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Companion Paper to the Update of Transpower's Maximum Allowable Revenues for the 2016/17 to 2019/20 Pricing Years

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1. Introduction

- 1.1 This Companion paper accompanies:
 - 1.1.1 the update of Transpower New Zealand Limited's (Transpower's) forecast maximum allowable revenue (forecast MAR) for the 2016/17 to 2019/20 pricing years; and
 - 1.1.2 the amendment to the *Transpower Individual Price-Quality Path Determination 2015* [2014] NZCC 35 (28 November 2014). This determination applies for the five year regulatory control period (RCP)² ending 31 March 2020 and is referred to in this paper as the RCP2 IPP determination.

Purpose of this paper

- 1.2 This paper provides background and context for stakeholders about why and how the Commerce Commission (Commission) has determined this year's update to the forecast MAR for the RCP2 IPP determination.³ It also sets out the decisions that we have made and supporting reasons, including the decisions we are required to make under the *Transpower Capital Expenditure Input Methodology Determination* [2012] NZCC 2 (Capex IM).
- 1.3 In this paper we set out:
 - 1.3.1 the background to the forecast MAR and this year's update (this Chapter);
 - 1.3.2 a summary of the updated forecast MAR (Chapter 2);
 - 1.3.3 how Transpower's total estimated revenues are expected to change over RCP2 (Chapter 3);
 - information on the process that we followed in making our decisions (Chapter 4); and
 - 1.3.5 the decisions we have made and the reasons for them (Chapter 5).

Background to the forecast MAR and this year's update

Transpower is regulated to limit how much revenue it can earn

1.4 Under Part 4 of the Commerce Act 1986 (the Act), we are responsible for determining an individual price-quality path (IPP) for the electricity lines services supplied by Transpower. This recognises that Transpower is supplying services in a market where there is little or no competition.

The regulatory control period, or 'RCP', is the period to which an individual price-quality path determination applies. RCP1 was the period from 1 April 2011 to 31 March 2015. RCP2, the current RCP, started on 1 April 2015 and will run until 31 March 2020. RCP3 will follow RCP2.

³ Please see the background section below for an explanation of 'forecast MAR' and other terms.

- 1.5 We do this by setting the maximum allowable revenues that Transpower can recover from consumers, as well as the quality standards it must meet, for each year of the RCP. The maximum allowable revenues that we set are specified as the forecast maximum allowable revenue, or 'forecast MAR'. The forecast MAR does not include forecast voluntary revenue reductions, forecast pass through costs, or forecast recoverable costs. Pass-through and recoverable costs are additional amounts prescribed in the Transpower input methodology determination that Transpower may recover.⁴
- 1.6 The RCP2 IPP determination specifies the forecast MAR for each of the five pricing years from April 2015. We made this determination in November 2014 after evaluating Transpower's RCP2 proposal and setting expenditure allowances. 6

Forecast figures used to set the forecast MAR need to be updated

- 1.7 A feature of Transpower's regulation is that in each disclosure year (other than the last disclosure year) of the regulatory period we must consider, and if appropriate amend, the forecast MAR to take account of the incremental revenue effect of forecast major capex and listed project base capex we have approved in the preceding disclosure year, as well as the Economic Value (EV) adjustments⁷ required under the RCP2 IPP determination.⁸ Further detail on the process for updating the forecast MAR is provided in our decisions and reasons paper setting the price path for RCP2.⁹
- 1.8 Forecasts for approved major capex, approved listed project base capex and EV adjustments are all inputs to the forecast MAR. Forecasts for major capex and listed project base capex include estimates of costs and commissioning times. Some of these projects are subject to continued needs testing and some are yet to be approved. New approvals, along with changes to project costs or timing will result in changes to Transpower's total estimated revenue.
- 1.9 The EV adjustment is similarly an input to the forecast MAR. Its purpose is to return to, or recover from, Transpower's customers under or over recoveries of revenue. This is to ensure that, overall, Transpower receives an appropriate return on its actual investment and efficiency gains are passed back to consumers through Transpower's pricing.

The input methodologies set the rules that apply for the price-quality paths that we determine. The rules apply to both the suppliers of regulated services and to us.

Pricing year means a year commencing 1 April. It differs from a disclosure year which is a year ending on 30 June.

