



ISBN no. 978-1-869455-83-5
Project no. 14.09/16274

Public version

Attachment B: Capex IM decisions, determinations and reasons papers

Transpower capex input methodology review - Proposed focus areas for the capex IM review

Date of publication: 15 May 2017

Attachment B: Capex IM decisions, determinations and reasons papers

1. This Attachment B includes:
 - 1.1 a list of all IM determinations and reasons papers published by the Commission in respect of the capex IM (Table B1);
 - 1.2 an outline of all of our decisions in the capex IM reasons paper and listed projects reasons paper (Table B2); and
 - 1.3 an outline the decisions we have made in implementing the capex IM since 2012 (Table B3).

Table B1: IM determinations and reasons papers published by the Commission in respect of the capex IM

IM determination	Associated reasons paper	Brief description
<u>Transpower Capital Expenditure Input Methodology Determination 2012 [2012] NZCC 2 (31 January 2012)</u>	<u>Transpower Capital Expenditure Input Methodology: Reasons Paper (31 January 2012)</u>	Original capex IM determination (the “principal determination”).
Error correction: repaired reference links in clause D1(2)(b) (2 February 2012)	N/A	Re-publication of the capex IM determination including repaired reference links in clause D1(2)(b).
<u>Transpower Input Methodologies Amendments Determination 2014 [2014] NZCC 22 (28 August 2014)</u>	<u>Amendments to input methodologies for Transpower 2014: Reasons paper (28 August 2014)</u>	Amendments to address issues relevant to the determination of Transpower’s IPP that apply from 1 April 2015.
<u>Transpower Input Methodologies Amendments Determination 2014 (No. 2) [2014] NZCC 34 (27 November 2014)</u>	<u>Amendments to input methodologies for Transpower to provide a listed project mechanism: Reasons paper (27 November 2014)</u>	Amends the capex IM determination and, Transpower IM determination to provide a listed project mechanism in respect of electricity lines services supplied by Transpower.
<u>Transpower Input Methodologies Amendment Determination 2015 [2015] NZCC 3 (5 February 2015)</u>	Explanatory note provided in the determination.	This amendment corrects two errors identified post-publication in amendments to the Transpower Input Methodologies Amendments Determination 2014 [2014] NZCC 22 and in the Transpower Input Methodologies Amendments Determination 2014 (No.2) [2014] NZCC 34.

Table B2: Decisions in the capex IM reasons paper and listed project reasons paper

Commission decision	Reference in capex IM determination ¹	References in Transpower RCP2 IPP determination ² , Transpower IM determination ³ and ID determination ⁴	Reference in capex IM reasons paper ⁵ and in listed projects (LP) reasons paper ⁶
Interaction with the IPP			
All capital expenditure adjustments are to be applied as post-tax entries to the appropriate EV account		IPP clause 7, definition of 'EV account entry'	Chapter 2 paragraph 2.3.7
Calculations relating to adjustments for base capex and grid outputs	Schedule B Division 1	IPP clause 23.1.3(i), (j) and (k)	Chapter 2 Section 2.3
Calculations relating to major capex adjustments	Schedule B Division 2	IPP clause 23.1.3(l), (m) and (n)	Chapter 2 Section 2.3
Major capex adjustments are EV account entries		IPP clause 7 definition of 'EV account entry'	Chapter 2 Section 2.3
Transpower must calculate EV adjustments that attribute the balances of the EV accounts to the update of the forecast MAR		IPP clause 24	Chapter 2 Section 2.3

¹ Commerce Commission, "Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2, consolidating all amendments to 5 February 2015".

² Commerce Commission, "Transpower Individual Price-Quality Path Determination [2014] NZCC 35, consolidating all amendments as of 4 November 2016".

³ Commerce Commission, "Transpower Input Methodologies Determination 2010 [2012] NZCC 17, consolidating all amendments to 28 February 2017".

⁴ Commerce Commission, "Transpower Information Disclosure Determination [2014] NZCC 5".

⁵ Commerce Commission, "Transpower Capital Expenditure Input Methodology, Reasons Paper", (31 January 2012).

⁶ Commerce Commission, "Amendments to input methodologies for Transpower to provide a listed project mechanism - Reasons paper", (27 November 2014).

The Commission has discretion to spread an EV adjustment over a number of years where the EV adjustment would result in an unacceptable price shock		IPP clause 25	Chapter 2 paragraph 2.3.8
Capex IM – core framework			
Capex IM applies to capital expenditure related to the provision of regulated services intended to enter Transpower's RAB	Clauses 1.1.2, 1.1.5		Chapter 2 Section 2.4
Capital expenditure definition under the capex IM includes non-transmission solutions	Clause 1.1.5		Chapter 2 Section 2.4
The capex IM does not apply to capital expenditure relating to new investment contracts (NICs)	Clause 1.1.5; Schedule D, clause D2		Chapter 2 paragraph 2.4.14
Capital expenditure requiring approval is classified as either base capex or major capex	Clause 1.1.5		Chapter 2 Section 2.4
Integrated transmission plan for capital expenditure expected to be incurred over the next ten years to be submitted by Transpower and updated annually	Clauses 2.1.1, 3.1.1, 7.2.1; Schedule E, clause E1		Chapter 2 Section 2.4
Base capex allowance to be approved for each year of the regulatory period	Clause 2.2.2	IPP clause 23.2.3	Chapter 2 Section 2.4
Major capex to be assessed and approved by applying the capex IM	Part 3 (subpart 3), 6 and 8		Chapter 2 Section 2.4
No substitution between major capex projects	Clause 1.1.5		Chapter 2 Section 2.4
Incentive regime to apply to base capex	Clause 3.2.3		Chapter 2 Section 2.4

Incentive regime to apply to major capex	Clauses 3.3.5 to 3.3.7; Clause 4.1.1		Chapter 2 Section 2.4
SOSPA capital expenditure not assessed under the capex IM	Clause 1.1.5		Chapter 2 paragraph 2.4.14
Categories and definitions for capital expenditure			
Capital expenditure requiring approval is classified as base capex or major capex	Clause 1.1.5		Chapter 2 Section 2.5
Adjustment made to the base capex allowances for a project that subsequently becomes a major capex project	Schedule B, clause B1(1), term 'g'		Chapter 2 paragraphs 2.6.1, 2.6.2
Situations in which capital expenditure may be recategorised			
Base capex proposal identifies the projects that are forecast to be undertaken during the next regulatory period	Schedule F, clauses F2(1)		Chapter 2 Section 2.6
Commission evaluates the projects in the identified programme and approves the base capex allowance	Schedule A, clause A2, and clause 2.2.2(1)(a)		Chapter 2 Section 2.6
Transpower to report annual information on approved base capex projects in accordance with ID Determinations or s 53ZD notice issued by the Commission	Schedule B, clause B1(1), term 'g'		Chapter 2 Section 2.6

Base capex allowance to be adjusted in calculating the base capex expenditure adjustment when Transpower applies for a previously approved base capex project to become a major capex project	Schedule B, clause B1(1)		Chapter 2 Section 2.6
Integrated transmission plan			
Requirement to submit an integrated transmission plan	Clause 2.1.1(1)		Chapter 2 Section 2.7
Requirement to make each integrated transmission plan publicly available	Clause 2.1.1(2)		Chapter 2 Section 2.7
Required to cover a period of at least ten disclosure years	Schedule E, clause E1		Chapter 2 Section 2.7
Information to be included in each integrated transmission plan, and supporting documents to be provided	Schedule E, clauses E2 and E3		Chapter 2 Section 2.7
Annual requirement to update the integrated transmission plan	Clause 3.1.1		Chapter 2 Section 2.7
Classification of transmission alternatives			
Expenditure on transmission alternatives may comprise operating expenditure, base capex or non-transmission solutions	Clause 1.1.5		Chapter 2 Section 2.8
Operating expenditure is approved under the IPP determination			Chapter 2 Section 2.8
Base capex proposals are approved under the capex IM	Clause 2.2.2		Chapter 2 Section 2.8
Non-transmission solutions are categorised as major capex and are approved as major capex proposals under the capex IM	Clause 3.3.2		Chapter 2 Section 2.8

