

## Terms of reference for verification of Transpower's RCP3 proposal

### Purpose of this document

1. The purpose of this document is to set out the terms of reference for a verifier to verify Transpower's RCP3 proposal.<sup>1</sup>
2. Note: These terms of reference have been prepared on the basis of the Capex IM, taking into account the revised draft amendment determination published on 29 March 2018 following the Commission's final decisions on the Capex IM review.<sup>2</sup> The revised draft amendment determination is currently under technical consultation and so remains subject to minor changes. The amendment determination is expected to be finalised by the end of May 2018. In carrying out these terms of reference, the verifier will apply the Capex IM as amended by the final amendment determination in May 2018 (which, in the meantime, the verifier should assume will be very similar to the revised draft amendment determination published on 29 March 2018).

### The verifier's role and obligations

3. At a high level, the verifier's role and obligations will be:
  - 3.1 engaging with Transpower in an independent manner in accordance with the tripartite deed;
  - 3.2 evaluating whether Transpower's proposed base capex allowance, proposed opex allowance, proposed grid output measures, and key assumptions are consistent with an expenditure outcome which represents the efficient costs of a prudent supplier, having regard to:
    - 3.2.1 Good Electricity Industry Practice (GEIP) as reflecting the appropriate planning and performance standards for a prudent supplier;<sup>3</sup> and

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<sup>1</sup> Transpower's RCP3 proposal will comprise a base capex proposal and an opex proposal. The requirements for the base capex proposal are governed by the Capex IM, and must include a proposed base capex allowance, proposed listed projects, and proposed grid output measures. The requirements for Transpower's opex proposal will be set out in an information gathering notice from the Commission to Transpower, likely in April 2018. Proposed major capex is not included in the RCP3 proposal because a separate approval regime exists for major capex. In short, major capex is enhancement and development capex over the value of \$20m (the full definition is found in the Capex IM); all other capex should be included in the base capex proposal.

<sup>2</sup> The revised draft capex IM amendment determination is available at <http://www.comcom.govt.nz/dmsdocument/16189>.

<sup>3</sup> 'Good electricity industry practice' is defined in Part 1 of the Electricity Industry Participation Code 2010 as: **good electricity industry practice** in relation to transmission, means the exercise of that degree of skill, diligence, prudence, foresight and economic management, as determined by reference to good international practice, which would reasonably be expected from a skilled and experienced **asset** owner engaged in the management of a transmission network under conditions comparable to those applicable to the **grid** consistent with applicable law, safety and environmental protection. The determination is to

3.2.2 the evaluation criteria in Attachment A; and

3.3 producing a verification report that meets the requirements in these terms of reference.

### **Content of verification report**

4. In the verification report, the verifier will:
  - 4.1 provide an opinion on whether Transpower's proposed base capex allowance, proposed opex allowance, proposed grid output measures, and key assumptions are consistent with the expenditure outcome described in paragraph 3.2;
  - 4.2 provide an opinion on the extent to which Transpower's relevant policies and governance processes (including Transpower's approach to, and use of, asset health modelling) are consistent with good asset management practice and are directed towards the expenditure outcome described in paragraph 3.2;
  - 4.3 provide an opinion on the extent to which Transpower's key policies and governance processes on which the proposal or its implementation depend have been made effective;
  - 4.4 provide an opinion on the extent to which Transpower has adequately addressed in its proposal its ability to deliver against its proposed base capex allowance and proposed opex allowance during RCP3, taking into account the expected availability of the resources required to deliver on those proposed allowances;
  - 4.5 provide an opinion on the extent and effectiveness of Transpower's consultation with its stakeholders;
  - 4.6 provide an opinion on the extent to which Transpower's proposal is consistent with the feedback Transpower received from its stakeholders;
  - 4.7 provide a list of the key issues and areas that it considers the Commission should focus on when the Commission evaluates Transpower's RCP3 proposal;
  - 4.8 provide an opinion on whether Transpower provided the verifier with the type and depth of information it needed to provide its verification report; and
  - 4.9 identify any other information not included in the RCP3 proposal that the verifier reasonably believes would:
    - 4.9.1 be available to Transpower; and

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take into account factors such as the relative size, duty, age and technological status of the relevant transmission network and the applicable law [bold terms in original].