Expenditure allowances were set in Commerce Commission "Setting Transpower's individual price-quality path for 2015-2020 – final decisions and reasons [2014] NZCC 23" (29 August 2014). The determination setting the forecast MAR is Commerce Commission "Transpower Individual Price-Quality Path Determination 2015 [2014] NZCC 35" (28 November 2014).

The EV adjustments for this year include the ex-post economic gain or loss for the final disclosure year of RCP1, also referred to as the 2014/15 wash-up calculation. This is discussed further in Chapter 2.

Transpower IM clause 3.7.4(5); and RCP2 IPP determination clauses 9.1, 10.1, 22, 24 and 25.

⁹ Commerce Commission "Setting Transpower's individual price-quality path for 2015-2020 – final decisions and reasons [2014] NZCC 23" (29 August 2014), paragraph 3.2.1, page 31.

- 1.10 The EV adjustment is recalculated for the purpose of updating the forecast MAR to take account of the MAR wash-up and incentive mechanisms for the preceding pricing year. The MAR wash-up involves replacing the forecast values in the building blocks used to calculate the forecast MAR with the actual values for the relevant year for the Regulatory Asset Base (RAB), depreciation, tax and the term credit spread differential (TCSD); and for the opex allowance, the original allowance adjusted for actual rather than forecast CPI. The incentive mechanism adjustments that feed into the EV adjustment calculation are specified in the Capex IM and relate to Transpower's performance in delivering its capex projects.
- 1.11 The process for making this yearly reconsideration and any consequential update to the forecast MAR is set out in the RCP2 IPP determination. ¹⁰ It requires Transpower to propose an update to the forecast MAR using the calculations set out in clause 22 and Schedule D (*Forecast MAR Building Blocks Calculation*) of the determination. We then consider what has been proposed and decide on the appropriate update to the forecast MAR. The steps we have gone through to make the determination for this year are detailed in Chapter 4.

The forecast MAR flows through to transmission pricing

- 1.12 The forecast MAR is a significant component of Transpower's total estimated revenue. Transpower's total estimated revenue is derived from the forecast MAR along with the addition or subtraction of forecast voluntary revenue reductions that Transpower chooses to make, forecast recoverable costs, forecast pass-through costs, and a pass-through and recoverable costs wash-up.
- 1.13 Transpower uses total estimated revenue to set its pricing through the transmission pricing methodology (TPM). The TPM allocates how the revenue is collected from consumers and is overseen by the Electricity Authority. While updates to the forecast MAR will affect the prices consumers pay, there is no direct link between our update to the forecast MAR and any corresponding changes in electricity prices for individual consumers due to the allocating actions of the TPM.

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See clauses 9 and 10 of the RCP2 IPP determination.

2. The updated forecast maximum allowable revenue (forecast MAR)

Purpose of this chapter

2.1 This chapter sets out and explains the values we have decided for the updated forecast MAR for the 2016/17 to 2019/20 pricing years. These values are now reflected in Schedule A (*Forecast MAR summary*) of the RCP2 IPP determination, which is summarised in Attachment A.

The updated forecast MAR

2.2 Following the process set out in Chapter 4, we have decided to update the forecast MAR as summarised in Table 2.1 below (2015/16 information is provided for comparative purposes). In particular we have decided to reduce the forecast MAR for the 2016/17 pricing year by \$7.0 million (0.76%). Over the entire RCP2, there is a \$5.6 million reduction in the total forecast MAR compared to the total forecast MAR we determined in November 2014.

2015/16 2016/17 2017/18 2018/19 2019/20 Description (\$m) (\$m) (\$m) (\$m) (\$m) 881.6¹² November 2014 forecast MAR 918.6 951.8 949.4 956.8 New major capex approvals 0.2 0.4 0.5 0.5 2014/15 wash-up (7.2)**Updated forecast MAR** 881.6 911.7 952.2 949.9 957.3

Table 2.1: Updated forecast MAR determined for RCP2¹¹

- 2.3 The key differences to the November 2014 forecast MAR arise from the 2014/15 wash-up calculation and our approval of the major capex amendment to the Upper South Island Grid Upgrade Project.¹³
- 2.4 The 2014/15 wash-up is the final wash-up of the maximum allowable revenues for RCP1. It ensures that the difference between actual and forecast values at the end of RCP1 is reflected in future revenue recovered by Transpower. The 2014/15 wash-up results in a reduction to the forecast MAR primarily due to revenue building blocks that were lower in aggregate than had been originally forecast. This wash-up calculation is set out in detail in Attachment B.
- 2.5 The total estimated revenue that Transpower can recover from customers (referred to in this document as 'total estimated revenue') is discussed in Chapter 3.

