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# **Transpower's individual price-quality path from 1 April 2020 – IRIS baseline adjustment term**

## **Draft decisions and reasons paper**

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## Associated documents

Publication date	Reference	Title
29 June 2017	978-1-869455-90-3	<a href="#">Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme</a>
28 November 2018	978-1-869456-27-6	<a href="#">Transpower Individual Price-Quality Path Determination 2015 [2014] NZCC 35, as amended and consolidated as at 26 November 2018</a>
1 June 2018	978-1-869456-39-9	<a href="#">Transpower Capital Expenditure Input Methodology determination 2012 [2012] NZCC 2, as amended and consolidated as at 1 June 2018</a>
25 October 2018	978-1-869456-63-4	<a href="#">Our process, framework and approach for setting Transpower's expenditure allowances, quality standards and individual price-quality path for 2020 to 2025</a>
7 February 2019	978-1-869456-82-5	<a href="#">Transpower's individual price-quality path for the next regulatory period - Issues paper</a>
29 May 2019	978-1-869456-04-4	<a href="#">Transpower's individual price-quality path from 1 April 2020 - Draft decisions and reasons paper</a>
10 June 2019	978-1-869457-09-9	<a href="#">Transpower Input Methodologies Determination 2010 [2012] NZCC 17, as amended and consolidated as at 10 June 2019</a>

Commerce Commission  
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## Executive Summary

- X1 The purpose of this draft decision is to seek views of interested parties on our proposed approach to determining the ‘differences in penultimate year’ for the purposes of calculating the ‘baseline adjustment term’ as required by the Transpower input methodologies (**Transpower IMs**).<sup>1</sup>
- X2 The baseline adjustment term is a value required under the Incremental Rolling Incentive Scheme (**IRIS**) applied to Transpower. This value is used to determine operating expenditure (**opex**) incentive amounts, which are recoverable costs applied from the second year of a regulatory period. Adopting a smoothed price path as proposed in our draft decision paper on Transpower’s individual price-quality path (**IPP**) requires that we forecast all opex incentive amounts to be recovered in regulatory control period 3 (**RCP3**).<sup>2</sup> The opex incentive amounts (including the baseline adjustment term) are only included as recoverable costs from Year 2 of RCP3 (ie, from 1 April 2021), so that all historical opex information is available from RCP2 prior to finalising the total amounts.
- X3 However, we have decided to consult on this now because we are proposing to build the forecast IRIS recoverable costs (ie, the opex incentive amounts) into the proposed smoothed price-path for RCP3. Any material change from the forecast recoverable costs set at the time of the IPP could lead to a price shock at a later date. It is therefore prudent to consider this issue now.
- X4 Although we expect the baseline adjustment term to be finalised in the first year of RCP3 once all information from RCP2 is available, we consider that any updated information is likely to have only a small effect on the estimated value. In estimating this final value, we expect to use the methodology we used in estimating the baseline adjustment term for the smoothed price-path for RCP3.

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<sup>1</sup> *Transpower Input Methodologies Determination 2010* [2012] NZCC 17, as amended and consolidated as at 10 June 2019, clause 3.6.4(4).

<sup>2</sup> Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper” (29 May 2019).

- X5 The IRIS has been designed to address an issue that occurs when the individual price-quality path is reset.<sup>3</sup> Specifically, while price-quality regulation creates an incentive to achieve efficiency savings, without an adjustment mechanism this incentive would decline (ie, the retention factor would decrease) as the regulatory period progresses.<sup>4</sup>
- X6 Without an adjustment mechanism such as the IRIS, the decreasing retention factor would exist because Transpower would be able to retain the revenue associated with any efficiency savings made at the start of the regulatory period for a longer time than those savings made at the end of the regulatory period.<sup>5</sup> The declining incentive that exists under a price-quality path without an IRIS mechanism is known as the ‘natural incentive’.
- X7 To counteract the declining strength of the natural incentive through the regulatory period, the IRIS is designed to allow Transpower to ‘carry forward’ the benefit of savings in opex from one regulatory period to the next. Doing so is intended to make the incentive for Transpower to make opex efficiency gains effectively the same in each year of the regulatory period.<sup>6</sup>
- X8 The IRIS mechanism requires an ‘expenditure baseline’ because it provides the basis for assessing whether a gain or loss has been made. For Transpower, this baseline is the forecast opex that is determined when setting an IPP.<sup>7</sup> However, because Transpower is subject to an IPP which can be determined independently from historical opex, a discontinuity arises that breaks the link between the expenditure baseline in one period and the next.

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<sup>3</sup> Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper”, above n 2, at part 3 subpart 6.

<sup>4</sup> A retention (or sharing) factor (or ‘incentive rate’) is the proportion of the benefits of any efficiency saving that is retained by Transpower. The remainder of the benefits will be shared with consumers.

<sup>5</sup> Efficiency savings are passed on to consumers (through lower prices) at the time of a price-quality path reset.

<sup>6</sup> The IRIS for Transpower is intended to adjust the natural incentives applying to opex efficiency savings only. There are separate incentive mechanisms applying to capital expenditure (**capex**). See: Commerce Commission “Transpower capex input methodology review – Decision and reasons” (29 March 2018), Figure 5.

<sup>7</sup> *Setting Transpower’s individual price-quality path for 2015–2020 – Final decisions and reasons* [2014] NZCC 23, at [A7]-[A8].

- X9 An additional term ('the baseline adjustment term') is therefore required to offset any IRIS carry forward amounts that are accumulated for savings made in the penultimate year of the period, but which are not considered when setting the IPP forecast in the next period.<sup>8,9</sup>
- X10 More specifically, the Transpower baseline adjustment term estimates the total savings made in the penultimate year of the period (ie, Year 4 in RCP2).<sup>10</sup> Without this adjustment the 'amount carried forward' under the IRIS would overcompensate any permanent and temporary savings made in that year.<sup>11</sup>
- X10.1 Any permanent savings in Year 4 would be overcompensated because they are assumed not to be included in the RCP3 forecast and therefore Transpower would retain an allowance for those savings within the RCP3 forecast as well as obtaining a positive IRIS revenue adjustment via the IRIS carry forward mechanism.<sup>12</sup>
- X10.2 Any temporary savings in Year 4 would be overcompensated because the IPP forecast would exclude any temporary savings from the forecast, but the IRIS carry forward mechanism would provide 5 years of compensation for the single year of temporary savings.<sup>13</sup>
- X11 The IRIS provisions in the Transpower IMs therefore require the Commission to:<sup>14</sup>
- X11.1 determine the 'differences in penultimate year' term by estimating the total savings in the penultimate year of the previous regulatory period (Year 4 of RCP2);

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<sup>8</sup> RCP3 is the regulatory period commencing on 1 April 2020. RCP2 is the regulatory period which commenced on 1 April 2015 and which ends on 31 March 2020.

<sup>9</sup> This compares to the approach taken for electricity distribution businesses (**EDBs**) subject to a default price-quality path (**DPP**) in which the forecast allowance is determined with reference to a historical base year.

<sup>10</sup> 'Total savings' in Year 4 of RCP2 includes all temporary and permanent savings made in that year. However, it is not the difference between forecast opex and actual opex in Year 4 of RCP2. This is because any permanent savings made by Transpower in Years 1-3 of RCP2 also affect the difference between forecast and actual opex in that year.

<sup>11</sup> *Transpower Input Methodologies Determination 2010*, above n 1, clause 3.6.3.

<sup>12</sup> Transpower "Submission on Input methodologies review draft decision" 20 April 2017, at 2.

<sup>13</sup> This is not an issue for the IRIS applied to EDBs under a DPP, because any temporary savings in the base year would also be included in the forecast for the next period. The effect of this 'reduced' allowance under a DPP exactly cancels out any positive IRIS adjustments.

<sup>14</sup> *Transpower Input Methodologies Determination 2010*, above n 1, clause 3.6.4.

- X11.2 use the ‘differences in penultimate year’ estimate to calculate the ‘baseline adjustment term’ so that appropriate revenue adjustments are made in the next regulatory period to offset the potential issues described above; and
- X11.3 combine the baseline adjustment term with other elements of the IRIS mechanism (ie, the ‘base year adjustment term’ and the ‘amounts carried forward’) to determine the total IRIS recoverable cost adjustments for RCP3 (the ‘opex incentive amounts’).
- X12 Other than the estimate of ‘differences in penultimate year’ term, the IRIS requirements of the Transpower IMs are mechanistic based on the formulas outlined in the Transpower IMs. Therefore, this paper focuses on how we intend to estimate the total savings in Year 4 of RCP2, which will be used to determine the baseline adjustment term to be applied in RCP3.
- X13 In 2017, we outlined two back casting methods that we intended to use to estimate the baseline adjustment term, using total savings in Year 4 of RCP2.<sup>15</sup> This paper compares those two methods:
- X13.1 Year 1 back cast method; and
- X13.2 Step-and-Trend back cast method.
- X14 Both methods use the forecast allowance for RCP3 and historical opex to estimate an overall growth trend in opex. We consider that this approach provides the most appropriate methodology from which the total savings in Year 4 can be estimated.<sup>16</sup>
- X15 In addition to the two methods identified, an alternative option may be to average the Year 1 back cast and Step-and-Trend methods to estimate the baseline adjustment term.
- X16 The use of the Step-and-Trend back cast method results in a proposed baseline adjustment term of approximately -\$42.7m, while the Year 1 back cast method results in a proposed baseline adjustment term of -\$22.0m. Both methods use a general growth trend in opex of 1.64% (based on our draft RCP3 IPP opex allowance).<sup>17</sup>

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<sup>15</sup> Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme” (29 June 2017), at [76]-[94].

