

Draft Transpower Capital Expenditure Input Methodology Amendments Determination 2018

[2018] xxxx

Input methodologies amendments made under Part 4 of the Commerce Act 1986

The Commission:

Transpower Division

Sue Begg

Dr Stephen Gale

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Date of decision

xxxx

Commented [TP1]:

Our commentary:

- reflects policy views from our submission to the draft decisions. We have suggested drafting amendment in the comment boxes, rather than direct amendments, so as not to confuse our suggestions with the Commission's amendments
- indicates where we consider drafting could be improved. We propose improvements to address consistency, and reduce repetition and redundancy.

[Drafting notes:

- This draft determination sets out the draft amendments to the Transpower Capital Expenditure Input Methodology Determination.
- The draft amendments to the Transpower Capital Expenditure Input Methodology which include deletions, substitutions and additions are tracked in this draft determination in blue.]

Determination history		
Determination date	Decision number	Determination name
31 January 2012	[2012] NZCC 2	Transpower Capital Expenditure Input Methodology Determination
2 February 2012	n/a	Error correction: repaired reference links in clause D1(2)(b)
28 August 2014	[2014] NZCC 22	Transpower Input Methodologies Amendments Determination 2014
27 November 2014	[2014] NZCC 34	Transpower Input Methodologies Amendments Determination 2014 (No. 2)
5 February 2015	[2015] NZCC 3	Transpower Input Methodologies Amendment Determination 2015

TRANSPOWER CAPITAL EXPENDITURE INPUT METHODOLOGIES AMENDMENTS DETERMINATION

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Pursuant to s 54S of the Commerce Act 1986 the Commerce Commission makes the following determination:

PART 1 GENERAL PROVISIONS

1.1.1 Title

This determination is the Transpower Capital Expenditure Input Methodology Determination.

Commented [TP2]: This determination is drafted as a replacement of the current determination.

1.1.2 Commencement and Application

(1) ~~The **input methodology** in this determination applies to **electricity transmission services** in relation to **IPP** regulation under Subpart 7 of Part 4 of the **Act**. This determination amends the **principal determination**.~~

The document is inconsistent as to whether this determination amends or replaces the current determination. This clause suggests a replacement whereas the title of the determination and clause 1.1.2(1) says it is an amendment.

(2) This determination comes into force on the day after the date on which notice of it is given in the New Zealand Gazette under s 52W of the **Act**.

(3) Amendments in this determination apply from the day it comes into force except-

- (a) subpart 2 of Part 3 of the **principal determination** will continue to apply in relation to **RCP2**;
- (b) clause 3.3.4 of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force;
- (c) clause 3.3.7 of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force;
- (d) ~~clause 4.1.1 of the **principal determination** will continue to apply in relation to **RCP2**;~~
- (e) clause 6.1.1(7) of the **principal determination** will continue to apply in relation to **RCP2**;
- (f) clause 7.4.2 of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force;
- (g) clause B1 of the **principal determination** will continue to apply in relation to **RCP2**;
- (h) clause B2 of the **principal determination** will continue to apply in relation to **RCP2**;
- (i) clause B4 of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force;

Commented [TP3]: We suggest stating that clauses 4.1.1 and B5 of this determination (relating to the major capex expenditure adjustment) **do not** apply in relation to RCP2.

- (j) clause B5 of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force;
- (k) clause B7 of the **principal determination** will continue to apply in relation to **RCP2**;
- ~~(l) Schedules C, D, G and I will continue to apply in relation to all **major capex projects** submitted to the **Commission** for approval before this determination came into force;~~
- ~~(b) Schedule H of the **principal determination** will continue to apply in relation to all **major capex projects** approved before this determination came into force.~~ Commencement
- ~~(c) This determination comes into force on the day after the date on which notice of it is given in the New Zealand Gazette under s 52W of the **Act**.~~
- ~~(d) For the avoidance of doubt-~~
- ~~(e) any application by **Transpower** for approval or amendment to an approval of a **major capex project** received after this determination comes into force will be decided in accordance with the **input methodology** in this determination; and~~
- ~~(f) any application by **Transpower** for approval of a **major capex project**-~~
- ~~(g) made to the **Commission** in accordance with s 54R(3)(b) of the **Act** prior to this determination coming into force; and~~
- ~~(h) in respect of which a decision as to its approval has not been made by the **Commission** at that time,~~
- ~~(i) will be decided in accordance with s 54R(3)(b) of the **Act** notwithstanding that this determination is in force.~~

Commented [TP4]: Should be "major capex proposals".

1.1.3 Transitional provisions

- (1) A **major capex project** approved by-
 - (a) the Electricity Commission under Part F of the Electricity Governance Rules 2003; or
 - (b) the **Commission** in accordance with s 54R(3)(b) of the **Act**,
 will be treated for the purposes of this determination as a **major capex project** that has been approved by the **Commission** under clause 3.3.3.

Commented [TP5]: Should be clause 3.3.3 of the principal determination. However, we consider the whole of clause 1.1.3 is redundant because clause 1.1.3 of the principal determination has already transitioned the historic approvals.

(2) Where subclause (1) applies, in treating the approval by the Electricity Commission or the **Commission** in question as an approval under clause 3.3.3-

- (a) the quantum of approved **major capex** is-
 - (i) the **major capex allowance**; or
 - (ii) **maximum recoverable costs**;

to the extent that the **major capex** relates to a **transmission investment** or **non-transmission solution** respectively;

- (b) any date specified as part of the approval as that on which the approval expires is the **approval expiry date**;
- (c) the quantum of any required outputs or deliverables are **approved major capex project outputs**;
- (d) any estimated cost adopted as part of approving the **major capex project** where the probability of the actual cost being lower than that estimated is 50% is the **P50**;
- (e) any forecast **commissioning date** of the **major capex project** adopted as part of approving the **major capex project** is the **commissioning date assumption**;
- (f) any forecast **completion date** in respect of a **non-transmission solution** adopted as part of approving the **major capex project** is the **completion date assumption**; and
- (g) any specification of the attribution of **major capex** in respect of a **non-transmission solution** as **recoverable costs** to one or more **disclosure years** is the **recovery scheme**.

Commented [TP6]: The way lists are done in the document is inconsistent. Sometimes "and" or "or" only appears after the second-to-last item (as here) and sometimes it appears after every item (e.g. clause 2.2.3(2)). Sometimes it appears semi-randomly (e.g. clauses 1.1.4(1) and 7.5.1(2)).

~~(3) A reference to-~~

~~(a) **regulatory period** in Part 2 does not include **RCP1**; and~~

~~(b) **disclosure year** in-~~

~~(i) **Part 3 Subpart 1**; or~~

~~(ii) **clause 3.2.3**;~~

~~does not include a **disclosure year** commencing in **RCP1**.~~

~~(4) The obligations of **Transpower** specified in clauses 3.2.1 and 3.2.2 do not apply to any **base capex project** or **base capex programme** in respect of **RCP1**.~~

1.1.4 Interpretation

- (1) In this determination-
- (a) unless stated otherwise, references to Parts are to named and numbered parts of the determination;
 - (b) references to Subparts are to subparts within the same part in which the reference is made;
 - (c) unless the context otherwise requires, a word which denotes the singular also denotes the plural and vice versa; and
 - (d) unless stated otherwise, any reference to an allowance, amount, cost, rate, sum or value is a reference to an allowance, amount, cost, rate, sum or value calculated in relation to **Transpower** in respect of a **disclosure year**;
 - (e) [any reference to a period of time is interpreted in accordance with section 35 of the Interpretation Act 1999.](#)
- (2) In this determination, including in the schedules, the words or phrases in bold type bear the following meanings:

A

Act means the Commerce Act 1986;

actual FX rate means, in respect of each relevant currency, weighted average exchange rate obtained by **Transpower** in its foreign currency transactions for the **base capex** or **major capex** in question;

adjusted standard incentive rate base capex allowance means [the value *b* calculated as specified in clause B1\(2\);](#) ~~base capex allowance plus monetary amount of additional approved base capex in respect of listed projects to be used when calculating maximum allowable revenue or forecast maximum allowable revenue in applying an IPP determination, adjusted to take account of any disparity between-~~

- (a) ~~forecast CPI that applied when the base capex allowance was determined and actual CPI; and~~
- (b) ~~forecast FX rates that applied when the base capex allowance was determined and actual FX rates;~~

~~and its quantum is calculated in accordance with clause B1(1);~~ **adjusted low incentive rate base capex allowance** means the value *b** calculated as specified in clause B1(2);

adjusted major capex allowance means [the value *b_i* calculated as specified in clause B5\(1\);](#) ~~major capex allowance adjusted to take account of any disparity between-~~

~~forecast CPI and actual CPI; and~~

~~forecast FX rates and actual FX rates; and~~

~~other amounts which do not apply in respect of the calculation of the major capex overspend adjustment;~~

~~and its quantum is calculated in accordance with clause B4(4);~~

ancillary service has the same meaning as ‘ancillary service’ is defined in the **code**;

application submission date means the date by which **Transpower** will submit an application for a **proposed investment** to the **Commission** under clause 3.3.1;

approval expiry date means date on which the approval given by the **Commission** in respect of a **major capex project** under clause 3.3.3 expires;

approval timeframes means timeframes for the **Commission** to approve or amend an approval for a **major capex project** under clause 3.3.3;

approved major capex project outputs means the **grid outputs** applying in respect of a **proposed investment** approved by the **Commission** under clause 3.3.3;

asset capability grid output measure means measure that-

- (a) quantifies the capability or utilisation of the **grid**, whether at the level of-
 - (i) individual assets;
 - (ii) an aggregation of assets, such as by substation; or
 - (iii) the **grid**; and
- (b) reflects the output or benefit (where ‘benefit’ may include a reduction in risk) delivered by investment in additional capacity to **supply electricity transmission services**;

asset health grid output measure means **measure** that-

- (a) quantifies the fitness for service of the **grid**, whether at the level of-
 - (i) individual assets;
 - (ii) an aggregation of assets, such as by substation; or
 - (iii) the **grid**; and
- (b) reflects the output or benefit (where ‘benefit’ may include a reduction in risk) delivered by expenditure-
 - (i) on **asset refurbishment**;
 - (ii) on **asset replacement**; or

Commented [TP7]: This term has been changed to singular later (e.g. in Subpart 3 of Part 3).

Commented [TP8]: This is not a defined term, so should be unbolded.
Another example of an undefined term in bold is “formula” in the definition of “grid output mechanism.”

(iii) which is **operating expenditure**;

asset performance measure means measure that quantifies the performance, reliability or availability of the **grid**, whether at the level of-

- (a) individual assets;
- (b) an aggregation of assets, such as by substation; or
- (c) the **grid**;

asset refurbishment means work driven by **Transpower's policies** on a **project** or **programme** that refurbishes an asset, or sub-component of an asset, and-

- (a) materially extends its original economic life; and
- (b) does not improve its original service potential,

save that it excludes any work to ensure that the asset or sub-component is able to perform its designated function for its normal estimated operating life;

asset replacement means work driven by **Transpower's policies** on a **project** or **programme** that replaces substantially all of an asset, or sub-component of an asset, where the replacement-

- (a) is required due to the condition or performance of that asset; and
- (b) does not materially improve the original service potential beyond that attributable to using modern equivalent assets;

B

base capex means **capital expenditure** (excluding a **non-transmission solution**) that-

- (a) is incurred in relation to one or more of the following things:
 - (i) **asset replacement**;
 - (ii) **asset refurbishment**;
 - (iii) **business support**; and
 - (iv) **information system and technology assets**; or
- (b) is not forecast to be included in a-
 - (i) **project** whose aggregate forecast **capital expenditure** exceeds the **base capex project threshold**; and
 - (ii) **programme** whose aggregate forecast **capital expenditure** exceeds the **base capex programme threshold**;

base capex allowances means the low incentive rate base capex allowance and standard incentive rate base capex allowance monetary amount of **base capex** to be used when calculating maximum allowable revenue or forecast maximum allowable revenue in applying an **IPP determination**;

base capex category means description of a category of **base capex** suitable for grouping programmes or projects relating to **base capex** as of similar type;

base capex expenditure adjustment means the monetary amount calculated as specified in clause B1 of after tax economic gain or loss to take account of deviation by Transpower in base capex for a disclosure year with respect to the adjusted base capex allowance for that disclosure year;

base capex incentive rate means the percentage that **Transpower** must bear-

- (a) of the difference between **base capex** for a **disclosure year** and the **adjusted base capex allowance** for that **disclosure year** as a result of the **base capex expenditure adjustment**; or
- (b) of the **base capex** relating to non-compliant **projects** or **programmes** as a result of the **policies and processes adjustment**;

base capex low incentive rate means 15%;

base capex standard incentive rate means 33%;

base capex programme threshold means; \$20 million; where the last asset delivered by a **programme** has a forecast **commissioning date** in-

- (a) the transition year, a threshold for the programme of \$5 million;
- (b) the remainder period, a threshold for the programme of \$5 million; and
- (c) any period other than RCP1, a threshold for the programme of \$20 million;

(a) **base capex project threshold** means, where the last asset delivered by a **project** has a forecast **commissioning date** in the transition year, a threshold for the project of \$1.5 million;

- (b) the remainder period, a threshold for the project of \$5 million; and
- (c) any period other than RCP1, a threshold for the project of \$20 million;

base capex proposal means information submitted by **Transpower** to the **Commission** for the purpose of the **Commission** determining the things specified in clauses 2.2.2(1) to 2.2.2(6);

Commented [TP9]: If this change (which we agree with) is to be made, then it should flow to all other relevant definitions too (e.g. "major capex project output adjustment").

business support means costs not directly incurred in relation to the **grid** and incurred in relation to-

- (a) **information system and technology assets;**
- (b) office buildings;
- (c) depots and workshops;
- (d) office furniture and equipment;
- (e) motor vehicles; or
- (f) tools, plant and machinery;

C

calculation period means 20 year period commencing on the **commissioning date** of the last asset to be delivered by the **proposed investment**, save that where significant **electricity market benefit or cost elements** and **project costs** are expected to-

- (a) cease to arise or be incurred during that period; or
- (b) arise or be incurred thereafter,

it means the period commencing on the **commissioning date** of the last asset delivered by the **proposed investment** and terminating on the last date that significant **electricity market benefit or cost elements** and **project costs** are expected to arise or be incurred;

cap means specified **grid output** which limits the amount of positive revenue adjustment arising from the calculation of the **grid output adjustment** through the application of the **grid output mechanism**;

capital expenditure means costs that-

- (a) have been or will be included in a **value of commissioned asset**, but only to the extent that the costs have been or will be included in a **closing RAB value**; or
- (b) are a **non-transmission solution**;

closing RAB value means the value calculated in accordance with clause 2.2.3(4) of the Commerce Act (Transpower Input Methodologies) Determination 2010, as modified pursuant to clause 3.3.1 of that determination;

code has the same meaning as 'code' is defined in the Electricity Industry Act 2010;

collar means specified **grid output** which limits the amount of negative revenue adjustment arising from the calculation of the **grid output adjustment** through the application of the **grid output mechanism**;

Commission has the same meaning as defined in s 2 of the **Act**;

commissioned has the same meaning as defined in the Commerce Act (Transpower Input Methodologies) Determination 2010;

commissioning date means date the asset is first **commissioned**;

commissioning date assumption means the assumption made as to the **commissioning date** of the last asset to be delivered by a **major capex project**;

committed project has meaning specified in clause D9;

competition effects has the meaning specified in clause D6;

completion means the provision of all services forecast to be delivered by the **non-transmission solution**;

completion date means date that a **non-transmission solution** achieves **completion**;

completion date assumption means the assumption made as to **completion date** for a **non-transmission solution**;

consumer has the same meaning as specified in s 52C of the **Act**;

CPI means-

- (a) subject to paragraph (c), in respect of the December 2010 quarter and subsequent quarters, the consumer price index stipulated in the 'All Groups Index SE9A' as published by Statistics New Zealand;
- (b) subject to paragraph (c), in respect of each quarter prior to the December 2010 quarter, the same index as described in paragraph (a) multiplied by 1.02; and
- (c) in respect of quarters prior to any quarter in which the rate of **GST** is amended after this determination comes into force, the same index as described in paragraph (a), multiplied by the Reserve Bank of New Zealand's forecast change in that index (expressed as a decimal) arising from the amendment;

D

decommissioned asset has the meaning specified in clause D9;

demand adjustment mechanism means a mechanism specified in an **IPP determination which will adjust the standard incentive rate base capex allowance based on changes in demand for electricity transmission services over a regulatory period**;

demand and generation scenario has the meaning specified in clause D4;

Commented [TP10]: We propose deletion of the definition. From our submission to draft decisions: We strongly oppose the Commission's draft decision to regulate uncertainty of E&D expenditure under \$20m via a baseline level with administrative update(s) using a demand trigger. We view this mechanism to be a disproportionate amount of administrative scrutiny that appears to be at odds with the decision above. Applying the proposed E&D mechanism is likely to affect our ability to invest in a dynamically efficient way (investing in the right projects at the right time).

director means individual occupying the position of director in the company, by whatever name that position is called;

disclosure year means 12 month period ending on 30 June;

Example: 'disclosure year 2012' means 12 month period ending on 30 June 2012;

discount rate has the meaning specified in clause D7(3);

document has the same meaning as defined in s 2 of the **Act**;

E

electricity market benefit or cost element has the meaning specified in clause D5(1);

electricity transmission services means electricity lines services (as 'electricity lines services' is defined in s 54C of the **Act**) supplied by **Transpower**;

exempt major capex means the amount of **the major capex or major capex allowance to which the major capex incentive rate does not apply, as determined by the Commission under clause 3.3.3(6)**;

existing asset has the meaning specified in clause D9;

expected net electricity market benefit has the meaning specified in clause D3(1);

F

forecast CPI means **CPI**, unless **CPI** does not apply to the period in question, in which case it means the most recent **CPI** extended by-

- (a) in the case of a quarter for which a forecast of the annual percent change in the headline **CPI** contained in the current Monetary Policy Statement issued by the Reserve Bank of New Zealand has been made, that forecast; and
- (b) in respect of later quarters, the forecast last applying under paragraph (a) adjusted such that an equal increment or decrement made to that forecast for each of the following three years results in the forecast for the last of those years being equal to the target midpoint for the change in headline **CPI** set out in the Monetary Policy Statement referred to in paragraph (a);

forecast FX rate means, in respect of each relevant currency, forecast weighted average exchange rate that **Transpower** can reasonably be expected to obtain in its foreign currency transactions for the **base capex** or **major capex** in question;

G

generator has the same meaning as defined in the **code**;

good electricity industry practice has the same meaning as specified in the **code**;

Commented [TP11]: Exempt major capex is always part of a major capex allowance, not major capex generally. Consistent with other definitions (e.g. "low incentive rate base capex allowance"), this could just be "...the amount to which..."

grid has the same meaning as specified in the **code**;

grid output means quantum of output in respect of a particular **grid output measure**;

grid output adjustment means the monetary amount of after tax economic gain or loss to take account of deviation by Transpower from its grid output targets calculated as specified in clause B2;

grid output incentive rate means quantum of money that **Transpower** may recover or must bear, as the case may be, per unit of the **grid output measure**, as a result of the quantum of difference between **grid output** for a **disclosure year** and the **grid output target**, which rate will be expressed as a-

- (a) positive number where an increase in **grid output** is intended to result in an increase in revenue; and
- (b) negative number where an increase in **grid output** is intended to result in a decrease in revenue;

grid output measure means a measure that quantifies the output or benefit (where 'benefit' may include reduction in risk) delivered by the **grid**, ~~or~~ investment in the **grid**, or works enabling investment in the grid;

grid output mechanism means the formula by which the **grid output adjustment** is calculated, as specified in the table in clause B2(1);

grid output target means quantum of output at which the **grid output adjustment** will be nil;

grid reliability standards means the grid reliability standards as specified in Schedule 12.2 to the **code**;

GST has the same meaning as defined in s YA 1 of the Income Tax Act 2007 as amended from time to time, and any equivalent legislation that supplements or replaces that definition;

I

ID determination means an information disclosure determination in relation to **Transpower** made by the **Commission** under s 52P of the **Act**;

identified programmes has the meaning specified in clause F2;

information system and technology assets means assets used in operating or supporting the operation of the **grid**, including-

- (a) **Transpower's** telecommunications network;
- (b) **SCADA**; and

Commented [TP12]: If this change (which we agree with) is to be made, then it should flow to all other relevant definitions too (e.g. "grid output incentive rate").

Commented [TP13]: If this change (which we agree with) is to be made, then it should flow to all other relevant definitions too (e.g. "asset capability grid output measure").

The addition of the appropriate definite or indefinite article generally is not consistent in the document.

Commented [TP14]: Preliminary investments may be strategic land purchases, or expenditure on detailed design. We consider "works" is not the right word because it implies building something. Suggest "...or expenditure enabling future investment in the grid" to accommodate all uses for preliminary funding, including funding for detailed design.

(c) devices which provide data to **SCADA** and **grid** systems;

input methodology has the same meaning as defined in s 52C of the **Act**;

integrated transmission plan means collection of **documents** describing **Transpower's** forecast expenditure and outputs that complies with clause 7.2.1;

investment need means need for ~~grid re-enforcement~~, **grid** investment or a **non-transmission solution**;

investment option has the meaning specified in clause D2;

investment test means test specified in Schedule D Division 1;

IPP means individual price-quality path;

IPP determination means individual price-quality determination applying to **Transpower** made by the **Commission** under s 52P of the **Act**;

ITP narrative means high level description, that includes the information specified in clause E2, of **Transpower's** forecast expenditure and outputs;

ITP supporting documents means **documents** specified in clause E3;

K

key assumption means assumption made by **Transpower** of significance to the outcome of the matter in question;

Commented [TP15]: This does not need to be a defined term, if it is going to be defined in this way (i.e. the definition is the ordinary meaning).

L

listed project means a **base capex project** or **base capex programme** that—

is identified as a 'listed project' in an **IPP determination**; ~~and~~

~~(d) — complies with the requirements of clause 2.2.3(2);~~

low incentive rate base capex allowance means the amount subject to the **base capex low incentive rate** as determined by the **Commission** under clause 2.2.2 (1);

low incentive rate base capex expenditure adjustment means the amount calculated as specified in clause B1(3);

low incentive rate base capex project means a **base capex project** or **base capex programme** that is specified as a 'low incentive rate base capex project' in an **IPP**;

Commented [TP16]: Should be "IPP determination", as in the definition of "listed project".