This is the initial determined value of the forecast MAR and is not updated.

Some amounts may not sum due to rounding.

See Commerce Commission "Final decision on Transpower's application to amend the project outputs and major capex allowance for Upper South Island reliability stage 1 project" [2015] NZCC 4, (26 February 2015).

Total estimated revenues 3.

Purpose of this chapter

This chapter sets out and explains the total estimated revenues over RCP2. This is to assist stakeholders in understanding Transpower's estimates of the revenue it will recover in the future. These estimates do not form part of our amendment determination.

Total estimated revenues

- 3.2 Total estimated revenue refers to the total amount Transpower may recover from consumers in a given year. This total amount includes the forecast MAR, voluntary revenue reductions, pass-through costs and recoverable costs. The input methodologies prescribe the types of costs Transpower may recover as pass-through and recoverable costs. In the case of pass-through costs the amounts reflect costs imposed by third parties. Recoverable costs are determined in accordance with the input methodologies. Any under or over recovery of forecast pass-through or recoverable costs is adjusted in a subsequent year by way of a wash-up mechanism. Total estimated revenues are ultimately allocated to pricing under the TPM, and therefore will likely be of interest to consumers.
- 3.3 Total estimated revenue for 2016/17 has increased by \$2.6 million (0.28%) from the November 2014 forecast. Total estimated revenues for the 2016/17 to 2019/20 pricing years is \$3.89 billion, up \$28.7 million (0.74%) from the November 2014 forecast. The nominal and real increases in total estimated revenue from 2015/16 to 2016/17 are 3.2% and 1.1% respectively. The present value of total estimated revenues over the 2016/17 to 2019/20 pricing years is approximately \$3.55 billion.
- The composition of total estimated revenues for RCP2 is summarised in table 3.1.¹⁴ 3.4

Table 3.1: total estimated revenues for RCP2¹⁵

	Pricing Years (Ending 31 March)					
Description	2015/16 (\$m)	2016/17 (\$m)	2017/18 (\$m)	2018/19 (\$m)	2019/20 (\$m)	
Updated forecast MAR	881.6	911.7	952.2	949.9	957.3	
Forecast voluntary revenue reductions	(8.5)	(9.1)	(9.7)	(10.3)	(11.0)	
Forecast pass-through costs	18.7	19.6	20.8	21.8	22.3	
Forecast recoverable costs	23.8	29.6	30.8	8.6	8.8	
Prior years pass-through and recoverable costs wash-up	1.0	(5.5)	-	-	-	
Total estimated revenues	916.6	946.2	994.2	970.0	977.4	

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^{2015/16} amounts are provided for comparative purposes.

Some amounts may not sum due to rounding.

- 3.5 Total estimated revenue includes the updated forecast MAR and it also reflects amounts for voluntary revenue reductions, forecast pass-through and forecast recoverable costs, and a pass-through and recoverable costs wash-up (ie, the difference between actual and forecast costs).
- 3.6 Forecast voluntary revenue reductions are revenues that Transpower will voluntarily forego. They relate to the Incremental Rolling Incentive Scheme (IRIS), ¹⁶ and the North Island Grid Upgrade (NIGU) Project.¹⁷ Transpower has chosen to return revenue relating to the IRIS incentive as it considered its scope reductions affecting opex spending were not true efficiencies. The voluntary reductions in respect of the NIGU Project are equivalent to the overspend adjustment identified in our NIGU Project amendment decision. 18 This means the update to the forecast MAR is not adjusted to account for the overspend adjustment; instead Transpower's total estimated revenue is reduced. We will continue to monitor the return of funds to consumers throughout the remainder of RCP2.¹⁹
- 3.7 Forecast pass-through costs relate to expenses such as local authority rates, Electricity Authority levies, and Commission levies. There is no change in forecast pass-through costs since they were initially forecast in November 2014.
- 3.8 Forecast recoverable costs relate to Instantaneous Reserve Charges (IRC) and IRIS. The forecast amounts in respect of IRC have not materially changed since the November 2014 forecast and only represent a small portion of the total. The increase in forecast recoverable costs in respect of IRIS since November 2014 (approximately \$15 million), reflects Transpower's lower opex spending in RCP1 compared to the opex allowance we provided for it. This is principally due to reduced spending on grid maintenance (eg, reduced preventative maintenance). We provide incentives to reward Transpower for becoming more efficient and underspending the allowance, as finding efficiencies is to the long-term benefit of consumers.
- 3.9 The wash-up in respect of pass-through costs and recoverable costs reflects the difference between forecast and actual values in respect of 2014/15. Actual passthrough costs were \$2.5 million lower than forecast due to local authority rates being \$3.9 million lower than forecast, and Commission and Electricity Authority levies being \$1.4 million more than forecast.