4.9.2 assist the Commission's evaluation of Transpower's RCP3 proposal.

### **Key process matters**

5. The verifier will carry out its role under a tripartite deed between the verifier, Transpower and the Commission. This will allow the Commission to communicate with the verifier during the verification process.
6. Transpower will provide the verifier with information on sections of the expenditure and quality proposal progressively during the compilation of its draft RCP3 proposal. It is anticipated that the information provided by Transpower in response to the requirements in the Capex IM, supplemented by the Commission's opex information gathering request to be made at about the same time, will provide the majority of the information required by the verifier.
7. As soon as reasonably practicable after the engagement of the verifier, Transpower and the verifier will agree a timeline for the verification process. This will set out what information Transpower will provide to the verifier and when.
8. It is anticipated that Transpower will prepare its RCP3 proposal in three stages:
  - 8.1 preparation of a baseline plan for expenditure and grid output measures;
  - 8.2 performing additional price-quality testing on that plan;
  - 8.3 finalising the RCP3 proposal in light of final stakeholder engagement.
9. In carrying out its verification work, the verifier will engage with Transpower on an ongoing basis during each of the stages of the proposal development. For the avoidance of doubt, the verifier is not required to prepare a draft report to be shared with the Commission at the conclusion of each stage.
10. In preparing the verification report, the verifier will follow the following process:
  - 10.1 the verifier will first produce a draft verification report.
  - 10.2 the draft verification report will be provided to Transpower, to give Transpower the opportunity to comment on the draft report and take account of the verifier's draft comments prior to submitting its RCP3 proposal to the verifier for final verification.
  - 10.3 the draft verification report will also be made available to the Commission to assist the Commission in planning for how it will evaluate the RCP3 proposal. The Commission may provide comments on the draft report (with a view to ensuring the final report meets the Commission's needs for its later evaluation of Transpower's RCP3 proposal) but the Commission does not intend to provide comments on Transpower's RCP3 proposal at this point.

11. The verifier may update its draft report to take account of any responses or further information provided by Transpower or any changes Transpower may make to its RCP3 proposal.
12. The verifier will provide Transpower with its final verification report so that Transpower can submit it to the Commission with Transpower's RCP3 proposal.
13. Transpower will highlight any matters in its RCP3 proposal where it maintains a different view from that of the verifier.
14. It is anticipated that the Commission will meet with and/or ask questions of the verifier after Transpower submits its RCP3 proposal to confirm the Commission's understanding of the verification report and to inform the Commission's plan for its evaluation of Transpower's RCP3 proposal.
15. It is anticipated that the verifier's findings will help inform a process and issues paper that the Commission will publish to invite stakeholder comment on Transpower's RCP3 proposal. As part of this paper the Commission anticipates consulting on the extent to which it should rely in its evaluation of the RCP3 proposal on the verifier's findings.
16. It is anticipated that the weight that the Commission attaches to the verification report will depend (amongst other things) on the level of engagement of the verifier at each stage of the RCP3 proposal development and the robustness of the analysis and information on which the verifier relied in preparing the report, taking account of the evaluation criteria (specified in Attachment A).

#### **What the verifier will review (scope of work)**

17. In preparing its verification report, the verifier will review:
  - 17.1 the opex and base capex allowances Transpower has proposed, with emphasis on identified programmes (as determined in accordance with the identified programmes criteria specified by the Commission on 28 March 2018), broken down into the following expenditure types or such further agreed types:
    - 17.1.1 opex;
    - 17.1.2 replacement and refurbishment base capex;
    - 17.1.3 enhancement and development base capex;
    - 17.1.4 information and communication technology capex; and
    - 17.1.5 business support capex;
  - 17.2 the grid output measures Transpower has proposed;

