 11kV underground and overhead works. The works will form a new feeder from Woy Woy Panel 10R, as well as some reconductoring and uprating of existing feeder sections. The estimated project cost is \$2.32m. Commissioning is required before summer 2010/11, with an investment decision date as soon as possible.

#### Recommendation

This proposal meets the conditions for a short form demand management screening test. Based on this information it is not considered reasonable to expect that it would be cost-effective to postpone the proposed supply-side solution by implementing demand management strategies.