



**TRANSPOWER**

*Keeping the energy flowing*

Waikoukou  
22 Boulcott Street  
PO Box 1021  
Wellington 6140  
New Zealand  
P 64 4 495 7000  
F 64 4 495 6968  
[www.transpower.co.nz](http://www.transpower.co.nz)

21 August 2019

Dane Gunnell  
Manager, Price-Quality Regulation  
Commerce Commission

By email: [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz)

### Submission on IRIS baseline adjustment term

Thank you for the opportunity to submit on your document *Transpower's individual price-quality path from 1 April 2020 – IRIS baseline adjustment term: Draft decisions and reasons paper*, published 12 July 2019.

Our submission is in the document attached to this letter. We would be happy to meet with you and discuss this submission if you would find that helpful.

Yours sincerely

Gordon Davidson  
**Chief Financial Officer**

## Draft Decision on IRIS baseline adjustment term

The Commerce Commission's draft decision on the IRIS baseline adjustment term (IBAT) represents a material departure from the IBAT position that Transpower had understood to have been established. Given the Commission's draft decision will set the precedent on future opex incentive arrangements, it remains critical for the market and for Transpower that the Commission reviews the draft decision and its effect carefully.

This submission makes five key points:

1. The Commission **should examine steps and trends** to reach an outcome consistent with its core *financial capital maintenance (FCM)* principle.<sup>1</sup> The draft IBAT decision would result in Transpower funding underlying (non-efficiency related) cost changes using proceeds from earlier efficiency gains. This undermines the principle that we should have an *ex ante* expectation of recovering prudent and efficient costs and undermines confidence in the efficiency mechanisms.
2. The IBAT decision is **very sensitive to the trend estimate** and extending the trend assessment period. The Commission's draft decision not to use the trend factors identified in the RCP3 proposal has led to a material impact. Historic costs have been taken into account through the base-step-trend opex forecast, as we undertook historic trend analysis in assessing the appropriateness of 2017/18 as a base year. Using extended historic data has led to a result that does not reflect inflation and the savings from our business improvement initiatives during RCP2.
3. Our RCP3 **proposal provides relevant information** to make a considered IBAT decision. The draft IBAT decision disregards using an analysis of step opex investments within our RCP3 proposal in favour of high-level examination of opex figures, including historic data that does not provide insight into future trends. The proposal provides clear evidence of new costs and relevant trends that we consider the Commission should examine to ensure the IBAT decision is well founded and consistent with the opex allowance decision.
4. The **outcome can be sense-checked**. The draft IBAT decision is not consistent with the information that has been provided to the Commission about our past efficiency gains and future cost pressures. Our view is that to reach a robust decision the Commission should complete both a detailed step cost assessment and a high-level sense-check of the efficiency and cost story implied by the IBAT decision.
5. The final IBAT **decision should provide clear guidance** on how future IBAT decisions will be made. A well-documented final IBAT decision will help to provide confidence and predictability.

We have carefully reviewed the Commission's draft decision and our own modelling and updated our proposed position to take into account the interpretations provided by the Commission. This is set out below.

The Commerce Commission's draft IBAT decision resulted in a reduction in incentives carried into RCP3 of \$110m.

	Trend growth rate (%)	Assumed Year 3 temporary savings (\$m)	Baseline adjustment term (and incremental changes) (\$m)	PV opex incentive amount (\$m)
Commerce Commission draft decision	1.64%	8.0	-42.7	-28.9
Transpower's original proposal position	1.9%	-13.9	79.3	81.1
Difference				-110.0

<sup>1</sup> For the most recent explanation of this principle and its importance, refer to the Commission's recent emerging views on fibre regulation. *Fibre regulation emerging views: Summary Paper*, [https://comcom.govt.nz/data/assets/pdf\\_file/0034/147778/Fibre-regulation-emerging-views-Summary-paper-21-May-2019.pdf](https://comcom.govt.nz/data/assets/pdf_file/0034/147778/Fibre-regulation-emerging-views-Summary-paper-21-May-2019.pdf)

To reach our updated position we have examined steps and trends from our RCP3 proposal and have reclassified some RCP3 step changes as reversal of temporary savings from RCP2. This has resulted in a moderated position compared to our original IBAT assessment (which was based on steps of ca. \$27m, now reduced to \$19m, the effect being to reduce year 3 temporary savings from \$14m to \$7m).