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IRIS provides a mechanism that allows suppliers to retain expenditure efficiency benefits beyond the regulatory period. This helps mitigate the declining incentive to make efficiency gains as the regulatory period draws to a close.

¹⁷ The NIGU Project was a major capital works project and is discussed further in Chapter 5.

Commerce Commission "Amending Transpower's allowance and outputs for the North Island Grid Upgrade Project", 6 August 2015.

See our discussion of how the overspend adjustment decision applies for the NIGU Project in Chapter 5 for further information on this.

4. The process we used to update the forecast MAR

Purpose

4.1 This chapter sets out the process we followed and the steps taken to update the forecast MAR and make this year's amendment to the RCP2 IPP determination.

The process we followed to update the forecast MAR

- 4.2 Updates to the forecast MAR are part of Transpower's price-quality regulation. The update process for the upcoming RCP2 pricing years is described in the RCP2 IPP determination, input methodologies and accompanying papers.²⁰
- 4.3 We have followed the process we described in our 2014 paper on setting Transpower's price-quality path for RCP2.²¹ More detail is provided in the 2014 companion paper to the RCP2 IPP determination.²²
- 4.4 These processes and decisions were given effect in the RCP2 IPP determination by requiring Transpower to provide us with a proposed update to the forecast MAR by a required date each year. ²³ This proposed update of the forecast MAR is based on calculations and templates specified in the RCP2 IPP determination. ²⁴
- 4.5 We consider the proposed update to the forecast MAR and supporting information provided by Transpower and determine whether the price-quality path should be amended. If so, we then amend the RCP2 IPP determination.²⁵
- 4.6 The process steps we followed in considering and making the amendment to the RCP2 IPP determination are set out below.

Transpower provided drafts of its proposed update to the forecast MAR to us

- 4.7 Transpower provided us with early, uncertified versions of its calculations (with no assurance opinion). This enabled us to develop an understanding of how Transpower constructed its calculations and applied the rules. We identified some potential issues and held discussions with Transpower to provide clarification in certain areas.
- 4.8 This assisted us in making our decision on the forecast MAR as soon as practicable after Transpower made its formal proposed update.

These are available at: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-individual-price-quality-regulation/transpowers-price-quality-path-from-2015-to-2020/.

See Setting Transpower's individual price-quality path for 2015-2020 [2014] NZCC 23 (29 August 2014).
Commerce Commission "Companion paper to final determination of Transpower's individual price-quality path for 2015-2020", 28 November 2014. See Attachment D for the worked examples of updating the forecast MAR.

RCP2 IPP clause 9.

²⁴ RCP2 IPP clause 22 and Schedule D: Forecast MAR building blocks calculation.

²⁵ RCP2 IPP clause 10.

This was expected as the assurance opinion is issued in respect of Transpower's final information.

Transpower proposed an update to the forecast MAR

4.9 On 21 October 2015, Transpower proposed an update to the forecast MAR based on the calculations and requirements of the RCP2 IPP determination.²⁷ The information that feeds into this calculation comes from Transpower's compliance statement for RCP1, and from the information disclosure requirements.²⁸ This information was supported by the specified Directors' sign-off and independent assurance opinion.

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4.10 We requested that Transpower supply us with similar Directors' sign-off and independent assurance opinion to support a portion of information not covered by certification requirements. We did this to ensure that all the information we relied upon to update the forecast MAR was consistently supported. Transpower supplied us with the requested information in a timely manner.