Definition of non-transmission solutions			
Transmission alternative that avoids or defers expenditure that be major capex and would meet the investment test is defined to be a non-transmission solution	Clause 1.1.5		Chapter 2 paragraphs 2.8.16 to 2.8.20
For approval purposes, a non-transmission solution is treated under the capex IM as if it is a capital expenditure amount	Clause 1.1.5		Chapter 2 paragraphs 2.8.16 to 2.8.20
Approval and cost recovery of non-transmission solutions			
The asset related-portion portion of a non-transmission solution is approved and recovered by Transpower as a transmission investment, subject to a major capex allowance and a commissioning date assumption	Clauses 3.3.3(5)(a), 3.3.3(5)(g)		Chapter 2 paragraphs 2.8.21 to 2.8.25
The non-asset related expenditure portion of a non-transmission solution is subject to maximum recoverable costs and a completion date assumption	Clauses 3.3.3(5)(b), 3.3.3(5)(c), 3.3.3(5)(h)		Chapter 2 paragraphs 2.8.21 to 2.8.25
The non-asset related expenditure portion of a non-transmission solution is recoverable as a recoverable cost under a defined recovery scheme that attributes the maximum recoverable costs to disclosure years, including by way of formulae	Clause 1.1.5		Chapter 2 paragraphs 2.8.21 to 2.8.25
Incremental rolling incentive scheme (IRIS)			
The IRIS is symmetrical from RCP2		IM Part 3 Subpart 6 Section 1	Chapter 2 Section 2.9

Base capex expenditure adjustment			
Commission requirement to calculate the expenditure adjustment annually	Clause 3.2.1(1)(a)		Chapter 3 Section 3.3
Incentive adjustment information requirements	Clauses 3.2.3(2), 3.2.3(3)		Chapter 3 Section 3.3
Formula for calculating the expenditure adjustment	Schedule B, clause B1		Chapter 3 Section 3.3
Commission publishes the expenditure adjustment decision	Clause 3.2.3(5)		Chapter 3 Section 3.3
Transpower records the EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 3 Section 3.3
Grid output adjustment – development of output measures			
Transpower base capex proposal to include proposed grid output measures	Schedule F, clauses F11 to F13		Chapter 3 paragraphs 3.4.6 to 3.4.10
Grid output adjustment - framework			
Commission requirement to calculate the output adjustment annually	Clause 3.2.3(1)(c)		Chapter 3 paragraphs 3.4.11 to 3.4.16
Output adjustment information requirements	Clauses 3.2.3(2), 3.2.3(3)		Chapter 3 paragraphs 3.4.11 to 3.4.16

Formula for calculating an output adjustment for each grid output measure and accumulation of results into overall output adjustment	Schedule B, clause B3		Chapter 3 paragraphs 3.4.11 to 3.4.16
Commission publishes output adjustment decision	Clause 3.2.3(5)		Chapter 3 paragraphs 3.4.11 to 3.4.16
Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 3 paragraphs 3.4.11 to 3.4.16
Grid output adjustment - process			
Transpower information requirements and base capex proposal	Clauses 2.2.1, 2.2.2(3)		Chapter 3 paragraphs 3.4.17 to 3.4.23
Commission consultation requirements	Clause 8.1.1		Chapter 3 paragraphs 3.4.17 to 3.4.23
Commission consideration of grid output measures to apply	Schedule A, clause A4		Chapter 3 paragraphs 3.4.17 to 3.4.23
Commission consideration of revenue-linked output measures to apply	Schedule A, clause A5		Chapter 3 paragraphs 3.4.17 to 3.4.23

Commission consideration for caps, collars, targets, incentive rates to apply	Schedule A, clause A6		Chapter 3 paragraphs 3.4.17 to 3.4.23
Commission determination of grid output measures, caps, collars, incentive rate, targets and incentive rate	Clauses 2.2.2(1)(c) and 2.2.1(1)(d)		Chapter 3 paragraphs 3.4.17 to 3.4.23
Commission publication of decisions	Clause 2.2.2(5)		Chapter 3 paragraphs 3.4.17 to 3.4.23
Base capex policies and processes adjustment			
Transpower to undertake cost-benefit analysis and consultation for base capex projects or programmes exceeding \$20 million	Clauses 3.2.1, 8.1.2		Chapter 3 Section 3.5
Transpower requirements to act in accordance with each policy specified in its base capex proposal	Clause 3.2.2		Chapter 3 Section 3.5
Commission requirement to calculate the policies and processes adjustment annually	Clause 3.2.3(1)(b)		Chapter 3 Section 3.5
Policies and processes adjustment information requirements	Clauses 3.2.3(2), 3.2.3(3)		Chapter 3 Section 3.5
Formula for calculating the policies and processes adjustment	Schedule B, clause B2, subject to clause 3.2.3(4)		Chapter 3 Section 3.5
Commission publishes policies and processes adjustment decision	Clause 3.2.3(5)		Chapter 3 Section 3.5

Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 3 Section 3.5
Base capex incentive rates			
Set rate for base capex expenditure adjustment – RCP2	Clause 2.2.2(1)(b)		Chapter 3 Section 3.6
Set rates for grid output adjustment – RCP2	Clause 2.2.2(1)(d)(iii)		Chapter 3 Section 3.6
Set rate for base capex policies and processes adjustment – RCP2	Clause 2.2.2(1)(b)		Chapter 3 Section 3.6
Major capex efficiency adjustment			
Commission determines major capex incentive rate	Clause 2.3.1		Chapter 4 Section 4.2
Major capex efficiency adjustment applications	Clause 4.1.1(1)		Chapter 4 Section 4.2
Timing for major capex efficiency adjustment applications	Clause 4.1.1(1)		Chapter 4 Section 4.2
Incentive adjustment information requirements – set out in information disclosure determination	Clauses 4.1.1(2)(a), 4.1.1(3)		Chapter 4 Section 4.2
Evaluation criteria for assessing major capex efficiencies for calculating incentive adjustment applications	Clause 6.1.1(7)		Chapter 4 Section 4.2
Formula for calculating incentive adjustment	Schedule B, clause B7		Chapter 4 Section 4.2
Commission's decision by the end of November	Clause 4.1.1(1)		Chapter 4 Section 4.2
Commission publishes its decision	Clause 4.1.1(4)		Chapter 4 Section 4.2

Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 4 Section 4.2
Major capex project output adjustment - framework			
Commission determines incentive rate	Clause 2.3.1		Chapter 4 paragraphs 4.3.1 to 4.3.8
Output adjustment information requirements	Clauses 3.3.6(2), 3.3.7(3), 3.3.7(5)		Chapter 4 paragraphs 4.3.1 to 4.3.8
Commission calculation of output adjustment annually	Clause 3.3.7(2)		Chapter 4 paragraphs 4.3.1 to 4.3.8
Formula for calculating output adjustment	Schedule B, clause B5		Chapter 4 paragraphs 4.3.1 to 4.3.8
The Commission publishes its decision	Clause 3.3.7(6)		Chapter 4 paragraphs 4.3.1 to 4.3.8
Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 4 paragraphs 4.3.1 to 4.3.8
Major capex project output adjustment - process			
Transpower specification of major capex project outputs in each major capex proposal	Schedule G, clause G6		Chapter 4 paragraphs 4.3.9 to 4.3.15

Transpower to report on the major capex projects outputs achieved for commissioned projects	Clause 3.3.6(2)		Chapter 4 paragraphs 4.3.9 to 4.3.15
Commission decision on whether the approved major capex outputs were met	Clause 3.3.6(1)		Chapter 4 paragraphs 4.3.9 to 4.3.15
Commission publishes its decision on whether the approved major capex project outputs were met	Clause 3.3.6(3)		Chapter 4 paragraphs 4.3.9 to 4.3.15
Major capex project output adjustment – development of output measures			
Transpower to propose major capex project outputs for each investment option in a major capex proposal	Schedule G, clause G6		Chapter 4 paragraphs 4.3.16 to 4.3.21
Major capex project output measures to reflect nature and quantum of a transmission investment	Schedule G, clause G6(3)(b)(i)		Chapter 4 paragraph 4.3.17
Major capex project output measures for a non-transmission solution to reflect the nature and quantum of services provided to Transpower	Schedule G, clause G6(3)(b)(iv)		Chapter 4 paragraph 4.3.18
Major capex project output measures to reflect the change in functional capability of the grid from the transmission investment or non-transmission solution	Schedule G, clause G6(3)(b)(ii)		Chapter 4 paragraphs 4.3.17, 4.3.18

Major capex project measures must be consistent with key assumptions in the major capex proposal	Schedule G, clause G6(3)(b)(iii)		Chapter 4 paragraphs 4.3.16 to 4.3.21
Major capex project output measures must be consistent with costs and benefits taken into account in the investment test	Schedule G, clause G6(3)(a)		Chapter 4 paragraphs 4.3.16 to 4.3.21
Major capex overspend adjustment			
Major capex overspend adjustment information requirements	Clauses 3.3.7(3), 3.3.7(5)		Chapter 4 Section 4.4
Commission calculation of major capex overspend adjustment annually	Clause 3.3.7(1)		Chapter 4 Section 4.4
Formula for calculating major capex overspend adjustment	Schedule B, clause B4		Chapter 4 Section 4.4
Commission publishes its decision	Clause 3.3.7(6)		Chapter 4 Section 4.4
Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 4 paragraph 4.4.3
Sunk costs adjustment			
Transpower application for sunk costs adjustment	Clause 3.3.5		Chapter 4 Section 4.5
The timing requirements that limits sunk cost applications to no later than six weeks after the approval expiry date of a project, subject to Commission approval for a time extension	Clauses 7.4.3(1)(a), 7.4.3(2)		Chapter 4 paragraph 4.5.2