	Trend growth rate (%)	Assumed Year 3 temporary savings (\$m)	Baseline adjustment term (and incremental changes) (\$m)	PV opex incentive amount (\$m)
Transpower's original proposal position	1.9%	-13.9	79.3	81.1
Adjustments to Transpower's position			-49.2	-23.3
Transpower updated position	2.08%	-6.9	30.1	57.8

The table below sets out the increments that contribute to our revised position.

	Trend growth rate (%)	Assumed Year 3 temporary savings (\$m)	Baseline adjustment term (and incremental changes) (\$m)	PV opex incentive amount (and incremental changes) (\$m)
Commerce Commission draft decision	1.64%	8.0	-42.7	-28.9
1. Updates to RCP2 numbers and revert to proposal allowance		11.9	-32.2	-8.3
2. Shorten the trend assessment period (2017/18 to 2024/25)		-1.4	74.3	67.2
3. Deduct steps from the RCP3 allowance and 18/19 and 19/20		-6.9	30.7	27.8
Transpower updated position	2.08%	-6.9	30.1	57.8

Our assessment is consistent with the Commission's June 2017 guidelines, and differs from the draft IBAT decision application of those guidelines in three ways. We have:

1. corrected RCP2 opex figures to ensure they are up to date and treat operating leases consistently,
2. used a forward-looking trend assessment period to ensure the assessment is based on the best available information about valid trends in underlying costs, and
3. used information about step changes in underlying costs sourced from our RCP3 proposal to ensure the IBAT assessment is consistent with opex allowance decisions and does not inadvertently reclassify changes in underlying costs as deterioration in efficiency.

The draft IBAT decision and our updated position portray different views on opex performance:

- The draft IBAT decision is consistent with underlying costs having long-term trend growth of 1.64%, well below CPI, with no step changes and with RCP3 opex reflecting a reversal of efficiency gains achieved during RCP2. This is not a credible incentive position, and does not recognise the extensive change programme undertaken by Transpower during RCP2
- The draft IBAT decision is inconsistent with the draft allowance decision, which accepted several step changes in our underlying costs, most notably related to future strategic step changes to respond to conductors entering a costlier phase of their lifecycle
- Our updated position is consistent with a view more aligned to inflation, that underlying costs have trend growth of 2.08% (measured between 2017/18 and the end of RCP3) and including moderated step changes of ca. \$19m. The step changes offset permanent efficiency gains of 13% achieved during RCP2.

### Examination of Step Changes and Trends

IRIS is part of an overall regulatory design that aims to achieve two key objectives:

- Transpower has an *ex ante* expectation of recovering prudent and efficient costs.
- Gains (and losses) associated with improving (or deteriorating) efficiency will be shared.

To achieve these objectives, it is necessary to account for movements in costs that are not due to changes in efficiency. The IBAT and opex allowance determinations must work together to ensure this is achieved. If

they don't, then increases in underlying costs will be treated as deteriorating efficiency and will not be fully recovered.<sup>2</sup>

The Commission has itself recognised this consideration is necessary when it discussed steps and trends in its draft decision, and in its earlier IBAT framework decision paper.<sup>3</sup> However, the draft IBAT decision does not include any discussion in relation to the Commission's evaluation of step changes.

It appears that the Commission has taken a narrower view of step changes when forming its draft decision, perhaps considering that major changes in legislative or regulatory requirements are the only likely source of step changes in underlying costs.<sup>4</sup> The Commission's discussion of our earlier IBAT assessment seems to overlook that we have identified changes in underlying costs, and tries to interpret our analysis in terms of efficiency movements only.