M

major capex means **capital expenditure** that-

- (a) is incurred to:
 - (i) meet the **grid reliability standards**; or
 - (ii) provide a **net electricity market benefit**;
- (b) is not incurred in relation to any of the following things:
 - (i) **asset replacement**;
 - (ii) **asset refurbishment**;
 - (iii) **business support**; and
 - (iv) **information system and technology assets**; and
- (c) is forecast to be-
 - (i) included in a **project** whose aggregate forecast **capital expenditure** exceeds the **base capex project threshold**;
 - (ii) included in a **programme** whose aggregate forecast **capital expenditure** exceeds the **base capex programme threshold**; or
 - (iii) a **non-transmission solution**;

major capex allowance means amount of **major capex** approved by the **Commission** in relation to a **major capex project** ~~with respect to one or more closing RAB values~~;

~~major capex efficiencies~~ means monetary amount equivalent to ~~Transpower's total net cost efficiencies during the regulatory period in question reflected in its major capex for major capex projects commissioned during that period~~; ~~major capex efficiency adjustment~~ means monetary amount of after tax economic gain to take account of ~~major capex efficiencies~~; ~~major capex expenditure adjustment~~ means the amount calculated as specified in clause B5;

major capex incentive rate means ~~the rate determined by the Commission in respect of a major capex project under clause 3.3.3(6), in respect of a regulatory period, percentage of the major capex efficiencies recoverable by Transpower~~;

~~major capex overspend adjustment~~ means monetary amount of after tax economic loss to take account of any ~~major capex~~ in excess of the relevant ~~major capex allowance~~; **major capex project** means a particular **project** of **major capex**-

- (a) undertaken to address ~~or enable~~ a **specific investment need**;

Commented [TP17]: "Capex" is shorthand for "capital expenditure", so this defined term reads as "major capital expenditure expenditure adjustment". Just "major capex adjustment" would be better.

Commented [TP18]: This definition is circular because it just refers to a clause where the defined term is used. The definition should say something about the nature of the rate (i.e. what it is intended to be used for), like the definitions of "major capex allowance" and "exempt major capex".

This may be intended to refer to clause 3.3.3(7). However, under that clause the major capex incentive rate is not always determined by the Commission (i.e. it may default to 15%).

Commented [TP19]: Major capex projects will not "enable" investment needs. Propose should be "undertaken to enable a future project of major capex to address an investment need", or "manage."

- (b) that is either or both of the following things:
- (i) a **transmission investment**, including a variant on another **transmission investment** by virtue of a non-negligible change in the **commissioning date assumption**; or
 - (ii) a **non-transmission solution**, including a variant on another **non-transmission solution** by virtue of a non-negligible change in the **completion date assumption**;

major capex project output adjustment means monetary amount of after-tax economic loss to take account of deviation by Transpower from its **approved major capex project outputs** **calculated by the Commission as specified in clause B3**;

major capex project outputs means the **grid outputs** applying in respect of an **investment option** or **proposed investment** contained in a **major capex proposal**;

major capex project (staged) means two or more **major capex projects** that together address an **investment need**, with any one such **major capex project** being referred to as a stage of that **major capex project (staged)**;

major capex proposal means **document** prepared by Transpower for the **Commission** that identifies a **proposed investment** for which **Commission** approval is sought;

major capex sunk costs adjustment means ~~monetary~~ ~~the~~ amount ~~of after-tax economic gain~~ calculated by the **Commission** ~~as specified under clauses 3.3.5 and B4 at its discretion to take account of costs arising for Transpower in respect of an approved major capex project which Transpower has decided not to proceed with or in respect of which the approval expiry date has passed~~;

~~market development scenario~~ means scenario described in clause D4(1)(a)(i);

~~market development scenario variation~~ means scenario described in clause D4(1)(a)(ii);

maximum recoverable costs means maximum amount of **major capex** which is not included in a **closing RAB value** and is approved in respect of a **non-transmission solution** by the **Commission**, over the duration of the **project**, as **recoverable costs**;

measure of grid performance means measure that quantifies the level of service received by **consumers**;

~~MED scenario~~ means scenario described in clause D4(1)(b);

~~MED scenario variation~~ means scenario described in clause D4(1)(c);

modelled project has the meaning specified in clause D9;

N

net electricity market benefit has the meaning specified in clause D3(2);

Commented [TP20]: As written, this definition could imply that both stages of a major capex project (staged) need to be greater than \$20m. We suggest the general term **projects** to describe the stages of the whole major capex project, to ensure each stage does not need to be greater than \$20m.

The defined term 'project' would appear to be broad enough to apply to land purchases, or undertaking detained design work to produce better cost estimates i.e. both capex and opex. (**project** means temporary endeavour requiring concerted effort, which is undertaken to create defined outcomes).

Commented [TP21]: The actual calculation is in clause B4. Clause 3.3.5 is about process.

Also, when the term is used in clause 3.3.5(1) it is not necessary to say "in accordance with clause B4" because that is already part of the definition (so effectively saying it twice). The change has been made for other definitions in clause 3.2.2(1)(a) and (b).

new investment contract means contract for the provision of new **electricity transmission services** between **Transpower** and another person in respect of which-

- (a) the other person has agreed in writing (whether in the same contract or not) that the terms and conditions of the contract-
 - (i) are reasonable; or
 - (ii) reflect workable or effective competition for the provision of the **electricity transmission services**; or
- (b) **Transpower** demonstrates beyond a reasonable doubt that the terms and conditions of the contract were arrived at following a process that provided opportunities for-
 - (i) affected customers to make or approve reasonable price-quality trade-offs; and
 - (ii) the competitive provision of new **electricity transmission services** by parties other than **Transpower**;

non-transmission solution means **costs** incurred by **Transpower**-

- (a) in relation to one of more of the matters listed in (c) and on a project that avoids or defers a **transmission investment** where the **transmission investment** would-
 - (i) be **major capex**; and
 - (ii) satisfy the **investment test** if the relevant **investment options** consisted solely of those that are **transmission investments**; or
- ~~(c)~~ (b) in relation to one **of** more of the matters listed in (c) and to manage operational risks such as network constraints or unavailability of assets while a **major capex project** is **being developed** or under construction;
- (c) (i) electricity generation;
 - (ii) energy efficiency;
 - (iii) demand-side management;
 - (iv) local network augmentation;
 - (v) improvement to the systems and processes of the **system operator**;
 - (vi) the provision of **ancillary services**; and
 - (vii) grid scale storage;
- ~~(a)~~ in relation to one or more of the following things:-

Commented [TP22]: The definition of NTS as a type of cost is not consistent with the way the term is used elsewhere in the determination. NTS is used to mean the project from which the costs arise (e.g. definition of "maximum recoverable costs"). This definition should start "...means a Transpower project-", with corresponding changes to the text that follows.

Commented [TP23]: Is it necessary to have an exhaustive list in paragraph (c)? A list assumes every type of possible NTS has been anticipated, and may stifle emerging NTS.

Commented [TP24]: "of" (highlighted) should be "or" We propose "in progress."

"being developed" is unclear, the phrase could mean being investigated, in the CC approval process, or something else.

Commented [TP25]: This should not be limited to the system operator as there may also be worthwhile improvements to grid owner systems and processes.

- (i) ~~electricity generation;~~
- (ii) ~~energy efficiency;~~
- (iii) ~~demand-side management;~~
- (iv) ~~local network augmentation;~~
- (v) ~~improvement to the systems and processes of the **system operator**;~~
and
- (vi) ~~the provision of **ancillary services**; and~~
- (b) ~~on a **project** that avoids or defers a **transmission investment** where the **transmission investment** would-~~
 - (i) ~~be **major capex**; and~~
 - (ii) ~~satisfy the **investment test** if the relevant **investment options** consisted solely of those that are **transmission investments**;~~

O

operating cost has the same meaning as defined in the Commerce Act (Transpower Input Methodologies) Determination 2010;

operating expenditure has the same meaning as defined in the Commerce Act (Transpower Input Methodologies) Determination 2010;

opex proposal means **Transpower's** written response to an **ID determination** or an ~~notice issued by the **Commission** under **s53ZD notice of the Act**~~ requiring information on proposed **operating expenditure** in respect of the **IPP for the next regulatory period** ~~in respect of an **IPP**;~~

P

P50 means estimated cost of a **project** where the probability of the actual cost being lower than that estimated is 50%;

performance-based measure means **asset performance measure** or **measure of grid performance**;

policies means documented and **director** or management-approved short-term and long-term procedures, processes, strategies, guidelines, plans and approaches including those relating to-

- (a) asset management;
- (b) asset security;
- (c) augmentation and planning;

Commented [TP26]: This definition no longer appears to be in use.

- (d) business cases, including cost-benefit analyses;
- (e) **capital expenditure** (e.g. **capital expenditure** approval and replacement);
- (f) condition monitoring and replacement;
- (g) corporate governance;
- (h) demand management;
- (i) disaster recovery;
- (j) energy supply and **consumer** growth forecasting;
- (k) information technology;
- (l) internal reviews;
- (m) investment decision making and evaluation;
- (n) land and easement acquisition;
- (o) network spares;
- (p) prioritisation and options analysis;
- (q) procurement;
- (r) project management;
- (s) regulatory compliance;
- (t) risk management and assessment;
- (u) self insurance; or
- (v) site and line safety;

~~policies and processes adjustment~~ means monetary amount of after tax economic loss to take account of any ~~base capex project or base capex programme~~

- (a) ~~involving forecast capital expenditure of greater than \$20 million in respect of which the requirements of clause 3.2.1 were not met in all material respects; or~~
- (b) ~~in respect of which Transpower has acted otherwise than in accordance with policies or processes specified in clause 3.2.2 except to the extent that the Commission is satisfied that it was appropriate for the relevant policies or processes not to have been followed for the project or programme;~~

principal determination means the Transpower Capital Expenditure Methodology Determination [2012] NZCC 2 as in effect immediately before this determination comes into force;

Commented [TP27]: See comment before about whether this determination is in fact the principal determination.

Also, the version of the Capex IM in effect at a particular time will always be a particular version, so not logically possible to amend it.

programme means-

- (a) 2 or more **projects**; or
- (b) 2 or more **projects** and expenditure activities,

within the same category of **capital expenditure** that are grouped together on the basis of having a common purpose;

project means temporary endeavour requiring concerted effort, which is undertaken to create defined outcomes;

project cost has the meaning specified in clause D5(2) and its quantum is calculated in accordance with clause D7(1);

proposed investment means a major capex project that **Transpower** seeks to have approved in terms of clause 3.3.2(1);

R

~~RCP1 means regulatory period commencing on 1 April 2011 and ending on 31 March 2015; RCP2 means the regulatory period commencing on 1 April 2015 and ending on 31 March 2020;~~

recovery scheme means specification for the systematic attribution of **maximum recoverable costs** to one or more **disclosure years**, including by way of formulae;

recoverable cost has the same meaning as defined in the Commerce Act (Transpower Input Methodologies) Determination 2010;

regulatory period means period to which an **IPP determination** relates;

regulatory templates means tables of information requirements regarding **Transpower's base capex**, whether actual or proposed, and which-

- (a) must at least-
 - (i) specify **base capex categories**; and
 - (ii) require quantitative actual and forecast information in respect of those categories;
 - (iii) require quantitative actual and forecast information in respect of **identified programmes**; and
- (b) may contain instructions on how they must be completed;

relevant demand and generation scenarios has the meaning specified in clause D4(3);

~~remainder period means period from disclosure year 2013 to disclosure year 2015 inclusive;~~

revenue-linked grid output measure means **grid output measure** to which the **grid output mechanism** applies;

S

SCADA means systems for monitoring and controlling, from one location, equipment in different locations, using computing technologies;

s53ZD notice means a notice issued by the Commission to Transpower under section 53ZD of the Act;

sensitivity analysis has the meaning specified in clause D8;

services has the same meaning as defined in s 2 of the Act;

standard incentive rate base capex allowance means the amount subject to the **base capex standard incentive rate** as determined by the Commission under clause 2.2.2(1);

standard incentive rate base capex expenditure adjustment means the amount calculated as specified in clause B1(2);

supply has the same meaning as defined in s 2 of the Act, and **supplied** must be construed accordingly;

system operator has the same meaning as defined in s 5 of the Electricity Industry Act 2010;

T

~~**transition year** means disclosure year 2012;~~

transmission investment means investment in the grid or works enabling investment in the grid;

Transpower has the same meaning as defined in s 54B of the Act;

V

value of commissioned asset has the same meaning as defined in the Commerce Act (Transpower Input Methodologies) Determination 2010;

value of expected unserved energy means-

- (a) the appropriate cost per megawatt hour specified in or under clause 4 of Schedule 12.2 to the **code**; or
- (b) another appropriate cost per megawatt hour,

of expected unserved energy (as 'expected unserved energy' is defined in the **code**);

Commented [TP28]: The expansion of the term is for preliminary (staged) investments under major capex, such as strategic land purchases, or detailed design. "works" is not the right word because it implies building something. Suggest "...or expenditure enabling future investment in the grid" to accommodate all types of preliminary funding, including funding for detailed design.

W

working day has the same meaning as defined in s 2 of the **Act**.

PART 2 PROCESSES PRIOR TO A REGULATORY PERIOD

SUBPART 1 Integrated transmission plan

2.1.1 Integrated transmission plan

- (1) **Transpower** must submit an **integrated transmission plan** in accordance with Part 7 to the **Commission** no later than the first **working day** in the December sixteen months before the start of a **regulatory period**.
- (2) **Transpower** must ~~publish~~ make available publicly on its website a copy of the information most recently submitted to the **Commission** under subclause (1) on its website.

SUBPART 2 Base capex

2.2.1 Required information

- (1) In the period commencing on the first **working day** in November and terminating on the last **working day** in February prior to the December sixteen months before the start of a **regulatory period**, the **Commission** and **Transpower** must use reasonable endeavours to agree, in respect of that next **regulatory period**-
 - (a) the form and content of **regulatory templates**; and
 - (b) the categories or criteria used to define **identified programmes**.
- (2) Where no agreement is reached on one or more of the things specified in subclause (1), the **Commission** must, having regard to the views **Transpower** expressed during the period referred to in subclause (1), specify those matters and notify **Transpower** thereof by the last **working day** in March prior to the December sixteen months before the start of a **regulatory period**.
- (3) **Transpower** must submit a **base capex proposal** in accordance with Part 7 to the **Commission** no later than the first **working day** in the December sixteen months before the start of a **regulatory period**.

2.2.2 Commission evaluation and decisions

- (1) No later than the last **working day** in the August of the year before the start of a **regulatory period**, the **Commission** will, subject to subclause (8), determine in respect of that **regulatory period**-
 - (a) a standard incentive rate base capex allowance and low incentive rate base capex allowance for each **disclosure year** of the **regulatory period**; and
 - ~~(b) the quantum of the base capex incentive rate to apply;~~

~~(c)~~(b) in accordance with clauses A6 and A7, the following as revenue-linked grid output measures:-

- (i) one or more **asset performance measures**;
- (ii) one or more **measures of grid performance**;
- (iii) at Transpower's request, one or more **asset capability grid output measures**;

~~(iv) at Transpower's request, one or more **asset health grid output measure**; and~~

at Transpower's request, any other **grid output measure**;

~~(d)~~(c) in accordance with clause A7, in respect of each **revenue-linked grid output measure**, a-

- (i) **cap**;
- (ii) **collar**;
- (iii) **grid output incentive rate**; and
- (iv) **grid output target**; ~~and~~

(2) When determining the **base capex allowances** in subclause (1)(a), the **Commission will also specify the-**

- (a) the **relevant low incentive rate base capex projects** if it determines a **low incentive rate base capex allowance**;
- (b) **forecast CPI** used to determine the **base capex allowances**;
- (c) **forecast FX rates** used to determine the **base capex allowances**; and
- (d) amount or percentage of the **base capex allowances** to which the **forecast FX rates** may apply.

(3) A **base capex project** or **base capex programme** may only be specified as a **low incentive rate base capex project** if-

- (a) the **Commission** considers that-
 - (i) it will require **capital expenditure** greater than \$20 million; and
 - (ii) there are no workable alternative **capital expenditure or operating expenditure** options to it.

Commented [TP29]: We consider the word 'relevant' is redundant. The low incentive rate base capex allowance will presumably apply to all low incentive rate base capex projects.

Commented [TP30]: We consider the criterion inappropriate. There may be other options that are "workable" but are more expensive than the low incentive rate base capex project being considered. Workability is not a recognised investment test. If this criterion is retained, "alternatives" would be a better word than "options" and there should be some mention of the alternatives meeting the same investment need.

We seek clarification on how the Commission could consider that "there are no workable alternative **capital expenditure or operating expenditure** options to it."

- (4) When determining the **revenue-linked grid output measures** mentioned in subclause (1)(b), the **Commission** may also determine in accordance with clause A4 ~~one~~ or more of those same **grid output measures** that are not linked to revenue.
- (5) When determining the **revenue-linked grid output measures** in subclause (1)(b) the **Commission** will also determine one or more **asset health grid output measures**.
- (6) The **asset health grid output measures** determined under subclause (5) may at the discretion of the **Commission** be-
- (a) **revenue-linked grid output measures** determined in accordance with clauses A6 and A7 in which case subclause (1)(c) will apply; or
 - (b) not linked to revenue determined in accordance with clause A5.
 - (c) in accordance with clause A4, none, one or more of each of the following **grid output measures** to which the **grid output mechanism** will not apply:
 - (i) ~~performance based measures;~~
 - (ii) ~~asset capability grid output measures;~~ and
 - (iii) ~~asset health grid output measures.~~
 - (f) In its decision specifying the matters specified in subclause (1), the **Commission** will also specify-
 - (i) ~~forecast CPI~~ used to determine the **base capex allowances**;
 - (ii) ~~forecast FX rates~~ used to determine the **base capex allowances**; and
 - (iii) amount or percentage of the **base capex allowances** to which the ~~forecast FX rates~~ may apply.
- (2)(7) Where the **Commission** considers that, for the purpose of deciding the matters specified in this clause, it requires further information of **Transpower**, the **Commission** will request ~~provision by Transpower to provide~~ such information by a **reasonable future date** specified by the **Commission** such that it is reasonable for **Transpower** to comply with.
- (3)(8) For the purpose of subclause (1), ~~the~~ **Commission** will only determine the things specified in ~~this clause~~ that subclause after-
- (a) consulting in any manner specified in clause 8.1.1; and
 - (b) evaluating in accordance with Part 6-
 - (i) the **base capex proposal**; and
 - (ii) any further information received pursuant to subclause (7).

Commented [TP31]: Not consistent with the way the cross-references are done in subclauses (2) and (5).

Commented [TP32]: Should refer to A5.

~~(4)~~(9) The **Commission** will publish its decisions under this clause as soon as reasonably practicable.

2.2.3 Listed projects, demand adjustment mechanism and low incentive base capex projects specification

(1) The **Commission** may specify the following matters ~~identify listed projects~~ in an IPP determination:

- (a) base capex projects or base capex programmes that are listed projects;
- (b) a demand adjustment mechanism, including the quantum of the standard incentive rate base capex allowance that will be subject to the demand adjustment mechanism; and
- c) low incentive rate base capex projects.

~~(1)~~(2) A **base capex project** or **base capex programme** may only be specified ~~identified~~ as a **listed project** if it is a **base capex project** or **base capex programme**:

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

Commented [TP33]: We propose removing 1 (c). It is not clear why phrase is included here, when the determination of this is already covered in clause 2.2.2(2) and (3).

SUBPART 3 Major capex

2.3.1 Major capex incentive rate

(1) ~~The **major capex incentive rate** in respect of **RCP1** is specified in the **IPP determination** applying to **RCP1**.~~

(2) ~~The **Commission** will, by the last **working day** in the August before the start of a **regulatory period** which is not **RCP1** determine the quantum of the **major capex incentive rate** to apply to that **regulatory period**.~~

(3) ~~The **Commission** will publish its determination as soon as reasonably practicable.~~

PART 3 PROCESSES DURING AND RELATING TO A PAST REGULATORY PERIOD

SUBPART 1 Integrated transmission plan

3.1.1 Integrated transmission plan

- (1) Subject to subclause (2), **Transpower** must, by the last **working day** of September of each **disclosure year**, submit to the **Commission**-
 - (a) **ITP supporting documents**; and
 - (b) an updated **ITP narrative** that takes account of-
 - (i) any material changes to matters covered in the **ITP narrative** most recently submitted to the **Commission**; and
 - (ii) the content of the **ITP supporting documents**.
- (2) Subclause (1) does not apply in respect of the last **disclosure year** commencing in a **regulatory period**.
- (3) **Transpower** must ~~make available publicly on its website~~ a copy of the information most recently submitted to the **Commission** under subclause (1).

Commented [TP34]: Change made to clause 2.1.1(2) and other clauses not carried through here.

SUBPART 2 Base capex

3.2.1 Base capex projects or programmes with forecast cost of greater than \$20 million

In respect of a **base capex project** or **base capex programme** involving forecast **capital expenditure** of greater than \$20 million **Transpower** must, prior to undertaking the **project** or **programme**, undertake-

- (a) a cost-benefit analysis consistent with determining **expected net electricity market benefit**; and
- ~~(b) consultation with interested persons in accordance with clause 8.1.2. Base capex projects or programmes – application of policies and processes~~
- ~~(c) in respect of each base capex project or base capex programme, **Transpower** must act in accordance with each relevant **policy** and **process** as specified in its base capex proposal.~~

Commented [TP35]: The origin for the clause was to provide for reconductoring projects, where applying the investment test was plausible (the investment test is the only place where the term ‘expected net market benefit’ is used).

We consider the clause redundant since the listed projects framework provides for reconductoring projects.

3.2.2 Base capex annual adjustments

- (1) By the last working day of the first November after a **disclosure year**, subject to subclauses (2) and (3), the **Commission** will calculate for that **disclosure year** a-

- (a) **base capex expenditure adjustment** ~~in accordance with clause B1; and~~
- (b) ~~policies and processes adjustment~~ in accordance with clause B2, subject to subclause (4); and
- ~~(c)~~ **grid output adjustment** ~~in accordance with clause B3;~~

(2) Where the **Commission** considers that it requires further information for the purpose of ~~making reviewing~~ the calculations and deciding on the ~~adjustments~~ ~~things specified in~~ subclause (1), the **Commission** will request ~~provision by Transpower to provide~~ of such information by a ~~reasonable future~~ date ~~specified by the Commission such that it is reasonable for Transpower to comply with.~~

Commented [TP36]: Could be simplified to “calculating the adjustments”, consistent with subclause (3).

(3) ~~For the purpose of subclause (1)~~ The **Commission** will not calculate the ~~adjustments items~~ ~~specified in that subclause (1)~~ until after having evaluated relevant information disclosed pursuant to:

Commented [TP37]: Similar to the use of “mentioned” in clause 2.2.2(4), the use of “specified” here is inconsistent with other clauses (e.g. subclause (2), where it has been deleted).

- (a) a request made pursuant to subclause (2);
- (b) an **ID determination** ~~;~~ ~~or~~
- (c) a ~~notice made under s53ZD~~ **notice of the Act**.

Commented [TP38]: Inconsistent list separator.

~~(4)~~ For the purpose of subclause (1)(b), where in respect of the same **project** or **programme** **Transpower** has not complied with both clause 3.2.1 and clause 3.2.2, the **Commission** will disregard one of those instances of non-compliance for the purpose of calculating the ~~policies and processes adjustment~~ in accordance with clause B2.