We evaluated the information used to propose an update to the forecast MAR

4.11 We considered the proposed forecast MAR information provided by Transpower. We have undertaken compliance checks against the requirements that apply. We also made the required decisions from the Capex IM that feed into the forecast MAR update; these are discussed in Chapter 5.

We decided on the update to the forecast MAR

4.12 We have decided that the update to the forecast MAR proposed by Transpower is appropriate to use as the updated forecast MAR. We have informed Transpower of our decision to amend the RCP2 IPP determination and provided it with the details of our decision. This allows Transpower to update its pricing through the TPM and inform its customers in a timely manner.

We decided to amend the forecast MAR in the RCP2 IPP determination

- 4.13 We decided to update the forecast MAR in the RCP2 IPP determination as a non-material amendment under s 54Q of the Act. This is consistent with all previous updates to Transpower's forecast MAR.
- 4.14 A non-material amendment to the RCP2 IPP determination is given effect by its publication in the Gazette, which will follow.²⁹

RCP2 IPP clauses 9, 22 and 24.

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

We have published the amendment determination and a consolidated version of the amended RCP2 IPP determination on our website at: http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-price-path-compliance/

5. Key decisions and reasons relating to the forecast MAR update and other matters

Purpose

5.1 This chapter sets out the decisions we made in our update to the forecast MAR. Some of these decisions are required to be made under the Capex IM. It also discusses our findings with the information Transpower provided us.

Decisions that were made relating to capital expenditure and incentives

- 5.2 Decisions we make under the Capex IM can affect the forecast MAR update, such as the decision on the overspend adjustment for the NIGU Project. These decisions and our reasons are set out below.
- 5.3 The Capex IM sets the rules relating to Transpower's capital expenditure, and includes approval and assessment requirements. It requires us to make decisions about the incentives that affect Transpower. These incentives are revenue adjustments that come from Transpower's performance in delivering its capex, and that flow into the update to the forecast MAR. Further information on the incentives is available in the Capex IM Reasons paper.³⁰
- 5.4 The revenue adjustments in the Capex IM include:
 - 5.4.1 the major capex efficiency adjustment;
 - 5.4.2 base capex adjustments;
 - 5.4.3 major capex output adjustments, and
 - 5.4.4 major capex overspend adjustments.
- 5.5 The major capex efficiency adjustment only applies at the end of a regulatory period. Transpower has not applied for a major capex efficiency adjustment for RCP1 and therefore we will not make any major capex efficiency adjustment for RCP1.
- 5.6 Base capex adjustments only apply for performance in RCP2 and onwards under the transitional provisions of the Capex IM. The base capex information Transpower disclosed is for expenditure in the 2014/15 disclosure year (i.e. in RCP1). Therefore no base capex adjustment applies for this year.
- 5.7 The revenue adjustment for major capex overspend and outputs adjustments requires us to consider if Transpower has met all major capex project outputs for all relevant projects along with a comparison of the total value of such projects compared to the maximum capital allowance approved. The decisions for the outputs and overspend adjustments are discussed separately below.

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Commerce Commission "Transpower Capex Input Methodology Reasons Paper" 31 January 2012.

We decided that one output was not met

- 5.8 We must decide if Transpower has met the major capex project outputs for major capex projects commissioned in the relevant disclosure year. These projects are the Auto Synchronisation Points³¹ and Wairakei Ring Projects.³² We can now also make this decision for the NIGU Project, which was commissioned in October 2012. The NIGU Project outputs decision was delayed as we had to first make a decision on the amendments for the project proposed by Transpower.
- 5.9 Transpower submits that all outputs were met,³³ except in the Auto Synchronisation Points Project. In the case of one output requiring 24 points installed at 10 locations, Transpower installed 17 points at nine locations.
- 5.10 Having examined the information provided, we agree with Transpower that the output of installing 24 points at 10 locations was not met in the Auto Synchronisation Points Project. We consider that all other outputs were met.
- 5.11 Having made a decision that this output was not met, the output adjustment must be applied.