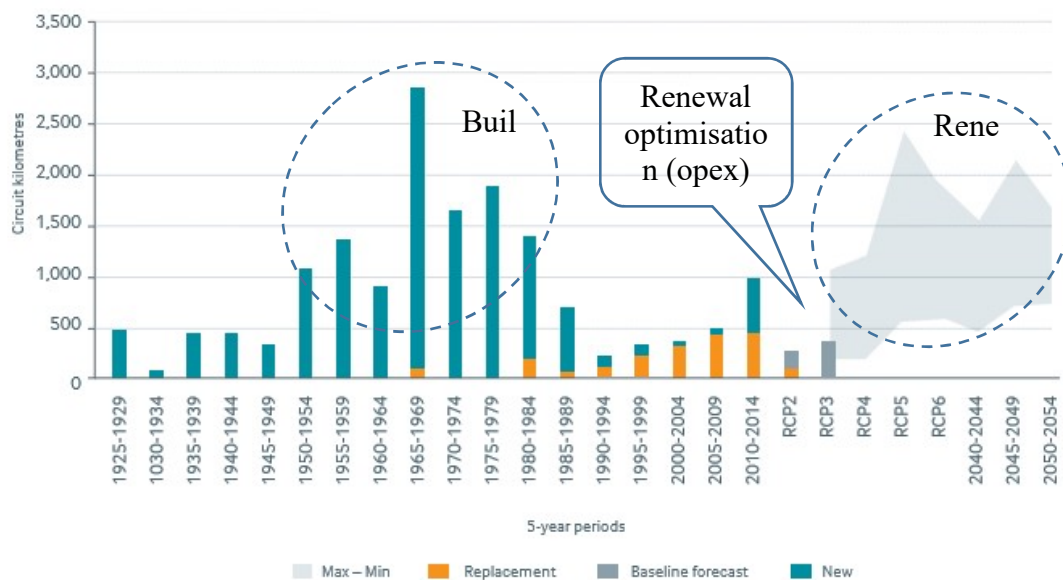
While this approach may (arguably) be appropriate in the context of default price-quality paths where firms have recourse to customised price-quality paths to address material changes in underlying costs, there is no such 'relief valve' mechanism for Transpower. This means the Commission must ensure step changes in underlying costs are addressed in every price path determination.

Below, we use two examples from our RCP3 proposal to illustrate the types of steps and trends that have been considered by the Commission when reaching its draft decision on opex allowances and then disregarded in reaching the draft IBAT decision.

#### Example A – Conductor Lifecycle

A central element of our RCP3 proposal is a plan to significantly increase expenditure aimed at managing the late life phase of conductors built in the second half of the 20<sup>th</sup> century.

Past and future – conductor installation volumes



<sup>2</sup> The same is true for the reverse case – decreases in underlying costs will be rewarded as if they were due to improving efficiency.

<sup>3</sup> Commerce Commission (2017). *Input methodologies review final decision: Transpower Incremental Rolling Incentive Scheme*, footnote 62 and paragraph 3.7.2 of the draft IBAT decision.

<sup>4</sup> This is the example of step changes given at paragraph 3.7.2 of the draft decision.

This is prudent and efficient expenditure driven by conductors' age profile – opex requirements are low when conductors are new and increase as each conductor reaches end of life. Because the grid was not built at a constant rate, it is natural for replacement capex and related opex to cycle up and down over time.

Increased spending near the end of conductor life can help extend useful life and optimise the timing and efficiency of the renewal programme. The cost and complexity of conductor replacement means there is considerable scope for investigation spend to deliver benefits in terms of:

- lowering the risks associated with ageing conductors,
- designing a conductor renewal programme with lower cost and network impact, and
- optimising the configuration of the network as lines are replaced or removed.

The Commission's draft opex allowance decision supports an increase in maintenance and investigation spending. The draft IBAT decision has the effect of partially undoing the allowance decision by treating the uplift as deteriorating efficiency. The net result of the two decisions is that the expenditure will not be fully recovered.

Capex incentive arrangements do not include any means for us to benefit from optimising the costs of conductor replacements beyond RCP3, so there is no standalone business case to invest during RCP3 to reduce future capex. The net effect is a penalty for prudent and efficient asset management.

#### **Example B – Opex Trend Factors**

Our RCP3 proposal explicitly includes adjustments to forecast opex due to trend factors, including:

- 0.2% pa reduction in real non-network labour costs due to improving productivity
- annual movements of between 2.4% and -0.1% for a range of input cost components.

There are three examples from several forward-looking trends explicitly built into our RCP3 forecast. Trend factors (up and down) will differ for each control period depending on a wide range of economy-wide factors (such as productivity and input cost movements) and network factors (such as growth and changes in standards). These are difficult things to predict, but they are relevant to forecasting opex levels more generally and so are addressed directly in a typical proposal.