<sup>16</sup> This was supported by Transpower in its submission on our 2017 decision paper. See: Transpower “Submission on Input methodologies review draft decision”, above n 12, at 2.

<sup>17</sup> We consider that using the trend from Transpower’s approach of approximately 2% is likely to overstate the general trend in opex as it is solely based on a forward-looking forecast allowance (that has also been adjusted).

- X17 We consider the two different methods are useful cross-checks against each other. For the purposes of the IPP for RCP3, our current view based on the information available to us, is to apply the Step-and-Trend method as it takes into account the total opex allowance compared to the Year 1 back-cast method.<sup>18</sup> This is because unlike the Year 1 back-cast method, the Step-and-Trend method does not rely on the value of a single year, which may include one-off factors which can be difficult to identify.
- X18 We are interested in views on the two approaches described above and the alternative option, including our current view to apply the Step-and-Trend method for the IPP for RCP3.
- X19 Our draft decision for determining the ‘differences in penultimate year’ term is therefore to use the Step-and-trend back-cast method,<sup>19</sup> and a proposed baseline adjustment term of approximately -\$42.7 million in RCP3. This compares with Transpower’s proposed estimate for the baseline adjustment term of \$79.3 million (adjusted for the WACC consistent with the RCP3 IPP draft decision).<sup>20</sup> Transpower’s proposed estimate for the baseline adjustment term was provided as part of its proposed forecast ‘smoothed’ price path.<sup>21</sup>
- X20 Using our estimate of the baseline adjustment term estimate would result in recoverable costs which are approximately \$110 million lower over RCP3.<sup>22</sup> This will result in a corresponding reduction in the maximum revenue that Transpower can earn, of approximately the same amount after the smoothing mechanism is applied. This is approximately 3% of total revenues over the period.<sup>23</sup>

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<sup>18</sup> Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at [89]-[95].

<sup>19</sup> This methodology was explained in our 2017 decision paper. See: Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at [86]-[88].

<sup>20</sup> This value is not precisely the same as provided by Transpower in their RCP3 proposal because it has been updated to use a WACC of 5.13%, consistent with the RCP3 IPP draft decision, rather than the WACC used in Transpower’s proposal of 5.5%. However, this value uses Transpower’s estimate for the total differences in penultimate year of -\$14.2 million.

<sup>21</sup> Refer Transpower’s ‘Revenue Model’ at <https://www.transpower.co.nz/keeping-you-connected/industry/rcp3/rcp3-proposal-securing-our-energy-future-2020-%E2%80%93-2025>, Worksheet “RCP2 IRIS” Row 69.

<sup>22</sup> This is the difference between Transpower’s opex incentive amount estimate and our estimated opex incentive amount and is provided on a present value basis as at the start of RCP3.

<sup>23</sup> This is based on our draft decision total revenue of approximately \$3.7 billion provided in PV terms as at the start of RCP3. See: Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper”, above n 2, at Figure X4.



X21 This paper does not focus on other parts of the IRIS mechanism and only invites submissions on the estimation of 'differences in penultimate year' as required by the Transpower IMs.<sup>24</sup>

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<sup>24</sup> *Transpower Input Methodologies Determination 2010*, above n 1, clause 3.6.4(4).

# 1. Introduction

## Purpose of paper

- 1.1 The draft decision outlined in this paper is in respect of the Incremental Rolling Incentive Scheme (**IRIS**) which is set out in the Transpower input methodologies (**Transpower IMs**).<sup>25</sup> The purpose of this draft decision is to seek views of interested parties on our proposed approach to determining the ‘differences in penultimate year’ for the purposes of calculating the baseline adjustment term as required by the Transpower IM.<sup>26</sup>
- 1.2 This paper outlines our proposed application of the ‘baseline adjustment term’ part of the IRIS mechanism. We do not focus on other parts of the IRIS mechanism and only invite submissions on the estimation of ‘differences in penultimate year’ as required by the Transpower IMs.<sup>27</sup>
- 1.3 We are undertaking this consultation as part of the IPP reset as we are proposing to build the forecast IRIS recoverable cost (ie, the opex incentive amount) into the smoothed price-path for the next regulatory period commencing 1 April 2020 (**RCP3**).<sup>28</sup> The smoothed price path would require the forecast recoverable costs (ie, the opex incentive amount), to be estimated when setting the IPP.
- 1.4 Therefore, we intend publishing a forecast baseline adjustment term with our final IPP decisions in August 2019.<sup>29</sup> Our final decision after consultation with interested persons will form part of the calculation of the price path in the IPP for RCP3.<sup>30</sup>
- 1.5 We are seeking views on the approach to determining the baseline adjustment term to allow interested parties to provide feedback and narrow the range of potential estimates so that there is greater certainty in the forecast IRIS recoverable costs that will be applied over RCP3.

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<sup>25</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at subpart 6, section 1.

<sup>26</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(4).

<sup>27</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4.

<sup>28</sup> The baseline adjustment term is an input to the opex incentive amount.

<sup>29</sup> The actual opex incentive amount will be washed up for actual values when the final baseline adjustment term is determined in the first year of RCP3.

<sup>30</sup> The final baseline adjustment term value is not required until the first year of RCP3 (when actual expenditure numbers over the whole of RCP2 will be available).

## Structure of paper

- 1.6 This paper sets out:
  - 1.6.1 background on the Transpower IRIS, including how the IRIS interacts with the IPP forecast and an explanation of the IRIS baseline adjustment term (Chapter 2);
  - 1.6.2 potential methods for estimating the baseline adjustment term (Chapter 3);
  - 1.6.3 how we have estimated the baseline adjustment term (Chapter 4); and
  - 1.6.4 a description of Transpower's estimated baseline adjustment term in its RCP3 proposal (Chapter 5).

## Submissions on this paper

- 1.7 We welcome your written views on the matters raised in this paper, with submissions due by **5pm on Friday, 26 July 2019**.
- 1.8 Responses should be addressed to:

Dane Gunnell (Manager, Price-Quality Regulation)  
c/o [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz)
- 1.9 Please include "Transpower IRIS baseline adjustment term" in the subject line of your email. We prefer submissions in both a format suitable for word processing (such as a Microsoft Word document), as well as a 'locked' format (such as a PDF) for publication on our website.

## Confidential submissions

- 1.10 While we discourage requests for non-disclosure of submissions so that all information can be tested in an open and transparent manner, we recognise that there may be cases where parties that make submissions wish to provide information in confidence.<sup>31</sup> We offer the following guidance:
- 1.10.1 If it is necessary to include confidential material in a submission, the information should be clearly marked, with reasons why that information is confidential.
  - 1.10.2 Where commercial sensitivity is asserted, submitters must explain why publication of the information would be likely to unreasonably prejudice their commercial position or that of another person who is the subject of the information.
  - 1.10.3 Both confidential and public versions of the submission should be provided.
  - 1.10.4 The responsibility for ensuring that confidential information is not included in a public version of a submission rests entirely with the party making the submission.
- 1.11 We request that you provide multiple versions of your submission if it contains confidential information or if you wish for the published electronic copies to be 'locked'. This is because we intend to publish all submissions on our website. Where relevant, please provide to the Commission both an 'unlocked' electronic copy of your submission, and a clearly labelled 'public version'.

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<sup>31</sup> Parties can also request that we make orders under s 100 of the Act in respect of information that should not be made public. Any request for a s 100 order must be made when the relevant information is supplied to us, and must identify the reasons why the relevant information should not be made public. We will provide further information on s 100 orders if requested by parties. A key benefit of such orders is to enable confidential information to be shared with specified parties on a restricted basis for the purpose of making submissions. Any s 100 order will apply for a limited time only as specified in the order. Once an order expires, we will follow our usual process in response to any request for information under the Official Information Act 1982.

## How this paper fits into the overall package of draft decisions for the Transpower IPP reset

1.12 There are a number of separate consultation processes, with different timeframes for receiving submissions, in relation to our draft decisions on Transpower's IPP for RCP3. These are set out in Table 1 below.

