

Schedule 1: 4. Capital Expenditure

4.1 Provide justification for TransGrid's total forecast capex, including: (a) why the total forecast capex is required for TransGrid to achieve each of the objectives in clause 6A.6.7(a) of the NER;

Refer to Chapter 5 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC. Additionally, each Need/Opportunity Statement for capital works sets out the objectives to which the need relate, these are provided as supporting documents to the Revenue Proposal.

(b) how TransGrid's total forecast capex reasonably reflects each of the criteria in clause 6A.6.7(c) of the NER;

Refer to Section 5.3.3.1 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

(c) how TransGrid's total forecast capex accounts for the factors in clause 6A.6.7(e) of the NER;

Refer to Section 5.8 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

(d) an explanation of how the plans, policies, procedures and regulatory obligations or requirements identified in regulatory templates 7.1 and 7.3 in Workbook 1 – regulatory determination, consultants reports, and assumptions identified in paragraph 1.4 have been incorporated; and

TransGrid plans the network in accordance with the Network Investment Process. Several procedures underlie this process, covering areas such as needs identification, project estimating, options evaluation, placement of contract and so forth. Progress from each stage to the next is approved by the appropriate authority, i.e. the board for projects >\$15m and the chief executive officer for projects up to \$15m. For Information on the governance of the capital program refer to Chapter 4 of the Revenue Proposal. The Need/Opportunity statement for each investment will note regulatory drivers that are specific to that need.

(e) an explanation of how each response provided to paragraph 4.1(a) to (d) above is reflected in any increase or decrease in expenditures or volumes, particularly between the current and forthcoming regulatory control periods, provided in regulatory templates 2.1 to 2.10 in Workbook 1 – regulatory determination.

The mix of capital expenditure over the next five years is different from the current regulatory period for TransGrid:

- > Annual average augmentation expenditure is circa four times the annual average augmentation expenditure budgeted for this regulatory period. This is mainly driven by the powering Sydney's future project;
- > Annual average Replacement expenditure has increased by 15% from that of the current regulatory period;
- > Annual average Security and Compliance expenditure has reduced by circa 44%, driven by the risk based approach to capital planning; and

- > Capital expenditure to support the business increased by circa 8% from the current regulatory period.

4.2 Provide the model(s) and methodology TransGrid used to develop its total forecast capex, including:

(f) a description of how TransGrid prepared the forecast capex, including:

Refer to Section 4.6 Prescribed Capital Investment Process and Section 5.2 Forecast Capital Expenditure Overview of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC. Also refer to TransGrid Forecasting Methodology as attached as revenue Proposal supporting document TransGrid - Forecasting Methodology - 0616 - PUBLIC.

(i) how its preparation differed or related to budgetary, planning and governance processes used in the normal running of TransGrid's business;

The preparation of forecasts for this proposal was done in accordance with the Prescribed Capital Investment Framework which is the process used in the normal running of TransGrid's business. Refer to Section 4.6 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

(ii) the processes for ensuring amounts are free of error and other quality assurance steps; and

Each supporting document for each investment need is prepared and reviewed at different level of the organisation. TransGrid is using the existing Capital Accumulation Model which was submitted in the last revenue proposal. TransGrid has not made any structural modifications to the model but rolled it forward to forecast for of the 2018/19 to 2022/23 regulatory period. The input data and output from the model was internally checked and verified by TransGrid. Each change in the Capital Accumulation Model went through the full review and sign off process backed by appropriate documentation.

(iii) if and how TransGrid considered the resulting amounts, when translated into price impacts, were in the long term interest of consumers;

This is provided in Sections 5.8.3 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC. Further information is available in the summary of consultation on consumer engagement, attached to the proposal as TransGrid – Appendix C Summary of Consumer Activities – 0117 – PUBLIC.

(g) any source material used (including models, documentation or any other items containing quantitative data); and

This is provided in:

- TransGrid – Capital Expenditure Forecasting Model – 0117 - PUBLIC
- TransGrid – BIS Shrapnel – Appendix F Expected wage changes – 1116 - PUBLIC
- Inflation forecasts based on November 2016 RBA monetary policy. The information can be downloaded directly from the link <http://www.rba.gov.au/publications/smp/2016/nov/>

(h) all calculations that demonstrate how data from the source material has been manipulated or transformed to generate data provided in the regulatory templates in Workbook 1 – regulatory determination.

Refer to the Revenue Proposal supporting document TransGrid – Evans and Peck – CAM Functional Specification -1012 – PUBLIC.

4.3 Identify which items of TransGrid's forecast capex have been:

- (i) derived directly from competitive tender processes;**
- (j) based upon competitive tender processes for similar projects;**
- (k) based upon estimates obtained from contractors or manufacturers;**
- (l) based upon independent benchmarks;**
- (m) based upon actual historical costs for similar projects; and**
- (n) reflective of any amounts for risk, uncertainty or other unspecified contingency factors, and if so, how these amounts were calculated and deemed reasonable.**

Refer to the RIN supporting document TransGrid – Reset RIN Capex Section 4.3 - 0117 – PUBLIC.

4.4 Provide all documents which were materially relied upon and relate to the deliverability of forecast capex and explain the proposed deliverability.

Refer to the RIN supporting document TransGrid - Project Deliverability - 0117 – PUBLIC.

4.5 Describe each capex category and expenditures comprising these categories identified in the regulatory templates, including:

- (o) key drivers for expenditure;**

Refer to Section 5.2 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

- (p) an explanation of how expenditure is distinguished between:**
 - (i) demand driven and non-demand driven augmentation capital expenditure;**

Refer to Section 5.2 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

- (ii) connections capital expenditure and augmentation capital expenditure;**

Refer to Section 5.2 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

- (iii) replacement capital expenditure driven by condition and asset replacements driven by other drivers (e.g. the need for demand or non-demand driven augmentation capital expenditure); and**

Refer to Section 5.2 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

- (iv) any other capex category or opex category where TransGrid considers that there is reasonable scope for ambiguity in categorisation.**

Refer to Section 5.2 of the TransGrid's Revenue Proposal for the period 2018/19 to 2022/23. See the document TransGrid – Revenue Proposal 18_19 to 22_23 – 0117 - PUBLIC.

Appendix E

2.39 If there is:

- (a) any overhead expenditure that is capitalised explain, in the *basis of preparation*, why it is capitalised;**

Not applicable – no historical overhead capitalisation is included in this RIN.

(b) a *material* change in reported expenditures due to a change in *capitalisation* policy:

(i) identify the expenditure categories and quantum of *capex* and *opex* that are affected; and

(ii) explain this in the *basis of preparation* (for historical information) or elsewhere in materials submitted to the *AER* (for *forecast information*).

TransGrid has not changed the capitalisation policy since its last submission to the AER.