For coherency between the IBAT and opex allowance decisions, the IBAT analysis should use the trend factors identified in the proposal. This can either be done through a bottom-up approach (isolating each trend factor) or at an aggregate level. For the latter approach, the Commission can simply fit a trend line through the RCP3 opex profile (after adjusting for step changes in underlying opex).

This is a more valid and coherent approach than fitting a trend line to a longer historical sequence back to 2010, which will be influenced by historic phases of productivity change, cost change and growth that are not relevant to RCP3.

The IBAT decision is very sensitive to the trend estimate, so the Commission's decision to use extended historic data has led to the material impact. In our analysis, choosing the correct (forward-looking) trend produces a much better fit and alters the incentive outcome by more than \$60m.

A successful evolution of individual price-quality path regulation requires the IBAT decision to address trends and step changes in underlying costs. Failure to do so will undermine confidence in the integrity of efficiency arrangements, discouraging initiatives and leading to poorer outcomes for consumers.

We encourage the Commission to bear in mind that overall incentive arrangements are incomplete because we cannot retain any share of the benefits from reducing capex in future control periods. For example, there is no incentive payoff from:

- investing now to reduce the scale of the RCP4 reconductoring programme, or
- the ongoing reduction in transformer and earth switch replacements beyond RCP2 that flow from the life extension strategies implemented in RCP2.

We accept that capex incentives are incomplete, but do not expect this position to be worsened through an undermining of the opex incentive regime. Treating changes in underlying costs as changes in efficiency would undermine both the objectives described at the beginning of this section.

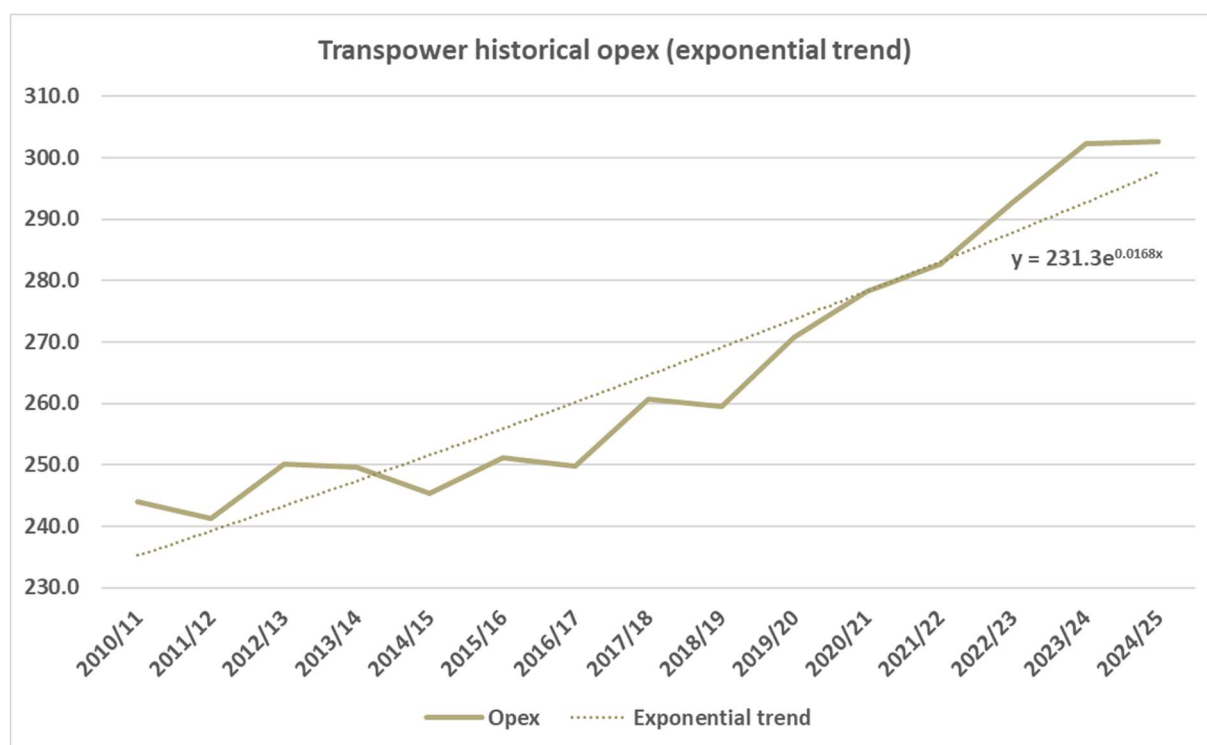
### Determining the trend assessment period

The following chart presents the draft IBAT assessment (with a correction to FY2020 to ensure consistent treatment of operating leases) but using the Commission's draft decision opex numbers.