Information requirements for sunk costs applications	Clauses 3.3.5(3), 7.4.3(1) and Schedule H, clauses H25 to H30		Chapter 4 Section 4.5
Commission criteria for assessing a sunk costs adjustment application	Clause 6.1.1(6)		Chapter 4 Section 4.5
Formula for calculating sunk costs adjustment	Schedule B, clause B6		Chapter 4 Section 4.5
Commission publishes its decision	Clause 3.3.5(5)		Chapter 4 Section 4.5
Transpower records EV account entry		IPP clause 7, definition of 'EV account entry'	Chapter 4 paragraphs 4.5.3
Major capex incentive rates			
Set rate for major capex overspend adjustment	Schedule B, clauses B4(1) and B4(3)		Chapter 4 paragraph 4.6.3
Set rate for major capex sunk costs adjustment	Schedule B, clause B6		Chapter 4 paragraph 4.6.4
Set rates for major capex project output adjustment and major capex efficiency adjustment – RCP1	Clause 2.3.1(1)		Chapter 4 Table 4.1
Set rate for major capex project output adjustment and major capex efficiency adjustment prior to regulatory period – RCP2	Clause 2.3.1(2)		Chapter 4 Table 4.1
Publish determination of major capex project output adjustment and major capex efficiency adjustment rates – RCP2.	Clause 2.3.1(3)		Chapter 4 Table 4.1

Process for agreeing the quantitative information requirements			
Commission and Transpower to commence pre-proposal process on the first working day of November, one year in advance of the December when the base capex proposal is due for submission.	Clause 2.2.1(1)		Chapter 5 Section 5.2
Commission and Transpower use reasonable endeavours to agree regulatory templates by the last working day of February prior to the December when the base capex proposal is due for submission.	Clause 2.2.1(1)(a)		Chapter 5 Section 5.2
Commission and Transpower must use reasonable endeavours to agree criteria to identify the projects and programmes for review, by the last working day of February prior to the December when the base capex proposal is due for submission.	Clause 2.2.1(1)(b)		Chapter 5 Section 5.2
For the purpose of agreeing criteria, identified programmes are to be defined by reference to specified categories and limitations.	Schedule F, clause F2		Chapter 5 Section 5.2
Where no agreement is reached on regulatory templates or criteria for identifying projects or programmes, the Commission may specify those matters after taking into account Transpower's views.	Clause 2.2.1(2)		Chapter 5 Section 5.2
Commission to notify Transpower of matters that are specified where there is no agreement by the last working day of March prior to the December when the base capex proposal is due for submission.	Clause 2.2.1(2)		Chapter 5 Section 5.2

Timing and content requirements for each base capex proposal			
A base capex proposal must be submitted by Transpower to the Commission by the first working day of December, 16 months prior to commencement of the regulatory period	Clause 2.2.1(3)		Chapter 5 paragraph 5.3.1
Base capex proposal to be in the required document formats and must identify confidential information	Clauses 7.1.1, 7.1.2		Chapter 5 paragraph 5.3.2
Base capex proposal to contain completed regulatory templates	Clauses 7.3.1(1)(a), 7.3.1(2)		Chapter 5 paragraph 5.3.2
Base capex proposal must comply with the qualitative information requirements of the Capex IM Determination	Clause 7.3.1(1)(b) and Schedule F		Chapter 5 paragraph 5.3.2
Base capex proposal must include certifications required by the capex IM	Clauses 7.3.1(1)(c), 9.1.1		Chapter 5 paragraph 5.3.2
Omission of required information must be explained, and the Commission may accept as complaint	Clause 7.1.3		
Qualitative information requirements			
Qualitative information to be included in the base capex proposal is specified in the capex IM	Schedule F		Chapter 5 Section 5.4
Commission's base capex determination and processes requirements			
Commission may request reasonable further information if required for its decision	Clause 2.2.2(3)		Chapter 5 paragraph 5.5.1

Commission may only make its decisions after consulting interested persons	Clause 2.2.2(4)(a)		Chapter 5 Section 5.5
Commission may only make its decision after evaluation of the base capex proposal and any additional information	Clause 2.2.2(4)(b) and Part 6		Chapter 5 Section 5.5
Commission to make base capex allowance decision no later than the last working day of August prior to the commencement of the regulatory period	Clause 2.2.2(1)		Chapter 5 paragraph 5.5.2
Commission to determine base capex allowances	Clause 2.2.2(1)(a)		Chapter 5 paragraph 5.5.2(a)
Commission to determine base capex incentive rate	Clause 2.2.2(1)(b)		Chapter 5 paragraph 5.5.2(b)
Commission to determine revenue-linked grid output measures	Clauses 2.2.2(1)(c)(i), 2.2.2(1)(c)(ii) and Schedule A, clauses A4, A5		Chapter 5 paragraphs 5.5.2(c)(i) to 5.5.2(c)(iv)
Commission may determine, at Transpower's request, other revenue-linked grid output measures	Clauses 2.2.2(1)(c)(iii) to 2.2.2(1)(c)(v) and Schedule A, clauses A4, A5		Chapter 5 paragraph 5.5.2(c)(v)
Commission to determine for each revenue-linked grid output measure a cap, collar, a grid output incentive rate and grid output target	Clause 2.2.2(1)(d) and Schedule A, clause A6		Chapter 5 paragraph 5.5.2(d)
Commission to determine the extent, if any, that the grid output mechanism will not apply to grid output measures	Clauses 2.2.2(1)(e) and Schedule A, clause A4		Chapter 5 paragraph 5.5.2(e)

Requirement to specify forecast CPI used to determine base capex allowances	Clause 2.2.2(2)(a)		Chapter 5 paragraph 5.5.3(a)
Requirement to specify forecast FX rates and amount/percentage of base capex allowances that forecast FX rates apply to	Clause 2.2.2(2)(b), 2.2.2(2)(c)		Chapter 5 paragraphs 5.5.3(b), 5.5.3(c)
Commission to publish its base capex allowance decision	Clause 2.2.2(5)		Chapter 5 Section 5.5
Commission's consultation obligations			
Commission's mandatory actions for consultation on base capex proposal	Clauses 2.2.2(4)(a), 8.2.2(1)(a), 8.1(3)		Chapter 5 Section 5.6
Commission's optional actions on base capex proposal	Clauses 2.2.2(4)(a), 8.1.1(1)(b), 8.1.1(4)		Chapter 5 Section 5.6
Commission may set timeframes and processes for consultation that we consider appropriate	Clause 8.1.1(5)		Chapter 5 paragraph 5.6.2
Criteria for evaluating and approving base capex			
Commission's evaluation may take into account results of consultation and any relevant information	Clause 6.1.1(1)(a)		Chapter 5 Section 5.7
Commission may engage appropriately qualified assistance with its evaluation	Clause 6.1.1(1)(b)		Chapter 5 Section 5.7
Commission is to consider consistency with input methodologies in the capex IM and in the IM Determination	Clause 6.1.1(2)(a)		Chapter 5 Section 5.7

Commission is to consider whether the base capex proposal promotes the purpose of Part 4 of the Act	Clause 6.1.1(2)(b)		Chapter 5 Section 5.7
Commission is to consider whether the base capex proposal is fit for purpose of the Commission exercising its powers under Part 4 of the Act	Clause 6.1.1(2)(c)		Chapter 5 Section 5.7
Commission is to evaluate the base capex proposal in accordance with Schedule A of the capex IM	Clause 6.1.1(3)		Chapter 5 Section 5.7
Commission evaluation is to include the required general evaluation factors	Schedule A, clause A1		Chapter 5 Section 5.7
Commission is to review each identified programme	Schedule A, clause A2		Chapter 5 Section 5.7
Commission may apply a variety of evaluation techniques	Schedule A, clause A3		Chapter 5 Section 5.7
Commission evaluation is to include the required evaluation criteria for grid output measures and revenue-linked grid output measures	Schedule A, clauses A4, A5		Chapter 5 Section 5.7
Commission evaluation is to include required evaluation criteria for revenue-linked grid output measures (caps, collars, base capex incentive rate and grid output targets)	Schedule A, clause A6		Chapter 5 Section 5.7
Pre-proposal processes			
Transpower to notify its intention to plan a major capex project	Clause 3.3.1(1)		Chapter 6 Section 6.2