**Table 1 – Package of IPP draft decisions and consultation timeframes**

Publication date	Consultation	Submissions due/received	Cross-submissions due/received
29 May 2019	<a href="#">Draft decisions on Transpower's IPP</a>	27 June 2019	11 July 2019
29 May 2019	<a href="#">Draft decisions on Transpower IMs and Capex IM amendments</a>	5 July 2019	19 July 2019
14 June 2019	<a href="#">Draft IPP determination</a>	11 July 2019	N/A
11 July 2019	<a href="#">Draft decision on IRIS baseline adjustment term</a>	25 July 2019	N/A
18 July 2019	<a href="#">Draft decision on further Transpower IM amendments on new reopeners and EV account balance carry forward</a>	1 August 2019	N/A

## 2. Background on Transpower IRIS

### Overview of the Transpower IRIS

- 2.1 Under Part 4 of The Commerce Act,<sup>32</sup> we are periodically required to make decisions that affect the maximum revenue that Transpower can earn for transmitting electricity in New Zealand. Transpower's individual price-quality path also specifies minimum standards for service quality.
- 2.2 Transpower has an incentive to economise on expenditure because it is permitted to recover a fixed amount of revenue for the duration of each regulatory period. It initially gains from any efficiency saving it makes because its costs fall, but revenue is maintained. Following a price-quality path reset, such as the one we are currently undertaking, the benefits of the efficiency gain will be shared with consumers, because Transpower's maximum revenue (and therefore prices it charges) are reset at a lower level – consistent with the lower (efficient) level of expenditure.
- 2.3 Transpower's IRIS provisions are included in the Transpower IM to address an issue that occurs when the individual price-quality path is reset. Specifically, while price-quality regulation creates an incentive to achieve efficiency savings, this incentive declines (ie, the retention factor decreases) as the given regulatory period progresses.<sup>33</sup>
- 2.4 The decreasing retention factor exists because Transpower is able to retain the revenue associated with any efficiency saving made at the start of the regulatory period for a longer time than those savings made at the end of the regulatory period.<sup>34</sup> The declining incentive that exists under a price-quality path without an IRIS mechanism is known as the 'natural incentive'.<sup>35</sup>

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<sup>32</sup> Commerce Act 1989, s 53ZC.

<sup>33</sup> A retention (or sharing) factor is the proportion of the benefits of any efficiency saving that is retained by Transpower. The remainder of the benefits will be shared with consumers.

<sup>34</sup> Efficiency savings are passed on to consumers (through lower prices) at the time of a price-quality path reset.

<sup>35</sup> For further background on how incentives to make efficiency savings are affected by the inclusion or not of an IRIS mechanism see: Commerce Commission "Input methodologies (Transpower) reasons paper" (December 2010), at 94-98; Commerce Commission "Incentives for Suppliers to Control Expenditure During a Regulatory Period: Process and Issues Paper" (20 September 2013).

- 2.5 To counteract the declining strength of the natural incentive through the regulatory period, the IRIS is designed to allow Transpower to ‘carry forward’ the benefit of a saving in operating expenditure (**opex**) after the end of the regulatory period (ie, from RCP2 into RCP3).<sup>36</sup>
- 2.6 The IRIS mechanism requires an ‘expenditure baseline’ because it provides the basis for assessing whether a gain or loss has been made. For Transpower, this baseline is the forecast opex that is determined when setting an individual price-quality path (**IPP**).<sup>37</sup> However, because Transpower is subject to an IPP, which can be determined independently from historical opex, a discontinuity arises that breaks the link between the expenditure baseline in one period and the next.
- 2.7 An additional term (‘the baseline adjustment term’) is therefore required to offset any IRIS carry forward amounts that are accumulated for savings made in the penultimate year of the period, but which are not considered when setting the IPP forecast in the next period.<sup>38, 39</sup>
- 2.8 More specifically, the Transpower baseline adjustment term estimates the total savings made in the penultimate year of the period (ie, Year 4 in RCP2).<sup>40</sup> Without this adjustment the ‘amount carried forward’ under the IRIS<sup>41</sup> would overcompensate any permanent and temporary savings made in that year.
- 2.8.1 Any permanent savings in Year 4 would be overcompensated because they are assumed not to be included in the RCP3 forecast and therefore Transpower would retain an allowance for those savings within the RCP3 forecast as well as obtaining a positive IRIS revenue adjustment via the IRIS carry forward mechanism.<sup>42</sup>

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<sup>36</sup> The Transpower IM only affects Transpower’s opex because incentive mechanisms concerning capital expenditure are covered under the Transpower capex IM.

<sup>37</sup> Commerce Commission “Amendments to input methodologies for electricity distribution services and Transpower New Zealand” (27 November 2014), at [A7].

<sup>38</sup> RCP3 is the regulatory period commencing on 1 April 2020. RCP2 is the regulatory period which commenced on 1 April 2015 and which ends on 31 March 2020.

<sup>39</sup> This compares to the approach taken for electricity distribution businesses (**EDBs**) subject to a default price-quality path (**DPP**) in which the forecast allowance is determined with reference to a historical base year.

<sup>40</sup> ‘Total savings’ in Year 4 of RCP2 includes all temporary and permanent savings made in that year. However, it is not the difference between forecast opex and actual opex in year 4 of RCP2. This is because any permanent savings made by Transpower in years 1-3 of RCP2 also affect the difference between forecast and actual opex in that year.

<sup>41</sup> *Transpower Input Methodologies Determination 2010*, above n 1, clause 3.6.3.

<sup>42</sup> Transpower “Submission on Input methodologies review draft decision”, above n 12, at 2.

- 2.8.2 Any temporary savings in Year 4 would be overcompensated because the IPP forecast would exclude any temporary savings from the forecast, but the IRIS carry forward mechanism would provide 5 years of compensation for the single year of temporary savings.<sup>43</sup>
- 2.9 The IRIS provisions in the Transpower IMs therefore require the Commission to:
- 2.9.1 estimate the ‘Differences in penultimate year’ term which is the total savings in the penultimate year of the previous regulatory period (Year 4 of RCP2),<sup>44</sup>
- 2.9.2 use the ‘differences in penultimate year’ estimate to calculate the ‘baseline adjustment term’ so that appropriate revenue adjustments are made in the next regulatory period to offset the potential issues described above;<sup>45</sup> and
- 2.9.3 combine the baseline adjustment term with other elements of the IRIS mechanism (ie, the ‘base year adjustment term’ and the ‘amounts carried forward’) to determine the total IRIS revenue adjustments required for RCP3 (the ‘opex incentive amount’).<sup>46</sup>
- 2.10 Other than the estimate of ‘differences in penultimate year’ term, the IRIS requirements of the Transpower IMs are mechanistic based on the formulas outlined in the Transpower IMs. Therefore, this paper focuses on how we intend to estimate the total savings in Year 4 of RCP2, which will be used to determine the baseline adjustment term to be applied in RCP3.

## Application of the Transpower IRIS

- 2.11 In June 2017, as part of the input methodology review (**IM review**), we reviewed the Transpower IRIS (2017 decision paper).<sup>47</sup> The 2017 decision paper described our decision to amend the IRIS provisions in the Transpower IM to be more consistent with the timing of Transpower’s opex forecasting and also provided guidance on how we intended to estimate the ‘baseline adjustment term’.<sup>48</sup>

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<sup>43</sup> This is not an issue for the IRIS applied to EDBs under a DPP, because any temporary savings in the base year would also be included in the forecast for the next period. The effect of this ‘reduced’ allowance under a DPP exactly cancels out any positive IRIS adjustments.

<sup>44</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(4).

<sup>45</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(3).

<sup>46</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clauses 3.6.4(1) and (2).

<sup>47</sup> Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15.

<sup>48</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(3).



- 2.12 The IRIS provisions in the Transpower IM require us to determine the total savings<sup>49</sup> (or overspends) in the penultimate year of the regulatory period (ie, Year 4 of RCP2), which is used as an input to the baseline adjustment term.<sup>50</sup> Also, our approach to estimating total savings in Year 4 of RCP2 is itself determined by estimating any temporary savings (or overspends) in Year 3 of RCP2.<sup>51</sup>
- 2.13 In our 2017 decision paper we considered that it may be appropriate to estimate the baseline adjustment term at the same time as setting the IPP (to allow combined consultation).<sup>52</sup> However, we noted that estimating the baseline adjustment term at this time reduces the quantity of historical data that can be used to estimate savings in Year 4 of RCP2.
- 2.14 We have decided to consult on the baseline adjustment term now because we are proposing to build the forecast IRIS recoverable costs (ie, the opex incentive amounts) into the proposed smoothed price-path for RCP3. Any material change from the forecast recoverable costs set at the time of the IPP could lead to a price shock at a later date. It is therefore prudent to consider this issue now.
- 2.15 Although we expect the baseline adjustment term to be finalised in the first year of RCP3 once all information from RCP2 is available, we consider that any updated information is likely to have only a small effect on the estimated value. In estimating this final value, we expect to use the methodology we used in estimating the baseline adjustment term for the smoothed price-path for RCP3.

### **Interaction between the IRIS and the IPP forecast**

- 2.16 The IRIS mechanism ensures that Transpower's incentives to control opex and make savings are constant over time. This relies on an explicit expenditure link between regulatory periods.

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<sup>49</sup> Total savings in Year 4 of RCP2 includes all temporary and permanent savings made in that year. However, it is not the difference between forecast opex and actual opex in Year 4 of RCP2. This is because any permanent savings in Years 1-3 of RCP2 also affect the difference between forecast and actual opex in that year.