~~(5)~~ ~~(4)~~ The **Commission** will publish its decision ~~under this clause of the matters referred to in subclause (1)~~ as soon as reasonably practicable.

3.2.3 Approval of base capex in addition to the base capex allowances

(1) **Transpower** may submit, no later than the last **working day** in the June twenty-two months before the end of a **regulatory period**, an application for approval of additional **base capex** relating to assets forecast to be **commissioned** within that **regulatory period** in respect of a **listed project** to be recognised as approved **base capex** for any of the **disclosure years** that follow the **disclosure year** of approval.

(2) **Transpower’s** application under subclause (1) must include:

- (a) a description of the reasons for carrying out the **listed project**, supported by relevant technical information, including evidence of the current and future need for the applicable assets by reference to the **demand and generation scenarios** in clause D4(1) ~~of Schedule D;~~
- (b) consideration of alternative options for carrying out the **listed project**, including non-replacement and demolition, enhancement or development of alternative assets, and ~~transmission alternatives~~ **non-transmission solutions**;

Commented [TP39]: Redundant.

- (c) intended scope of the **listed project**, including specification of the **grid outputs** that apply in respect of the **listed project**;
- (d) all relevant technical and costing information used to estimate both the cost of the **listed project** and alternative options, including details on risk allowances and contingencies;
- (e) estimated cost of the **listed project** broken down into year by year figures in expected **disclosure year** of expenditure commissioning prices, and the assumptions used to derive the estimated cost;
- (f) a cost-benefit analysis in accordance with clause 3.2.1(a), including a sensitivity analysis and reasons for selecting the variables of the sensitivity analysis;
- (g) information that the listed project meets the criteria for the base capex low incentive rate as set out in Schedule A4, if it requests that rate to apply to the additional base capex;

Commented [TP40]: Clause (not Schedule) A4 seems redundant given it is a substantive repeat of clause 2.2.2(3).

~~(f)~~(h) evidence of consultation with interested persons in accordance with clause 3.2.1(b);

~~(g)~~(i) evidence that its Board of Directors has approved the **listed project** as a **base capex project** or **base capex programme** and that the business case approved by **Transpower's** Board included a quality assurance checklist in respect of the **listed project**; and

~~(h)~~(j) certification of the application in accordance with clause 9.1.2.

(3) Where the **Commission** considers that, for the purpose of deciding whether to approve **base capex** in respect of a **listed project** it requires further information of than that provided in Transpower's application, the **Commission** will request provision by Transpower ~~of to provide~~ such information by a reasonable future date specified by the Commission such that it is reasonable for Transpower to comply with.

(4) The **Commission** may in addition to the **base capex allowance**, at its discretion, determine an approved amount of **base capex** in respect of a **listed project** for **disclosure years** in a **regulatory period**, following evaluation of **Transpower's** application, in accordance with:

- (a) the consultation requirements in clause 8.1.1 that would apply if this application was part of the **base capex proposal**; and
- (b) the criteria in clause 6.1.1(1), clause 6.1.1(2) and Schedule A2 ~~that would apply if this application was part of the base capex proposal and the listed project was an identified programme and, where relevant, Schedule A.~~

Commented [TP41]: Should be clause A2.

- (5) In any decision to approve additional **base capex** in respect of a **listed project**, the **Commission** will-
- (a) apply the **forecast CPI** used to determine the **base capex allowance** for that **regulatory period** to the approved additional **base capex** for the **listed project**;
 - (b) apply the **forecast FX rates** used to determine the **base capex allowance** for that **regulatory period** to the approved additional **base capex** for the **listed project**; ~~and~~
 - (c) specify the amount or percentage of the additional **base capex** for the **listed project** to which the **forecast FX rates** may apply;
 - ~~(e)~~(d) determine whether the **base capex standard incentive rate or base capex low incentive rate applies to the additional base capex**.
- (6) The **Commission** will publish its decision on **Transpower's** application for approval of **base capex** in respect of a **listed project** as soon as reasonably practicable.

Commented [TP42]: This could be "under this clause", consistent with the change made to clause 3.2.2(4) and other clauses.

SUBPART 3 Major capex projects

3.3.1 Consultation programme and approval timeframes

- (1) **Transpower** must notify the **Commission** of its intention to plan a **major capex project**, including whether or not the project is part of a proposed major capex project (staged) that **Transpower** considers may become a **proposed investment**.
- (2) In the two month period following such notification, the **Commission** and **Transpower** must use reasonable endeavours to agree, in respect of that **major capex project**-
- (a) in accordance with clause 8.1.3-
 - (i) a consultation programme for a **transmission investment or non-transmission solution**; and
 - (ii) an approach to ensure appropriate consideration of **non-transmission solutions** to meet the **investment need**; ~~and~~
 - (b) a **proposed application submission date**; and
 - ~~(b)~~(c) a **proposed approval timeframes**.
- (3) For the purpose of assisting interested persons, the **Commission** may include in the consultation programme referred to in subclause (2)(a)(i) such consultation processes that the **Commission** intends to follow, but **Transpower** is not required to agree such processes.

Commented [TP43]: Missing comma after this word.

Commented [TP44]: If the proposal is agreed, then it is no longer proposed. Remove 'proposed'. Also, applies to the references to the "proposed" approval timeframes

- (4) Where no agreement is made on one or more of the things referred to in subclause (2), the **Commission** will, by one week after the end of the period referred to in subclause (2), having regard to the views expressed by **Transpower** during that period, specify whichever of the following has not been agreed:
- (a) a consultation programme in respect of a **transmission investment** or **non-transmission solution**, in accordance with clause 8.1.3;
 - (b) an approach to ensure appropriate consideration of **non-transmission solutions** to meet the **investment need**, in accordance with clause 8.1.3;
 - ~~(b)~~(c) a proposed **application submission date**; and
 - ~~(c)~~(d) a proposed **approval timeframe**.
- (5) The **Commission** and **Transpower** must publish the-
- (a) consultation programme;
 - (b) approach for consideration of **non-transmission solutions**;
 - ~~(b)~~(c) proposed **application submission date**; and
 - ~~(c)~~(d) proposed **approval timeframe**,
- as soon as reasonably practicable.
- (6) The **Commission** and **Transpower** must-
- (a) regularly review the published-
 - (i) consultation programme; ~~and~~
 - (ii) approach for consideration of **non-transmission solutions**;
 - ~~(iii)~~(iii) proposed **application submission date**; and
 - ~~(iii)~~(iv) proposed **approval timeframe**,
- as to whether they remain appropriate and reasonable; and
- (b) the **Commission** may amend one or more of those things to ensure that they remain appropriate and reasonable.
- (7) **Transpower** must consult interested persons in accordance with the consultation programme and follow the approach for consideration of **non-transmission solutions**.
- 3.3.2 Major capex proposals
- (1) A **major capex project** must be approved by the **Commission** in order that **Transpower** can recover the **capital expenditure** relating to that **major capex project** under an **IPP**.

- (2) **Transpower** must submit a **major capex proposal** to the **Commission** in respect of a **proposed investment**.
- (3) **Transpower** may submit a **major capex proposal** at any time during a **regulatory period**.

3.3.3 Commission evaluation and approvals

- (1) The **Commission** ~~may reject will decide, with respect to~~ a **major capex proposal** ~~where, together-~~
- ~~Transpower has not complied with the requirements specified in clause 3.3.1;~~ or
 - the proposal does not comply with clause 7.4.1 ~~approve the proposed investment;~~
- (2) The **Commission** will decide, with respect to the **proposed investment**, to either-
- approve the **major capex project**; or
 - decline the **major capex project**.
- (3) Where the **Commission** considers that for the purpose of deciding whether to approve or decline ~~a~~ **major capex project proposed investment** it requires further information ~~of Transpower~~ than that provided in the **major capex proposal**, the **Commission** will request ~~provision by Transpower of~~ ~~to provide~~ such information by a **reasonable future date** ~~specified by the Commission such that it is reasonable for Transpower to comply with.~~
- (4) The **Commission** may only decide to approve ~~or decline~~ the **major capex project proposed investment** after-
- consulting in any manner specified in clause 8.1.1; and
 - having evaluated, in accordance with Part 6-
 - the **major capex proposal**; and
 - any further information received pursuant to subclause (3).
- ~~(5) The Commission may reject the major capex proposal where-~~
- ~~Transpower has not complied with the requirements specified in clause 3.3.1;~~ or
 - ~~that proposal does not comply with clause 7.4.1.~~
- ~~(6)~~(5) Where a **major capex project proposed investment** is approved by the **Commission** the-
- ~~major capex allowance;~~
 - ~~(a)~~ **maximum recoverable costs;**

Commented [TP45]: Clause 3.3.1 only requires Transpower to attempt to agree, publish and review certain things. It does not require Transpower to comply with the things themselves.

Commented [TP46]: Definite versus indefinite article disagreement between the subclauses.

Commented [TP47]: We consider Transpower should still propose the major capex allowance as the party with the information. Also, a purpose of staged approvals for major capex is to fund detailed design to obtain a better estimate of expected cost. The Commission should only amend the figure if it can robustly justify a different figure.

- ~~(e)~~(b) recovery scheme;
- ~~(d)~~(c) approved major capex project outputs;
- ~~(e)~~(d) approval expiry date;
- ~~(f)~~ — P50;
- ~~(e)~~(e) commissioning date assumption; and
- ~~(h)~~(f) completion date assumption,

applying in respect of the approval are those specified by **Transpower** in the relevant **major capex proposal** as applicable to the **transmission investment** or **non-transmission solution**.

(6) Where a **major capex project** is approved by the **Commission** the-

- (a) ~~major capex allowance~~;
- (b) ~~major capex incentive rate~~; and
- (c) ~~exempt major capex~~,

applying in respect of the approval are those specified ~~by the~~ **Commission** as applicable to the **transmission investment** or **non-transmission solution**.

(7) Where a **major capex project** is approved by the **Commission** the **major capex incentive rate** is 15% unless a different rate is specified by the **Commission**.

~~(7)~~(8) The **Commission** will publish its decisions under ~~this clause subclause (1)~~ as soon as reasonably practicable.

3.3.4 Amendments to approved investments

(1) At **Transpower's** application, the **Commission** may, subject to subclauses (2) and (3), ~~decide to~~ amend one or more of the following components of a **major capex project** approved under clause 3.3.3:

- ~~(a)~~ — ~~major capex allowance~~;
- ~~(b)~~(a) maximum recoverable costs;
- ~~(e)~~(b) recovery scheme;
- ~~(d)~~(c) approved major capex project outputs; and
- ~~(e)~~(d) approval expiry date.

(2) Where **Transpower** makes an application under subclause (1)-

- (a) **Transpower** must comply with the requirements in clause 7.4.2;

Commented [TP48]: Our submission to Capex IM draft decisions

"Although we consider our expected costs (P50) for a major capex project will benefit from the process changes such as staged approvals, any proposed changes to the P50 level by the Commission after application would need robust justification. The process for project approval should include a draft determination so that Transpower has a right of reply".

Commented [TP49]: Subclause (1) is not functionally subject to subclause (3) anymore.

- (b) the **Commission** and **Transpower** must use reasonable endeavours to agree **approval timeframes** in respect of the application, and where no agreement is made by two weeks from the date of receipt of the application then the **Commission** will, having regard to the views expressed by **Transpower** during that two week period, specify the **approval timeframes**; and
 - (c) the **Commission** will not make an amendment under subclause (1) until after having evaluated, in accordance with Part 6-
 - (i) the application; and
 - (ii) any information received pursuant to subclause (7).
- (3) ~~For the purpose of subclause (1), an amendment may be made by~~ **The Commission** must make reasonable efforts to determine any amendments under subclause (1) within the following timeframes-
- (a) an **approval expiry date**, by no later than the **approval expiry date** previously approved; and
 - (b) any other thing specified in subclause (1), ~~subject to subclause (9)(7)(8)~~, by no later than the last **working day** of the first November after the **disclosure year** in which the **commissioning date** or **completion date** occurs.
- (4) Where an amendment is made by the **Commission**, to the extent relevant to the application in question, the amended-
- ~~(a)~~ **major capex allowance**;
 - ~~(b)~~(a) **maximum recoverable costs**; and
 - ~~(c)~~(b) **recovery scheme**;
- are those specified by the **Commission**, and the amended-
- ~~(d)~~(c) **approved major capex project outputs**; and
 - ~~(e)~~(d) **approval expiry date**,
- are those proposed by **Transpower** in the relevant application.
- (5) Where the **Commission** makes an amendment to the approved major capex project outputs under subclause (1), the **Commission** may also make commensurate amendments to any of the the major capex allowance and exempt major capex.
- ~~(5)~~(6) Where the **Commission** makes any amendment under subclause (1), the **Commission** may also make amendments to any of the-
- ~~(a)~~ **P50**;
 - ~~(b)~~(a) **commissioning date assumption**; and

~~(e)~~(b) **completion date assumption.**

~~(6)~~(7) Where the **Commission** considers that, for the purpose of deciding whether to **make an amendment under subclause (1)** ~~amend one or more components of a major capex project~~, it requires ~~of Transpower~~ further information than that provided in **Transpower's** application, the **Commission** ~~will~~ **may** request **Transpower** to provide such information by a **reasonable future** date ~~specified by the Commission such that it is reasonable for Transpower to comply with.~~

~~(7)~~(8) The **Commission** will publish its decisions under subclause ~~this clause~~(1) as soon as reasonably practicable. ~~For the purpose of subclause (3)(b), the Commission, at the request of Transpower, may extend the relevant timeframe for making an amendment where the Commission is satisfied that not all of the information relevant to an amendment is, or will be, available within the timeframe specified in subclause (3)(b)~~

3.3.5 Major capex sunk costs adjustment

(1) At **Transpower's** application, where **Transpower** has incurred **capital expenditure** in relation to an approved **major capex project**, but prior to the **commissioning date** or **completion date**-

- (a) **Transpower** has decided not to proceed with the investment; or
- (b) the **approval expiry date** has passed,

the **Commission** may, at its discretion, decide to calculate a **major capex sunk costs adjustment** in accordance with clause B4.

(2) For the purpose of subclause (1)-

- (a) **Transpower** must comply with the requirements in clause 7.4.3; and
- (b) the **Commission** will not exercise its discretion pursuant to subclause (1) until after having evaluated, in accordance with Part 6-
 - (i) the application; and
 - (ii) any information received pursuant to subclause (3).

(3) Where the **Commission** considers that, for the purpose of exercising its discretion pursuant to subclause (1), it requires ~~of Transpower~~ further information than that provided in **Transpower's** application, the **Commission** will request ~~provision by Transpower of to provide~~ such information by a **reasonable future** date ~~specified by the Commission such that it is reasonable for Transpower to comply with.~~

(4) Where the **Commission** calculates a **major capex sunk costs adjustment** pursuant to subclause (1), any approval for the **major capex project** is treated as revoked.

- (5) The **Commission** will publish its decision under [this clause subclause \(1\)](#) as soon as reasonably practicable.

3.3.6 Decision on approved major capex project outputs after commissioning or completion

- (1) The **Commission** will decide, subject to subclause (2), by the last **working day** of the first November after each **disclosure year** whether **approved major capex project outputs** were met in respect of each approved **major capex project** having a **commissioning date** or **completion date** in that **disclosure year**.
- (2) For the purpose of subclause (1), the **Commission** will not make any decision required by that subclause until after having evaluated, to the extent relevant to the decision-
- (a) the information disclosed by **Transpower** in respect of the last completed **disclosure year** pursuant to either or both of-
 - (i) an **ID determination**; or
 - (ii) a ~~notice made under s53ZD~~ [notice of the Act](#); and
 - (b) any application received under clause 3.3.4.
- (3) The **Commission** will publish its decisions under [this clause subclause \(1\)](#) as soon as reasonably practicable.

3.3.7 Overspend and Major Capex Project eOutput adjustments

- (1) ~~The **Commission** will calculate, by the last **working day** of the first November after each **disclosure year**, subject to subclause (3), the quantum of the **major capex overspend adjustment** in accordance with clause B4 in respect of assets which are-~~
- ~~(a) included in a **major capex project** where the last asset delivered by the **project** has a **commissioning date** in that **disclosure year**;~~
 - ~~(b) not referred to in paragraph (a) and having a **commissioning date** in that **disclosure year**.~~
- (1) The **Commission** will calculate, by the last **working day** of the first November after each **disclosure year**, subject to subclauses (2), ~~and 3.3.7(3)3.3.7(3)(3) and 3.3.7(4)3.3.7(4)(4),~~ the quantum of the **major capex project output adjustment** ~~in accordance with clause B3B5~~ in respect of each **major capex project** where, to the extent the **project** is a-
- (a) **transmission investment**, the last asset delivered by the **project** has a **commissioning date** in that **disclosure year**; or
 - (b) **non-transmission solution**, it has a **completion date** in that **disclosure year**;
- and

for which an approval under clause 3.3.3 applies at the **commissioning date** or **completion date** referred to in paragraph (a) or (b) respectively.

Commented [TP50]: Should not be capitalised, consistent with other clause headings.

Commented [TP51]: On printing and updating, these subclause references have a redundant "3.3.7" added to the front of them.

- (2) ~~For the purposes of subclauses 1.1.1(1)(1) and (1)(2),~~ the **Commission** will not make the calculations referred to in ~~those~~ subclause (1)~~s~~ until after having evaluated-
- (a) the information relevant to the calculations disclosed by **Transpower** in respect of the last completed **disclosure year** pursuant to either or both of
 - (i) an **ID determination**; or
 - (ii) a ~~notice made under s53ZD~~ **notice of the Act**; and
 - (b) any application relevant to the calculations received under clause 3.3.4; and
 - (c) any material received pursuant to subclause (4).
- (3) ~~For the purpose of subclause (1)(2),~~ the **Commission** will not make the calculation referred to in subclause (1) until after having made a decision under clause 3.3.6.
- (4) Where the **Commission** considers that, for the purpose of making any of the calculations referred to in subclause (1) ~~and (1)(2)~~, it requires ~~of Transpower~~ further information than ~~that~~ referred to in subclauses (2)(a) ~~and (2)(b)(3)(b)~~, the **Commission** will request **Transpower** to provide such information by a reasonable future date ~~specified by the Commission such that it is reasonable for Transpower to comply with.~~
- (5) The **Commission** will publish its decisions under this clause as soon as reasonably practicable.

PART 4 PROCESSES FOLLOWING A REGULATORY PERIOD

4.1.1 ~~Major capex — efficiency adjustment after regulatory period~~

- (1) ~~At Transpower's application, the Commission will calculate, by the last working day of the first November after the regulatory period, subject to subclause (2) and in accordance with Part 6, the quantum of the major capex efficiency adjustment in accordance with clause B7.~~
- (2) ~~For the purpose of subclause (1), the Commission will not make the calculations referred to in that subclause-~~
- (a) ~~unless Transpower has disclosed information relevant to those calculations in respect of the last completed regulatory period pursuant to either or both of-~~
- (i) ~~an ID determination; and~~
- (ii) ~~a notice made under s53ZD of the Act; and~~
- (b) ~~until after having evaluated-~~
- (i) ~~the information contained in the application;~~
- (ii) ~~the information referred to in paragraph (a); and~~
- (iii) ~~any material received pursuant to subclause (3).~~
- (3) ~~For the purpose of subclause (2)(b)(iii), where the Commission considers that it requires further information of Transpower for the purpose of calculating the quantum of a major capex efficiency adjustment, the Commission will request Transpower to provide such information by a date specified by the Commission such that it is reasonable for Transpower to comply with.~~
- (4) ~~The Commission will publish its decisions under this clause as soon as reasonably practicable.~~

4.1.1 Major capex expenditure **adjustment**

- (1) The Commission will calculate, by the last **working day** of the first November after **the regulatory period**, subject to subclause (2), the quantum of the **major capex expenditure adjustment**.
- (2) The Commission will not calculate the adjustment in subclause (1) until after having evaluated relevant information disclosed pursuant to:
- (a) a request made pursuant to subclause (3);
- (b) an ID determination; or

Commented [TP52]: For the timing of the adjustment, we suggest either

- the adjustment is made a year earlier each RCP, so that the adjustment can be included in the forecast MAR for the following RCP. (The wording of "where n=" in Schedule B5 would need to be changed so that it covers all major projects completed up to the penultimate year of the RCP and covering the final year of the previous RCP in RCP4 onwards.)

or

- the adjustment number could be one of the numbers we forecast as part of the forecast MAR (in the penultimate year) and it will then simply wash up when we get to the end of the RCP

Also, need to clarify that the new efficiency policy applies only to Commission-approved major capex.

Commented [TP53]: Should be "each" regulatory period.

(c) a s53ZD notice.

- (3) Where the **Commission** considers that it requires further information for the purpose of calculating the adjustment in subclause (1) the **Commission** will request **Transpower** to provide such information by a reasonable future date.
- (4) The **Commission** will publish its decision under this clause as soon as reasonably practicable.

PART 5 CONSEQUENCES OF COMMISSION NOT COMPLYING WITH TIMEFRAMES

5.1.1 Consequences of timeframes not being met by Commission

- (1) None of the **Commission's** functions or decisions described in this determination are invalidated on account of any **Commission** failure to meet-
 - (a) timeframes applying to the **Commission** specified in this determination; or
 - (b) **approval timeframes**.
- (2) Notwithstanding subclause (1), the **Commission** will, as soon as reasonably practicable after it believes that a timeframe applying to the **Commission**-
 - (a) is not likely to be met; or
 - (b) has not been adhered to,notify **Transpower** and, where relevant, interested persons, of the new timeframe that applies.