Commission and Transpower to use reasonable endeavours over a two month period to agree a consultation programme, approach for consideration of non-transmission solutions and approval timeframes	Clause 3.3.1(2)		Chapter 6 Section 6.2
Commission may include its own consultation processes without requiring agreement from Transpower	Clause 3.3.1(3)		Chapter 6 Section 6.2
Commission is to specify any steps not agreed upon	Clause 3.3.1(4)		Chapter 6 Section 6.2
Commission and Transpower are to publish conclusions on consultation, consideration of non-transmission solutions and approval timeframes	Clause 3.3.1(5)		Chapter 6 Section 6.2
Commission and Transpower are to regularly review to ensure that the process remains appropriate	Clause 3.3.1(6)		Chapter 6 Section 6.2
Transpower to consult interested persons in accordance with the agreed programme and approach for consideration of non-transmission solutions	Clause 3.3.1(7)		Chapter 6 Section 6.2
Commission decisions not invalidated by failure to meet timeframes	Clause 5.1.1(1)		Chapter 6 Section 6.2
Approach to considering non-transmission solutions			
Transpower must consider non-transmission solutions	Clause 3.3.1(2)(a)(ii)		Chapter 6 Section 6.3
Transpower consultation on non-transmission solutions prior to submitting a major capex proposal to cover relevant parts of the investment test in Schedule I	Clause 8.1.3 and Schedule I, Division 2		Chapter 6 Section 6.3

Consideration of non-transmission solutions must take into account the size of investment need and likelihood that non-transmission solutions could meet the need	Schedule D and Schedule I, clause I5(1)		Chapter 6 Section 6.3
Approach must take into account information needs and views of interested persons	Schedule I, clause I5(2)		Chapter 6 Section 6.3
Transpower is to invite interested persons to provide views and information on possible non-transmission solutions when consulting on an investment need	Schedule G, clauses G2(c), G8(b), and Schedule I, clause I5(3)(a)		Chapter 6 Section 6.3
Transpower is to consult with and proactively engage with interested persons on its longlist of options	Schedule I, clauses I2, I5(3)(b)		Chapter 6 Section 6.3
Transpower is to invite interested persons to provide more comprehensive proposals on its shortlist of options	Schedule I, clauses I3, I5(3)(c)		Chapter 6 Section 6.3
Interested persons to generally have six weeks to respond	Schedule I, clauses I5(4), I5(5)		Chapter 6 Section 6.3
Transpower consultation requirements			
Mandatory guidance when devising consultation programme or approach	Clause 8.1.3(2)(a)		Chapter 6 Section 6.4
Transmission investment consultation requirements	Clause 8.1.3(2)(a) and Schedule I		Chapter 6 Section 6.4
Commission may allow certain matters to be excluded from consultation if it considered unreasonable	Clause 8.1.3(2)(b)		Chapter 6 Section 6.4
Specified matters to consult on for transmission investments	Schedule I, clause I1(1)		Chapter 6 Section 6.4

Required order of consultation on transmission investments	Schedule I, clause I1(2), I1(3)		Chapter 6 Section 6.4
Longlist options must be solutions to meet the investment need	Schedule I, clause I2(1)		Chapter 6 Section 6.4
Specified information requirements for longlist of options	Schedule I, clause I2(2)		Chapter 6 Section 6.4
Specified information requirements for shortlist of investment options to meet each investment need	Schedule I, clause I3(1)		Chapter 6 Section 6.4
Specified key assumptions to be consulted on for shortlist consultation	Schedule I, clause I4		Chapter 6 Section 6.4
Non-transmission solution consultation requirements	Clause 8.1.3(1)(b) and Schedule I, Division 2		Chapter 6 Section 6.4
Consideration of non-transmission solutions must consider size, nature, and likelihood of the solution meeting the investment need	Schedule I, clause I5(1)		Chapter 6 Section 6.4
Approach to consideration of non-transmission solutions must take account of information needs and views of interested persons	Schedule I, clauses I5(2), I5(3)		Chapter 6 Section 6.4
Approach to considerations of non-transmission solutions must generally allow six weeks for interested persons to respond	Schedule I, clauses I5(4), I5(5)		Chapter 6 Section 6.4
Commission's consultation obligations			
Commission's mandatory actions for consultation on a major capex proposal	Clauses 3.3.3(3)(a), 8.1.1(1)(a), 8.1.1(3)		Chapter 6 Section 6.5

Commission's optional actions on major capex proposal	Clauses 3.3.3(3)(a), 8.1.1(1)(b), 8.1.1(4)		Chapter 6 Section 6.5
Commission may set timeframes and processes for consultation that it considers appropriate	Clause 8.1.1(5)		Chapter 6 Section 6.5
Rules for submitting a major capex proposal			
Major capex must be approved by the Commission in order for Transpower to recover the capex under the IPP	Clause 3.3.2(1)		Chapter 6 Section 6.6
Transpower must be submit a major capex proposal for a proposed investment	Clause 3.3.2(2)		Chapter 6 Section 6.6
Transpower may submit a major capex proposal at any time in the RCP	Clause 3.3.2(3)		Chapter 6 Section 6.6
Major capex proposals must comply with the information requirements	Clause 7.4.1(1)(a) and Schedule G		Chapter 6 Section 6.6
Major capex proposals must meet the certification requirements	Clauses 7.4.1(1)(b), 7.4.1(4), 9.2.1		Chapter 6 Section 6.6
Investment options in a proposal must be appropriate	Clause 7.4.1(2)		Chapter 6 Section 6.6
Information and rigour of analysis in a proposal must be commensurate with the size of expenditure	Clause 7.4.1(3)		Chapter 6 Section 6.6
Rules for approving or rejecting a major capex proposal			
The Commission may request further information from Transpower	Clause 3.3.3(2)		Chapter 6 Section 6.7

The Commission may only make its decision after consulting interested persons	Clauses 3.3.3(3)(a) and 8.1.1		Chapter 6 Section 6.7
The Commission may only make its decision after evaluation of the proposal and any additional information	Clause 3.3.3(3)(b)		Chapter 6 Section 6.7
The Commission is to either approve the proposed investment or reject the major capex proposal	Clauses 3.3.3(1), 3.3.3(4)		Chapter 6 Section 6.7
Approved proposed investment must set out components of approval	Clause 3.3.3(5)		Chapter 6 Section 6.7
The Commission must publish its decision	Clause 3.3.3(6)		Chapter 6 Section 6.7
Major capex proposal requirements			
Major capex proposal to include information specified in Schedule G of the capex IM	Clause 7.4.1(1)(a) and Schedule G		Chapter 6 Section 6.8
Major capex proposal must be in the specified format	Clause 7.1.1		Chapter 6 Section 6.8
The number of investment options is to reflect magnitude of the proposed investment and complexity of investment need	Clause 7.4.1(2)		Chapter 6 Section 6.8
Transpower may provide additional information it considers relevant to the major capex proposal	Schedule G, clause G9		Chapter 6 Section 6.8
Project approval expiry date			
Transpower to include, in a major capex proposal, a proposed expiry date and rationale for it	Schedule G, clause G5(2)(j)		Chapter 6 Section 6.9

Commission approval of major capex proposal to include approval expiry date specified by Transpower	Clause 3.3.3(5)(e)		Chapter 6 Section 6.9
Commission publishes its decision	Clause 3.3.3(6)		Chapter 6 Section 6.9
Transpower may apply for an amendment to the approval expiry date no later than six weeks before the existing approval expiry date	Clauses 3.3.4(1)(e), 3.3.4(2)(a), 7.4.2(2)		Chapter 6 Section 6.9
Commission may request further information in support of an application by a date specified by the Commission	Clause 3.3.4(6)		Chapter 6 Section 6.9
Approval expiry date amendment may only be approved prior to the existing expiry date	Clause 3.3.4(3)(a)		Chapter 6 Section 6.9
Commission approval of an amendment to be approval expiry date specified in application by Transpower	Clause 3.3.4(4)(e)		Chapter 6 Section 6.9
The Commission publishes its amendment decision	Clause 3.3.4(7)		Chapter 6 Section 6.9
Criteria for evaluating major capex proposals			
The Commission may take into account the results of its consultation and any other information	Clause 6.1.1(1)		Chapter 6 Section 6.10
The Commission will evaluate a major capex proposal in accordance with Schedule C of the capex IM	Clause 6.1.1(4) and Schedule C		Chapter 6 Section 6.10
Consideration of whether the proposed investment passes the major capex investment test in Schedule D	Schedule C, clause C1(2)(c) and Schedule D, Division D1		Chapter 6 Section 6.10

