

Schedule 1: 12. Non Network Alternatives

12.1 Identify the policies and strategies and procedures provided in the response to Workbook 1 – regulatory determination, regulatory template 7.1 which relate to the selection of efficient non-network solutions.

The following documents are described in 7.1 of the regulatory template and are also provided as supporting documents to the Revenue Proposal:

- > TransGrid - Prescribed Capital Investment Framework - 0816 - PUBLIC
- > TransGrid - Prescribed Capital Investment Governance Arrangements - 0616 -PUBLIC
- > TransGrid - Prescribed Capital Investment Procedure - 0716 - PUBLIC
- > TransGrid - Prescribed Capital Investment Benefits and Optimisation Procedure - 0716 - PUBLIC
- > TransGrid - Asset Management Policy - 0916 PUBLIC

12.2 Explain the extent to which the provision for efficient non-network alternatives has been considered in the development of the forecast capex proposal and the forecast opex proposal.

For every need or opportunity identified by TransGrid, a preferred solution is identified using an extensive planning process that considers a wide range of options, always including non-network alternatives.

Consequently TransGrid's capital and operating expenditure forecasts reflect the cost of implementing optimum solutions, following a selection process that has considered non-network alternatives.

12.3 Identify each non-network alternative that TransGrid has: (a) commenced during the current regulatory control period; and

The current regulatory period has been a period with very little augmentation capital expenditure and demand growth. Consequentially no non network alternative solutions have commenced during the current regulatory period.

(b) selected to commence during, or will continue into, the forthcoming regulatory control period.

At this stage, there are no firm non-network alternatives that are expected to be implemented in the next regulatory control period. However, the following needs have the potential to lead to a non-network alternative being the preferred option:

- > TransGrid - NOS 1754 Supply to Broken Hill Contingent Project - 0117 - PUBLIC
- > TransGrid - NOS DCN43 Supply to Sydney Inner Metropolitan Area and CBD - 0117 – PUBLIC
- > TransGrid – NOS 1489 Thermal Limitation on 969 - 0117 - PUBLIC
- > TransGrid - NOS 1529 Reinforcement of Northern Network Contingent Project - 0117 - CONFIDENTIAL
- > TransGrid - NOS 1528 Reinforcement of Southern Network Contingent Project - 0117 - CONFIDENTIAL
- > TransGrid - NOS 1746 Support South Western NSW for Renewables Contingent Project - 0117 - CONFIDENTIAL
- > Munyang network support – economic opportunity [no reference available]

12.4 For each non-network alternative identified in the response to paragraph 12.3, provide a description, including cost and location.

Reliability of Supply to Broken Hill

The non-firm potential non-network alternative solutions for the Reliability of Supply to Broken Hill include:

- > New gas-turbine generation with an estimated cost of \$10 million
- > Demand management from Perilya mines with an estimated cost of \$1.5 million
- > Battery supplemented gas-turbine generation with an estimated cost of \$1.3 million
- > Each of these high level estimates are much greater than the network solution of the establishment of a second 220kV transmission line to Broken Hill with an estimated cost of \$200 million.

Powering Sydney's Future

- > An expression of interest has been published to obtain potential non-network alternatives to the Powering Sydney's Future network solutions, which may lead to the deferral or substitution of network solutions.

Thermal Limitation on 969 - probabilistic

- > Diesel generation at Gunnedah or Narrabri with an estimated cost to be confirmed.
- > Local mines, located within the Gunnedah and Narrabri areas, load curtailment with an estimated cost to be confirmed.
- > Battery storage technology Gunnedah or Narrabri with an estimated cost to be confirmed.
- > Consumer (residential, agricultural or industrial customers within the Gunnedah and Narrabri areas) load curtailment with an estimated cost to be confirmed.

Reinforcement of the Northern Network - contingent

- > Fast load curtailment north of QNI with an estimated cost to be confirmed as part of the RIT-T process.
- > Generation runback at Liddell and load curtailment north of Tamworth with an estimated cost to be confirmed as part of the RIT-T process.

Reinforcement of the Southern Network - contingent

- > Generation runback south of Yass/Canberra and load curtailment north of Bannaby with an estimated cost to be confirmed as part of the RIT-T process.

Support South Western NSW for Renewables - contingent

- > Generation runback west of Darlington Point and load curtailment north of Canberra/Yass with an estimated cost to be confirmed as part of the RIT-T process.

Munyang network support

- > Network support for Munyang located at Guthega with an estimated cost of \$0m (network support pass through under Clause 6A.7.2 of the Rules).