- 17.3 to the extent that Transpower includes listed projects in its RCP3 proposal, whether, having regard to paragraph A10 in Attachment A, those projects meet the criteria to be specified by the Commission as listed projects;
  - 17.4 to the extent that Transpower includes low incentive rate base capex projects in its RCP3 proposal (as defined in the Capex IM), whether, having regard to paragraph A4 in Attachment A, those projects should be specified by the Commission as low incentive rate base capex projects;
  - 17.5 the extent to which Transpower adequately demonstrates that its RCP3 proposal is consistent with the relevant input methodologies;
  - 17.6 the extent of Transpower's stakeholder engagement (including on grid output measures) and the extent to which Transpower's RCP3 proposal reflects the outcomes of that engagement; and
  - 17.7 whether any enhancement and development base capex projects or programmes included in Transpower's RCP3 proposal are subject to uncertainty such that the Commission should consider making those projects or programmes subject to a base capex allowance adjustment mechanism (as defined in the Capex IM). For any such projects or programmes, the verifier should also provide its view on the appropriate pre-set base capex amounts of any such adjustments that should be provided for during the regulatory period and what the trigger thresholds should be for these base capex amounts. In reviewing this aspect of the proposal, the verifier shall have regard to paragraph A9 in Attachment A.
18. The verifier will not be asked to review issues relating to the form of control (eg, smoothed price path and reopener provisions, application of the listed projects mechanism, and processes for annual forecast MAR updates).

#### **How the verifier will perform the review (process of work)**

19. In preparing its verification report, the verifier will have regard to (as relevant):
- 19.1 Transpower's policies and processes;
  - 19.2 Transpower's application of its policies and processes;
  - 19.3 Transpower's strategic documents (including Transmission Tomorrow);
  - 19.4 the consistency of Transpower's RCP3 proposal with the strategies set out in the strategic documents;
  - 19.5 information supplied by Transpower to the verifier in the course of the verification process;

- 19.6 the proportionate scrutiny principle;<sup>4</sup>
  - 19.7 the identified evaluation criteria specified in Attachment A;
  - 19.8 Transpower's performance in RCP1 and RCP2; and
  - 19.9 international best practices where appropriate in a New Zealand context.
20. For the avoidance of doubt, the verifier is not required to audit the quantitative information in Transpower's RCP3 proposal. But it is expected that the verifier will ascertain and conclude on the effectiveness of the process used to assemble the quantitative information that informs the RCP3 proposal (consistent with paragraph 4.3 above).
  21. Identified evaluation criteria are specified in Attachment A to these terms of reference to provide both Transpower and the Commission with more certainty about how the verifier will evaluate Transpower's RCP3 proposal.
  22. The verifier and Transpower will agree directly the communication protocols regarding the sourcing and use of information from Transpower by the verifier.

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<sup>4</sup> The principle that the level of scrutiny applied should generally be commensurate with the price and quality impact on consumers of the aspect of the proposal being scrutinised.

## Attachment A: Evaluation criteria

### Purpose

This attachment provides more detail on the evaluation criteria that the verifier is to apply in undertaking the verification.

The evaluation criteria for the **base capex proposal** largely reflect the evaluation criteria in Schedule A of the Capex IM, which the Commission must apply when assessing Transpower's **base capex proposal**. The evaluation criteria for the **opex proposal** are consistent with those for the **base capex proposal** where appropriate and include further criteria that are specific to assessing opex proposals. While some of the criteria below apply just to base capex, others just to opex, and some to both, the verifier should, where relevant, consider opex and base capex together given the potential cost trade-offs between opex and base capex.

In applying these evaluation criteria, the verifier should exercise its professional judgement about the relative consideration to give to each of the criteria, having regard to the proportionate scrutiny principle described at paragraph 19.6 above.

### Definitions

Terms in bold are defined in the Capex IM.