Form and scope of investment test			
The investment test is a cost-benefit analysis using discounting of relevant costs and benefits in the electricity market over a defined calculation period	Schedule D, clause D1(1)		Chapter 7 Section 7.2
The investment test includes estimates of qualified costs and benefits, including where an expected monetary value can be calculated allowing for uncertainty	Schedule D, clause D1(1)(c)(ii)		Chapter 7 Section 7.2
Where the estimates for two investment options give a similar result after taking into account quantified costs and benefits, Transpower may choose the investment option that gives the highest result including a qualitative assessment to take into account of unqualified costs and benefits	Schedule D, clause D1(1)(c)(ii)		Chapter 7 Section 7.2
Calculation of expected net electricity market benefit using scenarios			
Net electricity market benefit is the aggregate of the electricity market costs and benefits less the project costs	Schedule D, clause D3(2)		Chapter 7 paragraphs 7.3.2 to 7.3.8
Expected net electricity market benefit of each investment option must be evaluated under a number of scenarios	Schedule D, clause D3(1) and Schedule I, clauses I1(1)(e) and I3(1)(a)		Chapter 7 paragraphs 7.3.2 to 7.3.8
Expected net electricity market benefit of each investment option is calculated taking into account the scenario weighting assigned to the scenario by the party who developed the scenario unless Transpower consults on the variation in weighting	Schedule D, clause D3(1) and Schedule I, clause I3(1)(a)		Chapter 7 paragraphs 7.3.2 to 7.3.8

Investment options			
Transpower to develop investment options	Clause 8.1.3(1)(a) and Schedule I, clause I3		Chapter 7 paragraphs 7.3.9 to 7.3.16
Investment options is a feasible major capex project, other than a new investment contract, that is materially different to another major capex project that meets the same investment need	Schedule D, clause D2		Chapter 7 paragraphs 7.3.9 to 7.3.16
Transpower to consider size and complexity when deciding number of investment options	Clause 7.4.1(2), and Schedule I, clause I3(3)(a)		Chapter 7 paragraphs 7.3.9 to 7.3.16
Investment options may include transmission investments and non-transmission solutions	Schedule D, clause D2, clause 1.1.5, definition of major capex project		Chapter 7 paragraphs 7.3.9 to 7.3.16
Transpower must consider non-transmission solutions as part of the investment test	Clause 8.1.3(1)(b) and Schedule I, clause I5		Chapter 7 paragraphs 7.3.9 to 7.3.16
Satisfying the investment test			
The Commission may not approve a proposed investment where it is not satisfied that the investment satisfies the investment test criteria specified in the capex IM	Clause 6.1.1(4), Schedule C, clause C1(2)(c) and Schedule D, clause D1(1)		Chapter 7 paragraphs 7.3.17 to 7.3.26

Unquantified electricity market costs or benefits can only be considered if investment options otherwise have similar outcomes	Schedule D, clauses D1(1)(c)(ii), D1(2)(b)		Chapter 7 paragraphs 7.3.17 to 7.3.26
Similar outcomes means difference in outcome is measured as 10% or less of the aggregate project costs	Schedule D, clauses D1(2)(a)		Chapter 7 paragraphs 7.3.17 to 7.3.26
Transpower may request Commission approval to adopt an alternative percentage to 10% when considering whether outcomes of investment options are similar	Schedule D, clause D1(3)		Chapter 7 paragraphs 7.3.17 to 7.3.26
Costs and benefits			
Costs and benefits accruing to customers in the electricity market, excluding Transpower project costs, are included in the investment test	Schedule D, clauses D3, D5(1), paragraphs (a) to (h) and (k), D5(3), D5(4), D7(2)		Chapter 7 paragraphs 7.4.2 to 7.4.8
Consumer costs are to take into account third party contributions or subsidies	Schedule D, clauses D5(1), paragraphs (i) and (j), D5(5)		Chapter 7 paragraphs 7.4.2 to 7.4.8
Transpower may agree with the Commission to include other electricity market costs and benefits in its shortlist consultation	Schedule D, clause D5(1)		Chapter 7 paragraphs 7.4.2 to 7.4.8
Project costs of each investment option are included in the investment test	Schedule D, clauses D3, D5(2), D7(1), D7(6)		Chapter 7 paragraphs 7.4.2 to 7.4.8

Quantification of the expected values of costs and benefits			
Costs and benefits are to be calculated using expected values	Schedule D, clauses D7(4), D7(5)		Chapter 7 paragraphs 7.4.17 to 7.4.24
Costs and benefits may be treated as unquantified if the cost of calculating the expected value is disproportionate to the size of the effect or the expected value cannot be calculated with an appropriate level of certainty	Schedule D, clause D17(2)(b)		Chapter 7 paragraphs 7.4.17 to 7.4.24
Projects costs are to be calculated using expected values	Schedule D, clause D7(4)		Chapter 7 paragraphs 7.4.17 to 7.4.24
Project costs are to be calculated using good electricity industry practice	Schedule D, clause D7(6)		Chapter 7 paragraphs 7.4.17 to 7.4.24
Expected value is probability-weighted average of possible values, also reflecting uncertainty of assumptions and calculation approaches	Schedule D, clause D7(4)		Chapter 7 paragraphs 7.4.17 to 7.4.24
Discount rate			
Discount rate for the investment test is a default rate of 7%	Schedule D, clause D7(3)(b)(i)		Chapter 7 paragraphs 7.4.25 to 7.4.32

Transpower may apply an alternative discount rate if default rate is not appropriate	Schedule D, clause D7(3)(a)		Chapter 7 paragraphs 7.4.25 to 7.4.32
Transpower's consultation must include the reasons for the alternative discount rate	Schedule I, clauses I3(3)(d)(ii), I4(b)		Chapter 7 paragraphs 7.4.25 to 7.4.32
If default rate is not used, Transpower must also use default rate as part of sensitivity analysis	Schedule D, clause D8(3)		Chapter 7 paragraphs 7.4.25 to 7.4.32
Calculation period and discounting			
Transpower must consult on the calculation period and must specify if a non-standard period has been used	Clause 8.1.3(1)(a) and Schedule I, clauses I3(1)(b), I3(3)(d)(ii), I4(c)		Chapter 7 paragraphs 7.4.33 to 7.4.39
The standard calculation period is 20 years from the last date of asset commissioning under the proposed investment	Clause 1.1.5, definition of 'calculation period'		Chapter 7 paragraphs 7.4.33 to 7.4.39
The calculation period is reduced from standard when significant market benefit or cost elements and project costs are expected to cease prior to the end of a standard 20 year period	Clause 1.1.5, definition of 'calculation period', paragraph (a)		Chapter 7 paragraphs 7.4.33 to 7.4.39
The calculation period is extended from standard when significant market benefit or cost elements and project costs are expected to arise after the end of a standard 20 year period	Clause 1.1.5, definition of 'calculation period', paragraph (b)		Chapter 7 paragraphs 7.4.33 to 7.4.39

Benefits and costs arising or incurred in the calculation period are discounted (by applying the discount rate) back to the start of the calculation period	Schedule D, clause D7(2)		Chapter 7 paragraphs 7.4.33 to 7.4.39
Project costs incurred prior to the start of the calculation period are compounded (by applying the discount rate) from the date incurred to the start of the calculation period	Schedule D, clause D7(1)		Chapter 7 paragraphs 7.4.33 to 7.4.39
Demand and generation scenarios			
Transpower must use the [MBIE] demand and generation scenarios when published	Schedule D, clauses D4(1)(b), D4(3)(b)		Chapter 7 paragraphs 7.4.40 to 7.4.48
Electricity Commission market development scenarios apply until MBIE scenarios are published	Schedule D, clauses D4(1)(a)(i), D4(3)(a)		Chapter 7 paragraphs 7.4.40 to 7.4.48
Reasonable and feasible variations based on specified factors may be used after considering views of interested persons	Schedule D, clauses D4(1)(a)(ii), D4(1)(c), D4(2) and Schedule I, clauses I1(1)(b), I2(2)(b), I3(1)(a)		Chapter 7 paragraphs 7.4.40 to 7.4.48
Sensitivity analysis			
The investment test is only satisfied if the proposed investment is robust under sensitivity analysis	Schedule D, clause D1(1)(a)		Chapter 7 paragraphs 7.4.49 to 7.4.51

Transpower must undertake and report on its sensitivity analysis	Schedule D, clause D8, and Schedule G, clauses G5(8) to G5(11)		Chapter 7 paragraphs 7.4.49 to 7.4.51
Sensitivity analysis is to include specified variables to demonstrate robust results	Schedule D, clause D8		Chapter 7 paragraphs 7.4.49 to 7.4.51
Variables may be excluded if not reasonable practicable or not necessary	Schedule D, clause D8(1)		Chapter 7 paragraphs 7.4.49 to 7.4.51
Value of lost load			
Value of lost load (referred to in the Code as value of expected unserved energy), or VOLL, is to be determined by the Electricity Authority in Schedule 12.2, clause 4 of the Code	Clause 1.1.5, definition of 'value of expected unserved energy', paragraph (a)		Chapter 7 paragraphs 7.4.52 to 7.4.58
Transpower may apply an alternative value if the Electricity Authority value is not appropriate for a particular transmission investment	Clause 1.1.5, definition of 'value of expected unserved energy', paragraph (b)		Chapter 7 paragraphs 7.4.52 to 7.4.58
Where an alternative value is used, Transpower must carry out the sensitivity analysis on both the Electricity Authority value and the alternative value	Schedule D, clause D8(2)		Chapter 7 paragraphs 7.4.52 to 7.4.58
Transpower must consult on and report on the value used	Schedule G, clause G4(5)(c), and Schedule I, clauses I2(2)(b), I2(2)(c), I3(3)(d)		Chapter 7 paragraphs 7.4.52 to 7.4.58