PART 6 COMMISSION EVALUATION OF MATTERS RELATING TO CAPITAL EXPENDITURE

6.1.1 Evaluation criteria

- (1) In evaluating anything pursuant to this Part, the **Commission** may-
 - (a) take into account-
 - (i) the views of any person the **Commission** has consulted pursuant to clause 8.1.1; and
 - (ii) any other information it considers relevant; and
 - (b) engage any appropriately qualified person to assist the **Commission** with its evaluation.
- (2) The **Commission** will apply the following criteria in evaluating **base capex proposals**, **major capex proposals** and applications under clause 3.3.4:
 - (a) whether what is proposed is consistent with the **input methodology** in this determination and, where relevant, the Commerce Act (Transpower Input Methodologies) Determination 2010;
 - (b) the extent to which what is proposed will promote the purpose of Part 4 of the **Act**; and
 - (c) whether, the data, analysis, and assumptions underpinning what is proposed are fit for the purpose of the **Commission** exercising its powers under Part 4 of the **Act**, including consideration as to the accuracy and reliability of data and the reasonableness of assumptions and other matters of judgement.
- (3) The **Commission** will also evaluate a **base capex proposal** in accordance with Schedule A.
- (4) The **Commission** will also evaluate a **major capex proposal** in accordance with Schedule C.
- (5) The **Commission** will also evaluate an application under clause 3.3.4 in accordance with the following criteria:
 - (a) the extent to which each key factor relevant to the proposed amendment-
 - (i) was reasonably foreseeable by **Transpower** before the **major capex project** was approved by **Commission**; and
 - (ii) was or is within **Transpower's** control;
 - (b) in relation to each key factor outside **Transpower's** control-

- (i) the reasonableness of any applicable mitigation strategy devised by **Transpower**; and
 - (ii) the reasonableness and extent of mitigation actions taken by **Transpower**;
 - (c) the extent to which the **major capex project's expected net electricity market benefit** would be materially lower as a result of the amendment than when it was approved; and
 - (d) in respect of a **major capex project** that has already commenced, the extent to which **Transpower** has incurred **capital expenditure** by the date of the application.
- (6) The **Commission** will also evaluate an application under clause 3.3.5 relating to the calculation of a **major capex sunk costs adjustment** in accordance with the following criteria:
- (a) the reasons and key factors that resulted in **Transpower** applying for the **major capex sunk costs adjustment**;
 - (b) in relation to each such key factor, whether it-
 - (i) was reasonably foreseeable by **Transpower** before the **major capex project** was approved by the **Commission**; and
 - (ii) was or is within **Transpower's** control;
 - (c) in relation to each key factor outside **Transpower's** control, the-
 - (i) reasonableness of any applicable mitigation strategy devised by **Transpower**; and
 - (ii) reasonableness and extent of mitigation actions taken by **Transpower**;
 - (d) the reasonableness of the progress of the **major capex project**, including details of-
 - (i) planning processes undertaken;
 - (ii) resource management consents, other regulatory consents, and property rights and access rights obtained;
 - (iii) construction and labour contracts and arrangements made;
 - (iv) construction completed;
 - (v) testing undertaken; and
 - (vi) [approved](#) **major capex project outputs** delivered; and

- (e) the reasonableness of the **major capex** incurred and the extent of the forecast **major capex** yet to be incurred.

- (7) ~~The Commission will also evaluate **major capex efficiencies** for the purpose of calculating a **major capex efficiency adjustment** by taking into account~~
 - ~~(a) changes in forecast aggregate **capital expenditure** during the design and build phases of the **major capex project** in question;~~
 - ~~(b) contractual arrangements, including the reasonableness of provisions relating to the sharing of risk between **Transpower** and its contractors; and~~
 - ~~(c) in relation to a key factor outside **Transpower's** control, the-~~
 - ~~(i) reasonableness of any applicable mitigation strategy devised by **Transpower**; and~~
 - ~~(ii) reasonableness and extent of mitigation actions taken by **Transpower**.~~

PART 7 INFORMATION REQUIREMENTS APPLYING TO TRANSPOWER

SUBPART 1 General information requirements

7.1.1 Format of information

(1) This clause applies to all information provided by **Transpower** pursuant to this Part.

~~(2)~~ Information must be provided in accordance with the **input methodology** in this determination.

~~(3)~~(2) All significant financial and numerical data must be provided in an electronic Microsoft Excel file capable of a 'copy and paste' function being applied to it.

~~(4)~~(3) All other information must be provided in an electronic Microsoft Word, Microsoft Excel or Adobe PDF file capable of a 'copy and paste' function being applied to it.

~~(5)~~(4) Information provided must be accompanied by an index that-

- (a) specifies the reference in this determination to the relevant information requirement;
- (b) succinctly describes each relevant information requirement; and
- (c) provides a reference to the place or places in the submitted **document** or collection of **documents** where a response to each relevant information requirement is provided.

~~(6)~~(5) Where data is provided on or derived from a spreadsheet, and has been computed or derived from other values in the spreadsheet through the use of formulae, all underlying formulae must be accessible or provided, as the case may be.

7.1.2 Information claimed to be confidential

(1) Where **Transpower** considers that it has a right to confidentiality in any information it provides the **Commission** pursuant to this Part and it does not waive that right, it must-

- (a) include that information in an appendix; and
- (b) clearly mark it as confidential.

(2) For the avoidance of doubt-

- (a) nothing in subclause (1) prevents the **Commission** publishing such information in respect of which it considers **Transpower** has no right to confidentiality; and

- (b) nothing in paragraph (a) affects **Transpower's** rights or remedies for breach of any right to confidentiality.

7.1.3 Omission of required information

Where **Transpower** provides the **Commission** with any **document** under this determination that omits any required information, the **Commission** may treat that **document** as compliant with the requirement in question where that **document** contains a reasonable explanation for its omission.

SUBPART 2 **Integrated transmission plan**

7.2.1 Integrated transmission plans

An **integrated transmission plan** must contain the information specified in clause E1.

SUBPART 3 **Base capex**

7.3.1 Base capex proposals

- (1) A **base capex proposal** must-
 - (a) contain completed-
 - (i) **regulatory templates** agreed pursuant to clause 2.2.1(1); or
 - (ii) **regulatory templates** specified pursuant to clause 2.2.1(2);
 - (b) comply with Schedule F; and
 - (c) contain the certificates specified in clause 9.1.1.
- (2) For the purpose of subclause (1)(a), the **regulatory templates** must specify **base capex categories**.
- (3) A requirement of Schedule F may be met by **Transpower** by providing a reference to information published in another **document**, such as the **documents** specified in clauses E3(a) or E3(b), provided that-
 - (a) the reference clearly and succinctly provides the required information, without the need for additional analysis, explanation or interpretation; and
 - (b) in respect of each **document** relied upon, an index is provided stating the-
 - (i) reference to the relevant requirement or requirements of Schedule F; and
 - (ii) precise reference or references within the **document** relied upon.

- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.1.1.

SUBPART 4 **Major capex**

7.4.1 Major capex proposals

- (1) A **major capex proposal** must-
- (a) comply with Schedule G; and
 - (b) contain the certificates specified in clause 9.2.1.
- (2) The number of **investment options** contained in a **major capex proposal** must be appropriate given the magnitude of the estimated **capital expenditure** and the complexity of the **investment need** associated with the **proposed investment**.
- (3) With respect to each **investment option** described in such a proposal, the-
- (a) specificity of information; and
 - (b) rigour and comprehensiveness of the analysis,
- must be commensurate with the estimated **capital expenditure** and complexity of that option.
- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.2.1.

7.4.2 Amendment applications

- (1) An application under clauses 3.3.4(1)(a) to 3.3.4(1)(c) ~~to 3.3.4(1)(d)~~ must be received by the **Commission** by the last **working day** of the September after the **disclosure year** in which the **project** in question is first **commissioned**.
- (2) An application under clause 3.3.4(1)(d) must be received by the **Commission** no later than 6 weeks before the **approval expiry date**.
- (3) An application under-
- ~~(a)~~ clause 1.1.1(1)(a) must contain the information specified in Schedule A Division 1;
 - ~~(b)~~ (a) clause 3.3.4(1)(a) or 3.3.4(1)(b) must contain the information specified in Schedule H Division 1;
 - ~~(c)~~ (b) clause 3.3.4(1)(c) must contain the information specified in Schedule H Division 2; and
 - ~~(d)~~ (c) clause 3.3.4(1)(d) must contain the information specified in Schedule H Division 3.

(4) An application under clause 3.3.4 must contain the certificates specified in clause 9.3.1.

7.4.3 Sunk costs applications

(1) Subject to subclause (2), an application under clause 3.3.5 must-

- (a) be received by the **Commission** no later than 6 weeks after the **approval expiry date**;
- (b) contain the information specified in Schedule H Division 4; and
- (c) contain the certificates specified in clause 9.3.1.

(2) For the purpose of subclause (1), the **Commission**, at the request of **Transpower**, may extend the relevant timeframe for making an application where the **Commission** is satisfied that not all of the information relevant for its evaluation of an application is, or will be, available within the timeframe specified in subclause (1).

SUBPART 5 Expected benefits and impact of proposed investments on transmission charges

7.5.1 Explanation of the expected benefits of proposed investments and their impact on transmission charges

(1) This clause applies to-

- (a) major capex proposals;
- (b) listed project applications; and
- (c) base capex proposals;

(2) All proposals and applications referred to in subclause (1) must include to the extent reasonably possible-

- (a) a description of the expected **service benefits** that will be delivered by the proposed investment;
- (b) a description of the expected system benefits that will be delivered by the proposed investment; and
- (c) a quantitative estimate of the expected system benefits;
- (d) details of the expected increase in transmission charges to consumers due to the proposed investments, including estimated increases in-
 - (i) transmission charges per kilowatt of demand;
 - (ii) transmission charges per kilowatt hours of **energy supplied**; and

Commented [TP54]: Our submission to the draft decisions "We consider the proposed new obligation² for quantitative estimates for base capex proposals to be unreasonable because:

- most base capex is for replacement and refurbishment investment that is not amenable to system and service benefit description: asset replacement and refurbishment are defined to **not** improve original service potential¹, and refurbishment is to extend economic life.
- E&D expenditure is amenable to specific project quantification, only **after** options investigation. Our proposed approach to the E&D portfolio is via an aggregate quantification (see Appendix A)

For base capex proposals, we consider the qualitative information at the time of the proposal, as well as periodic updates, provide efficient opportunities for consumers to review and engage with the benefits of our proposed investments.

Commented [TP55]: These terms should be defined but may not be trivial task, as not clear what the difference between a service benefit and system benefit. For major capex and listed projects, the benefits are **market benefits**.

Commented [TP56]: Request delete. Our submission to the draft decisions "We consider the proposed new obligation² for quantitative estimates for base capex proposals to be unreasonable because:

- most base capex is for replacement and refurbishment investment that is not amenable to system and service benefit description: asset replacement and refurbishment are defined to **not** improve original service potential¹, and refurbishment is to extend economic life.
- E&D expenditure is amenable to specific project quantification, only **after** options investigation. Our proposed approach to the E&D portfolio is via an aggregate quantification (see Appendix A)

For base capex proposals, we consider the qualitative information at the time of the proposal, as well as periodic updates, provide efficient opportunities for consumers to review and engage with the benefits of our proposed investments

Commented [TP57]: Energy supplied to whom, and by who? This implies we would need to know each customer's energy consumption. Currently we provide an aggregate c/kWh derived from our conveyance of electricity. We propose to retain at aggregate level.

(+)(III) transmission charges for each effected EDB or direct connect consumer.

Commented [TP58]: Request delete.

Our submission to the draft decision

“However, for base capex proposals, we consider the proposed requirement is not reasonably possible. The issues are:

- difficulty in creating a credible counterfactual against which to assess the change
- deciding in advance which pricing year to apply any change in revenue to individual charges
- explaining the above processes to customers to ensure the information is relevant.

We consider the proposal for base capex would be unworkable in practice. Addressing the issues above would be complicated and we would forego more valuable business activity.

For listed projects and major capex, we consider the proposals (and the draft rule) may have merit, though we caution that charge information to customers would always be incorrect and potentially likely to mislead due to reliance on input assumptions.”

PART 8 CONSULTATION

8.1.1 Consultation by Commission

- (1) After receiving any **base capex proposal** or **major capex proposal**, the **Commission**:
 - (a) must take all of the actions specified in subclause (3); and
 - (b) may take the actions specified in subclause (4).
- (2) The **Commission** may take none, any or all of the actions listed in subclauses (3) or (4) in evaluating applications received from **Transpower** or making decisions or calculations under:
 - (a) clause 3.3.4;
 - (b) clause 3.3.5;
 - (c) clause 3.3.6; or
 - ~~(d)~~ clause 3.3.7; ~~or~~
 - ~~(e)~~ (d) clause 1.1.14.1.1.
- (3) The actions referred to by subclauses (1)(a) and (2) are:
 - (a) publish the relevant proposal or application;
 - (b) make and publish a draft decision or decisions;
 - (c) seek the written views of interested persons on anything so published; and
 - (d) seek the written views of interested persons on others' submissions.
- (4) The actions referred to by subclauses (1)(b) and (2) are:
 - (a) seek the views of any person the **Commission** considers has expertise on a relevant matter; and
 - (b) hold a conference at which the views of some or all interested persons may be sought orally or in other forms of presentation.
- (5) Where the **Commission** takes any of the actions referred to in the subclauses (3) or (4), it may do so in accordance with such timeframes and processes as it considers appropriate.

8.1.2 Base capex projects or programmes forecast to cost more than \$20 million

For the purpose of clause 3.2.1(b), consultation by **Transpower** with interested persons must be-

- (a) of a scope commensurate with the proposed **project's** or **programme's** nature, complexity, impact and significance; and

- (b) undertaken by **Transpower** acting in accordance with the **policies** and processes specified in its **base capex proposal**.

Commented [TP59]: Delete, consistent with amendment at 3.2.1.

8.1.3 Consultation on major capex projects

- (1) For the purpose of clause 3.3.1(2), subject to subclause (2)-
 - (a) the consultation programme for a **transmission investment** or **non-transmission solution** must make provision for consultation by **Transpower** prior to submitting a **major capex proposal** on such matters specified in Schedule I as are applicable; and
 - (b) the approach to ensure appropriate consideration of **non-transmission solutions** must make provision for consultation by **Transpower** prior to submitting a **major capex proposal** on such matters specified in Schedule I Division 2 as are applicable.
- (2) For the purpose of subclause (1), the consultation programme and approach referred to-
 - (a) must have regard to:
 - (i) the complexity, nature and quantum of expenditure associated with the **major capex project**;
 - (ii) the likely costs and benefits arising from consultation, taking into account various stakeholder perspectives including **Transpower**, industry participants, proponents of **non-transmission solutions**, end users of electricity, and the **Commission**;
 - (iii) the urgency of the **investment need** that is the subject of the **major capex project**, including the duration of time available until a decision to proceed with options to address the **investment need** is required;
 - (iv) co-ordination between the consultation programme and the approach to considering **non-transmission solutions** for the **major capex project** in question;
 - (v) the extent and nature of any relevant prior consultations; and
 - (b) need not cover a matter specified in Schedule I where, on account of the **investment need** in question, the **Commission** is satisfied that its inclusion would be unreasonable in the circumstances.

PART 9 CERTIFICATION

SUBPART 1 Base capex proposals

9.1.1 Director certification – base capex proposals

In relation to all information provided in accordance with the **regulatory templates** and Schedule F with respect to a **base capex proposal**, no fewer than 2 **directors** of **Transpower** must each certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (a) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**; and
- (b) the **base capex proposal** complies, in all material respects, with the requirements of clause 7.3.1.

SUBPART 1A Listed project applications

9.1.2 Chief executive officer certification – listed project applications

In relation to all information provided with respect to an application for approval of **base capex** in respect of a **listed project**, the chief executive officer of **Transpower** must certify in writing that, having made all reasonable enquiries, it is his or her belief that:

- (a) the information provided in **Transpower's** application to the **Commission** was derived from and accurately represents, in all material respects, the relevant operations of **Transpower**; and
- (b) the **base capex** in respect of the **listed project** was approved by **Transpower** in accordance with the applicable requirements of **Transpower's capital expenditure** approval policies.

SUBPART 2 Major capex proposals

9.2.1 Chief executive officer certification – major capex proposals

In relation to all information provided in accordance with Schedule G with respect to a **major capex proposal**, the chief executive officer of **Transpower** must certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (a) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**;

- (b) the **proposed investment** to which the information relates was approved in accordance with the applicable requirements of **Transpower's director** and management approval policies; and
- (c) the **major capex proposal** complies, in all material respects, with the requirements of clause 7.4.1.

SUBPART 3 **Major capex project amendment and sunk costs applications**

9.3.1 Chief executive officer certification – major capex project amendment and sunk costs applications

In relation to all information provided in accordance with Schedule H with respect to-

- (a) an application for amendment of components of a **major capex project** approved by the **Commission** under clause 3.3.3; or
- (b) an application for a **major capex sunk costs adjustment**,

the chief executive officer of **Transpower** must certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (c) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**;
- (d) all parts of the **major capex project** to which the information relates have been approved in accordance with the applicable requirements of **Transpower's director** and management approval policies; and
- (e) the application complies, in all material respects, with the requirements of clause 7.4.2 or clause 7.4.3, as the case may be.

SUBPART 4 **Changes in opinion or matters of fact**

9.4.1 Changes in opinion or matters of fact

(1) Where-

- (a) a **director** or chief executive officer of **Transpower** has made a certification involving a matter of his or her opinion in accordance with this Part;
- (b) his or her opinion has changed before the **Commission's** decision in relation to the proposal or application in question; and
- (c) the change is likely to be material to the **Commission's** evaluation of the proposal or evaluation,

that **director** or chief executive officer must notify the **Commission** as soon as reasonably practicable.

(2) Where-

- (a) a **director** or chief executive officer of **Transpower** has made a certification involving a matter of fact in accordance with this Part;
- (b) before the **Commission's** decision in relation to the proposal or application in question, he or she-
 - (i) becomes aware that the fact is untrue; or
 - (ii) has significant cause to doubt the accuracy of that fact; and
- (c) that fact is likely to be material to the **Commission's** evaluation of the proposal or application,

that **director** or chief executive officer must notify the **Commission** as soon as reasonably practicable.

SCHEDULE A **BASE CAPEX PROPOSAL - EVALUATION CRITERIA**

cl.2.2.2, 6.1.1(3)

A1 **General evaluation of base capex proposals**

The **Commission** will have regard to the following factors when evaluating a **base capex proposal**:

- (a) whether the proposed **base capex allowances** have been prepared in accordance with **Transpower's policies** and planning standards for the **grid** and for each **base capex category**;
- (b) whether the **policies** and planning standards upon which the proposed **base capex allowances** rely are directed towards achieving cost-effective and efficient solutions;
- (c) the reasonableness of the **key assumptions** relevant to **base capex** relied upon, including-
 - (i) the method and information used to develop them;
 - (ii) how they were applied; and
 - (iii) their effect on the proposed **base capex allowances**;
- (d) whether **policies** regarding the need for, and prioritisation of **projects** and **programmes** demonstrate a risk-based approach consistent with good asset management practice;
- (e) the dependencies between the proposed **grid output measures** and the proposed **base capex allowances** at the level of the **grid** and for each **base capex category**;
- (f) the dependencies between the proposed **grid output targets** and the proposed **base capex allowances** at the level of the **grid** and for each **base capex category**;
- (g) the extent to which the **grid output targets** were met in the previous **regulatory period**;
- (h) the overall deliverability of the proposed **base capex** during the current **regulatory period**;
- (i) the reasonableness and adequacy of any asset replacement models used to prepare the proposed **base capex allowances** including-
 - (i) inputs to the model; and

- (ii) the methods used to check the reasonableness of the forecasts and related expenditure;
- (j) the reasonableness of the **key assumptions**, key input data and forecasting methods used in determining demand forecasts;
- (k) the appropriateness of using those demand forecasts and other **key assumptions** in determining the proposed **base capex allowances**;
- (l) the type of efficiency improvements obtained in the current and previous **regulatory periods**; and
- (m) the scope for efficiency improvements during the **regulatory period** in question.

A2 Evaluation of identified programmes

In evaluating a **base capex proposal**, the **Commission** will undertake a review of each **identified programme** 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, including its use of cost-benefit analyses, 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, the method used to test the efficiency of unit rates 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) links with other **projects** or **programmes**, whether proposed or in progress;
- (i) mechanisms for controlling actual **capital expenditure** with respect to the proposed **base capex allowances** and ensuring performance of proposed **grid output targets**; and

- (j) the efficiency of the proposed approach to procurement of associated goods and services.

A3 Evaluation techniques

In undertaking the evaluations described in clauses A1 and A2, the **Commission** may employ one or more of the following techniques:

- (a) process benchmarking;
- (b) process or functional modelling;
- (c) unit rate benchmarking;
- (d) trending or time-series analysis;
- (e) high level governance and process reviews;
- (f) internal benchmarking of forecast costs against costs in the current period;
- (g) capital expenditure category and opex category benchmarking;
- (h) project and programme sampling;
- (i) 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
- (j) any other technique or approach that the **Commission** considers appropriate in the circumstances.

A4 Criteria for considering the low incentive rate base capex allowance

When considering the low incentive rate base capex allowance, the Commission will evaluate whether the project or programme for which Transpower requests the base capex low incentive rate to apply meets the following criteria:

- (a) it will require capital expenditure greater than \$20 million; and
- (b) there are no workable alternative capital expenditure or operating expenditure options to it.

Commented [TP60]: We consider the criterion inappropriate. There may be other options that are "workable" but are more expensive than the low incentive rate base capex project being considered. Workability is not a recognised investment test. If this criterion is retained, "alternatives" would be a better word than "options" and there should be some mention of the alternatives meeting the same investment need.

We seek clarification on how the Commission could consider that "there are no workable alternative capital expenditure or operating expenditure options to it."

Commented [TP61]: For the 'low incentive rate' projects, the draft determination (DD) schedule F2 (3) provides for our base capex proposal to identify base capex projects as 'low incentive rate' projects if a project meets criteria of 'no workable alternative capex or opex options'. Transpower may not be able to conclude whether a project meets this criterion before an RCP proposal (we would need to conduct a full investigation first).

We seek the ability for Transpower to be able to re-classify base capex projects to a 'low incentive rate' project during a RCP.

A4A5 Criteria for considering grid output measures

The **Commission** 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;
- (c) whether the proposed measure was devised in accordance with the **policies** and processes referred to in the **base capex proposal**, including consultation processes; and
- (d) the extent to which the measure aligns with the business processes used by **Transpower** in its **supply of electricity transmission services**.

Commented [TP62]: Under our base capex proposal, at F12 (c) (ii) we agree that the grid output targets should reflect consumer preferences and thus any consultation responses. However, we consider the terms 'relevant policies' and 'key assumptions' have little value, as other information provided in F12 and F11 should be sufficient to evaluate the appropriateness of the output measure targets and degree of consultation undertaken.

Propose deleting "in accordance with the **policies** and processes referred to in the base capex proposal" from the Commission 's evaluation (and under F12 (c) (ii)).

A5A6 Criteria for considering revenue-linked grid output measures

In addition to the criteria specified in clause A5, the **Commission** 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.

A6A7 Criteria for considering matters relating to revenue-linked grid output measures

The **Commission** 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**.

SCHEDULE B REVENUE ADJUSTMENTS

cl. (1), (1), ~~(1)(4)1.1.1(4)~~, (1), ~~1.1.1(1)1.1.1(1)1.1.1~~

DIVISION 1 BASE CAPEX AND GRID OUTPUT ADJUSTMENTS

B1 Calculation of ~~annual~~ base capex expenditure adjustment

(1) The **base capex expenditure adjustment** is the sum of the **standard incentive rate base capex expenditure adjustment** and the **low incentive rate base capex expenditure adjustment**.