#### A1 General evaluation of the base capex proposal and the opex proposal

The verifier will have regard to the following factors when evaluating the **base capex proposal** and the **opex proposal**:

- (a) the reasonableness of the key assumptions relevant to **base capex** and opex relied upon, including-
  - (i) the method and information used to develop them;
  - (ii) how they were applied;
  - (iii) for the **base capex proposal**, their effect on the proposed **base capex allowance**; and
  - (iv) for the **opex proposal**, their effect or impact on the proposed opex allowance.
- (b) whether **policies** regarding the need for, and prioritisation of, **projects** and **programmes** demonstrate a risk-based approach consistent with good asset management practice and are directed towards achieving cost-effective and efficient solutions;
- (c) the dependencies between the proposed **grid output measures** and the proposed **base capex allowance** and proposed opex allowance at the level of the **grid** and for each **base capex category** and opex category;

- (d) the dependencies between the proposed **grid output targets** and the proposed **base capex allowance** and proposed opex allowance at the level of the **grid** and for each **base capex category** and opex category;
- (e) the extent to which the **grid output targets** were met in the previous **regulatory period**;
- (f) the overall deliverability of the proposed **base capex** and opex during the current **regulatory period**;
- (g) the reasonableness and adequacy of any models used, including but not limited to asset replacement models, to prepare the proposed **base capex allowance** and proposed opex allowance including-
  - (i) inputs to the model; and
  - (ii) the methods used to check the reasonableness of the forecasts and related expenditure;
- (h) the reasonableness of the key assumptions, key input data and forecasting methods used in determining demand forecasts;
- (i) the appropriateness of using those demand forecasts and **other** key assumptions in determining the proposed **base capex allowance** and proposed opex allowance;
- (j) the extent to which Transpower has demonstrated the type of efficiency improvements obtained in the current and previous **regulatory periods**; and
- (k) the extent to which Transpower has demonstrated the scope for efficiency improvements during the **regulatory period** in question.

## A2 **Specific evaluation of the opex proposal**

In addition to the criteria provided above in clause A1, when evaluating the **opex proposal**, the verifier will review and assess:

- (a) any other opex drivers not covered by the key assumptions that have contributed the proposed opex allowance, and whether the opex associated with these drivers is consistent with the expenditure outcome described in paragraph 3.2;
- (b) the reasonableness of the methodologies used in establishing the proposed opex allowance (such as cost benchmarking or internal historic cost trending), including the relationship between the proposed opex allowance and the proposed base capex allowance;
- (c) the reasonableness of any opex reduction initiatives undertaken or planned during the current **regulatory period** or RCP3; and
- (d) the reasonableness of any efficiencies built into the proposed opex allowance as a result of the investment programme carried out under RCP1 and RCP2.



### A3 Evaluation of identified programmes

In evaluating the **base capex proposal** and the **opex proposal**, the verifier will undertake a review of each identified programme (as determined in accordance with the identified programmes criteria specified by the Commission on 28 March 2018), and such a review may include evaluation of at least-

- (a) whether **policies** regarding the need for the identified programme and its priority demonstrate a risk-based approach consistent with good asset management practice and were applied appropriately;
- (b) whether other relevant **policies** and planning standards were applied appropriately;
- (c) **Transpower's** process to determine the identified programme's reasonableness and cost-effectiveness;
- (d) **Transpower's** internal processes for challenging a need for an identified programme and the possible alternative solutions;
- (e) how **grid outputs**, key drivers, assumptions, and cost modelling were used to determine its forecast **capital expenditure**;
- (f) the capital costing methodology and formulation, including unit rate sources and the quantum of included contingencies;
- (g) the effect of its forecast **capital expenditure** on other cost categories, including the relationship with **operating expenditure**;
- (h) the effect of its forecast **operating expenditure** on other cost categories, including the relationship with **capital expenditure**;
- (i) links with other **projects** or **programmes**, whether proposed or in progress; and
- (j) the proposed approach to procurement of associated goods and services.

### A4 Criteria for considering the low incentive rate base capex allowance

Where the verifier considers that a **base capex project** or **base capex programme** proposed by **Transpower** as a **low incentive rate base capex project** is likely to require **capital expenditure** greater than \$20 million, it will take into account at least the following criteria in evaluating whether the **base capex project** or **base capex programme** should be specified by the Commission as a **low incentive rate base capex project**:

- (a) the extent to which **Transpower** has demonstrated that it has considered whether there are viable alternatives that meet the same **investment need**; and
- (b) the magnitude of cost uncertainty of the **base capex project** or **base capex programme** demonstrated by **Transpower**.