<sup>50</sup> Our approach to estimating total savings in Year 4 of RCP2 is itself determined by estimating any temporary savings/overspends in Year 3 of RCP2.

<sup>51</sup> This is demonstrated in our 2017 decision paper. See: Commerce Commission "Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme", above n 15, at Attachment C.

<sup>52</sup> Commerce Commission "Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme", above n 15, at [96]-[97].

- 2.17 The allowance for opex in RCP3 is not necessarily determined by projecting forward an initial level of opex from a base year in the previous period (ie, Year 4 of RCP2). The link is broken between expenditure in one period and the next. To correct for this discontinuity, an adjustment is required that corrects for any incorrectly compensated savings or losses.
- 2.18 Under the IPP, the underlying assumption is that only permanent savings in the previous period are incorporated in the forecast, because the forecast is determined independently (ie, on a bottom-up basis).
- 2.19 As a result, there is no offsetting of the incorrect opex incentive that arises from temporary savings in Year 4 (ie, penultimate year of the regulatory period). Without any offsetting adjustment, suppliers would therefore be over-rewarded for any temporary savings in Year 4 or over-penalised for any temporary overspends.<sup>53</sup>

### **What is the baseline adjustment term?**

- 2.20 To adjust for the expenditure disconnect between IPP periods and the error in the opex incentive we must make a revenue adjustment. We do this through a 'baseline adjustment term', which has the effect of re-establishing the link between the expenditure baseline and expenditure in the previous period.
- 2.21 The baseline adjustment term acts to link expenditure between the IPP periods and is applied to Transpower's revenues in the following regulatory period. This is an input to the 'adjustment to the opex incentive' which is the sum of the 'baseline adjustment term' and the 'base year adjustment term'.<sup>54</sup>
- 2.22 In the Transpower IM, the relevant adjustment amount provided through the baseline adjustment term is equal to the distortion created by total savings in the penultimate year (Year 4) of the preceding regulatory period.<sup>55</sup> This negates the opex incentive that would otherwise be wrongly attributed to temporary savings in Year 4.

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<sup>53</sup> This may result in a higher retention factors than intended under the IRIS mechanism. For example, see: Commerce Commission "Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme", above n 15, at Attachment A.

<sup>54</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(1).

<sup>55</sup> This does not include the impact of savings that have been made in previous years (ie, Years 1 to 3) of the regulatory period.

2.23 The baseline adjustment term reduces the net present value of these savings to the supplier such that they only retain the appropriate retention factor, consistent with the IRIS policy objective.<sup>56</sup>

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<sup>56</sup> This is demonstrated in the model published with our draft decision on Transpower's IRIS provisions as part of the IM review. See: [https://comcom.govt.nz/\\_data/assets/excel\\_doc/0026/62387/Transpower-IRIS-baseline-adjustment-demonstration-model-24-March-2017.xlsx](https://comcom.govt.nz/_data/assets/excel_doc/0026/62387/Transpower-IRIS-baseline-adjustment-demonstration-model-24-March-2017.xlsx).

### 3. Potential methods for estimating the baseline adjustment term

- 3.1 The ‘differences in penultimate year’ term<sup>57</sup> (total savings in Year 4 of RCP2) is unobservable and must be estimated. Savings (or expenditure overspends) can be classified as permanent or temporary in nature, but these classifications are not easily discernible for a specific year.<sup>58</sup>
- 3.2 As part of our 2017 decision paper we outlined two methods for estimating the ‘differences in penultimate year’ term – a Year 1 back-cast and a Step-and-Trend back-cast.<sup>59</sup> Both methods use similar steps to estimate the ‘differences in penultimate year’ term in Year 4.<sup>60</sup>
- 3.2.1 A back casting approach is used to identify the level of opex consistent with a ‘revised expenditure baseline’ in Year 3 of RCP2 using actual opex over RCP2 and forecast opex over RCP3.
- 3.2.2 An estimate for permanent savings that have been made over the Years 1-3 of RCP2 can be determined by comparing this revised baseline for Year 3 with the original opex baseline (ie, forecast opex made when setting RCP2).
- 3.2.3 The estimate for permanent savings over Years 1-3 can be used to determine total savings in Year 4 of the period (ie, the differences in penultimate year’).
- 3.3 We can use the estimate of permanent savings over Years 1-3 to determine total savings in Year 4 (the ‘differences in penultimate year’). This can be calculated mathematically because (for Year 4):

$$\text{Forecast opex} - \text{Actual opex} = \text{Permanent savings in Years 1-3} + \text{Total savings in Year 4}$$

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<sup>57</sup> *Transpower Input Methodologies Determination 2010*, above n 1, at clause 3.6.4(4).

<sup>58</sup> Temporary savings are those which only take place in a given year, whereas permanent savings are those which are maintained in perpetuity. It is not straightforward to distinguish between temporary and permanent savings by examining actual expenditure and we therefore consider it therefore more appropriate to consider the trend in opex over time against an expenditure baseline.

<sup>59</sup> Back cast refers to trending from the RCP3 IPP opex allowance back to RCP2. See: Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at [77].

<sup>60</sup> Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at Attachment C.

- 3.4 Transpower supported our proposed approaches outlined in our 2017 decision paper to estimating the baseline adjustment term.<sup>61</sup>

...we support the Commission’s suggestion of using either or both of their proposed approaches to estimate temporary savings in Year 3 of the second Regulatory Control Period (RCP2), depending on the context of the IPP forecast.

### **RCP3 Year 1 back-cast method**

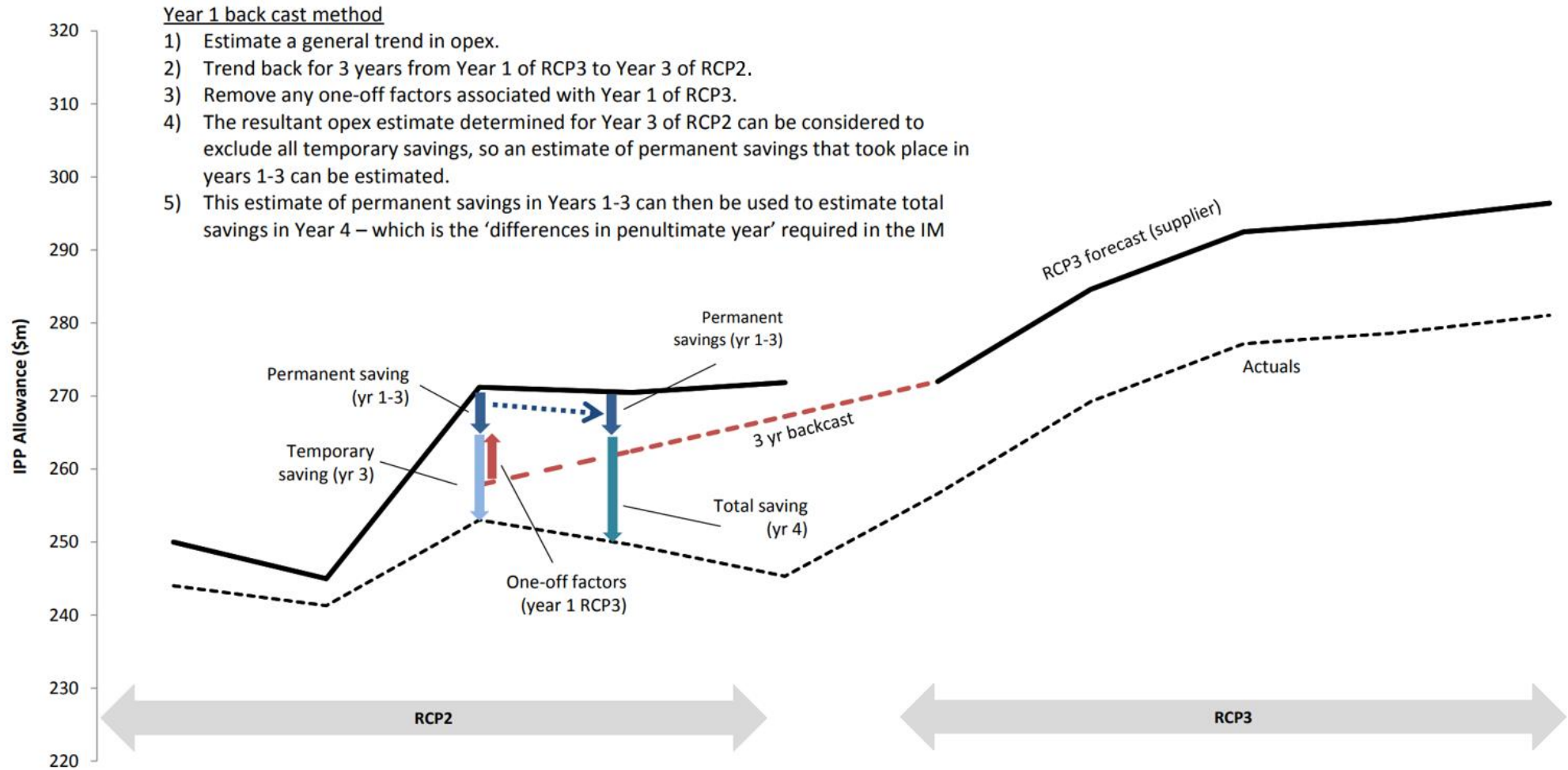
- 3.5 The RCP3 Year 1 back-cast requires us to estimate a general trend in opex. We then use this value to trend back from Year 1 of RCP3 to Year 3 of RCP2. This enables us to determine an estimate for opex in Year 3 of RCP2 that is consistent with the overall trend in opex and does not include any temporary savings in Year 3.
- 3.6 Any difference between this estimate of opex costs in RCP2 Year 3 and the actual incurred cost for that year can then be assumed to only be temporary savings. This is because the RCP3 Year 1 forecast is assumed to include any permanent savings made in RCP2, but not any temporary savings. Therefore, when we trend back from a starting point in RCP3 on a consistent basis, temporary savings can be identified.
- 3.7 However, because the trend is back-cast from one specific year of RCP3 (Year 1), we also need to take into account:
- 3.7.1 any one-off factors associated with the forecast of opex in RCP3 Year 1;<sup>62</sup> and
  - 3.7.2 any permanent ‘step changes’ in opex that have taken place between RCP2 Year 3 and RCP3 Year 1 that are not captured by the trend assumption. For example, a change in legislative or regulatory requirements may result in a ‘step change’ in opex.
- 3.8 Figure 1 illustrates the RCP3 Year 1 back-cast approach. The two key assumptions required are an estimate of the opex trend which is used to trend back over three years, and an estimate of one-off factors in the RCP3 Year 1 forecast. This example does not assume any permanent step change in expenditure between RCP2 Year 3 and RCP3 Year 1.