~~(1)(2)~~ Subject to subclause (4), the quantum of the **standard incentive rate base capex expenditure adjustment** ~~base capex expenditure adjustment~~ is calculated in accordance with the following ~~formula~~~~table~~: $a(b-c-g)$

Term	Description base capex expenditure adjustment	Specification a(b-c-g)
a	base capex standard incentive rate	33% determination in accordance with clause 2.2.2
b	adjusted standard incentive rate base capex allowance	d + d' + e + f + <u>h</u>
c	aggregate capital expenditure that is base capex subject to the base capex standard incentive rate resulting in assets first commissioned in the disclosure year	base capex annual information required by an ID determination or a s53ZD notice
d	standard incentive rate base capex allowance	determination in accordance with clause 2.2.2(1)(a)
d'	monetary amount of approved base capex in respect of listed projects subject to the base capex standard incentive rate to be used when calculating maximum allowable revenue or forecast maximum allowable revenue in applying an IPP determination	approved in accordance with clause 3.2.3(4) and 3.2.3(5)

e adjustment correcting for disparity between **forecast CPI** that applied when the **standard incentive rate base capex allowance** was determined and actual **CPI** in respect of *d* and *d'* **base capex** annual information required by an **ID determination** or a **s53ZD notice**

f adjustment correcting for disparity between **forecast FX rates** that applied when the **standard incentive rate base capex allowance** was determined and **actual FX rates** for each relevant currency in respect of *d* and *d'* **base capex** annual information required by an **ID determination** or a **s53ZD notice**

g aggregate amount of the adjusted base capex allowance or capital expenditure that is base capex to which the base capex incentive rate does not apply in circumstances where the expenditure was included in the standard incentive rate base capex allowance in respect of a project which has expanded in scope and become a major capex project base capex annual information required by an ID determination or a s53ZD notice

Commented [TP63]: We query why there is no equivalent "g" variable in clause B1(3).
Commented [TP64]: "standard incentive" missing.
Commented [TP65]: We consider these words are redundant
Commented [TP66]: "standard" missing.

h adjustment correcting for disparity between forecast demand for **electricity transmission services** in respect of the portion of *d* that is subject to the **demand adjustment mechanism** specified in an IPP determination

Commented [TP67]: Should be "became."

(3) Subject to subclause (4), the quantum of the **low incentive rate base capex expenditure adjustment** is calculated in accordance with the following formula:
 $a*(b*-c*)$

Commented [TP68]: In our submission to draft decisions: We strongly oppose the Commission's draft decision to regulate uncertainty of E&D expenditure under \$20m via a baseline level with administrative update(s) using a demand trigger. We view this mechanism to be a disproportionate amount of administrative scrutiny that appears to be at odds with the decision above. Applying the proposed E&D mechanism is likely to affect our ability to invest in a dynamically efficient way (investing in the right projects at the right time).

<u>Term</u>	<u>Description</u>	<u>Specification</u>
<u>a*</u>	<u>base capex low incentive rate</u>	<u>15%</u>
<u>b*</u>	<u>adjusted low incentive rate base capex allowance</u>	<u>d* + d'* + e* + f*</u>
<u>c*</u>	<u>aggregate capital expenditure that is base capex subject to the base capex low incentive rate in the disclosure year</u>	<u>base capex information required by an ID determination or a s53ZD notice</u>
<u>d*</u>	<u>low incentive rate base capex allowance</u>	<u>in accordance with clause 2.2.2(1)(a)</u>

Propose delete adjustment term "h".
Commented [TP69]: We do not support the demand adjustment policy.
 A comparator is missing (forecast demand is not compared to anything else in this description).

<u>d'^*</u>	<u>monetary amount of approved base capex in respect of listed projects subject to the base capex low incentive rate to be used when calculating maximum allowable revenue or forecast maximum allowable revenue in applying an IPP determination</u>	<u>in accordance with clause 3.2.3(4) and 3.2.3(5)</u>
<u>e^*</u>	<u>adjustment correcting for disparity between forecast CPI that applied when the low incentive rate base capex allowance was determined and actual CPI in respect of d^* and d'^*</u>	<u>base capex information required by an ID determination or a s53ZD notice</u>
<u>f^*</u>	<u>adjustment correcting for disparity between forecast FX rates that applied when the low incentive rate base capex allowance was determined and actual FX rates for each relevant currency in respect of d^* and d'^*</u>	<u>base capex information required by an ID determination or a s53ZD notice</u>

~~(2)~~(4) For the purposes of subclauses ~~(2)~~ and (3), in calculating the amounts or values for one or more of c , e , f and g , c^* , e^* , and f^* the Commission need not use the amounts or values disclosed by Transpower in the base capex annual information provided by Transpower and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

~~B2~~ Calculation of base capex annual policies and processes adjustment

~~(1)~~ Subject to subclause (2), the quantum of the policies and processes adjustment is calculated in accordance with the following table:

Term	Description	Specification
	policies and processes adjustment	$(a \times h) + (a \times h')$

<i>a</i>	base capex incentive rate	determination in accordance with clause 2.2.2
<i>h</i>	aggregate capital expenditure that is base capex resulting in assets first commissioned in the disclosure year with respect to base capex projects or base capex programmes for which the requirements of clause 3.2.1 have not been met in all material respects	base capex annual information required by an ID determination or a s53ZD notice
<i>h'</i>	aggregate capital expenditure that is base capex resulting in assets first commissioned in the disclosure year with respect to base capex projects or base capex programmes for which the requirements of clause 3.2.2 have not been met except to the extent that the Commission is satisfied that it was appropriate for the relevant policies or processes not to have been followed for the project or programme	base capex annual information required by an ID determination or a s53ZD notice

(2) — For the purpose of subclause (1), in calculating the amounts or values for one or more of *h* or *h'*, the **Commission** need not use the amounts or values for *h* and *h'* disclosed by **Transpower** in the **base capex** annual information and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

B3B2 Calculation of annual grid output adjustment

- (1) Subject to subclause (2), and (3) the quantum of the **grid output adjustment** is calculated in accordance with the following table:

Term	Description	Specification
	grid output adjustment	$\sum i$
<i>i</i>	grid output adjustment in respect of the revenue-linked grid output measure in question	$\max(l(j-n), \min(l(m-n), l(k-n)))$
<i>j</i>	collar in respect of the revenue-linked grid output measure in question	determination in accordance with clause 2.2.2(1)(c)
<i>k</i>	cap in respect of the revenue-linked grid output measure in question	determination in accordance with clause 2.2.2(1)(c)
<i>l</i>	grid output incentive rate in respect of the revenue-linked grid output measure in question	determination in accordance with clause 2.2.2(1)(c)
<i>m</i>	output achieved in respect of the revenue-linked grid output measure in question	base capex annual information required by an IPP determination ID determination or a s53ZD notice
<i>n</i>	grid output target in respect of the revenue-linked grid output measure in question	determination in accordance with clause 2.2.2(1)(c)

- (2) For the purpose of subclause (1), in calculating the value for *m*, the **Commission** need not use the value for *m* disclosed by **Transpower** in the **base capex** annual information and may instead, having regard to the views of interested persons, use the value that it considers is correct in the circumstances.

Commented [TP70]: From our submission to draft decision B30.

We agree, in part. We have raised an issue previously with the Commission regarding the use of current grid output mechanism to determine the grid output adjustment. We seek further use of a asset health pilot to develop a non-mechanistic output framework for the asset health output measures over RCP3, instead of the quantitative grid output mechanism.

We suggest drafting below to accommodate a non-mechanistic approach for asset health grid output measure:

- *m* = output achieved in respect of the **revenue-linked grid output measure** in question, adjusted for amounts that are justified in relation to an **asset health grid output measure**
- note only the IPP should compel output information (propose delete "base capex annual" and ID determination and s53ZD notice)
- new term *o* = **materiality threshold in respect of an asset health grid output measure**

DIVISION 2 MAJOR CAPEX ADJUSTMENTS

B4—Calculation of major capex overspend adjustment

- (1) The quantum of the **major capex overspend adjustment**, subject to subclause (2), is equal to the present value of the after-tax revenue expected to be recovered by **Transpower** under one or more **IPP determinations** in respect of the inclusion of the excess amount in one or more **closing RAB values**.
- (2) For the purpose of subclause (1)—
- the present value is calculated using a discount rate consistent with the **WACC** applicable to the **IPP** in respect of the **disclosure year** in question; and
 - in calculating the after-tax revenue expected to be recovered by **Transpower** the inclusion of any revenue adjustment calculated under this clause in the revenue calculation of any **IPP determination** must be disregarded.
- (3) In this clause ‘excess amount’ means—
- in respect of assets for which an approval by the **Commission** under clause 3.2.3 applies at the **commissioning date** of the last asset to be delivered by the **project**, the amount by which the **capital expenditure** relating to the assets exceeds the **adjusted major capex allowance**; and
 - for all other assets, the amount of **capital expenditure** relating to the assets in question that is **major capex**.
- (4) The quantum of the **adjusted major capex allowance** is calculated, subject to subclause (5), in accordance with the following table:

Term	Description	Specification
	adjusted major capex allowance	$e + p + q + r$
e	major capex allowance	approval in accordance with Part 3 Subpart 3
p	adjustment correcting for disparity between forecast CPI and actual CPI in respect of e	major capex annual information required by an ID determination or a s53ZD notice

<i>q</i>	adjustment correcting for disparity between forecast FX rates and actual FX rates for each relevant foreign currency in respect of <i>e</i>	major capex annual information required by an ID determination or a s53ZD notice
<i>r</i>	amount of major capex to which the major capex overspend adjustment does, or does not, apply as the case may be (and therefore being a positive or negative amount).	major capex annual information required by an ID determination or a s53ZD notice

(5) For the purpose of subclause (4), in calculating the amounts or values for one or more of *p*, *q* and *r*, the **Commission** need not use the amounts or values of *p*, *q* and *r* disclosed by **Transpower** in the **major capex** annual information and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

B5B3 Calculation of major capex project output adjustment

(1) Subject to subclause (2), the quantum of the **major capex project output adjustment** is calculated in accordance with the following formulatable: $s \times t$

Term	Description	Specification
	major capex project output adjustment	$s \times t$
<i>s</i>	major capex incentive rate	33% IPP determination
<i>t</i>	aggregate capital expenditure in respect of the major capex project in question that does not deliver the approved major capex project outputs	major capex annual information required by an ID determination or a s53ZD notice

(2) For purposes of subclause (1), in calculating an amount of *t*, the **Commission** need not use the value of *t* disclosed by **Transpower** in the **major capex** annual information and may instead, having regard to the views of interested persons, use an amount that it considers is correct in the circumstances.

Commented [TP71]: Should be 15%

From our submission to draft decisions:
We consider that any output changes for efficiency should allow a net major capex expenditure incentive of 15% (or the rate relevant to the project) under Schedule B5.

We find this incentive, and the Commission's decision and explanations for it, to be confusing. The original objective for Schedule B3 incentive (page 54 of the 2012 Capex IM Reasons Paper) was to penalise non-delivery of outputs. However, the drafting (unchanged since 2012) does not have that effect because it requires that the incentive rate is applied to the "aggregate capital expenditure ... that does not deliver the approved ... outputs" – the strict reading of which is that the incentive penalty is calculated as 33% of any capital expenditure that does not relate to (or deliver) any project outputs.

We seek clarity on the project output adjustment policy under Schedule B3. One interpretation, (although inconsistent with the Reasons Paper), is that there is a 33% penalty on capex that has been applied to a major project's costs, but that do not relate to that project ["aggregate capital expenditure ... that does not deliver the approved ... outputs"]. If such costs were discovered, then we agree that a 33% rate should apply, because those costs should have been recorded against our base capex for the year. However, we reject the suggestion in B46 that a lower incentive rate would incentivise what would be a deliberate and incorrect recording of base capex against a major project.

B6B4 Calculation of major capex sunk costs adjustment

The **major capex sunk costs adjustment** is equal to the amount of the **major capex** incurred by **Transpower** in respect of the **major capex project** in question which, having regard to the factors listed in clause 6.1.1(6), the **Commission** considers should reasonably be recovered by **Transpower** under one or more **IPP determinations**.

B7 Calculation of major capex efficiency adjustment

(1) Subject to subclause (2), the quantum of the **major capex efficiency adjustment** is calculated in accordance with the following table:

Term	Description	Specification
	major capex efficiency adjustment	$u \times v$
u	major capex incentive rate	IPP determination
v	major capex efficiencies	application by Transpower or information required by an ID determination or a s53ZD notice

(2) For the purpose of subclause (1), in calculating a value for v , the **Commission** need not use the value for v disclosed by **Transpower** and may instead, having regard to the views of interested persons, use a value that it considers is correct in the circumstances.

B5 Calculation of major capex expenditure adjustment

(3)(1) Subject to subclause (2), the quantum of the **major capex expenditure adjustment** is calculated in accordance with the following formula taking account of all approved **major capex projects**:

$$\sum_{i=1}^n a_i (b_i - c_i - g_i)$$

where n = number of **major capex projects** (excluding a stage of a **major capex project staged**) completed in the **regulatory period** to which the adjustment applies as determined in an **IPP determination**.

Commented [TP72]: Brackets missing around "staged".

Commented [TP73]: We consider the Capex IM does not require anything about a particular major capex project to be determined in an IPP determination.

<u>Term</u>	<u>Description</u>	<u>Specification</u>
<u><i>a_i</i></u>	<u>major capex incentive rate for the relevant major capex project</u>	<u>as determined under clause 3.3.3(6)</u>
<u><i>b_i</i></u>	<u>adjusted major capex allowance for the relevant major capex project</u>	<u>$d_i + e_i + f_i$</u>
<u><i>c_i</i></u>	<u>aggregate capital expenditure for the relevant major capex project</u>	<u>major capex information required by an ID determination or a s53ZD notice</u>
<u><i>d_i</i></u>	<u>major capex allowance for the relevant major capex project</u>	<u>in accordance with clause 3.3.3(6)</u>
<u><i>e_i</i></u>	<u>adjustment correcting for disparity between forecast CPI that applied when the relevant major capex allowance was determined and actual CPI in respect of <i>d_i</i></u>	<u>major capex information required by an ID determination or a s53ZD notice</u>
<u><i>f_i</i></u>	<u>adjustment correcting for disparity between forecast FX rates that applied when the relevant major capex allowance was determined and actual FX rates for each relevant currency in respect of <i>d_i</i></u>	<u>major capex information required by an ID determination or a s53ZD notice</u>
<u><i>a</i></u>	<u>aggregate amount of exempt major capex</u>	<u>in accordance with clause 3.3.3(6)</u>

Commented [TP74]: Inconsistent with "in accordance" in this clause and elsewhere.

Commented [TP75]: Missing bolding. Several examples of missing bolding throughout this and the other Schedules, particularly (though not exclusively) where new text has been added.

Commented [TP76]: This variable does not make sense in the formula for the major capex expenditure adjustment. The part of the exempt major capex incorporated in variable "c" needs to be added back in.

(2) For the purposes of subclause (1), in calculating the amounts or values for one or more of c_i , e_i , f_i , the Commission need not use the amounts or values in the major capex information provided by Transpower and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

SCHEDULE C MAJOR CAPEX PROPOSAL - EVALUATION CRITERIA

cl. 6.1.1(4)

C1 Proposed investment – investment test and components

(1) Subject to subclause (2) and (3), when deciding whether to approve a proposed investment the Commission will evaluate whether the proposed investment satisfies the investment test.

(2) Where a proposed investment relates to the first stage(s) of a major capex project (staged), the Commission will evaluate whether the investment test is satisfied for the entire major capex project (staged).

(3) Where a proposed investment relates to subsequent stage(s) of a major capex project (staged), the Commission will evaluate whether the investment test is satisfied for the remainder of the major capex project (staged).

(4) The Commission will also evaluate to the extent applicable to the transmission investment or non-transmission solution in question, the following proposed components of the proposed investment:

- (a) major capex allowance;
- (b) maximum recoverable costs;
- (c) recovery scheme;
- (d) approved major capex project outputs;
- (e) approval expiry date;
- (f) major capex incentive rate;
- (g) P50 commissioning date assumption; and
- (h) completion date assumption.

(5) The Commission may not approve a major capex project proposed investment where, after evaluating the matters components listed in subclauses Error! Reference source not found. (1) to (4), it is not satisfied-

- (a) that the investment test is satisfied as set out in subclauses (1), (2), or (3); and with one or more of the proposed components;
- (b) with the proposed investment in whole, including the components set out in subclause (4) taking account of its ability to specify a different major capex allowance and major capex incentive rate to those proposed; and, or in part; or

Commented [TP77]: The Capex IM should be consistent about it being the proposed investment, rather than the major capex project, that needs to satisfy the investment test and is approved. The change in subclause (5), for example, is inconsistent with this subclause.

Commented [TP78]: For major capex, we may stage a major capex proposal to create options, or decision points, and the second or subsequent stages may still be part of an overall optimal development plan.

We suggest drafting should read

“where a proposed investment relates to subsequent stage(s) of a major capex project (staged), the Commission will re-validate, in consultation with Transpower, whether the investment test is satisfied for the staged major capex project”.

- (c) with the proposed investment as a whole, which in the case of a major capex project (staged) includes, as applicable, the entire major capex project (staged) or the remainder of the major capex project (staged) that the proposed investment satisfies the investment test.

~~(3)~~(6) In evaluating the components listed in subclauses ~~5~~ **Error! Reference source not found.** ~~(4)~~ to (4), the Commission will apply the evaluation criteria in clauses C2 to C6 below.

C2 General evaluation of major capex proposal

The **Commission** must have regard to at least one of the following factors when evaluating a **major capex proposal**:

- (a) whether the **proposed investment and investment options**:
 - (i) reflect **good electricity industry practice**;
 - (ii) are technically feasible;
 - (iii) are able to be implemented in terms of the statutory planning process under the Resource Management Act 1991, other regulatory consents, and obtaining property and access rights; and
 - (iv) can be integrated into system and market operations;
- (b) whether the estimated time required for construction, consultation, meeting statutory planning and other regulatory requirements, and obtaining property and access rights prior to a proposed **commissioning date** or **completion date** is reasonable;
- (c) whether the **key assumptions** around outage planning are reasonable;
- (d) the extent to which, in complying with clause 3.3.1(7) with respect to the consultation programme or the approach for consideration of **non-transmission solutions**, **Transpower** has had regard to the views of interested persons; and
- (e) the impact of the **sensitivity analysis** on **electricity market benefit or cost elements** of the **proposed investment and investment options**.

C3 Evaluation of major capex allowance and maximum recoverable costs

The **Commission** must have regard to at least one of the following factors when evaluating the **major capex allowance** and **maximum recoverable costs** for **proposed investments** and **investment options**:

- (a) how **major capex project outputs**, key drivers, **key assumptions**, and cost modelling were used to determine the **P50** and **major capex allowance** or **maximum recoverable costs**;
- ~~(b)~~ what **key assumptions** were made regarding cost uncertainty in moving from a **P50** forecast to the proposed **major capex allowance** or **maximum recoverable costs**;
- ~~(c)~~~~(b)~~ the capital costing methodology and formulation, including unit rate sources, the method used to test the efficiency of unit rates and the level of contingencies included;
- ~~(d)~~~~(c)~~ the impact of forecast costs on other costs of **Transpower**, including the relationship with **operating expenditure**;
- ~~(e)~~~~(d)~~ mechanisms for controlling actual **capital expenditure** with respect to the **major capex allowance** or **maximum recoverable costs**; and
- ~~(f)~~~~(e)~~ the efficiency of the proposed approach to procurement of goods and services.

C4 Evaluation of approval expiry date

The **Commission** must have regard to at least one of the following factors when evaluating a proposed **approval expiry date**:

- (a) the effect of the proposed **approval expiry date** on the quantified and unquantified costs and benefits under the **investment test**;
- (b) the effect of the changes to the **commissioning date assumption** or **completion date assumption** on the **expected net electricity market benefit** under the **investment test**;
- (c) the effect of the proposed **approval expiry date** and the **commissioning date assumption** or **completion date assumption** in the **major capex proposal**;
- (d) the sensitivity of the proposed **approval expiry date** to the **key assumptions** used in the **major capex proposal**;
- (e) **demand and generation scenarios**; and
- (f) **sensitivity analysis**.

C5 Evaluation of major capex project outputs

The **Commission** must have regard to at least one of the following factors when evaluating proposed **major capex project outputs**:

- (a) the extent to which the **major capex project outputs** reflect the nature, quantum and functional capability of the **transmission investment** assets to be **commissioned**;
- (b) the extent to which the **major capex project outputs** reflect the change in the functional capability of the **grid** as a result of undertaking the **proposed investment**;
- (c) the extent to which the **major capex project outputs** are consistent with **key assumptions** used in determining the **major capex allowance** or **maximum recoverable costs**;
- (d) the nature of the **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services** taken into account in applying the **investment test**; and
- (e) in the case of a **non-transmission solution**-
 - (i) the extent to which the **major capex project outputs** reflect the nature and quantum of any product or service provided to **Transpower**; and
 - (ii) the extent to which the **major capex project outputs** reflect the change in the functional capability of the **grid** resulting from the product or service provided to Transpower.

C6 **Evaluation of major capex incentive rate**

The **Commission** must have regard to at least one of the following factors when evaluating proposed **major capex incentive rates**:

- (a) whether the forecast cost of the **project** is so high such that the potential costs to **consumers** of overforecasting warrants a lower incentive rate, when considered against the lower incentives for efficiency;
- (b) whether the cost forecast is so uncertain such that the potential costs to **consumers** of overforecasting warrants a lower incentive rate, when considered against the lower incentives for efficiency; or
- (c) whether the potential for efficiency gains during the **project** is sufficiently high such that the gains to **consumers** from a stronger efficiency incentive warrant a higher incentive rate, when considered against any potential costs to consumers from overforecasting the allowance.

Commented [TP79]: We request the whole clause be deleted.

The rationale for proposing a lower incentive rate is because Transpower is unlikely to sink capital on a high expected cost investment based on risk settings under a higher incentive rate.

If the clause must remain, we request deletion of the incorrect framing of “costs to **consumers** of overforecasting” because it is an inappropriate for objective evaluation.

Suggest replace with
“potential risk to consumers of foregone investment benefits of Transpower not undertaking the investment”.

Comment applies to (b) also.

For (c) please delete “when considered against any potential costs to consumers from overforecasting the allowance”.

66C7 Evaluation techniques

In undertaking the evaluations described in the clauses in this schedule, the **Commission** may employ one or more of the following techniques:

- (a) analysis of powerflow and dynamics in the **grid**, in the context of the **proposed investment, investment options** and **modelled projects**;
- (b) detailed critiques of conceptual designs to the extent necessary to derive credible cost and time estimates, including forecast **commissioning dates** or **completion dates**;
- (c) analysis and review of the calculation of costs and benefits associated with the **proposed investment** and **investment options** including, but not limited to:
 - (i) calculation of loss benefits;
 - (ii) reductions in fuel consumption by generators of electricity;
 - (iii) enabled lower cost generation;
 - (iv) reliability benefits; and
 - (v) **competition effects**;
- (d) critiques of market development scenarios contained in **major capex proposals**;
- (e) unit rate benchmarking; and
- (f) any other technique or approach that the **Commission** considers appropriate in the circumstances.