No revenue adjustment should apply for the output that was not met

- 5.12 Transpower has submitted, and we agree, that the output adjustment in this case should be zero. Transpower incurred lower capital costs to deliver the reduced output, because in its opinion the reduced output could meet the operational requirements of the grid. The end cost for the project is less than the allowance adjusted for the reduced number of points.
- 5.13 Our assessment is that this action is in the long-term benefit of consumers and costs have not been incurred simply to meet an objective. While accurate project forecasting supporting approval is desirable, so too is the efficient response to information developed post-approval. Transpower could have applied for an amendment to the outputs. However, this would have added additional cost and complexity for the same result. Our decision not to adjust is consistent with our previous output adjustment decisions when outputs were not met, eg, for the HVDC and Kawerau projects, made in the RCP2 decision last year.³⁴

See http://www.ea.govt.nz/about-us/what-we-do/our-history/archive/operations-archive/grid-investment-archive/gup/2009-gup/auto-sync-points/.

See http://www.ea.govt.nz/about-us/what-we-do/our-history/archive/operations-archive/grid-investment-archive/gup/2008-gup/wairakei-ring-economic-investment-history/.

All the outputs for the NIGU Project were met due to our decision to amend the outputs to those proposed by Transpower. Transpower's proposed outputs were the same as what the project actually delivered.

Commerce Commission "Companion paper to final determination of Transpower's individual price-quality path for 2015-2020", 28 November 2014 paragraph 2.19.

No overspend adjustments apply to Auto Synchronisation Points and Wairakei Ring Projects

Transpower has provided information on the performance of its major capex projects including the total value compared to maximum capital allowance. Transpower has not overspent its major capex allowance for the Auto Synchronisation Points and Wairakei Ring Projects. Therefore no overspend adjustment applies to these projects.

The overspend adjustment decision deferred for the NIGU Project

- 5.15 In November 2014 (when we set the Transpower RCP2 IPP determination), we noted that we had deferred our decision on the NIGU Project major capex overspend adjustment while Transpower's application for amendment to the major capex allowance was outstanding.³⁵ On 6 August 2015 we decided to amend the major capex allowance for the NIGU Project – the amended major capex allowance did not include \$17.7 million of avoidable costs. As noted in the NIGU Project decisions paper, we consider that avoidable costs should be dealt with by applying the processes set out in the IMs, and overspends considered within the major capex overspend adjustment framework.³⁶
- 5.16 The quantum of the major capex overspend adjustment is calculated according to the formula set out in B4(4) of the Capex IM. We consider it appropriate to continue to defer our decision on the NIGU major capex overspend adjustment for the reasons discussed below.
- 5.17 Transpower's information disclosures note that it is required to recognise a major capex overspend adjustment – and then indicate that it has already embarked on, and intends to continue, a programme of voluntary revenue reductions returning \$18 million to consumers, concluding at the end of RCP2.³⁷ To this end Transpower had made an EV account³⁸ entry to return revenue to consumers for the NIGU Project before our 2015 NIGU Project decision was made. One year's portion of the return has already been reflected in the amount of revenue recovered from consumers in 2014/15. Transpower proposes the remainder is returned as voluntary adjustments to reduce its revenue over RCP2, rather than through a major capex overspend adjustment that would directly adjust the update of the forecast MAR.
- 5.18 The voluntary return of revenue in lieu of the NIGU Project overspend adjustment anticipates a NIGU Project overspend adjustment of zero in each of the RCP2 pricing years, with no separate EV adjustment for the NIGU Project overspend flowing through to the IPP as part of the forecast MAR update.

The economic value account (EV account) is used to transfer revenue adjustments from year to year to update the forecast MAR and it has the effect of ensuring any over/under recoveries of revenue are reflected in future pricing.

³⁵ Commerce Commission "Companion paper to final determination of Transpower's individual price-quality path for 2015-2020", 28 November 2014 footnote 10, page 12.

Amending Transpower's allowance and outputs for the North Island Grid Upgrade Project (NIGU Project) [2015] NZCC 21 at paras 2.57-2.59.

³⁷ See Transpower's 2014/15 IPP disclosure, tab 18.