The draft IBAT decision is consistent with:

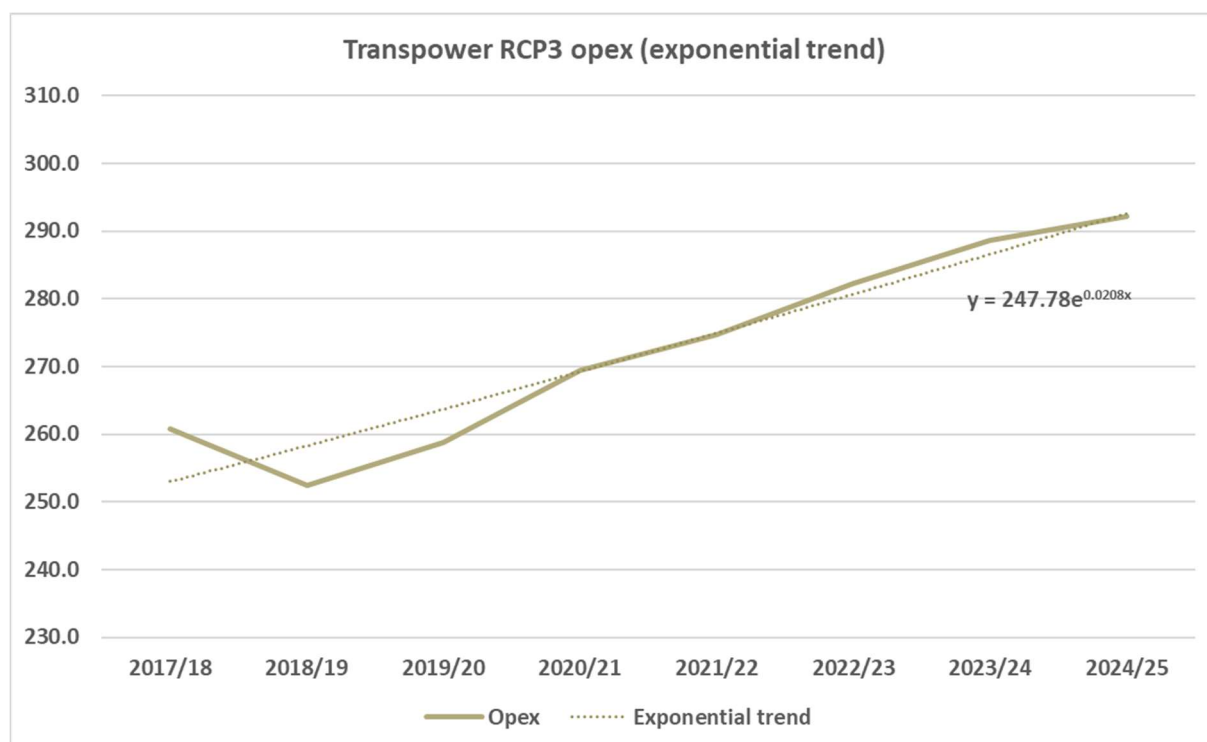
- underlying costs having long-term trend growth of 1.64%, which is well below CPI,
- no step changes, and
- RCP3 opex reflecting reversal of efficiency gains achieved during RCP2.

This incentive position does not recognise the extensive change programme undertaken by Transpower during RCP2.



The following chart presents our updated assessment of the IBAT position.

Our updated position is consistent with a view more aligned to inflation, that underlying costs have trend growth of 2.08% (measured between 2017/18 and the end of RCP3) and including moderated step changes of ca. \$19m. The step changes offset permanent efficiency gains of 13% achieved during RCP2.



### Proposal Provides Relevant Information

We were aware when preparing our RCP3 proposal that the Commission would require a clear and compelling evidence base to support its IBAT assessment. As such, we purposely adopted base-step-trend (BST) methods for forecasting opex where possible. BST methods are well suited to providing the evidence base needed to identify changes in underlying expenditure.