SCHEDULE D MAJOR CAPEX - INVESTMENT TEST

cl. 1.1.4(1)(e), 'investment test'

DIVISION 1 INVESTMENT TEST

D1 Major capex - investment test

- (1) The investment test is satisfied in respect of a **proposed investment** if the **proposed investment** is an **investment option** that-
- (a) is sufficiently robust under **sensitivity analysis**;
 - (b) has a positive **expected net electricity market benefit** unless it is designed to meet an **investment need** the satisfaction of which is necessary to meet the deterministic limb of the **grid reliability standards**; and
 - (c) has-
 - (i) the highest **expected net electricity market benefit**, where only quantified **electricity market benefit or cost elements** are taken into account; or
 - (ii) the highest **expected net electricity market benefit** including a qualitative assessment to take into account the contribution of associated unquantified **electricity market benefit or cost elements**, if the **proposed investment** has a similar **expected net electricity market benefit** to the **investment option** with the highest **expected net electricity market benefit** where only quantified **electricity market benefit or cost elements** are taken into account.
- (2) For the purpose of subclause (1)(c)(ii)-
- (a) a similar **expected net electricity market benefit** is one where the difference in quantum, subject to subclause (3), is 10% or less of the aggregate **project costs** of the **investment option** to which the **proposed investment** is compared; and
 - (b) an **electricity market benefit or cost element** may be treated as unquantified where-
 - (i) the cost of calculating its quantum in accordance with clause D7(4) is likely to be disproportionately large relative to the quantum; or

- (ii) its expected value cannot be calculated in accordance with clause D7(4) with an appropriate level of certainty due to the extent of uncertainties in underlying assumptions or calculation approaches.
- (3) For the purpose of subclause (2)(a), the **Commission** may, at its discretion, adopt ~~such~~ an alternative percentage to 10% as proposed by **Transpower** ~~in respect of a proposed investment~~.

DIVISION 2 MEANING OF TERMS USED IN INVESTMENT TEST

D2 Investment option

Investment option means a **major capex project**-

~~(a)~~ (a) other than a stage of a **major capex project (staged)**;

~~(a)(b)~~ other than one proposed to be fully funded under a **new investment contract**;

~~(b)(c)~~ designed to meet a particular **investment need**;

~~(c)(d)~~ that is technically feasible; and

~~(d)(e)~~ that is different to another **major capex project** designed to meet the same **investment need** at least in respect of its proposed **commissioning date** or **completion date** or date for proposed delivery of **major capex project outputs**, as the case may be, which difference must be material.

D3 Expected net electricity market benefit

- (1) **Expected net electricity market benefit** means, in respect of an **investment option**, the weighted average of the **net electricity market benefit** under each **relevant demand and generation scenario**, where each **relevant demand and generation scenario** is accorded the explicit or implicit weighting assigned to it by the party who developed the scenario, unless **Transpower** considers that alternative weightings should apply and has consulted on these as part of its consultation on the short list of **investment options**.
- (2) **Net electricity market benefit** means, in respect of an **investment option** applied to a **demand and generation scenario**, its aggregated quantum of each **electricity market benefit or cost element** less its aggregated quantum of each **project cost**.

D4 Demand and generation scenario

- (1) Demand and generation scenario means-

- ~~(a) until a document described in paragraph (b) of this clause is published,~~
- ~~(i) scenario specified as ‘market development scenario’ in the statement of opportunities published by the Electricity Commission in 2010; or~~
- ~~(ii) reasonable variation on a scenario referred to in sub-paragraph (i), that reasonably has regard to the views of interested persons;~~
- ~~(b)(a)~~ description of a hypothetical future situation relating to forecast electricity demand and generation published by the Ministry of [Business, Innovation and Employment Economic Development](#) (or other agency which subsequently assumes the responsibility) for the purpose of the preparation or evaluation of major capex proposals; or
- ~~(c)(b)~~ reasonable variation on a description referred to in [subclause \(1\)\(a\) paragraph \(b\)](#) that reasonably has regard to the views of interested persons.
- (2) For the purpose of subclause (1)(~~ba~~)(iii) and ~~(c)~~, a variation must-
- (a) contain at least as much detail as each [demand and generation market development scenario or MED scenario, as the case may be](#); and
- (b) be feasible and reasonable with regard to at least the following factors:
- (i) existing and forecast demand;
 - (ii) the **grid reliability standards**;
 - (iii) the **value of expected unserved energy**;
 - (iv) transfer capacities and capabilities of the **grid**;
 - (v) the cost of supplying sufficient **ancillary services**;
 - (vi) the cost of losses necessarily incurred in efficiently meeting demand;
 - (vii) **operating expenditure** incurred in efficiently meeting demand by means of **existing assets, committed projects, decommissioned assets and modelled projects**;
 - (viii) the capital cost of efficiently meeting demand by means of **modelled projects**;
 - (ix) the timing of decommissioning an asset or removing or re-rating a **decommissioned asset**; and
 - (x) likely range of **investment options** to which the **investment test** relates.
- (3) **Relevant demand and generation scenarios** means-

Commented [TP80]: This change is inconsistent with how cross-references are done elsewhere in the document.

Commented [TP81]: Under subclause (1) a variation under paragraph (b) is a demand and generation scenario, so this paragraph does not make sense.

In several other places the document does not deal well with a variation to a prescribed scenario being a “demand and generation scenario” and, potentially, a “relevant demand and generation scenario” (e.g. clauses D4(3)(b), G3(1) and I1(1)(b)).

- (a) ~~each current demand and generation scenario; or until the first MED scenario is published,–~~
~~(i) — each market development scenario; or~~
~~(ii) — a reasonable number of market development scenario variations; and~~
- (b) ~~a reasonable number of demand and generation scenario variations after the first MED scenario is published,–~~
~~(i) — each current MED scenario; or~~
~~(ii) — a reasonable number of MED scenario variations.~~
- ~~(4) — For the purpose of subclause (1)(a)(i), ‘statement of opportunities’ has the same meaning as defined in the Electricity Governance Rules 2003 immediately before their revocation.~~

Commented [TP82]: This “or” rules out a combination of prescribed scenarios and variations to prescribed scenarios.

D5 Costs or benefits

- (1) **Electricity market benefit or cost element** means, subject to subclause (3), any of the following things received or incurred by **consumers** during the **calculation period** under the **demand and generation scenario** in question that will affect **net electricity market benefits**:
- (a) fuel costs incurred by **generators** in relation to **existing assets, committed projects** and **modelled projects**;
 - (b) the cost of involuntary demand curtailment borne by end users of electricity;
 - (c) the costs of demand-side management;
 - (d) capital costs of **modelled projects**;
 - (e) costs resulting from operations and maintenance expenditure on **committed projects, existing assets** and **modelled projects**;
 - (f) the cost of **ancillary services** including **system operator** costs;
 - (g) the cost of losses, including local losses;
 - (h) any **real option value**;
 - (i) subject to subclause (5), the value of any benefit associated with any financial contribution that a third party has committed to make towards the costs of the **project**;
 - (j) subsidies or other benefits-
 - (i) relating to anything listed in paragraphs (a) to (i); and

- (ii) provided under or arising pursuant to all electricity-related legislation and electricity-related administrative determinations;
 - (k) **competition effects**; and
 - (l) any other benefit or cost occurring in the electricity market proposed by **Transpower** prior to its consultation on the short list of **investment options** and agreed to by the **Commission**.
- (2) **Project cost** means any of the following things reasonably incurred by **Transpower** prior to or during the **calculation period** in undertaking a **major capex project**
- (a) **capital expenditure** incurred, including **capital expenditure** in relation to land specified in subclause (6), prior to the date implied by the **commissioning date assumption** for assets associated with the **investment option**;
 - (b) amounts payable to a third party in relation to its testing of assets associated with the **investment option**;
 - (c) an amount reasonably related to the **commissioning** of assets associated with the **investment option**;
 - (d) operating, maintenance and dismantling costs associated with the **investment option**;
 - (e) reasonable costs of complying with or arising pursuant to all applicable existing and reasonably anticipated legislation relating to the approval for and undertaking of an **investment option**;
 - (f) reasonable costs of complying with or arising pursuant to administrative requirements relating to the approval for and undertaking of an **investment option**, including costs relating to the preparation of a **major capex proposal**; and
 - (g) any other reasonable costs incurred by **Transpower** associated with the **investment option**.
- (3) For the purpose of subclause (1), an **electricity market benefit or cost element** excludes any **project cost** incurred by **Transpower** specified in subclause (2).
- (4) For the purpose of subclause (1)(h), **real option value** means the value attaching to the flexibility of a participant in the electricity market to make investment decisions, relating to an overall investment, in phases, where the value reflects the expected relative reduction of future costs to future benefits due to the making of those investment decisions based on information available in the future but presently unavailable or uncertain.

- (5) For the purpose of subclause (1)(i), the value of any such benefit may not exceed the amount of the contribution committed by the third party.
- (6) The land referred to in subclause (2)(a) is land that, at the time of the **major capex proposal**, is **commissioned** but which is not used by **Transpower** to provide **electricity transmission services**.

D6 **Competition effects**

Competition effects means [the](#) value of the expected change in economic surplus due to a change in competition among participants in the electricity market as a result of a **major capex project** undertaken by **Transpower**, which must exclude any expected change in economic surplus due to a change in another **electricity market benefit or cost element** listed in clause D5(1).

D7 **Quantification of costs and benefits**

- (1) The quantum of a **project cost** incurred prior to the **calculation period** must be calculated using compounding of the **project cost** over the period from the date it was incurred to the start of the **calculation period** using the **discount rate**.
- (2) The quantum of an **electricity market benefit or cost element** received or incurred during the **calculation period** must be calculated using discounting of the **electricity market benefit or cost element** over the **calculation period** using the **discount rate**.
- (3) **Discount rate** means-
 - (a) a standard rate of 7%; or
 - (b) a non-standard rate other than 7% which is appropriate in the circumstances and subject to consultation under clause I3.
- (4) The quantum of an **electricity market benefit or cost element** or **project cost** must be calculated using its expected value, which is the probability-weighted average of the possible values of the cost or benefit where the probability weightings reflect the uncertainties in underlying assumptions or calculation approaches.
- (5) The cost of involuntary demand curtailment borne by end users of electricity is the expected quantity of curtailed demand multiplied by the **value of expected unserved energy**.
- (6) The quantum of a **project cost** must be calculated using **good electricity industry practice**.

D8 Sensitivity analysis

- (1) **Sensitivity analysis** means consideration, save where it is neither reasonably practicable nor reasonably necessary, of the effect on quantum of variations in the following parameters, taking into account their probability of occurrence:
 - (a) forecast demand;
 - (b) size, timing, location, fuel costs and operating and maintenance costs, relevant to **existing assets, committed projects, modelled projects** and the **investment option** in question;
 - (c) capital cost of the **investment option** in question (including variations up to proposed **major capex allowance**) and **modelled projects**;
 - (d) timing of decommissioning, removing or de-rating **decommissioned assets**;
 - (e) subject to subclause (2), the **value of expected unserved energy**;
 - (f) **discount rate**;
 - (g) range of hydrological inflow sequences;
 - (h) **relevant demand and generation scenario** probability weightings;
 - (i) in relation to any **competition effects** associated with an **investment option**, generator offering and demand-side bidding strategies; and
 - (j) any other variables that **Transpower** considers to be relatively uncertain.
- (2) For the purpose of subclause (1)(e), where paragraph (b) of the definition of **value of expected unserved energy** is relied on, **sensitivity analysis** must be undertaken in respect of variations in both the value described in that paragraph and the value described in paragraph (a) of the definition of **value of expected unserved energy**.
- (3) For the purpose of subclause (1)(f), **sensitivity analysis** must be undertaken in respect of the following **discount rates**-
 - (a) 4%;
 - (b) the standard rate of 7%;
 - (c) 10%; and
 - (d) any non-standard rate other than 7% which has been adopted by **Transpower**.

D9 Assets and projects

- (1) **Committed project** means assets that are likely to be commissioned during the **calculation period** and-
- (a) in relation to which all of the following are satisfied:
 - (i) the proponent has obtained all required planning consents, construction approvals, and licences, and fulfilled any other regulatory requirement that must be met before commencing construction;
 - (ii) construction has commenced or a firm commencement date for construction has been set;
 - (iii) the proponent has acquired or executed an agreement to acquire land (or commenced legal proceedings to acquire land), or has executed an agreement for the leasing of land, for the purposes of construction;
 - (iv) contracts for supply and construction of the major components of the plant and equipment (including any generating units, turbines, boilers, transmission towers, conductors, termination station equipment) have been executed (i.e. all the necessary formal legal requirements have been observed to make the contract valid and complete); and
 - (v) if required, contracts for the financing of the project, including any debt plans, have been executed (i.e. all the necessary formal legal requirements have been observed to make the contract valid and complete); or
 - (b) that is an approved investment (as 'approved investment' is defined in the **code**).
- (2) **Decommissioned asset** means an existing asset in relation to which-
- (a) the following things are satisfied:
 - (i) a final decision to decommission, remove or de-rate the existing asset after a specified date has been made and publicly announced; and
 - (ii) firm arrangement to directly or indirectly facilitate the decommissioning, removal or de-rating of the existing asset has been made;
 - (b) consents or contracts for its operation and maintenance have-
 - (i) been terminated; or
 - (ii) expired with no reasonable prospect of renewal; or

- (c) agreements for early termination of consents or contracts for its operation and maintenance have been executed.
- (3) **Existing asset** means any asset in operation at the time a **major capex proposal** is made.
- (4) **Modelled project** means assets, other than those that are part of an **investment option**-
 - (a) which are likely to exist-
 - (i) as part of a **demand and generation scenario**; and
 - (ii) during the **calculation period** for any **investment option** based on that scenario; and
 - (b) for which the likelihood, nature and timing of their existence are affected by an **investment option** proceeding.

SCHEDULE E INTEGRATED TRANSMISSION PLAN

cl. 7.2.1

E1 Information to be included in integrated transmission plan

- (1) The information that must be included is:
 - (a) an **ITP narrative**; and
 - (b) **ITP supporting documents**.
- (2) The information listed in this schedule in relation to the **ITP narrative** is, unless otherwise stated, required in respect of a period of at least ten **disclosure years** commencing on the first day of the next **regulatory period**.
- (3) The robustness of information provided must be commensurate with the degree of certainty **Transpower** may be reasonably expected to have in respect of it.

E2 Information to be included in the ITP narrative

- (1) with reference, where relevant, to the information contained in the **ITP supporting documents**, a high level-
 - (a) overview of the expenditure and outputs which are proposed for the first **regulatory period** to which the **ITP narrative** relates coinciding with the **disclosure year** and forecast expenditure needs and outputs over the next **regulatory period**;
 - (b) overview of the **key assumptions** and scenarios used to determine forecast expenditure and **grid outputs**;
 - (c) assessment of the key uncertainties in the **key assumptions**, and forecast expenditure and grid outputs;
 - (d) assessment of the key risks affecting forecast expenditure;
 - (e) assessment of how the key uncertainties and key risks will affect **Transpower's** ability to deliver the forecast **grid outputs**;
 - (f) description of the proposed measures to manage and mitigate the key uncertainties and key risks; and
 - (g) description of the key relationships, including any synergies or trade-offs, within and between the following:
 - (i) **projects** and **programmes** assumed for the purpose of determining the forecast expenditure; and

- (ii) the forecast **grid outputs**.
- (2) forecast expenditure in the form of a schedule in respect of each **disclosure year** for-
 - (a) **operating expenditure** (disaggregated by major areas of expenditure);
 - (b) **base capex** (disaggregated by major areas of expenditure); and
 - (c) approved **major capex** (disaggregated by project);
- (3) forecast **grid outputs** in the form of a schedule in respect of each **disclosure year** for-
 - (a) each **revenue-linked grid output measure** described in the **base capex proposal** relating to the first **regulatory period** to which the **ITP narrative** relates;
 - (b) all proposed **grid output measures** other than those referred to in (a) above described in that **base capex proposal** relating to the first **regulatory period**; and
 - (c) **major capex project outputs** assumed to be delivered by each approved **major capex project**;
- (4) a summary of **major capex projects** under development, including:
 - (a) a summary of the key issues being addressed with reference to the planning report which is an **ITP supporting document**;
 - (b) estimates of likely **capital expenditure**; and
 - (c) estimates of project timings, including those relating to consultation periods, submissions for approval, construction, and **commissioning**.

E3 ITP supporting documents

the following **documents**, prepared or updated no more than two years before the submission date-

- (a) an asset management plan that includes the information specified in clause E4;
- (b) a planning report that includes the information specified in clause E5;
- (c) a report setting out **Transpower's** output and performance objectives that includes the information specified in clause E6.

E4 Information to be included in the asset management plan

- (1) overall asset management strategy and objectives;
- (2) overall asset risk management framework; and
- (3) asset management plans for each asset class covering:
 - (a) specifications for assets life cycle activities;
 - (b) general condition of existing assets;
 - (c) intended programmes of asset management works;
 - (d) routine maintenance and repair plans for assets; and
 - (e) programmes for routine maintenance and repair plans.

E5 Information to be included in the planning report

- (1) the capabilities of the existing **grid**;
- (2) demand and generation forecasts for the forthcoming 10 years;
- (3) the **grid's** ability to meet future demand and generation needs;
- (4) the role of the **grid** in facilitating generation; and
- (5) **grid** investment that may be required to meet future needs for the next 10 years and beyond, by way of-
 - (a) **grid** backbone transmission plans for the main North and South Island transmission corridors and for the HVDC link; and
 - (b) a set of regional plans.

E6 Information to be included in the report on output and performance objectives

- (1) a longer term view of the **grid outputs** and associated **grid** performance that will be economic to achieve, taking account of-
 - (a) performance expectations of end users of electricity, including in relation to the value of unserved energy;
 - (b) the costs of delivering changes in the level of **grid outputs**;
 - (c) the impact of committed expenditure on **grid outputs**; and
 - (d) any forecast degradation in asset condition or performance which will affect **grid outputs**.

- (2) a detailed description on the analysis, assumptions and approach used to determine the longer term view; and
- (3) an approach to convert the longer term view to appropriate shorter term objectives for **grid outputs**.

SCHEDULE F BASE CAPEX PROPOSAL - QUALITATIVE INFORMATION

cl. 7.3.1, 9.1.1

F1 Qualitative information required in a base capex proposal

For the purpose of clause 7.3.1(1)(b), a **base capex proposal** must, in addition to the other things specified in that clause, include all the information listed or described in this schedule.

F2 List of identified programmes, listed projects and low incentive rate base capex projects

(1) Provide a list of identified programmes ~~means base capex projects or base capex programmes~~ forecast to be undertaken during the next **regulatory period** defined by reference to one or more of the following categories or criteria-

- (a) **base capex categories;**
- (b) a classification by way of an appropriate a maximum cost or expenditure threshold or another related financial measure;
- (c) a an appropriate ranking system, ~~such as the five highest cost programmes or projects;~~
- (d) any other distinguishing characteristic or measure ~~applicable to types of programmes or projects undertaken by Transpower,~~

and 'identified programme' means one of ~~these~~ **base capex programmes or base capex projects;**

(2) Identify all proposed listed projects and explain why they meet the criteria for listed projects set out in clause 2.2.3(2);

~~(2)~~(3) Identify all proposed low incentive rate base capex projects and explain why these meet the criteria for low incentive rate base capex projects set out in A4.

F3 Overview

(1) An overview narrative on detailed commentary as to how the proposed **projects** and **programmes** relating to **base capex** are consistent with the-

- (a) most recent **integrated transmission plan**, and an explanation for any material divergence if not, why not; and

Commented [TP83]: From our submission to draft decisions:

We agree with the changes the Commission has made to F2 to clarify the criteria for determining identified programmes. For the 'low incentive rate' projects, the draft determination (DD) schedule F2 (3) provides for our base capex proposal to identify base capex projects as 'low incentive rate' projects if a project meets criteria of 'no workable alternative capex or opex options'. Transpower may not be able to conclude whether a project meets this criterion before an RCP proposal (we would need to conduct a full investigation first).

We seek ability for Transpower to re-classify base capex projects to low incentive rate during RCP.

Also at DD 2.2.2 (3) (a) (ii) and A (4) we seek clarity for how the Commission would determine 'no workable alternative capital expenditure or operating expenditure options.'

Commented [TP84]: The subclauses of clauses F2 to F13 are grammatically inconsistent. Some (like this one) start with a capital, most don't. Some (like this one) have introductory words, most don't. This is also an issue for Schedule G (major capex proposals).

Commented [TP85]: Paragraphs (b) to (d) are specific examples of base capex categories and are therefore redundant.

Commented [TP86]: It is unusual to define the term after it has already been used in the same subclause. Also, "identified programme" is not a particularly appropriate term for a concept that includes both programmes and projects

(b) **opex proposal,**

for the next **regulatory period;**

- (2) overall description of **Transpower's** aims and objectives with respect to **base capex** during the next **regulatory period;**
- (3) summary of the key evidence supporting those aims and objectives;
- (4) explanation as to the overall deliverability of the proposed **projects** and **programmes** relating to **base capex;** and
- (5) identification and explanation of the factors likely to affect the deliverability of the proposed **projects** and **programmes** relating to **base capex,** by **base capex category.**

F4 **Governance**~~Policies, processes~~ and consultant ~~reports~~

- (1) schedule listing **Transpower's governance (including policies, processes, strategies and risk assessments)** ~~all policies or processes~~ applicable to **base capex** concerning-
 - (a) **base capex projects** costing over \$20 million;
 - (b) **base capex programmes;**
 - (c) asset management;
 - (d) business planning; ~~and~~
 - (e) capital works;
- (2) description of all material changes to **policies** and processes ~~described in subclause (1) made since the Commission's last determination of a base capex allowance that have had a material impact on expenditure levels;~~ and
- (3) schedule listing all consultant reports commissioned for the purpose of preparing the proposal.

F5 **Cost and efficiency**

- (1) evidence demonstrating if, and how, **Transpower** has, in relation to **base capex,** during the current **regulatory period-**
 - (a) pursued, and is pursuing process improvements;
 - (b) ensured and is seeking to ensure appropriate least-whole-of-life cost and efficient interventions;

Commented [TP87]: From our submission to draft decisions:

The changes have materially increased requirements and the scope of information provision (in addition to policies and processes, new requirements are 'strategies and risk assessments'). We disagree with the Commission increasing the information requirements in F4(1). The change is made without sufficient justification or evidence to demonstrate how the changes better promote the outcomes sought by 52A.

The role of our proposal for 'governance' was to describe key internal **processes** that describe how expenditure is governed. We consider Transpower is best placed to decide the appropriate documentation to convey our governance processes.

Commented [TP88]: From our submission to draft decisions:

We retain the view expressed in our **additional information** in support of our 24 June submission on focus areas for the Capex IM review, to remove this requirement. We were asked to propose any specific information requirements that should be added, amended or removed. We have included in the 2nd column our rationale* for our conclusion that the requirement should be removed.