Process requirements for amendment applications			
Transpower may apply for an amendment to components of approved major capex project	Clause 3.3.4		Chapter 8 Section 8.2
An application must meet application requirements	Clause 3.3.4(2)(a)		Chapter 8 Section 8.2
The Commission and Transpower are to agree an approval timeframe	Clause 3.3.4(2)(b)		Chapter 8 Section 8.2
The Commission may request additional information	Clause 3.3.4(6)		Chapter 8 Section 8.2
The Commission may consult with interested persons on the application and may engage expert assistance	Clauses 6.1.1(1), 8.1.1(2)		Chapter 8 Section 8.2
The Commission is to evaluate the application and any additional information	Clause 3.3.4(2)(c)		Chapter 8 Section 8.2
The approval expiry date may only be approved prior to the previous expiry date	Clause 3.3.4(3)(a)		Chapter 8 Section 8.2
Other components of approved major capex must be approved by the first November after the disclosure year of commissioning or completion	Clauses 3.3.4(3)(b), 3.3.4(8)		Chapter 8 Section 8.2
The Commission may specify a major capex allowance, maximum recoverable costs or recovery scheme	Clauses 3.3.4(4)(a), 3.3.4(4)(c)		Chapter 8 Section 8.2
The Commission adopts Transpower's proposed amended major capex project outputs or approval expiry date	Clauses 3.3.4(4)(d), 3.3.4(4)(e)		Chapter 8 Section 8.2

The Commission may make consequential amendments to P50, commissioning and completion date assumptions	Clause 3.3.4(5)		Chapter 8 Section 8.2
The Commission is to publish its decision on the application	Clause 3.3.4(7)		Chapter 8 Section 8.2
Information requirements for amendment applications			
Application for amendment to approval expiry date to be received six weeks or more before previous approved expiry date	Clause 7.4.2(2)		Chapter 8 Section 8.3
Application for other components must be received by last working day of September following the disclosure year of first commissioning	Clause 7.4.2(1)		Chapter 8 Section 8.3
The application must include information specified in Schedule H of the capex IM	Clause 7.4.2(3) and Schedule H		Chapter 8 Section 8.3
Criteria for evaluating amendment applications			
The Commission may consult with interested persons on the amendment application	Clauses 3.3.4(2)(c), 6.1.1(1)(a)(i)		Chapter 8 Section 8.4
The Commission may take into account information it considers relevant	Clauses 3.3.4(2)(c), 6.1.1(1)(a)(ii)		Chapter 8 Section 8.4
The Commission may engage an appropriately qualified person to assist with the evaluation	Clauses 3.3.4(2)(c), 6.1.1(1)(b)		Chapter 8 Section 8.4
The Commission will include the specified criteria in its evaluation of the amendment application	Clause 6.1.1(5)		Chapter 8 Section 8.4

Consultation requirements for amendment application			
The Commission selects which consultation actions it will use in its evaluation of the amendment application	Clause 8.1.1(2)(a)		Chapter 8 Section 8.5
Available consultation actions	Clauses 8.1.1(3), 8.1.1(4)		Chapter 8 Section 8.5
The Commission may set its own consultation timeframes and processes	Clause 8.1.1(5)		Chapter 8 Section 8.5
Certification of proposals and applications			
Director certification of base capex proposal	Clauses 7.3.1(1)(c), 9.1.1, and Schedule F		Chapter 9 paragraphs 9.2.1 to 9.2.14
CEO certification of major capex proposal	Clauses 7.4.1(1)(b), 9.2.1, and Schedule G		Chapter 9 paragraphs 9.2.1 to 9.2.14
CEO certification of application for an amendment to a major capex project	Clauses 7.4.2, 9.3.1, and Schedule H, Division 1 to 4		Chapter 9 paragraphs 9.2.1 to 9.2.14
CEO certification of application for sunk costs adjustment	Clauses 7.4.3, 9.3.1, and Schedule H, Division 5		Chapter 9 paragraphs 9.2.1 to 9.2.14

Certification of annual information			
Director certification of annual compliance statement under the IPP Determination		IPP clause 19.2.3	Chapter 9 Section 9.3
No fewer than two Transpower directors required to certify annual information requirements		ID clause 16	Chapter 9 Section 9.3
Director certification of base capex proposal	Clause 9.1.1		Chapter 9 Section 9.3
CEO certification of all information provided for a major capex proposal in Schedule G	Clause 9.2.1		Chapter 9 Section 9.3
CEO certification of major capex project amendment and sunk costs application	Clause 9.3.1		Chapter 9 Section 9.3
Transpower's CEO is required to certify each base capex project or programme forecast to cost more than \$20 million		To be included in a future ID determination in respect of relevant base capex disclosures	Chapter 9 Section 9.3
Transpower's CEO will be required to certify each base capex project or programme first commissioned		ID clause 16	Chapter 9 Section 9.3
Change of certification of opinion or matters of fact			
Where there is a change of opinion or fact that impacts on a certification given by a director or CEO, the director or CEO (as applicable) must notify the Commission	Clause 9.4.1		Chapter 9 paragraphs 9.2.15, 9.2.16

Base capex annual reporting requirements			
Annual information requirements specified in ID Determination [now included in the IPP determination]		IPP clause 20.1.15	Chapter 10 Section 10.2
Base capex annual reporting deadline – report due by last working day each September [now the third working week of October]		IPP clause 19.1	Chapter 10 Section 10.2
Major capex annual reporting requirements			
Major capex overspend adjustment annual calculation	Clause 3.3.7(3) and Schedule B clause B4	IPP clause 23.1.3(l)	Chapter 10 Section 10.3
Major capex project output adjustment annual calculation	Clause 3.3.7(3) and Schedule B clause B5	IPP clause 23.1.3(m)	Chapter 10 Section 10.3
Reporting requirements for uncompleted projects		To be included in a future ID determination in respect of relevant base capex disclosures	Chapter 10 Section 10.3
Reporting requirements for commissioned projects		ID clause 8.5 and Schedule F5	Chapter 10 Section 10.3
Formatting of information – Proposals, applications and information requirements			
Formatting – Base capex proposal information	Clause 7.1.1 to 7.1.3, 7.3.1, 9.1.1 and Schedule F		Chapter 10 Section 10.4
Formatting – Major capex proposal information	Clause 7.1.1 to 7.1.3, 7.4.1, 9.2.1 and Schedule G		Chapter 10 Section 10.4

Formatting – Major capex project amendment application information	Clauses 7.1.1 to 7.1.3, 7.4.2 and Schedule H Divisions 1 to 4		Chapter 10 Section 10.4
Formatting – Major capex sunk costs application information	Clauses 7.1.1 to 7.1.3, 7.4.3 and Schedule H Division 5		Chapter 10 Section 10.4
Formatting – Base capex annual information requirements		ID Schedule F3	Chapter 10 Section 10.4
Formatting – Major capex annual information requirements		ID Schedule F5	Chapter 10 Section 10.4
Formatting – Major capex RCP report		To be included in a future ID determination in respect of relevant major capex disclosures	Chapter 10 Section 10.4
Base capex transitional provisions			
Base capex information requirement (regulatory templates, identified programmes and base capex proposal) applies with effect from RCP2	Clauses 1.1.3(1), 1.1.4(3)(a), 2.2.1		Chapter 11 Section 11.2
The Commission is to make a base capex allowance decision under the capex IM with effect from RCP2	Clauses 1.1.3(1), 1.1.4(3)(a), 2.2.2		Chapter 11 Section 11.2
Base capex cost-benefit analysis and consultation requirements (as applicable) to apply from RCP2	Clauses 1.1.3(1), 1.1.4(4), 3.2.1		Chapter 11 Section 11.2
Base capex policies and processes requirement to apply from RCP2	Clauses 1.1.3(1), 1.1.4(4), 3.2.2		Chapter 11 Section 11.2

Base capex revenue adjustments to apply to RCP2	Clauses 1.1.3(1), 1.1.4(3)(b)(ii), 3.2.3		Chapter 11 Section 11.2
Major capex transitional provisions			
Major capex approved prior to the capex IM will be treated as approved under the capex IM	Clause 1.1.4(1)		Chapter 11 Section 11.3
For projects approved prior to the capex IM, the components of those project approvals will be considered to be the approved components under the capex IM	Clause 1.1.4(2)		Chapter 11 Section 11.3
Application for approval of a major capex project received before the date of commencement and where approval is not made at the time of commencement is to be decided in accordance with s 54R(3)(b) of the Commerce Act 1986	Clause 1.1.3(2)		Chapter 11 Section 11.3
Listed projects			
The Commission may identify listed projects in an IPP determination for RCP2	Clause 2.2.3(1)	IPP Schedule I	LP Chapter 2 paragraphs 24.2 and 24.3
A listed project means a base capex project or base capex programme that is identified as a 'listed project' in an IPP determination, and complies with the requirements of clause 2.2.3(2) of the capex IM	Clause 1.1.5(2) definition of 'listed project', and clause 2.2.3(2)		LP Chapter 2 paragraph 24.4 and LP Chapter 3 paragraphs 109 to 111, 131 to 140