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<sup>61</sup> Transpower “Submission on Input methodologies review draft decision”, above n 12, at 2.

<sup>62</sup> One-off factors in this instance mean one-off factors that have resulted in an allowance above the overall opex trend for RCP3.

Figure 1 – RCP3 Year 1 back-cast example



### **RCP3 Step-and-Trend back-cast method**

- 3.9 The Step-and-Trend back-cast method is similar to the RCP3 Year 1 back-cast method, but instead of trending back from Year 1 of RCP3, we create a Step-and-Trend forecast for RCP3 that:
- 3.9.1 is equivalent to the opex forecast in RCP3 in present value (**PV**) terms; and
  - 3.9.2 increases each year in line with the estimated opex trend.
- 3.10 This new forecast is then extended back to Year 3 of RCP2 and the forecast is assumed to include permanent savings that took place in Year 3 of RCP2, but not temporary savings. An estimate for temporary savings can therefore be identified in a similar way to the RCP3 Year 1 back-cast method.
- 3.11 Figure 2 illustrates the Step-and-Trend back-cast method, including how an estimate of temporary savings in RCP2 Year 3 can be used to determine an estimate of total savings in RCP2 Year 4 for use in the baseline adjustment term.<sup>63</sup>

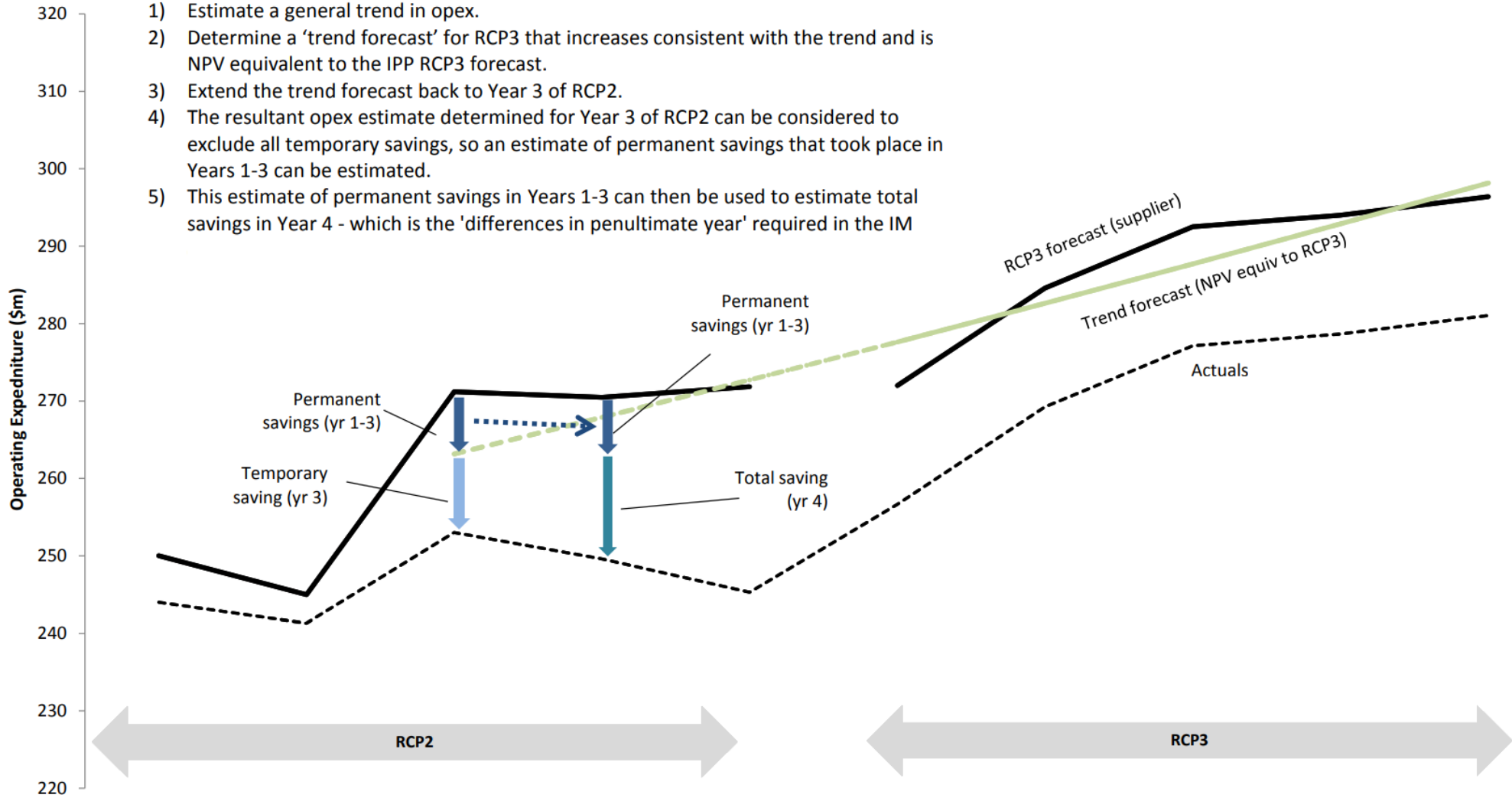
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<sup>63</sup> Note that this example does not include any permanent step change in expenditure, between Year 3 of RCP2 and Year 1 of RCP3.

**Figure 2 – RCP3 Step-and-Trend back-cast example**

Step and Trend back cast method

- 1) Estimate a general trend in opex.
- 2) Determine a 'trend forecast' for RCP3 that increases consistent with the trend and is NPV equivalent to the IPP RCP3 forecast.
- 3) Extend the trend forecast back to Year 3 of RCP2.
- 4) The resultant opex estimate determined for Year 3 of RCP2 can be considered to exclude all temporary savings, so an estimate of permanent savings that took place in Years 1-3 can be estimated.
- 5) This estimate of permanent savings in Years 1-3 can then be used to estimate total savings in Year 4 - which is the 'differences in penultimate year' required in the IM





## Comparison of the two methods

- 3.12 The two methods both result in an estimate of temporary savings in RCP2 Year 3, from which we can determine total savings in RCP2 Year 4. The key difference between the two approaches is the required input assumptions.
- 3.13 Broadly speaking:
  - 3.13.1 The accuracy of the RCP3 Year 1 back-cast method is dependent on our estimate of the opex trend, and the extent to which we can identify one-off factors in RCP3 Year 1.
  - 3.13.2 The accuracy of the RCP3 Step-and-Trend back-cast method is also dependent on our estimate of the opex trend. However, any variance in the trend assumption has a bigger impact under the RCP3 Step-and-Trend back-cast method than under the RCP3 Year 1 back-cast method, because it is applied over a longer time period.
- 3.14 There is therefore a trade-off between the two methods:
  - 3.14.1 The RCP3 Year 1 back-cast method has an additional input assumption (with the potential for additional error); and
  - 3.14.2 The RCP3 Step-and-Trend back-cast method results in a bigger impact from any variance in the trend assumption.