**[because "under the regulatory framework created by the Commission we should be relying on the expenditure incentives to encourage us to search for and reveal efficiencies. The expenditure efficiency arrangements should reinforce an approach where our proposal for the next regulatory period allows for the revealed efficiency i.e. take our efficiency as achieved up to the forecasting base year."]*

- (c) pursued and is pursuing cost reduction strategies for its **projects and programmes**;
- (d) ensured and is seeking to ensure that both internal and external suppliers of goods and services have incentives to perform well and identify cost savings;
- (2) description of all efficiency assumptions relied upon in the proposed **base capex allowances**; and
- (3) description of-
 - (a) any contingency included in proposed costs; and
 - (b) the methodology for calculating such contingencies.

F6 Information on programmes and identified programmes

- (1) description, in respect of each **base capex programme**, of the milestones that have been passed in accordance with **Transpower's** internal approval processes;
- (2) in respect of each **identified programme**:
 - (a) description of the **programme**, including its aims and objectives;
 - (b) ~~cost-benefit~~**economic** analyses that support it;
 - (c) explanation as to its deliverability, with reference to factors likely to specifically affect that programme;
 - (d) description of the methodology used to generate the forecast of its **base capex**, including, but not limited to-
 - (i) the relevant **key assumptions** and how they were applied;
 - (ii) any relevant cost benchmarking undertaken by or for **Transpower**; ~~and~~
 - ~~(iii)~~ internal historical cost trends for specific cost components relied upon e.g. unit costs; ~~and~~
 - ~~(iii)~~ (iv) any models used, accompanied by explanations of the models and how they were relied upon;
 - (e) any material change from historical costs in any cost component included in the programme and its effect on the forecast capex;
 - (f) list of all relevant documents taken into account in forecasting its **base capex**, including documents relating to its deliverability, relevant **policies** and consultant reports;
 - (g) explanation of the extent to which its forecast **base capex** implements the **key assumptions**, any consultant reports, and **policies** relating to the

Commented [TP89]: We suggest this should be "identified programme."

Commented [TP90]: An identified programme may also be a project.

- planning of the **grid** and the forecasting of **capital expenditure** and **operating expenditure** for that purpose, including in relation to-
- (i) long term **grid** development;
 - (ii) **grid** maintenance; and
 - (iii) **grid** operation;
- (h) explanation of all material departures from any-
- (i) relevant **policies**;
 - (ii) planning standards; or
 - (iii) conclusions and recommendations contained in the consultant reports identified pursuant to paragraph (f);
- (i) overview of any significant tradeoffs between **operating expenditure, base capex** and quality that **Transpower** considered in its development;
- (j) assessment of its impact upon either or both of the-
- (i) quality performance; and
 - (ii) serviceability,
- of the assets to which it relates;
- (k) description of relevant legally enforceable duties owed by **Transpower**, whether arising under legislation, at common law or in contract, that have a material impact on an **identified programme**;
- (l) description of any material step change compared to historic costs for the same or a similar type of programme;
- (m) explanation of the effect of a step change identified pursuant to paragraph (l) on its forecast **base capex**, ~~and where not required by the regulatory templates agreed pursuant to clause 2.2.1(1)2.2.1(1) or specified pursuant to clause 2.2.1(2)2.2.1(2), schedule of any models used accompanied by explanations of them and how they were relied upon;~~
- (3) in respect of each **identified programme** forecast to be first **commissioned** during the next **regulatory period**-
- ~~(a) description of the system growth **project** prioritisation approach;~~
 - (a) where options have been considered, provide a summary of the options considered, the analyses undertaken and the reasons for rejecting those that are not proposed to be implemented; and

- (b) identify, quantify and justify all contingency sums included in the forecast cost of the programme.
- ~~(c)~~ a schedule-
- (i) listing all programmes or projects whose forecast base capex includes a contingency amount additional to the forecast cost of that programme;
 - (ii) describing the rationale for inclusion of each such contingency amount;
 - (iii) describing the uncertainties each contingency amount accounts for; and
 - (iv) specifying the methodology for calculating the quantum of each contingency amount; and
- (4) in respect of each identified programme with a fixed end date forecasted to be first commissioned in the regulatory period after the next regulatory period, information of the type specified in subclause (1) must be provided in respect of the period ending on the forecast commissioning date
- (a) describe the milestones that are planned to be completed in the next regulatory period; and;
 - (b) provide the forecast commissioning date of the identified programme.
- (5) In relation to any identified programme that may use outsourced services which may have a material effect on the desired outcome of the programme-
- (a) identify the outsourced services;
 - (b) explain whether those outsourced services are to be provided-
 - (i) under a discrete contract;
 - (ii) or as part of a broader operational arrangement or contract or similar);
 - (c) provide an overview of the procurement process, including an explanation of the extent to which the process will involve competitive bidding, and if not, why not;
 - (d) identify any significant components of any outsourced services that have been, or will be sub-contracted to another supplier; and
 - ~~(d)~~(e) identify relevant procurement documents in a schedule, including but not limited to requests for tender and submissions in response.

Commented [TP91]: Inconsistent with subclause (3).

Commented [TP92]: Some of the things listed in this subclause may not be known at the time of the base capex proposal, particularly those in paragraphs (d) and (e).

F7 Procurement

- (1) Provide a description of the procurement process used to deliver the proposed capital expenditure; and
- ~~(1),(2)~~ Identify and explain the key risks that have the potential to affect the delivery of the proposed capital expenditure. In relation to procurement, identify any **identified programme** that uses outsourced services which have a material effect on the desired outcome of that **identified programme**.
- ~~(2)~~ In relation to each **identified programme** identified pursuant to subclause (1),
- ~~(a)~~ identify the outsourced services that have a material effect;
 - ~~(b)~~ explain whether those outsourced services are to be provided
 - ~~(i)~~ under a discrete contract; or
 - ~~(ii)~~ as part of a broader operational arrangement or contract (or similar);
 - ~~(c)~~ provide an overview of the procurement process, including an explanation of the extent to which the process was competitive, and if not, why not;
 - ~~(d)~~ identify any significant components of any outsourced services that will be or have been sub-contracted to another supplier; and
 - ~~(e)~~ identify relevant procurement documents in a schedule, including but not limited to requests for tender and submissions in response.

Commented [TP93]: From our submission to draft decisions:

We retain the view expressed in our [additional information](#) in support of our 24 June submission on focus areas for the Capex IM review. We were asked to propose any specific information requirements that should be added, amended or removed

We requested "lift up level of detail" to provide an overview of the procurement process, including an explanation of the extent to which the process was competitive, and if not, why not.

For the new sub clauses in F7, we seek to clarify if F7(1) is an overview of Transpower's procurement processes, not covered by F6 (5).

Our view is that F7(2) is redundant and replicates information requirements in F8. If there are risks to delivery relating to our procurement methodologies, F8 is sufficient to ensure this information is provided.

Commented [TP94]: This does not necessarily relate to procurement.

F8 Resourcing and delivery

- (1) description of plans for resourcing and delivering the proposed **base capex projects**;
- (2) identification of the key risks associated with resourcing and delivering the proposed **base capex projects** including explanation of each risk's potential to affect-
 - (a) the forecast **base capex**; and
 - (b) forecast **grid output measures**; and
- (3) description of the processes that will be implemented to manage or mitigate the risks to which subclause (2) relates.

F9 Other capex

In respect of any **base capex** included in the **regulatory templates** agreed pursuant to clause (1) or specified pursuant to clause 2.2.1(2) to which clause F6 does not apply,

description of the rationale for any forecast **base capex** exceeding \$1 million in any one disclosure year.

Commented [TP95]: Change to \$5 million as per draft decision paper for clause F9.

F10 Escalation factors and foreign exchange assumptions

- (1) in respect of each escalation factor relied on to account for changes in input prices in completing the **regulatory templates** agreed pursuant to clause (1) or specified pursuant to clause 2.2.1(2)-
 - (a) description of each such escalation factor and rationale for its use;
 - (b) methodology underlying the calculation of its quantum, by reference to data sources, data conversions and assumptions relied upon, including lags;
 - (c) the weighting given to it and description of how that weighting was determined, including any assumptions relied upon;
 - (d) explanation of whether the same escalation factor has been used in the **base capex proposal** and **opex proposal**, and if not, explanation and supporting evidence as to why different escalator factors were applied;
 - (e) an explanation of whether, in applying escalation factors that relate to labour or material inputs, additional contingency factors were applied and, if so, description of the uncertainties they account for and how they were calculated;
- (2) a list of the foreign exchange rates used to prepare the proposed **base capex allowance**;
- (3) an estimate of the exposure to foreign currency for each foreign currency for each year of the next **regulatory period** and description of how these estimates were produced.

F11 Information on proposed grid output measures

- (1) lists of all proposed **output measures** that must include the following-
 - (a) **asset performance performance-based measures**;
 - (b) **measures of grid performance asset capability grid output measures**; and
 - ~~(c) asset health grid output measures; and~~
 - ~~(d) grid output measures designed to measure the benefit delivered by proposed expenditure not captured by paragraphs (a) to (c) above, that clearly identify those proposed to be revenue-linked grid output measures;~~
- (2) lists of **grid output measures** that may include the following-

Commented [TP96]: Should be "grid output measures."

Commented [TP97]: Redundant.

Commented [TP98]: This wording does not sit easily with subclause (1) which already requires "all proposed [grid] output measures" to be listed.

- (a) asset capability grid output measures; and
 - (b) any other grid output measures;
- (2)(3) description of each measure listed under subclauses (1) and (2) including-
- (a) detailed definitions;
 - (b) details as to what the measure includes and excludes;
 - ~~(c) any relevant calculations;~~
 - ~~(d)~~(c) the reasons for selecting each measure, including the relationship with the;
 - (i) ~~relationship between it and~~ risks associated with the **grid**;
 - (ii) ~~relationship between it and~~ forecast performance of the **grid**;
 - (iii) ~~relationship between it and the~~ key purposes of the **investment**;
- (3)(4) in respect of each measure listed under subclauses (1) and (2)-
- (a) identify whether it is proposed as a revenue-linked grid output measure, or not linked to revenue;
 - ~~(a)~~(b) the effect that the proposed **base capex allowances** would have on the measure it both during the next **regulatory period** and beyond it; and
 - (c) ~~the~~is alignment with the underlying business processes used to plan and operate the **grid**;
 - (d) all relevant calculations, models and supporting data;
- (5) in respect of each **grid output measure not linked to revenue-**
- (a) the forecast value of the measure at the start and by the end of the regulatory period; and
 - (b) an explanation of how the forecast value was determined.-

F12 Revenue-linked grid output measures

- (1) in respect of each proposed **revenue-linked grid output measure-**
 - (a) a description of how it will be linked to revenue through the **grid output mechanism**;
 - (b) in respect of each **disclosure year** of the **regulatory period**, a proposed-
 - (i) **grid output target**;
 - (ii) **grid output incentive rate**;
 - (iii) **cap**; and

Commented [TP99]: From our submission to draft decisions:

We consider the Commission has increased the regulatory burden of providing information, by requiring Transpower to provide all models and supporting data relating to all output measures (both revenue and non-revenue linked).

No Part 4 rationale is provided for why the models are needed. We urge the Commission to evaluate its need for information by clarifying how it intends to use all the models.

Propose that provision of models is only relevant to output measures linked to revenue.

- (iv) **collar;**
- (c) description of and justification for the proposed **grid output targets, caps, collars, and grid output incentive rates** including-
 - (i) how each was determined by reference to the relevant definitions;
 - (ii) whether, and if so, for each **grid output target**, Transpower has had regard to any consultation **responses** and relates to relevant **policies and key assumptions;**
- (d) to the extent possible, historical performance data for the seven most recently completed **disclosure years;**
- (2) commentary comparing and evaluating the performance of each proposed **revenue-linked grid output measure** with respect to actual **capital expenditure and operating expenditure** over the 7 most recently completed **disclosure years;**
- (3) commentary as to how the proposed **grid output targets** relate to the proposed **base capex allowances** and proposed **operating expenditure** allowance as contained in the **opex proposal;**
- (4) identification of any **key assumptions** relied upon and modifications or changes made to historical performance data for the purpose of determining the proposed **grid output targets;** and
- (5) description of models and all data used to determine the **grid output targets, caps and collars;**

Commented [TP100]: Under F12 (c) (ii) we agree that the grid output targets should reflect consumer preferences and thus any consultation responses.

We consider the terms 'relevant policies' and 'key assumptions' have little value, as other information provided in F12 and F11 should be sufficient to evaluate the appropriateness of the output measure targets and degree of consultation undertaken.

Propose deleting "and relates to relevant **policies and key assumptions.**"

F13 Grid output measures not linked to revenue

in respect of each **grid output measure** not subject to the **grid output mechanism-**

- (a) the forecast quantum of the **grid output measure** at the start of the **regulatory period;**
- (b) explanation as to how that forecast quantum was determined;
- (c) forecast incremental change to its quantum by the end of the **regulatory period** were no **base capex** undertaken during the **regulatory period;**
- (d) forecast incremental change to its quantum by the end of the **regulatory period** were expenditure made in accordance with the proposed **base capex allowances;** and
- (e) models and data used to forecast-
 - (i) its quantum at the start of the **regulatory period;** and

Commented [TP101]: As per draft decisions for clause F13, this clause F13 needs to be deleted.

- (ii) incremental changes to its quantum during and by the end of the **regulatory period**.

SCHEDULE G MAJOR CAPEX PROPOSALS

cl.7.4.1, 9.2.1

G1 Information required in a major capex proposal

For the purpose of clause 7.4.1(1)(a)–

- (a) a **major capex proposal** must include the information listed or described in this schedule; and
- (b) where the **major capex proposal** relates to subsequent stages of a **major capex project (staged)** the information relating to the **major capex project (staged)** may be provided as updates to information previously supplied.

G2 Information on the investment need

explanation of the need for investment, including–

- (a) information on its nature, extent, location and timing;
- (b) commentary as to how the **investment need** is consistent with the most recent **integrated transmission plan**; and
- (c) a summary of consultation participants' views on the **investment need** and how **Transpower** had regard to those views and if not, why not.

G3 Information on relevant demand and generation scenarios

(1) detailed description of each **relevant demand and generation scenario variation**, including–

~~that is a **market development scenario variation** or **MED scenario variation**, as the case may be;~~

(1) in respect of–

- (a) explanation of the major variations between the variation and the relevant **demand and generation scenarios**;
- (b) the rationale for the variations; and
- (c) a summary of consultation participants' views on them;

~~(a) each **market development scenario variation** or **MED scenario variation**, as the case may be, a description of it;~~

~~(b) each **market development scenario variation**,~~

- (i) ~~explanation of the major variations between it and the **market development scenarios**; and~~
- (ii) ~~the rationale for the variations; and~~
- (c) ~~each **MED scenario variation**,~~
 - (i) ~~explanation of the major variations between it and the current **MED scenarios**; and~~
 - (ii) ~~the rationale for the variations;~~
- (2) in respect of each **relevant demand and generation scenario**-
 - (a) the relative weighting of each scenario; and
 - ~~(b) where that weighting was determined by **Transpower**, the methodology used to determine it ~~and~~.~~
 - ~~(b) _____~~
 - ~~(3) in respect of each **market development scenario variation** or **MED scenario variation**, as the case may be, summary of consultation participants' views on them.~~

G4 **Information relating to each investment option**

In relation to each **investment option** contained in the **major capex proposal**-

- (1) description of the **investment option**;
- (2) **net electricity market benefit** of each **investment option** under each **demand and generation scenario**;
- (3) in respect of each **investment option**, quantum of-
 - (a) each **electricity market benefit or cost element**;
 - (b) each **project cost**;
 - (c) aggregate **electricity market benefit or cost element**; and
 - (d) aggregated **project costs** on a **P50** basis, used to calculate each **net electricity market benefit**;
- (4) methodology used to determine the quantum of all information provided pursuant to subclause (3), including details commensurate with the estimated **capital expenditure** and complexity of the **investment option** of any-
 - (a) internal and external benchmarking and how the results were applied;
 - (b) relevant existing or proposed supply or procurement processes;

- (c) modelling tools or techniques; and
- (d) key publications and data sources;
- (5) **key assumptions** used to determine the **net electricity market benefit** of each **investment option**, including-
 - (a) **discount rate**;
 - (b) **calculation period**;
 - (c) cost per megawatt hour used to determine the **value of expected unserved energy**; and
- (6) **expected net market benefit** of each **investment option**.

G5 Information relating to proposed investment only

- (1) identification of the ~~investment option that is the~~ **proposed investment** ~~and, where the proposed investment is part of a proposed major capex project (staged), provide-~~
 - (a) a description of all the proposed stages of the **major capex project (staged)**;
 - (b) reasons for the proposed staging, including the extent to which splitting the **project** into stages has the potential to reduce the timing, scope or cost uncertainties of the **project**; and
 - ~~(c)~~ (c) the estimated projects costs, planned **major capex project outputs** and planned timing of each stage;
- (2) detailed description of the components of the **proposed investment**, including at least-
 - (a) identification of the extent to which the **proposed investment** is a **transmission investment** or a **non-transmission solution**;
 - (b) a summary of requirements for completion, such as property or property right acquisition, resource management approvals, asset purchases, asset construction and site remediation;
 - (c) any proposed **major capex allowance** **which must be a P50 estimate**;
 - ~~(d)~~ (d) **sensitivity analysis on the probability of lower or higher capex expenditure than the proposed major capex allowance (for example, an estimated probability distribution of capital expenditure incurred as part of the major capex project)**;
 - ~~(d)~~ (e) where a **major capex allowance** is applicable, the **commissioning date assumption** and rationale for it;

Commented [TP102]: The definition of "P50" relates to project costs, not major capex allowances.

Suggest "which must include a P50 cost estimate and estimated probability distribution"

If project costs are not based on symmetrical cost distributions, Transpower should be able to propose a **major capex allowance** that is not based on a P50 estimate.

Commented [TP103]: If P50 project costs are provided and supported, then this is redundant.
"capex expenditure" should be "capital expenditure"

Unclear on sensitivity analysis purpose, propose "an estimated probability distribution of capital expenditure ~~incurred as part of the major capex project~~" (the major capex is not yet spent, so cannot be incurred).

- ~~(e)~~(f) any proposed **maximum recoverable costs**;
- ~~(f)~~(g) where **maximum recoverable costs** are applicable, the **completion date assumption** and rationale for it;
- ~~(g)~~(h) the estimated P50, the major capex incentive rate where a different rate to the default rate of 15% is proposed and the rationale for it;
- ~~(h)~~(i) all relevant supporting technical information and costing information;
- ~~(i)~~(j) where the **project** is a **non-transmission solution**-
- (i) the proposed **recovery scheme**; and
 - (ii) an explanation of the relationship between any proposed **major capex allowance** and any proposed **maximum recoverable costs** for that **non-transmission solution**; and
- ~~(j)~~(k) proposed **approval expiry date** and rationale for it;
- (3) detailed description of the rationale for seeking approval of the **proposed investment**;
- (4) summary of the key evidence that supports that rationale such as contracts, reports, memos, financial or other data, results of modelling exercises, customer documentation and letters, and statements from directors;
- (5) detailed commentary as to how consistent with the most recent integrated transmission plan, and if not, why not the-
- (a) the proposed investment is; or
 - ~~(a)~~(b) entire major capex project (staged) is, where the proposed investment relates to a major capex project (staged) is consistent with the most recent integrated transmission plan, and if not, why not;
- ~~(5)~~(6) identification of anything associated with the **proposed investment** falling under any of clauses D5(1)(a) to D5(1)(g) that did not meet the definition of expected market benefit or cost element only by virtue of its being unlikely to affect the **net electricity market benefit** to an appreciable degree;
- ~~(6)~~(7) description of considerations, assumptions and calculations used to determine that something falling under any of clauses D5(1)(a) to D5(1)(g) did not meet the definition of expected market benefit or cost element by virtue of its being unlikely to affect the **net electricity market benefit** to an appreciable degree;
- ~~(7)~~(8) outcome of sensitivity analysis;
- ~~(8)~~(9) description of the methodology applied in undertaking **sensitivity analysis**;
- (10) explanation as to how robust to sensitivity analysis the-

Commented [TP104]: Retain, see comment at (c) above.

Commented [TP105]: Needs own sub-clause.

Commented [TP106]: The ITP is an overview document, suggest delete "detailed" to align 'commentary' level to ITP level.

"commentary about consistency with most recent ITP."

(a) **proposed investment** is ~~to sensitivity analysis~~; or
~~(a)~~(b) **entire major capex project (staged)** is, where the **proposed investment** relates to a **major capex project (staged)**;

~~(9)~~(11) reasons for any selection of a-

- (a) **discount rate** other than 7%; and
- (b) **calculation period** other than 20 years;
- (c) cost per megawatt hour determined using paragraph (b) of the definition of **value of expected unserved energy**;

(12) a description as to how ~~the proposed investment reflects~~ consistent with good electricity industry practice ~~the~~;

(a) **proposed investment** is; or

~~(d)~~(b) **entire major capex project (staged)** is, where the **proposed investment** relates to a **major capex project (staged)**;

~~(10)~~(13) rationale for determining that the **proposed investment, or the entire major capex project (staged)** where the **proposed investment** relates to a **major capex project (staged)**, may satisfy the **investment test**, by reference to each subclause and paragraph of that test; and

~~(11)~~(14) a plan for monitoring costs, project milestones and deliverables that reflects the best information available to **Transpower**.

G6 **Grid outputs**

In relation to ~~the each investment option~~ proposed investment contained in the **major capex proposal**-

- (1) specification of ~~approved major capex~~ **project outputs** that are proposed;
- (2) quantum of each ~~approved major capex~~ **project output** that is proposed;
- (3) rationale for those ~~approved major capex~~ **project outputs** that are proposed including-
 - (a) description of key factors and **key assumptions** relevant to their determination including the uncertainty associated with each such factor or assumption; and
 - (b) explanation of the extent to which the quantum of each proposed **major capex project output** reflects:
 - (i) the assets to be **commissioned**;

Commented [TP107]: Request delete words **major capex**, and treat each stage as a **project** of the whole **major capex project**, to ensure that an individual stage does not have to cost more than \$20m.

- (ii) the forecast changes to the functional capability of the **grid**;
 - (iii) the quantum of forecast **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services**; and
 - (iv) in respect of a **non-transmission solution**, any service provided by a third party;
- (4) explanation of the relationship between the proposed **P50-major capex allowance** and the quantum of each **approved major capex project output** that is proposed including the sensitivity of the quantum of each **approved major capex project output** that is proposed to changes in the **major capex allowance P50**, including commentary in terms of increases or decrease in the scope of the **project**;
- (5) description of factors that may affect **Transpower's** ability to achieve each **approved major capex project output** that is proposed, including identification of each factor, with reasons, as within or outside **Transpower's** control; and
- (6) in the case of a **non-transmission solution** description of the **transmission investment** it avoids in terms of both assets and expected costs avoided.

Commented [TP108]: Suggest **proposed major capex project output** as nothing will have been approved at this point. Also, applies to subclause (5) below.