## A5 Evaluation techniques

In undertaking the evaluations described in clauses A1–A4, A9 and A10, the verifier may employ one or more of the following techniques:

- (a) process benchmarking;
- (b) process or functional modelling;
- (c) trending or time-series analysis;
- (d) high level governance and process reviews;
- (e) internal benchmarking of forecast costs against costs in the current period;
- (f) project and programme sampling;
- (g) critiques or independent development of-
  - (i) demand forecasts;
  - (ii) labour unit cost forecasts;
  - (iii) materials forecasts;
  - (iv) plant forecasts; and
  - (v) equipment unit cost forecasts; and
- (h) any other technique or approach that the verifier considers appropriate in the circumstances.

## A6 Criteria for considering grid output measures

The verifier will take into account at least the following criteria in considering **grid output measures**:

- (a) the extent to which a measure is a recognised measure of either or both of the following things:
  - (i) risk in the **supply of electricity transmission services**; and
  - (ii) performance of the **supply of electricity transmission services**;
- (b) the relationship between a measure, **base capex, major capex** and **operating expenditure** including the extent to which the relationship can be quantified; and
- (c) the extent to which the measure aligns with the business processes used by **Transpower** in its **supply of electricity transmission services**.

## A7 Criteria for considering revenue-linked grid output measures

In addition to the criteria specified in clause A6, the verifier will take into account at least the following criteria in considering **revenue-linked grid output measures**:

- (a) the extent to which a measure is a recognised measure of **grid outputs** that are valued by **consumers**;

- (b) the strength of the relationship between a measure and **base capex**; and
- (c) whether a measure is quantifiable, controllable by **Transpower**, auditable and replicable over time.

#### A8 **Criteria for considering matters relating to revenue-linked grid output measures**

The verifier will take into account at least the following criteria in considering **caps**, **collars**, the **grid output incentive rate** and **grid output targets** in respect of each **revenue-linked grid output measure**:

- (a) the value that **consumers** place on that **grid output measure** and the relationship between this value and the proposed **grid output incentive rate**;
- (b) quantification of relationship between **base capex** and the **grid output** both-
  - (i) within the **regulatory period** in question; and
  - (ii) over the longer term;
- (c) the extent of the likely effect of factors unrelated to investment that may affect the **grid output**, such as-
  - (i) natural degradation in asset condition;
  - (ii) impact of changes in loading of the **grid**; and
  - (iii) extreme weather events;
- (d) the plausible range of **grid outputs** likely to be delivered taking into account factors described in paragraphs (b) and (c);
- (e) the relationship between the range described in paragraph (d) and the proposed **caps** and **collars**; and
- (f) the impact on return on capital implied by both the range described in paragraph (d) and the application of the proposed **cap**, **collars** and **grid output incentive rate**.

#### A9 **Criteria for considering base capex allowance adjustment mechanism**

Where the verifier evaluates whether any **E & D base capex projects** or **E & D base capex programmes** are subject to uncertainty such that a **base capex allowance adjustment mechanism** should be specified by the Commission in respect of such projects or programmes, the verifier will take into account at least one of the following criteria:

- (a) the cost and timing uncertainties of any individual **E & D base capex project** or **E & D base capex programme**;
- (b) the extent to which any timing uncertainties of an **E & D base capex project** or **E & D base capex programme** are linked to a certain level of demand or connecting new generation;

- (c) any other relevant drivers of **E & D base capex** that may influence **project** or **programme** need or uncertainty.

#### A10 **Criteria for considering listed projects**

Where the verifier evaluates whether a **base capex project** or **base capex programme** meets the criteria specified to qualify as a **listed project**, the verifier will assess whether it is a **base capex project** or **base capex programme** that meets all of the following criteria:

- (a) will require **capital expenditure** greater than \$20 million;
- (b) is reasonably required by **Transpower**;
- (c) has at least one asset that is likely to be **commissioned** in the **regulatory period**;
- (d) for which the **base capex** forecast to be incurred is in relation to **asset replacement, asset refurbishment, or both asset replacement and asset refurbishment**;
- (e) has an anticipated commencement date within the **regulatory period** but that cannot be forecast with specificity; and
- (f) is not already accommodated in the **base capex allowances** for the **regulatory period**.