## 4. How we have estimated the baseline adjustment term

- 4.1 To estimate the total ‘differences in the penultimate year’ of RCP2, and hence the baseline adjustment term, using the two methods outlined above, we require a general trend in opex and an estimate of any one-off factors in RCP3 Year 1.
- 4.2 We have estimated a general trend in opex (explained below) and used this in our model to calculate the baseline adjustment term and total IRIS recoverable costs (from savings made in RCP2) based on Transpower’s RCP2 allowance and RCP2 actual spend, and our draft decision on the RCP3 IPP opex allowance.<sup>64</sup> We are publishing a model alongside this paper demonstrating how we have estimated the baseline adjustment term.
- 4.3 The categorisation of Fire and Emergency New Zealand (**FENZ**) levies and levies payable by all members of the Energy Complaints Scheme operated by Utilities Disputes Limited (**UDS**)<sup>65</sup> have been proposed to change from being in the opex allowance in RCP1 and RCP2 to becoming recoverable costs in RCP3. Therefore, to be consistent with historical actual opex, we have adjusted the RCP3 draft opex allowance to include the value of FENZ and UDS levies for the purposes of estimating the baseline adjustment term.
- 4.4 We have not identified any one-off factors in Year 1 of the RCP3 IPP opex allowance.

### How we have estimated the opex trend

- 4.5 The general trend in opex used in estimating temporary savings in RCP2 Year 3 and total savings in RCP2 Year 4 is a significant factor in determining the baseline adjustment term.
- 4.6 Based on the information available to us, our current preferred approach for estimation of the general opex trend is to use an exponential trend function. We have used nominal dollars in estimating our trend. Inflation is an example of exponential growth as it is inherently compounding.<sup>66</sup>

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<sup>64</sup> Years 4 and 5 actual opex are Transpower’s estimate of actual opex for the remainder of RCP2. At the time of the baseline adjustment term determination in RCP3 we will have the disclosed actual opex values for Years 4 and 5 of RCP2.

<sup>65</sup> This scheme has been approved under Schedule 4 of the Electricity Industry Act 2010.

<sup>66</sup> In comparing the exponential trend to a linear trend over the opex series, the exponential trend has a slightly higher R-squared (0.85 compared to 0.84). A higher R-squared value indicates that the model is a better fit of the data.

- 4.7 We have used two different time periods in estimating the trend:
- 4.7.1 The historical trend in opex, including our draft decision for the RCP3 IPP opex allowance (ie, the period from 2010/11 to 2024/25); and
- 4.7.2 The observed actual opex from 2010/11 to 2019/20 (where 2018/19 and 2019/20 are Transpower’s estimates of actual opex for the last two years of RCP2). These will be updated for actual opex when calculating the final baseline adjustment term in RCP3.
- 4.8 Table 2 sets out the opex trend estimates for the different time periods.

**Table 2 – General opex trend**

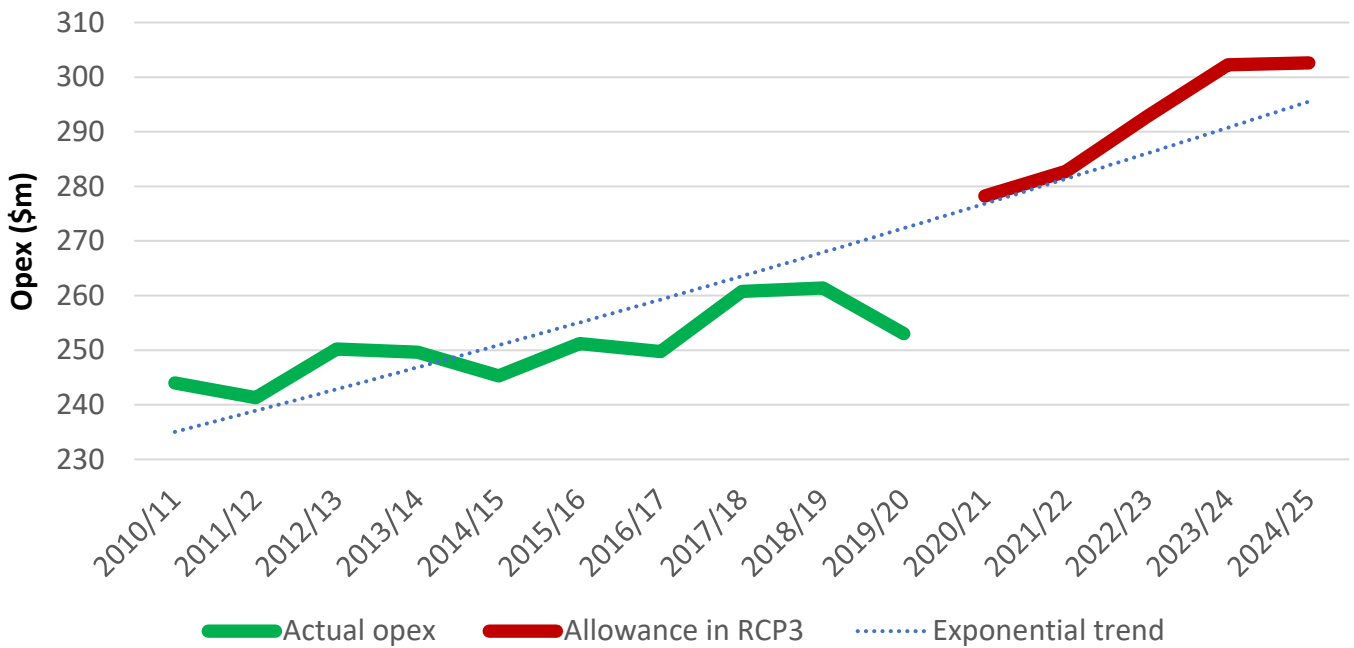
Time period	Trend estimate
Exponential trend (2010/11 to 2024/25) – historical trend including draft RCP3 IPP opex allowance	1.64%
Exponential trend (2010/11 to 2019/20) – observed actual opex spend	0.68%

- 4.9 Of the two time periods we prefer to use the exponential historical trend including the impact of our draft RCP3 IPP opex allowance. This is currently our best estimate of opex spend in RCP3, so we consider it should be included in estimating a general opex trend.
- 4.10 In addition, because we apply a back cast from the forecast opex amount in RCP3, our current proposed approach may become inconsistent if we use an opex trend that is only based on actual opex values and does not consider the RCP3 opex forecast that has been determined as part of the IPP setting process.<sup>67</sup>
- 4.11 The overall trendline (including the impact of the draft RCP3 allowance) is displayed in Figure 3.<sup>68</sup> This illustrates that although Transpower’s opex reduced in 2019/2020, forecast opex in RCP3 is expected to be much higher compared to historical levels.

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<sup>67</sup> For example, if we use a trend that is only based on historical opex values, we may need to make an additional adjustment to the RCP3 forecast prior to undertaking the back cast to exclude the additional opex that is above the historical trend.

<sup>68</sup> As noted previously, the last two years of RCP2 cannot be observed yet and are Transpower’s estimates of actual opex spend.

**Figure 3 – Opex trend**

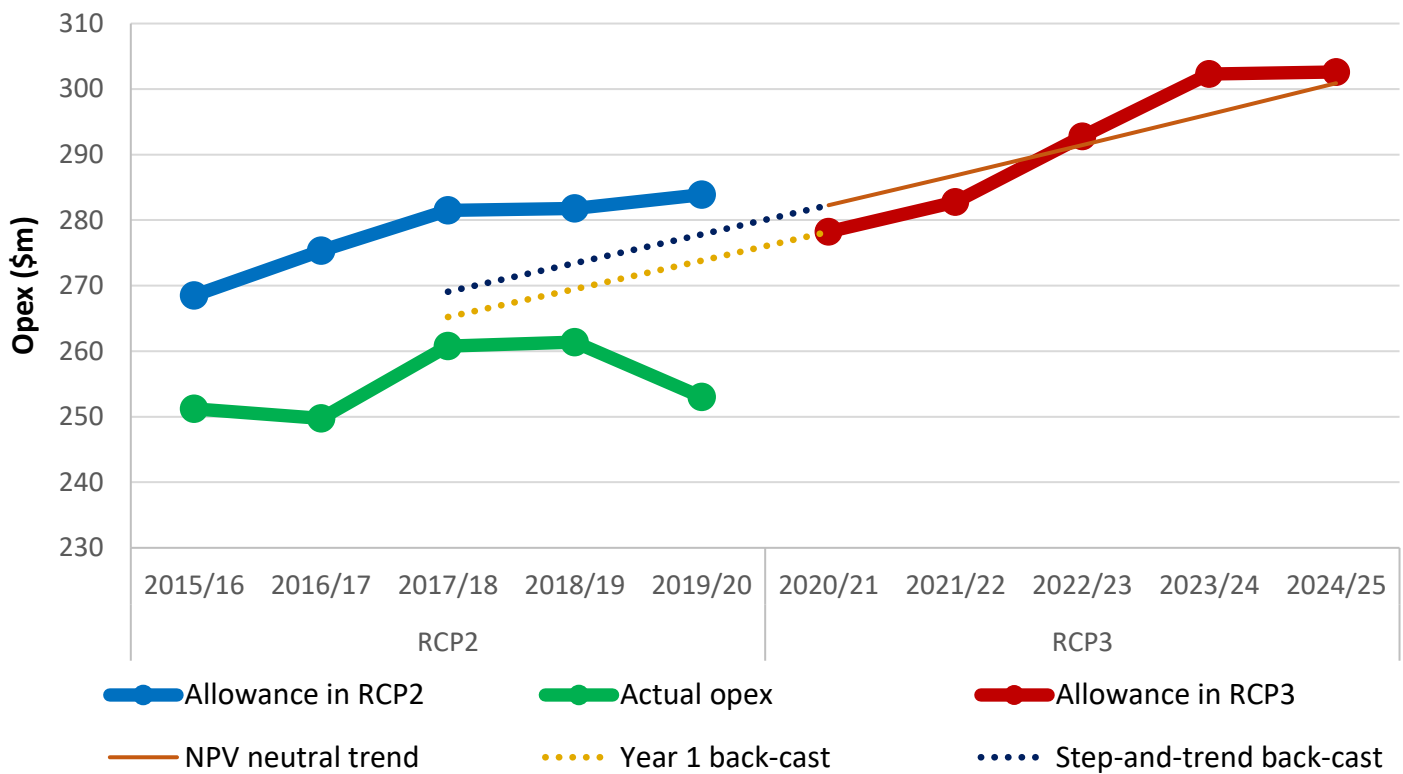
- 4.12 As a cross-check we have estimated general trends in opex using methods other than our current preferred exponential trend. The results are outlined in Table 3 in comparison to the exponential trend. The trend estimates in each of the time periods are relatively consistent. We consider this provides confidence in our proposed opex trend for the full time series.