G7 Information on consultation

In respect of consultation, the specified information is a description as to how the consultation programme referred to in clause 3.3.1(2)(a)(i) was followed, including-

- (a) a list of the relevant consultation steps and confirmation by **Transpower** that each occurred;
- (b) a list of respondents to the consultation;
- (c) a description of all issues raised by interested persons in response to **Transpower's** intended **major capex proposal**;
- (d) a summary of the arguments raised in respect of each issue to which paragraph (c) applies; and
- (e) in respect of the issues to which paragraph (c) applies, an explanation as to whether the **major capex proposal** accommodates the arguments referred to in paragraph (d); and
 - (i) if so, how; and
 - (ii) if not, why not.

G8 Information on non-transmission solutions

In respect of **non-transmission solutions**, a description as to how the requirements of Schedule I Division 2 were met, including-

- (a) summary of the process followed to identify and assess **non-transmission solutions**;
- (b) description of **non-transmission solutions** suitable to meet the relevant **investment need** identified either by **Transpower** or by consultation participants;
- (c) explanation as to how the **non-transmission solutions** to which paragraph (b) applies were taken into account when determining the **investment options** and applying the **investment test**; and
- (d) description and justification of how any assets that would be **commissioned** by **Transpower** form part of the **non-transmission solution**.

G9 Additional information

any additional supporting material **Transpower** reasonably considers is relevant to the decision of the **Commission** under clause 3.3.3.

SCHEDULE H INFORMATION REQUIREMENTS FOR AMENDMENT AND SUNK COSTS APPLICATIONS FOR MAJOR CAPEX PROJECTS

cl. 7.4.2(3), (1), 9.3.1

~~DIVISION 1~~ AMENDMENT TO MAJOR CAPEX ALLOWANCE

H1—~~Information to be provided~~

~~For the purpose of clause 7.4.2(3)(a), the amendment application must include the information listed or described in this division.~~

H2—~~Project identification and specifications~~

~~identification of relevant **major capex project** and its **major capex allowance**;~~

H3—~~Amendment sought~~

- ~~(1) quantum of proposed amendment to **major capex allowance**;~~
- ~~(2) calculations showing how the quantum of the proposed amendment was calculated;~~
- ~~(3) assumptions made in making those calculations; and~~
- ~~(4) evidence in support of the calculations, including, where relevant—~~
 - ~~(a) correspondence from manufacturers, suppliers, contractors and other relevant parties; and~~
 - ~~(b) equipment test results;~~
- ~~(5) proposed **P50**; and~~
- ~~(6) calculations, **key assumptions** and supporting evidence used to determine proposed **P50**, by reference to specified **P50**;~~

H4—~~Progress of project~~

~~description of progress made on the **major capex project**, including details of—~~

- ~~(a) planning processes undertaken;~~
- ~~(b) resource management consents, other regulatory consents, and property rights and access rights obtained;~~
- ~~(c) construction and labour contracts and arrangements made;~~

(d) — construction completed; and

(e) — testing undertaken;

H5 — ~~Current and forecast expenditure~~

(1) — ~~major capex~~ incurred to the date of the application;

(2) — ~~forecast major capex~~; and

(3) — ~~difference between forecast major capex and the major capex allowance~~;

H6 — ~~Reasons for making the application~~

(1) — ~~reason for applying, including-~~

(a) — ~~description of key factors leading to the application;~~

(b) — ~~commentary on the extent to which each key factor is within Transpower's control; and~~

(c) — ~~commentary on the extent to which each key factor was reasonably foreseeable by Transpower before the relevant major capex proposal was approved;~~

(2) — ~~description of the implications of the proposed amendment on the relevant approved major capex project outputs;~~

(3) — ~~where an application for amendment to the approved major capex project outputs is being made concurrently, explanation as to how the proposed amendments relate to each other;~~

(4) — ~~where no application for amendment to the approved major capex project outputs is being made concurrently, explanation as to why those approved major capex project outputs will remain appropriate were the proposed adjustment made;~~

(5) — ~~statement as to whether the net electricity market benefit of the major capex project is materially lower at the time of the application than when the relevant major capex proposal was approved and if so, current quantum of its net electricity market benefit; and~~

(6) — ~~explanation as to why making the proposed amendment would promote the long-term benefit of consumers;~~

~~DIVISION 2~~ DIVISION 1 AMENDMENTS TO MAXIMUM RECOVERABLE COSTS OR RECOVERY SCHEME

H7H1 Information to be provided

For the purpose of clause 7.4.2(3)(a), the amendment application must include the information listed or described in this division.

H8H2 Project identification and specifications

identification of-

- (a) the relevant **non-transmission solution**;
- (b) its **maximum recoverable costs**; and
- (c) its **major capex allowance**, if any.

H9H3 Amendments sought

- (1) quantum of any proposed amendment to **maximum recoverable costs**;
- (2) calculations showing how the quantum of the proposed amendment was calculated;
- (3) assumptions made in making those calculations;
- (4) evidence in support of the calculations, including, where relevant-
 - (a) correspondence from manufacturers, suppliers, contractors and other relevant parties; and
 - (b) equipment test results;
- (5) an explanation of the relationship between the proposed **maximum recoverable costs** and any **major capex allowance** for that **non-transmission solution**;
- (6) description of any amendment proposed to the **recovery scheme**;
- (7) proposed **P50**; and
- (8) calculations, **key assumptions** and supporting evidence used to determine proposed **P50**, by reference to specified **P50**.

H10H4 Progress of project

description of progress made on the **non-transmission solution**, including details of-

- (a) planning processes undertaken;

- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) any request for information or request for services issued to third parties;
- (d) construction and labour contracts and arrangements made with providers of **non-transmission solutions**;
- (e) construction completed;
- (f) testing undertaken; and
- (g) the proportion (measured by reference to costs incurred by **Transpower**) of the **non-transmission solution**-
 - (i) already provided; and
 - (ii) remaining to be provided.

H11H5 Current and forecast expenditure

- (1) **operating expenditure** incurred, in aggregate;
- (2) **operating expenditure** incremental to the operating expenditure allowance specified in the **IPP determination** proposed to be classified as **recoverable costs** (in aggregate and broken down by type);
- (3) capital costs incurred proposed to be classified as **recoverable costs** (in aggregate and broken down by type);
- (4) total costs incurred proposed to be classified as **recoverable costs**;
- (5) forecast remaining costs proposed to be classified as **recoverable costs**;
- (6) difference between proposed amendment to **maximum recoverable costs** and **maximum recoverable costs**.

H12H6 Reasons for making the application

- (1) reason for applying, including-
 - (a) description of key factors leading to the application;
 - (b) explanation as to the extent to which each key factor is within **Transpower's** control; and
 - (c) explanation as to the extent to which each key factor was reasonably foreseeable by **Transpower** before the relevant **major capex proposal** was approved;

- (2) description of the implications of the proposed amendment on the relevant **approved major capex project outputs**;
- (3) where an application for amendment to the **approved major capex project outputs** is being made concurrently, explanation as to how the proposed amendments relate to each other in light of the information to which clause (2) applies;
- (4) where no application for amendment to the **approved major capex project outputs** is being made concurrently, explanation as to why those **approved major capex project outputs** will remain appropriate were the proposed adjustment made in light of the information to which clause (2) applies;
- (5) statement as to whether the **net electricity market benefit** of the **non-transmission solution** is materially lower at the time of the application than when the relevant **major capex proposal** was approved and if so, current quantum of its **net electricity market benefit**; and
- (6) explanation as to why making the proposed amendment would promote the long-term benefit of **consumers**, taking into account-
 - (a) any costs that are sunk;
 - (b) the context in which the **major capex proposal** was made; and
 - (c) the context in which any subsequent amendments to the approval were made by the **Commission**.

~~DIVISION 3~~DIVISION 2 AMENDMENT TO APPROVED MAJOR CAPEX PROJECT OUTPUTS

H13H7 Information to be provided

For the purpose of clause 7.4.2(3)(b), the amendment application must include the information listed or described in this division.

H14H8 Project identification and specifications

identification of relevant **major capex project** and its **approved major capex project outputs**;

H15H9 Amendment sought

- (1) proposed amendments to the **approved major capex project outputs**;
- (2) explanation as to how each proposed amendment was arrived at; and

- (3) description of the extent to which each proposed amendment reflects a change to the-
- (a) assets to be **commissioned**;
 - (b) functional capability of the **grid**;
 - (c) quantum of **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services** that are likely to be achieved as a result of undertaking the **project**; and
 - (d) in the case of a **non-transmission solution**, description of the extent to which each proposed amendment reflects a change to any relevant service provided by a third party;

H16H10 Progress of project

description of progress made on the **major capex project**, including as applicable details of-

- (a) planning processes undertaken;
- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) construction and labour contracts and arrangements made;
- (d) construction completed; and
- (e) testing undertaken;

H17H11 Current and forecast expenditure

- (1) in the case of a **transmission investment**:
 - (a) **major capex** incurred; and
 - (b) forecast remaining **major capex**;
- (2) in the case of a **non-transmission solution**:
 - (a) total costs incurred proposed to be classified as **recoverable costs**;
 - (b) total costs incurred in relation to assets to be **commissioned** in relation to the **non-transmission solution**;
 - (c) forecast remaining costs proposed to be classified as **recoverable costs**; and
 - (d) forecast remaining costs incurred in relation to assets to be **commissioned** in relation to the **non-transmission solution**.

H18H12 Reasons for making the application

- (1) reason for applying, including-
 - (a) description of key factors leading to the application;
 - (b) commentary on the extent to which each key factor is within **Transpower's** control and actions taken to mitigate it; and
 - (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before approval of the **major capex proposal**;
- (2) description and, where relevant, quantum of any current **key assumptions** different to those relied upon in applying the **investment test** in the **major capex proposal**;
- (3) description of the outcome of applying the **investment test** as it was applied in the **major capex proposal** modified by the proposed amendments and **key assumptions** described in subclause (2), including all relevant calculations and justifications for any exercises of judgment;
- (4) explanation as to why making the proposed amendment would promote the long-term benefit of **consumers** taking account of-
 - (a) the outcome referred to in subclause (3);
 - (b) any costs that are sunk;
 - (c) the context in which the **major capex proposal** was made; and
 - (d) the context in which any subsequent amendments to the approval were made by the **Commission**;
- (5) where no application for amendment to the ~~major capex allowance or maximum recoverable costs, as the case may be,~~ is being made concurrently, an explanation as to why ~~that allowance or~~ those costs will remain appropriate were the proposed amendment to **approved major capex project outputs** made; and
- (5)(6) an explanation as to the appropriate major capex allowance if the proposed amendment to the approved major capex project outputs were made.

~~DIVISION 4~~DIVISION 3 AMENDMENT TO APPROVAL EXPIRY DATE

H19H13 Information to be provided

For the purpose of clause 7.4.2(3)(c), the amendment application must include the information listed or described in this division.

H20H14 Project identification and specifications

identification of relevant **major capex project** and-

- (a) its **approval expiry date**; and
- (b) its **major capex allowance** or **maximum recoverable costs**;

H21H15 Amendment sought

proposed new **approval expiry date**;

H22H16 Progress of project

- (1) where a **major capex allowance** is applicable, the **commissioning date assumption**;
- (2) where **maximum recoverable costs** are applicable, the **completion date assumption**; and
- (3) description of progress made on the **major capex project**, including details of-
 - (a) planning processes undertaken;
 - (b) details of resource management consents, other regulatory consents, and property rights and access rights obtained;
 - (c) details of resource management consents, other regulatory consents, and property rights and access rights still in progress;
 - (d) details of other consent, property or access negotiations in progress;
 - (e) any request for information or request for services issued to third parties;
 - (f) construction and labour contracts and arrangements made;
 - (g) construction completed; and
 - (h) testing undertaken;

H23H17 Current and forecast expenditure

- (1) **major capex** incurred;
- (2) forecast remaining **major capex**; and
- (3) amount of any **major capex** in the forecast remaining **major capex** in excess of the **major capex allowance** or **maximum recoverable costs**, as the case may be.

H24H18 Reasons for making the application

- (1) reason for making the application, including-
 - (a) a description of the key factors leading to the application;
 - (b) commentary on the extent to which each key factor is within **Transpower's** control; and
 - (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before the approval of the relevant **major capex proposal**;
- (2) description of the likely implications of the amendment, including the effect over the **calculation period** on other approved **major capex projects** where, in the case of a **major capex project** that is a-
 - (a) **transmission investment**, the last asset to be delivered by the **project** has not yet been **commissioned**; or
 - (b) **non-transmission solution**, has not yet achieved **completion**.
- (3) statement as to whether the **net electricity market benefit** of the **major capex project** is materially lower at the time of the amendment application than when the relevant **major capex proposal** was approved and if so, current quantum of its **net electricity market benefit**; and
- (4) explanation as to why making the proposed amendment would promote the long-term benefit of **consumers**, taking into account:
 - (a) any costs that are sunk;
 - (b) the context in which the **major capex proposal** was made; and
 - (c) the context in which any subsequent amendments to the approval were made by the **Commission**.

~~DIVISION 5~~DIVISION 4 SUNK COSTS APPLICATIONS

H25H19 Information to be provided

For the purpose of clause (1), the application for the **major capex sunk costs adjustment** must include the information listed or described in this division.

H26H20 Project identification and specifications

identification of relevant **major capex project**;

H27H21 Sunk costs approvals sought

quantum of **major capex** that is sought to be recovered as sunk costs;

H28H22 Current and forecast expenditure

information on current and forecast expenditure, including-

- (a) **major capex** incurred;
- (b) forecast remaining **major capex** to be incurred;
- (c) calculations showing how the amount in clause H21 was calculated;
- (d) assumptions made in calculating the amount in clause H21; and
- (e) evidence in support of the **major capex** incurred, forecast remaining **capital expenditure** and the amount in clause H21, including, where applicable, **documents** and correspondence from manufacturers, suppliers, contractors and other relevant parties.

H29H23 Progress of project

description of progress made on the **major capex project**, including details of-

- (a) planning processes undertaken;
- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) construction and labour contracts and arrangements made;
- (d) construction completed;
- (e) testing undertaken; and
- (f) **major capex project outputs** delivered.

H30H24 Reasons for making the application

- (1) reason for applying, including-
 - (a) description of key factors leading to the application, including the date of **Transpower** became aware of each of them;
 - (b) commentary on the extent to which each key factor was within **Transpower's** control and actions taken to mitigate its adverse effects; and

- (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before approval of the **major capex proposal**; and
- (2) explanation as to why making the **major capex sunk costs adjustment** would promote the long-term benefit of **consumers**;

SCHEDULE I MAJOR CAPEX CONSULTATION REQUIREMENTS

cl. 8.1.3(1), 8.1.3(2)

DIVISION 1 CONSULTATION ON OPTIONS

11 What Transpower must consult on

- (1) **Transpower** must, except where **Commission** is satisfied that the inclusion of any matter outlined below would be unreasonable in the circumstances as provided for by clause 8.1.3(2)(b), consult on-
 - (a) its **investment need**;
 - (b) each **demand and generation market development scenario** variation ~~or MED scenario variation, as the case may be~~;
 - (c) **key assumptions**;
 - (d) a long list of options to meet each **investment need**; and
 - (e) a short list of **investment options** to meet each **investment need**.
- (2) When consulting on the matters referred to in subclause (1)(e) that consultation must occur after any consultation on the matters referred to in the other paragraphs of that subclause has taken place.
- (3) For the avoidance of doubt, the matters referred to in subclauses (1)(a) to (1)(d) may be consulted upon together or separately.

12 Long list consultation requirements

- (1) Options that must be contained on the long list for consultation purposes must be solutions for meeting the **investment need**.
- (2) When consulting on a long list of options, in its consultation **document**, **Transpower** must-
 - (a) provide a description of the relevant **investment need** that includes appropriate references to other **documents** referring to that need or a similar need, such as the most recent **integrated transmission plan** and any prior consultation document on the **investment need**;
 - (b) provide information on the **key assumptions** and **demand and generation scenarios** it is developing for the purpose of applying the **investment test**;

- (c) specify any non-standard values or amounts, as the case may be, of the **calculation period** or **value of expected unserved energy** that it may use for the purpose of the **investment test**;
- (d) specify any non-standard **discount rate** that it may use for the purpose of the **investment test**; and
- (e) in respect of each option-
 - (i) specify whether it is a **transmission investment** or **non-transmission solution**;
 - (ii) where it is a **non-transmission solution**, describe its type, where possible by reference to the things listed in the definition of non-transmission solution; ~~and~~
 - (iii) describe its features, by reference to at least type, location, and anticipated duration of the works required;
 - (iv) identify if the option may be staged and if so, describe its potential stages; and
 - ~~(iii)~~(v) consult on the proposed staging of the options identified in (e)(iv).

13 Short list consultation requirements

- (1) When consulting on a short list of **investment options**, in its consultation **document**, **Transpower** must, except where **Commission** is satisfied that the inclusion of any matter outlined below would be unreasonable in the circumstances as provided for by clause 8.1.3(2)(b)-
 - (a) describe the **demand and generation scenarios** it intends using for the purpose of the **investment test** and the weightings of those scenarios; and
 - (b) provide information on the relevant **key assumptions**, including-
 - (i) cost of expected unserved energy per megawatt hour used to calculate the cost of involuntary demand curtailment borne by end users of electricity; and
 - (ii) any other variables material to application of the **investment test**.
- (2) In respect of each **investment option** on its short list, **Transpower** must, as a minimum-
 - (a) describe its features by reference to-
 - (i) the definition of investment option; and

- (ii) at least its type, location, and anticipated duration of the works required.
 - (b) address any submissions raised in respect of each option described during the previous consultation;
 - (c) describe the likely **electricity market benefit or cost elements** and **project costs**;
 - (d) specify which **electricity market benefit or cost elements** are treated as unquantified;
 - (e) specify an estimate of the quantum of each likely **electricity market benefit or cost element** and **project cost** that is quantified; and
 - (f) specify the methodology or methodologies used to quantify **electricity market benefit or cost elements** and **project costs**;
- (3) In respect of the **investment options** on its short list, **Transpower** must-
- (a) demonstrate that they are appropriate in number and technology with respect to the **investment need** in question;
 - (b) describe the outcome of a preliminary application of the **investment test** based on the information required to be provided by subclauses (1) and (2);
 - (c) where the option **Transpower** considers satisfies the **investment test** is not the option with the highest **net electricity market benefit**, explain with reasons how the option satisfying the **investment test** was selected; and
 - (d) in respect of its application of the **investment test**-
 - (i) describe the nature and application of the qualitative assessment used to take into account the contribution of any unquantified **electricity market benefit or cost elements**;
 - (ii) explain the approach taken to **sensitivity analysis**; and
 - (iii) specify any non-standard values or amounts, as the case may be, of the **calculation period, discount rate** or **value of expected unserved energy** used, and why those non-standard values or amounts are appropriate.

14 **Key assumptions**

For the purpose of clause 13, the **key assumptions** consulted upon must include the following things:

- (a) nature of the qualitative assessment used to take into account the contribution of associated unquantified **electricity market benefit or cost elements**;
- (b) cost of expected unserved energy per megawatt hour used to calculate the cost of involuntary demand curtailment borne by end users of electricity;
- (c) **discount rate** used; and
- (d) **calculation period** used.

DIVISION 2 NON-TRANSMISSION SOLUTIONS

15 Approach to consideration of non-transmission solutions to meet investment need

- (1) The approach to enabling consideration of whether one or more **non-transmission solution** may meet an **investment need** must take into account-
 - (a) the size and nature of the **investment need**; and
 - (b) the likelihood that **non-transmission solutions** could reasonably meet it.
- (2) The approach must enable the-
 - (a) reasonable information needs of interested persons, including potential proponents of **non-transmission solutions** to be met; and
 - (b) views of interested persons, including potential proponents of **non-transmission solutions** to be expressed and ~~taken into account~~ considered.
- (3) As a minimum, the approach must include the requirements that-
 - (a) when consulting on an investment need, Transpower must in addition to the consultation requirements in clause 12 invite interested persons to provide views or information on or relevant to possible non transmission solutions to meet that need;
 - (i) provide sufficient information to enable interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions; and
 - (ii) invite interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions;
 - (b) Transpower need not seek proposals for non-transmission solutions from interested persons prior to the initial consultations on when developing its long list of options to consult on, but Transpower must take those views and information on or relevant to possible non-transmission solutions into account to the extent they have been provided prior to or during the period

Commented [TP109]: We suggest this 'invitation' approach is more efficient for stakeholders as it provides an opportunity for them to signal interest and capability, but not have to undertake a full response as a proposal.

We suggest retaining the use of the existing 'request for information' approach to test the market for NTS.

Commented [TP110]: We consider specifying what we want (which at the point of our investigation may be difficult to specify accurately) could require stakeholders to respond to a "request for proposal", a more significant and costly undertaking for stakeholders, and potentially risky sunk cost if our specification is not accurate.

in which the long list is developed, including pro-actively engaging with the parties providing them, where appropriate; and

- (c) when consulting on its long list of options, Transpower must in addition to the consultation requirements in clause I2-
 - (i) provide sufficient information to enable interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions; and
 - (ii) invite interested persons, including potential proponents of non-transmission solutions to propose non-transmission solutions; and
- ~~(a)~~(d) when consulting on a developing the short list of investment options that includes a non-transmission solution, Transpower must invite proponents of non-transmission solutions interested persons to provide more comprehensive proposals in respect of their that type of non-transmission solutions.
- (4) The invitation described in subclauses (3)(c) and 3(d) must grant interested persons and proponents of non-transmission solutions 6 weeks to respond, subject to subclause (5).
- (5) For the purpose of subclause (4), the approach may specify a longer or shorter period where appropriate in light of the factors specified in subclause (1).

DIVISION 3 MAJOR CAPEX PROJECTS (STAGED)

I6 Approach to consulting on major capex project (staged)

- (1) The consultation requirements for the commencement of a major capex project (staged) shall be as set out in subclauses I1 to I5.
- (2) The consultation requirements for all subsequent stages shall include, in relation to the remaining part of the major capex project (staged) consultation on the following matters:
 - (a) updates on the investment need;
 - (b) updated relevant demand and generation scenarios and updates on demand and generation scenarios variations;
 - (c) updates in key assumptions;
 - (d) short list of investment options to meet each investment need;
 - (e) invitation for proposals on non-transmission solutions;

Commented [TP111]: Suggest 'update on options', and suggest inserting 'or manage' after "meet" to account for expanded role of NTS.

- (f) the **investment test** if there is material difference between the method or parameters of the **investment test** between stage one and the subsequent stage; and
 - (g) long list of investment options if required by the **Commission**.
- (3) The extent of consultation by **Transpower** for the purposes of I6(2) shall be commensurate with the materiality of changes identified in I6(2) but shall contain sufficient information to enable interested and affected parties to engage on the remaining part of the **major capex project (staged)**.

Commented [TP112]: Suggest remove clause, because of suggestion at (d).