Approval of base capex in addition to the base capex allowance			
Transpower may submit a listed project application for approval no later than the last working day in June twenty-two months before the end of an RCP	Clause 3.2.4(1)		LP Chapter 2 paragraph 24.5 and LP Chapter 3 paragraphs 119 to 129
Transpower's listed project application must include a description of the reasons for carrying out the listed project	Clause 3.2.4(2)(a)		LP Chapter 2 paragraph 24.6
Alternative options for carrying out the listed project, including non-transmission solutions, must be considered for a listed project	Clause 3.2.4(2)(b)		LP Chapter 2 paragraph 24.6
The intended scope of the listed project must be identified, including the specified grid outputs	Clause 3.2.4(2)(c)		LP Chapter 2 paragraph 24.6
All relevant technical and costing information must be included	Clause 3.2.4(2)(d)		LP Chapter 2 paragraph 24.6
Transpower must specify the estimated cost of the listed project	Clause 3.2.4(2)(e)		LP Chapter 2 paragraph 24.6
Transpower must undertake a cost-benefit analysis in accordance with clause 3.2.1(a)	Clause 3.2.4(2)(f)		LP Chapter 2 paragraph 24.6
Transpower must consult interested persons in accordance with clause 3.2.1(b)	Clause 3.2.4(2)(g)		LP Chapter 2 paragraph 24.6
Transpower must provide evidence that its board of directors has approved the listed project as a base capex project	Clause 3.2.4(2)(h)		LP Chapter 2 paragraph 24.6

Transpower must comply with certification of the application in accordance with clause 9.1.2	Clause 3.2.4(2)(i)		LP Chapter 2 paragraph 24.6
The Commission may request further information from Transpower on the listed project	Clause 3.2.4(3)		LP Chapter 2 paragraph 24.6
The Commission evaluation of the application includes the consultation requirements in clause 8.1.1 that would apply if the application was a base capex proposal	Clause 3.2.4(4)(a)		LP Chapter 2 paragraph 24.6
The Commission evaluation of the application is to apply the criteria in clause 6.1.1 and Schedule A that would apply as if the listed project was an identified programme in a base capex proposal	Clause 3.2.4(4)(b)		LP Chapter 2 paragraph 24.6 and Chapter 3 paragraph 130
The Commission may, in addition to the existing base capex allowance, determine a further approved amount of base capex in respect of a listed project	Clause 3.2.4(4)	IM clauses 3.7.4(4)(b) and 3.7.5(2)(b)(vii), and IPP clauses 22.1.2, 22.3.2 and 22.3.3	LP Chapter 3 paragraphs 112 to 118
The Commission will apply the forecast CPI and forecast FX rates used for the base capex allowance to the listed project	Clause 3.2.4(5)(a) and 3.2.4(5)(b)		
The Commission will publish its decision as soon as reasonably practicable	Clause 3.2.4(6)		

Table B3: Decisions made in implementing the capex IM decisions since 2012

Commission decision	Decision Date	Reference
Transpower major capex proposals		
<p>HVDC – increase in interim grid expenditure:</p> <p>On 14 June 2011, Transpower applied to the Commission concerning the recovery of the HVDC interim grid expenditure. The former Electricity Commission approved the interim grid expenditure of \$6.3 million for preparatory work on the HVDC upgrade project.⁷</p> <p>On 25 August 2011, the Commission agreed to amend the approved amount to \$8 million.</p> <p>This was a project amendment made under the transitional provisions of the capex IM.</p>	25 August 2011	<p>Details on this proposal can be found on the Commission website:</p> <p>http://www.comcom.govt.nz/regulated-industries/electricity/electricity-archive/approved-transpower-grid-upgrade-plans/hvdc-increase-in-interim-grid-expenditure-2011/</p>
<p>Kaitaia Capacitor Bank Project Overspend:</p> <p>On 29 March 2011, Transpower applied to the Commission for an amendment of the approved expenditure for the Kaitaia capacitor bank project from \$2,600,000 to \$2,848,119. The former Electricity Commission approved this project on 9 March 2006 as one of the projects included in the Grid Development Proposals.</p> <p>On 21 June 2011, the Commerce Commission agreed to amend the approved expenditure for this project to \$2,848,119.</p> <p>This was a project amendment made under the transitional provisions of the capex IM.</p>	21 June 2011	<p>Details on this proposal can be found on the Commission website:</p> <p>http://www.comcom.govt.nz/regulated-industries/electricity/electricity-archive/approved-transpower-grid-upgrade-plans/kaitaia-capacitor-bank-project-overspend-2011/</p>

⁷ Under section 54R of the Commerce Act 1986, the role of approving Transpower's grid upgrade plan proposals passed from the Electricity Commission (now the Electricity Authority) to the Commerce Commission on 1 November 2010.

<p>Kawerau generation export enhancement investment proposal:</p> <p>Norske Skog Tasman proposed to connect a new geothermal power station at Kawerau in December 2012. In addition, a number of other generators had advised Transpower of their plans to build up to 135 MW of geothermal generation in the region within the next 15 years. The capacity of the interconnecting transformers at Kawerau limits the amount of generation that can be exported out of Kawerau. To increase the export limit and thus enable development of further generation in the area Transpower proposed to replace one of its interconnecting transformers with a 250 MVA unit.</p> <p>Transpower expected a cost \$9.5 million for the project. On 19 April 2012 the Commission issued a notice of intention to approve Transpower's application.</p> <p>As the proposal from Transpower was received prior to the capex IM being determined, this decision was made under the transitional provisions of the capex IM.</p>	18 April 2012	<p>Details on this proposal and the proposal reasons paper can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-archive/approved-transpower-grid-upgrade-plans/kawerau-generation-export-enhancement-investment-proposal/</p>
<p>Upper South Island Grid reliability stage 1:</p> <p>Transpower established that the 220 kV transmission grid supplying the Islington substation would not be able to supply the expected upper South Island peak demand from 2016. Transpower therefore planned to upgrade the upper South Island grid to increase the transmission capacity.</p> <p>On 29 June 2012, Transpower submitted to the Commission a major capex proposal for stage one of the South Island Reliability Upgrade. The Commission made its decision to approve the major investment proposal on 11 February 2013.</p>	11 February 2013	<p>Details on this proposal and the proposal reasons paper can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/upper-south-island-grid-upgrade-stage-1/</p>

<p>Otahuhu Substation Diversity project MCA Amendment Application:</p> <p>On 12 June 2006, an equipment failure at the Otahuhu substation resulted in a widespread loss of supply of electricity to Auckland and Northland. Following this incident, Transpower implemented the Otahuhu Substation Diversity Project to improve the reliability of supply into Auckland and Northland. Transpower commissioned the last asset in November 2011.</p> <p>On 27 September 2012 Transpower submitted to the Commission a proposal to increase the major capex allowance for the Otahuhu Substation Diversity project to \$106.1 million (2009 dollars). The former Electricity Commission had approved a maximum of \$99 million (2009 dollars) on 31 August 2007. The Commerce Commission made its decision to amend the major capex allowance for the Otahuhu Substation Diversity project to \$106.1 million (2009 dollars) on 12 April 2013.</p>	12 April 2013	<p>Details on this proposal can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/otahuhu-substation-diversity-project-mca-amendment-application/</p>
<p>Amending Transpower's demand response initiatives in the upper North Island:</p> <p>On 13 August 2013 Transpower submitted to the Commission a proposal to expand the geographical area within which it can test its demand response initiatives. These initiatives were developed as part of Transpower's Upper North Island Dynamic Reactive Support Project. Transpower considered that testing these demand response initiatives nationally would better meet its goals.</p> <p>The outputs that Transpower was required to deliver under the project's approval needed to be amended so that Transpower could test its demand response initiatives with participants outside the upper North Island area.</p>	28 November 2013	<p>Details on this proposal can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/amending-the-outputs-of-transpowers-demand-response-initiatives-in-the-upper-north-island/</p>