**Table 3 – General opex trend estimations**

Trend estimation	Full period (including RCP3)
Average annual % change	1.60%
Compound annual growth	1.55%
Linear regression	1.69%
Exponential regression	1.64%

- 4.13 Figure 4 demonstrates how the trend estimate (ie, the exponential trend of 1.64%) is applied as under our two back casting methods and how it compares to the opex allowances over RCP2 and RCP3.

Figure 4 – Our two back-cast methods



### Our range of estimates of the baseline adjustment term

- 4.14 With our current preferred trend estimate (the exponential trend of 1.64%), and assuming no one-off factors in our draft decision for the RCP3 Year 1 opex allowance, we can estimate temporary savings in RCP2 Year 3 under each of the two methods (the RCP3 Year 1 back-cast method and RCP3 Step-and-Trend back-cast method).
- 4.15 Using the value of temporary savings in RCP2 Year 3 we are able to estimate the total differences in RCP2 Year 4 and therefore an estimate of the baseline adjustment term that applies in RCP3.
- 4.16 In addition to the two methods identified, an alternative option may be to average the Year 1 back cast and Step-and-Trend methods to estimate the baseline adjustment term. We are interested on views as to whether this alternative option is an appropriate approach.
- 4.17 Table 4 presents our range of baseline adjustment terms and opex incentive amounts under different assumptions.<sup>69</sup>

<sup>69</sup> The calculations for these outcomes are displayed in our associated model.

**Table 4 – Opex incentive outcomes**

	<b>Method</b>	<b>Growth trend</b>	<b>Total savings in Year 4 (\$m)</b>	<b>Baseline adjustment term (\$m)</b>	<b>Opex incentive amount including baseline adjustment term (\$m)<sup>70</sup></b>
Exponential trend (full series)	RCP3 Year 1 back cast	1.64%	3.9	-22.0	-10.1
Exponential trend (full series)	RCP3 Step-and-Trend back cast	1.64%	7.7	-42.7	-28.9

- 4.18 The baseline adjustment term is negative under both scenarios, resulting in a negative total opex incentive amount once other IRIS adjustments are included. A negative opex incentive amount means that there will be a negative revenue adjustment in RCP3.
- 4.19 This reflects that, based on our modelling under both methods, the total savings amount in Year 4 of RCP2 is positive.<sup>71</sup> As described in paragraph 2.8, positive savings in Year 4 require a negative adjustment via the baseline adjustment term to offset positive IRIS revenue adjustments from the IRIS carry forward mechanism.
- 4.20 We consider the two different methods are useful cross-checks against each other. For the purposes of the IPP for RCP3, our current view based on the information available to us, is to apply the Step-and-Trend method as it takes into account the total opex allowance compared to the Year 1 back-cast method.<sup>72</sup> This is because unlike the Year 1 back-cast method, the Step-and-Trend method does not rely on the value of a single year, which may include one-off factors which can be difficult to identify.
- 4.21 We are interested in views on the two approaches described above and the alternative option, including our current view to apply the Step-and-Trend method for the IPP for RCP3.

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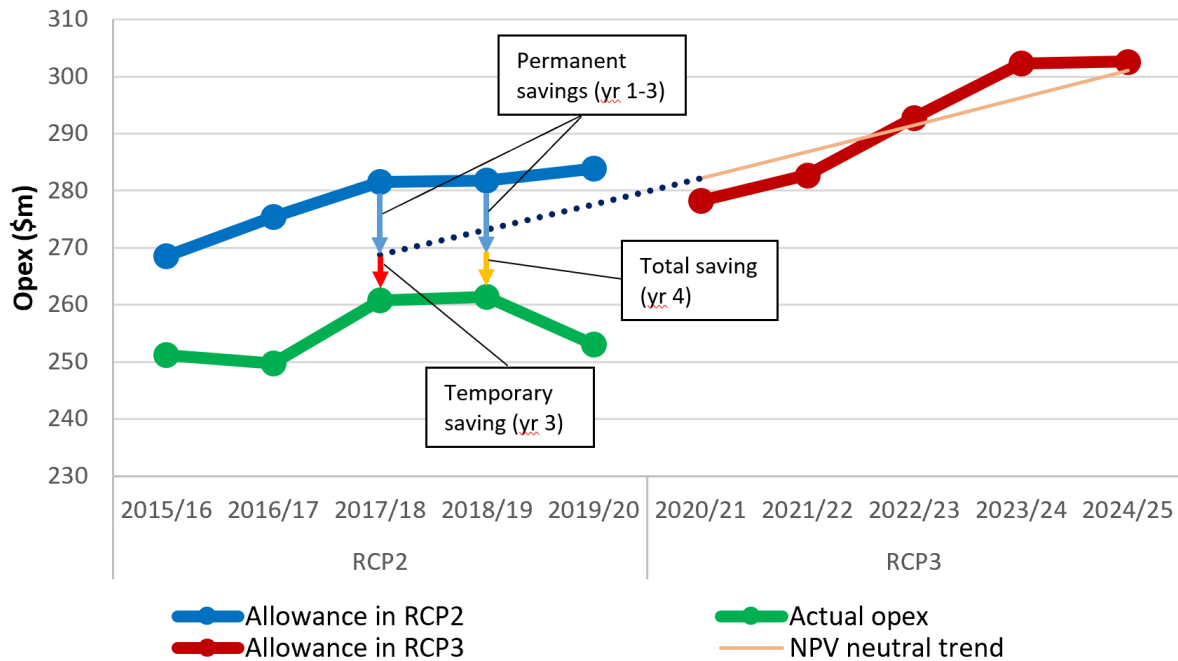
<sup>70</sup> This is the present value of the opex incentive amount as at the start of RCP3, ie, 1 April 2020.

<sup>71</sup> By positive saving we mean that the actual opex spend is lower than the forecast opex allowance for that year, taking into account all permanent savings made in previous years of the period.

<sup>72</sup> Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at [89]-[95].

- 4.22 Figure 5 demonstrates how the back-casting can be used to estimate total savings in RCP2 Year 4 using the 1.64% exponential trend is used with the RCP3 Step-and-Trend method.

**Figure 5 – Application of Step-and-Trend back-cast method for RCP3 IRIS adjustment**



- 4.23 The total savings in Year 4 that is estimated using this approach is our estimate of the 'differences in penultimate year' term described in the IMs.<sup>73</sup>
- 4.24 The baseline adjustment is determined using the 'difference in penultimate year' term and the WACC that will be applied for RCP3. The WACC that we have applied for our analysis is based on the WACC assumptions used for our draft decision (ie, 5.13%). The WACC has been used for discounting purposes to calculate the present value of expenditure, and is used to estimate the baseline adjustment term.
- 4.25 The Transpower IMs require that we use the WACC applying at the time the IRIS recoverable costs are determined, and the baseline adjustment term is applied in the second year of RCP3.
- 4.26 For the purposes of the IPP for RCP3, our draft decision for determining the 'differences in penultimate year' term is therefore to use the Step-and-trend back-

<sup>73</sup> Transpower Input Methodologies Determination 2010, above n 1, at clause 3.6.4 (3).

cast method,<sup>74</sup> and a proposed baseline adjustment term of approximately -\$42.7 million based on our general opex trend of 1.64%.

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<sup>74</sup> This methodology was explained in our 2017 decision paper. See: Commerce Commission “Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme”, above n 15, at [86]-[88].