- 5.19 While we have a high degree of confidence that Transpower's programme of voluntary revenue reductions will indeed proceed as forecast, we are conscious that forecast voluntary revenue reductions occur outside of the individual price-quality path matters that we enforce. If the programme of voluntary revenue reductions had already been returned to consumers, we would agree with Transpower's anticipated NIGU Project major capex overspend adjustment of zero. But the majority of the voluntary revenue reductions have not yet been returned to consumers.
- 5.20 Accordingly, we are deferring our decision on the NIGU Project major capex overspend adjustment until after Transpower's programme of voluntary revenue reductions is complete.³⁹ We anticipate our decision on the quantum of the major capex overspend adjustment in respect of the NIGU Project will align with that suggested by Transpower provided the programme of voluntary revenue reductions proceeds as Transpower has indicated.

Other decisions that we made when we decided to amend the forecast MAR

- 5.21 As part of our consideration of the update of the forecast MAR, we identified several issues relating to:
 - 5.21.1 the term credit spread difference calculation;
 - 5.21.2 the application of the post-tax WACC rate; and
 - 5.21.3 the WACC rate that applies for capping interest on assets during construction.
- 5.22 How we resolved the issues is set out in the sections below.

Term credit spread difference calculation

5.23 The Transpower input methodologies determination required the calculation of the TCSD⁴⁰ to use *the Bloomberg New Zealand 'A' fair value curve*, which is no longer produced by Bloomberg. This made it impossible for Transpower to apply the input methodologies in the way in which it was envisaged. Transpower suggested an alternative, which we agreed with. We subsequently made a non-material amendment to the Transpower input methodologies determination to allow use of *the New Zealand Dollar Interest Rate Swap Curve as reported by Bloomberg plus the mean of the credit spreads of New Zealand corporate 'A-band' rated bonds as reported by Bloomberg.*⁴¹

In order to calculate the TCSD, Transpower is first required to calculate the **Term Credit Spread Difference** as set out in Clause 2.4.10 of the Transpower input methodologies determination.

In accordance with clause 5.1.1(2) of the Capex IM.

That amendment determination can be found here: http://www.comcom.govt.nz/regulated-industries/input-methodologies-2/transpower-input-methodologies/.

The application of the post-tax WACC rate

- 5.24 Transpower has used a post-tax estimate of WACC of 6.44% in the EV account. 42 We had previously advised Transpower that 6.43% was the corresponding post-tax value to the vanilla WACC rate set in accordance with the Transpower input methodologies determination.
- 5.25 We accept Transpower's use of a post-tax WACC estimate of 6.44% on the basis that the effect of the difference is not material and Transpower has already linked the 6.44% figure to over 50 contracts it has entered into with its customers. The cost of unwinding this from the contracts would outweigh any consumer benefit or gain.
- 5.26 As part of improving our processes, in future we will publish the spreadsheet that calculates the post-tax WACC rate, along with the risk free rate and debt premium.

The WACC rate that applies for capping interest on assets during construction

- 5.27 In order to incentivise Transpower to seek the most economical finance available to fund its capital projects, the Transpower input methodologies determination applies an interest expenditure cap in respect of capital works during their construction (IDC cap). The cap is set at the post-tax WACC rate.
- 5.28 For the purposes of the 2014/15 wash-up calculation that feeds into the forecast MAR update, Transpower has applied an IDC cap at the post-tax WACC rate that applies to Transpower's IPP. Transpower has recognised the full amount of the IDC cap reduction in its (wash-up) depreciation building block in the year of commissioning.
- 5.29 Under the Transpower input methodologies determination the issue of whether the appropriate IDC cap rate should be the post-tax WACC for information disclosure purposes or the post-tax WACC rate for the IPP is unclear. Transpower considers it should be the post-tax IPP WACC rate. The Commission's view is that the IDC cap rate should be the post-tax WACC rate for information disclosure purposes. This is essentially on the basis that the post-tax WACC rate for information disclosure purposes (which is updated yearly) provides a better reflection of the cost of capital.
- 5.30 We consider that the matter of the appropriate post-tax WACC rate to use for the maximum rate of interest allowed during construction in respect of projects not yet commissioned is more properly determined as part of the wider review of input methodologies. On the basis of the information we have from Transpower that the 2014/15 capping adjustment is not material, we are comfortable that Transpower's proposed approach will not give rise to any material harm to consumers with regards to the effects on the forecast MAR and pricing.

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Note rounding has been applied.

Matters we found when evaluating Transpower's information

5.31 When evaluating the proposal Transpower made, we encountered some issues relating to the IRIS mechanism and the information provided that are discussed below.