<p>Amending the outputs for Transpower's Bombay 110 kV bus security project:</p> <p>During the implementation phase of the project, Transpower discovered that it could not efficiently deliver one of the approved project outputs – install the bus coupler circuit breaker - due to physical constraints at the Bombay substation site. Transpower assessed that it was less expensive to deliver an alternative solution of replacing some of the existing circuit breakers, rather than overcome the physical constraints.</p> <p>Transpower implemented the alternative solution and sought our approval to amend the project outputs. The change in outputs did not affect the level of transmission service delivered by the project. On 30 September 2013, Transpower submitted its proposal to amend the outputs of the project.</p>	1 November 2013	<p>Details on this proposal can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/amending-the-outputs-for-transpowers-bombay-110-kv-bus-security-project/</p>
<p>Bunnythorpe Haywards A and B lines conductor replacement investment proposal:</p> <p>Transpower advised that the conductors of these lines had reached the end of their economic life and needed to be replaced. Under the regulatory rules, Transpower could replace the existing conductors and maintain the existing capacity of the lines under its base capital works programme but had to seek approval from the Commission if it wanted to increase the capacity of the lines.</p> <p>On 8 November 2013, Transpower submitted a major capex proposal and sought our approval to upgrade the Bunnythorpe Haywards lines A and B. Transpower sought \$161 million dollars in 2020 prices. The Commission approved the proposal on 9 May 2014.</p>	9 May 2014	<p>Details on this proposal can be found on the Commission website: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/bunnythorpe-haywards-a-and-b-lines-conductor-replacement-investment-proposal/</p>

<p>Amendment to Upper South Island Grid reliability stage 1:</p> <p>On 27 August 2014 Transpower submitted a proposal to the Commission to amend the allowance for the Upper South Island Grid Upgrade Stage 1 project. Taking into account the proposed changes, Transpower’s application also requested an increase in the major capex allowance of \$4.15m which would set the maximum major capex allowance at \$9.14m (taking into account underspend to date of application).</p> <p>On 18 November 2014, Transpower submitted a letter revising its application – reducing the requested increase in the maximum major capex allowance to \$3m. The Commission approved Transpower’s revised application on 26 February 2015, setting the major capex allowance for the Upper South Island Reliability Stage 1 project at \$7.99m.</p>	26 February 2015	<p>Details on this proposal can be found on the Commission website:</p> <p>http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/amending-the-allowance-and-outputs-for-the-upper-south-island-stage-1-project/</p>
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<p>Amending the allowance and outputs for the North Island Grid Upgrade Project:</p> <p>Transpower’s application sought an amendment to the originally approved Maximum Capital Allowance and four major capex project outputs for the North Island Grid Upgrade project. Transpower spent \$894 million delivering the project, \$70 million more than the originally approved MCA of \$824 million, and some of the delivered outputs differed from those originally approved.</p> <p>On 3 March 2015 Transpower modified its amendment application by proposing another output. The information relevant to this proposed amendment can be found with the original application. The Commission’s decision on Transpower’s application to amend the major capex allowance (MCA) for the North Island Grid Upgrade project was to set an allowance of \$876.3 million. This was an increase of \$52.3 million above the \$824 million originally approved, but was \$17.7 million less than the \$894 million Transpower applied for.</p> <p>On 30 September 2013 Transpower submitted an application to the Commission to amend the allowance for the North Island Grid Upgrade project. On August 2015 we published our final decision.</p>	6 August 2015	<p>Details on this proposal can be found on the Commission website:</p> <p>http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-major-capital-proposal/amending-the-allowance-and-outputs-for-the-north-island-grid-upgrade-project/</p>
<p>Transpower’s Price-Quality Path from 2015 to 2020 – summary of decisions made during RCP2</p>		
<p>Central Park – Wilton B re-conductoring project:</p> <p>Transpower’s cost estimate for the Central Park/Wilton B listed project was \$11.3m. However, given uncertainties it considered it could cost up to \$12.4m and it requested that we approve this amount. Transpower plans to complete this project by the summer of 2019.</p> <p>Our draft decision was to increase the base capex allowance by \$9.8m for Transpower for the disclosure years ending 2018 and 2019.</p>	13 April 2017 (date of draft published)	<p>Details on this proposal can be found on the Commission website:</p> <p><i>Transpower Central Park/Wilton re-conductoring project – draft decision (13 April 2017)</i></p>

2015 update of the forecast MAR for the balance of RCP2 to take account of the washup of the forecast MAR and capex incentives for 2014-15	5 November 2015	Transpower Individual Price-Quality Path Amendment Determination 2015 [2015] NZCC 29 (5 November 2015)
2016 update of the forecast MAR for the balance of RCP2 to take account of the washup of the forecast MAR and capex incentives for 2015-16	31 October 2016	Transpower Individual Price-Quality Path Amendment Determination 2016 (MAR update November 2016) [2016] NZCC 23 (31 October 2016)
Setting Transpower's individual price-quality path for 2015 to 2020 – summary of decisions required by the capex IM to be made by 29 August 2014	29 August 2014 (date of published paper)	Setting Transpower's individual price-quality path for 2015 – 2020 [2014] NZCC 23 (29 August 2014)
Base capex allowance (nominal values): <ul style="list-style-type: none"> • For disclosure year 1 July 2015 to 30 June 2016: \$235.2 million • For disclosure year 1 July 2016 to 30 June 2017: \$249.5 million • For disclosure year 1 July 2017 to 30 June 2018: \$242.0 million • For disclosure year 1 July 2018 to 30 June 2019: \$231.6 million • For disclosure year 1 July 2019 to 30 June 2020: \$213.1 million 		Attachment J, Table J1
Base capex incentive rate: 33%		Attachment J, Table J1
Major capex incentive rate: 33%		Attachment J, Table J1

<p>Revenue-linked grid output measures:</p> <p>The decision sets out the description, grid output targets, caps, collars and grid output incentive rates for the following revenue-linked grid output measures for RCP2:</p> <ul style="list-style-type: none"> • AP1: HVDC availability (%) • AP2: HVAC availability (%) • GP1A: number of unplanned interruptions – high priority category • GP1B: number of unplanned interruptions – important category • GP1C: number of unplanned interruptions – standard category • GP1D: number of unplanned interruptions – generator category • GP1E: number of unplanned interruptions – N-security category • GP2A: average duration (minutes) of unplanned interruptions – high priority category • GP2B: average duration (minutes) of unplanned interruptions – important category • GP2C: average duration (minutes) of unplanned interruptions – standard category • GP2D: average duration (minutes) of unplanned interruptions – generator category • GP2E: average duration (minutes) of unplanned interruptions – N-security category • GP3A: duration (minutes) of P90 unplanned interruption – high priority category 		Attachment J, Table J1
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| <ul style="list-style-type: none"> • GP3B: duration (minutes) of P90 unplanned interruption – standard category • GP3C: duration (minutes) of P90 unplanned interruption – generator category • GP3D: duration (minutes) of P90 unplanned interruption – generator category • GP3E: duration (minutes) of P90 unplanned interruption – N-security category • AH1: number of towers coated • AH2: number of grillages commissioned • AH3: number of insulators commissioned • AH4: number of outdoor circuit breakers commissioned in the regulatory period • AH5: number of transformers commissioned in the regulatory period • AH6: number of outdoor to indoor conversions commissioned in the regulatory period <p>Attachment J also specifies the grid output measures to which the grid output mechanism do not apply:</p> <ul style="list-style-type: none"> • AH1RL: change in remaining life (years) of tower coating • AH4RL: change in remaining life(years) of outdoor circuit breakers • AH5RL: change in remaining life (years) of transformers | | |
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<p>CPI & FX forecasts:</p> <p>Schedule J specifies the forecast CPI used to determine the base capex allowances for RCP2:</p> <ul style="list-style-type: none">• For disclosure year 1 July 2015 to 30 June 2016: 1.80%• For disclosure year 1 July 2016 to 30 June 2017: 2.09%• For disclosure year 1 July 2017 to 30 June 2018: 2.06%• For disclosure year 1 July 2018 to 30 June 2019: 2.03%• For disclosure year 1 July 2019 to 30 June 2020: 2% <p>Schedule J specifies forecast FX used to determine the base capex allowances for RCP2:</p> <p>USD/NZD:</p> <ul style="list-style-type: none">• For disclosure year 1 July 2015 to 30 June 2016: 0.79• For disclosure year 1 July 2016 to 30 June 2017: 0.77• For disclosure year 1 July 2017 to 30 June 2018: 0.76• For disclosure year 1 July 2018 to 30 June 2019: 0.74• For disclosure year 1 July 2019 to 30 June 2020: 0.72 <p>EUR/NZD:</p> <ul style="list-style-type: none">• For each disclosure year in the regulatory period: 0.57		Attachment J, Table J1
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GBP/NZD:

- For each disclosure year in the regulatory period: 0.47

AUD/NZD:

- For each disclosure year in the regulatory period: 0.79

JPY/NZD:

- For each disclosure year in the regulatory period: 61.28

SEK/NZD:

- For each disclosure year in the regulatory period: 5.1

CAD/NZD:

- For each disclosure year in the regulatory period: 0.71

Table J1 also specifies the amount/percentage of base capex allowances to which forecast FX rates may apply.