## 5. Transpower’s estimated baseline adjustment term in its RCP3 proposal

- 5.1 This chapter will briefly discuss Transpower’s estimated baseline adjustment term, which was calculated and used in its RCP3 proposal as part of its forecast ‘smoothed’ price path.<sup>75</sup> The discussion reflects our understanding of Transpower’s approach based on the documents it has provided.
- 5.2 The discussion will note some potential differences in approach that might explain the variance between the calculated baseline adjustment term from Transpower (paragraph 5.6 below) and the Commission’s baseline adjustment term (Table 4 above). In addition, each interested party may consider Transpower’s documents to form its own view on how Transpower reached their baseline adjustment term.
- 5.3 Transpower is not required to estimate opex incentive amounts (and hence the baseline adjustment term) as part of its RCP3 proposal.<sup>76</sup> It has, however, included estimates of those amounts as part of its forecast smoothed price path.<sup>77</sup>
- 5.4 Transpower appears to have estimated a baseline adjustment term by:
- 5.4.1 removing the effects of ‘non-underlying factors’ that were not included in the base year when setting the RCP3 forecast opex allowance to give an adjusted allowance for the purposes of back casting;
  - 5.4.2 trending from the adjusted RCP3 allowance (without non-underlying factors) back to Year 3 of RCP2 based on the trend of the RCP3 allowance; and
  - 5.4.3 comparing the difference between the back cast based on the adjusted allowance and actual opex in RCP2 to get an estimate of temporary savings in Year 3.
- 5.5 Figure 6 displays how Transpower has calculated the temporary savings in RCP2 Year 3 using the adjusted opex allowance.<sup>78</sup>

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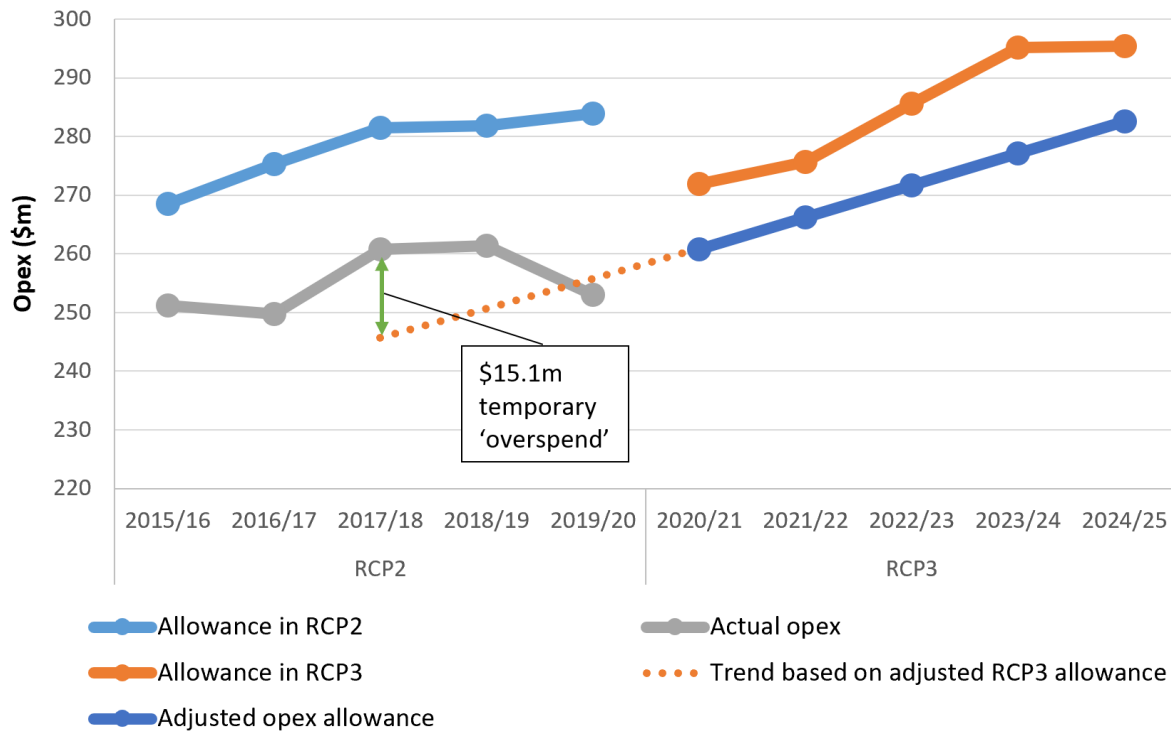
<sup>75</sup> Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper”, above n 2, at [X7].

<sup>76</sup> Transpower’s proposed IRIS calculation can be found with its RCP3 proposal on its website in the Revenue Model (Transpower’s Revenue Model, above n 21).

<sup>77</sup> This forms part of Transpower’s proposed RCP3 total revenue. Transpower’s proposed IRIS calculation can be found with its RCP3 proposal on its website in the ‘Revenue Model’ (above n 21).

<sup>78</sup> We have generated this graph using data from Transpower’s proposal. Refer Transpower’s Revenue Model (above n 29).

Figure 6 – Transpower opex and IRIS



- 5.6 Transpower’s estimate of temporary savings in Year 3 results in a negative estimate for total savings in RCP2 Year 4 which in turn results in a positive baseline adjustment term of \$79.3m.<sup>79</sup> This would be a recoverable cost for Transpower over RCP3. This contrasts with our estimate of a positive value for total savings in Year 4 and consequently a negative baseline adjustment term (-\$42.7m).<sup>80</sup>
- 5.7 The estimate of the baseline adjustment term has a material impact on Transpower’s revenue over the period. The use of our estimate rather than Transpower’s estimate would result in a lower revenue for Transpower of approximately \$110m over RCP3.<sup>81</sup> This is approximately 3% of total revenues over the period.<sup>82</sup>

<sup>79</sup> This value is not precisely the same as provided by Transpower in their RCP3 revenue proposal because it has been updated to use a WACC of 5.13%, consistent with the RCP3 IPP draft decision, rather than the WACC used in Transpower’s proposal of 5.5%. However, this value uses Transpower’s estimate for the total differences in penultimate year of -\$14.2 million.

<sup>80</sup> Our estimate of the baseline adjustment has been calculated using a WACC assumption of 5.13% (using the WACC assumptions from our RCP3 IPP draft decision). This is lower than the WACC used in Transpower’s baseline adjustment term calculation.

<sup>81</sup> This is the difference between Transpower’s opex incentive amount estimate and our estimated opex incentive amount and is provided on a present value basis as at the start of RCP3.

<sup>82</sup> This is based on our RCP3 IPP draft decision total revenue of approximately \$3.7 billion provided in PV terms as at the start of RCP3. See: Commerce Commission “Transpower’s individual price-quality path from 1 April 2020: Draft decisions and reasons paper”, above n 2, at Figure X4.

- 5.8 After reviewing Transpower’s approach, we consider one difference may be a difference in interpretation of a ‘temporary saving’.<sup>83</sup> Transpower appears to have interpreted temporary savings as any expenditure which is made on a one-off basis. This interpretation would always result in a negative amount for temporary savings (because it would only cover costs). However, we consider that a ‘temporary saving’, under the IRIS approach is more appropriately described as a temporary increase or decrease in costs against a baseline trend in opex.<sup>84</sup>

### **Transpower opex trend estimate**

- 5.9 Transpower appears to have used a trend based on its adjusted RCP3 allowance (as explained above) to estimate temporary savings made in Year 3 of RCP2. Transpower appears to have used a trend of approximately 2% compared to our general opex trend of 1.64% as discussed in paragraphs 4.5 to 4.13.<sup>85</sup>
- 5.10 We consider that using the trend from Transpower’s approach is likely to overstate the general trend in opex as it is solely based on a forward-looking forecast allowance (that has also been adjusted). This trend estimate does not take into account outturn actual opex from RCP1 or RCP2.
- 5.11 We encourage Transpower to include a further explanation of its approach to calculating the baseline adjustment term in its submission. In particular, we are interested in any differences in the assumptions that we have used when determining our proposed baseline adjustment term.

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<sup>83</sup> Commerce Commission “Incentives for Suppliers to Control Expenditure During a Regulatory Period: Process and Issues Paper”, above n 35, at [31].  
[https://comcom.govt.nz/data/assets/pdf\\_file/0019/145207/Incentives-for-suppliers-to-control-expenditure-during-a-regulatory-period-Process-and-issues-paper-20-September-2013.pdf](https://comcom.govt.nz/data/assets/pdf_file/0019/145207/Incentives-for-suppliers-to-control-expenditure-during-a-regulatory-period-Process-and-issues-paper-20-September-2013.pdf).

<sup>84</sup> Temporary savings are those which only take place in a given year, whereas permanent savings are those which are maintained in perpetuity. It is not straightforward to distinguish between temporary and permanent savings by examining actual expenditure and we therefore consider it more appropriate to consider the trend in opex over time against an expenditure baseline.

<sup>85</sup> We have estimated Transpower’s trend in opex using its back casting of the adjusted RCP3 IPP opex allowance which has been used to estimate temporary savings in Year 3 of RCP2. Refer to Transpower’s Revenue Model, above n 21.