Clarification of the IRIS mechanism

5.32 In the draft information supplied by Transpower, the allowable IRIS amount calculated was derived using a split of the operating expenditure between the HVAC and HVDC services. In our discussions with Transpower we noted Transpower is one regulated service, irrespective of its revenue and expenditure sources, and that splitting of the expenditure into the HVAC and HVDC services for the purposes of calculating IRIS was not provided for under the input methodologies. Transpower accepted this position in its proposed forecast MAR update and submitted a corrected IRIS calculation. This reduced the IRIS benefits to Transpower by approximately \$2.8 million which is to consumers' benefit.

Issues relating to Transpower's provision of information

5.33 The forecast MAR update process has a tight deadline set in the RCP2 IPP determination. The spreadsheets used to provide the information are very large and complex. We observed areas where we consider that changes could improve our understanding of, and confidence in, the information. This would allow faster assessment and processing, as well as increased confidence in the systems used for the next regulatory reset.⁴³ We will discuss these with Transpower.

See also the improvements we recommended to Transpower in Attachment I *Setting Transpower's individual price-quality path for 2015-2020* [2014] NZCC 23 (29 August 2014).

Attachment A: Forecast MAR summary

Forecast MAR applied to pricing years in RCP2 ending	Forecast MAR is calculated based on building block values for the disclosure year ending	Initial determined value of forecast MAR	Incremental update to forecast MAR determined not later than the second Wednesday in November 2015	Incremental update to forecast MAR determined not later than the second Wednesday in November 2016	Incremental update to forecast MAR determined not later than the second Wednesday in November 2017	Incremental update to forecast MAR determined not later than the second Wednesday in November 2018	Total forecast MAR applicable to the pricing year (sum of amounts in columns 3 to 7)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]	[Column 8]
31 March 2016 (Year 1)	30 June 2016	\$881.6 million	N/A	N/A	N/A	N/A	\$881.6 million
31 March 2017 (Year 2)	30 June 2017	\$918.6 million	\$(7.0) million*	N/A	N/A	N/A	\$911.7 million
31 March 2018 (Year 3)	30 June 2018	\$951.8 million	\$0.4 million	\$XX.X million	N/A	N/A	\$952.2 million
31 March 2019 (Year 4)	30 June 2019	\$949.4 million	\$0.5 million	\$XX.X million	\$XX.X million	N/A	\$949.9 million
31 March 2020 (Year 5)	30 June 2020	\$956.8 million	\$0.5 million	\$XX.X million	\$XX.X million	\$XX.X million	\$957.3 million

^{*} Rounded number

Attachment B: 2014/15 Wash-up Calculation

	Disclosure Year ended 30 June 2015				
MAR Building Block	Total (\$m)	HVAC (\$m)	HVDC (\$m)		
Average RAB	4,657.4	3,913.6	743.8		
WACC	8.05%	8.05%	8.05%		
Capital Charge (A)	374.9	315.0	59.9		
Revenue	924.5	779.8	144.7		
Term Credit Spread Differential	2.6	2.2	0.4		
Operating Expenditure	271.9	248.0	23.9		
Depreciation	242.0	199.0	43.0		
Net Operating Profit before Tax	408.0	330.6	77.4		
Tax	41.1	32.3	8.8		
Net Operating Profit after Tax (B)	366.9	298.3	68.7		
Wash-up (A-B) (note 1)	8.0	16.8	(8.8)		
Net Post-tax EV Entries Relating to Prior Years	(8.7)	(19.1)	10.3		
Voluntary Revenue Reductions	(4.0)	(4.0)	0.0		
Total adjustments	(4.7)	(6.3)	1.5		
Interest + Tax Gross-up + Cash-flow Timing Adjustment	(2.5)	(2.9)	0.5		
Updated effect on 2016/17 forecast MAR (note 2)	(7.2)	(9.2)	2.0		

Notes:

- 1. The wash-up calculation is carried out in accordance with Schedule E of the IPP Determination for RCP1.
- 2. The total adjustments from 2014/15 are adjusted to 2016/17 revenue by calculating interest at the post-tax WACC rate from 2014/15 through to 2016/17, are then grossed up from the after-tax adjustment to a revenue equivalent at the corporate tax rate, and the cash-flow timing factor for EV adjustments is applied to find the forecast MAR value.