Following the Commission’s draft IBAT decision, we have reviewed our opex forecasts to reach a revised and conservative view of how each movement in our opex profile should be treated to achieve the correct outcome, supported by a sense check. The following table sets out the categorisation system we have used for this exercise.

	Category	Illustration
Efficiency Changes	<b>1 Permanent efficiency</b>  Firm has taken an action that will permanently reduce its costs.	
	<b>2a Temporary efficiency – base year adjustment</b>  One-off factors that are normalised to establish the base year amount for use within BST forecasts.	



	Category	Illustration
	<p>2b Temporary efficiency – RCP3 catch-up</p> <p>Costs reduced in one period, caught-up in the following. Treated as a step in BST forecasts (rather than base year normalisation) but now excluded from steps in our updated position.</p>	
Underlying (non-efficiency) Changes	<p>3a Underlying change – step</p> <p>Step change in underlying costs. Due to external factors (e.g. input costs) or firm-specific factors (e.g. growth, asset cycles).</p>	
	<p>3b Underlying change – trend</p> <p>Trend in underlying costs. Due to external factors (e.g. input costs) or firm-specific factors (e.g. growth, asset cycles).</p>	

The outcome of this process is to identify the value of Category 3 items – i.e. changes in underlying costs. Where these are step changes (Category 3a), they should be removed from the RCP3 opex profile before fitting a trend line and back-casting to the base year. Where these are trend items (Category 3b), they can be used to sense-check the trend line.<sup>5</sup>

The interaction of the IBAT adjustment, annual IRIS credit calculations and the opex building block will together produce the correct sharing outcome for the other categories of expenditure.<sup>6</sup>

Our detailed review has produced a reduced estimate of the scale of Category 3 items relative to the IBAT assessment included in our original proposal – i.e. we have shifted some items from Category 3 to Category 2.

In carrying out this assessment, we have:

- erred on the side of a conservative assessment – i.e. we have moved a total of \$8m per annum of items to Category 2 (reducing the scale of incentive credits)
- avoided overly granular assessment – i.e. we have examined expenditure using the same level of detail as presented on our BST forecasts.

The following table summarises our assessment of Category 3a items – i.e. items that should be removed from RCP3 opex before trend fitting and back-casting. We have provided an annual breakdown in the Appendix.

<sup>5</sup> Alternatively, items presented as trends can be converted to steps and removed. Either method produces a consistent result.

<sup>6</sup> Noting that Category 2a and Category 2b will present differently while nonetheless producing the same economic outcome.



Item	Value <sup>7</sup> (\$m)	Comment
<p>Service provider cost base.</p> <p>Increases in the cost of contracting service providers – including increased training requirements, new asbestos procedures, management service fee increases (due to work volumes) and energy costs.</p>	3.1	Increases commence ahead of RCP3 so will not be fully recovered.
<p>Maintenance cycle.</p> <p>Increased maintenance activity – includes new assets adding to scheduled maintenance (e.g. inspections) and aging assets driving an increase in interventions.</p>	6.7	Increases commence ahead of RCP3 so will not be fully recovered.
<p>Renewal optimisation.</p> <p>Work associated with optimising renewal programmes – includes RCP4+ conductor renewal planning, Auckland renewal support, and earth switch life extension.</p>	5.4	Planned to start from FY20, so initial ramp up will not be fully recovered if we proceed to current plan.
<p>Digitisation.</p> <p>Costs associated with growing digitisation – includes expanding traffic capacity, data centre energy usage, cybersecurity and support costs.</p>	2.2	Stronger in RCP3 but some movement in latter part of RCP2 that will not be fully recovered.
<p>Insurance cover.</p> <p>Increases in the amount of insurance cover purchased due to – growth in replacement costs and lower policy excess (deductible) levels.</p>	4.4	Increases commence ahead of RCP3 so will not be fully recovered.
<p>Debt raising costs.</p> <p>Costs that were omitted from RCP2 opex allowances.</p>	2.6	Costs that were not recovered in RCP2 at all.
<p>Deliverability overlay.</p> <p>An allocation of the deliverability adjustment.</p>	(5.0)	Adjustment applies to RCP3 only.
Minor items	(0.4)	

<sup>7</sup> Annual average over RCP3.

Item	Value <sup>7</sup> (\$m)	Comment
TOTAL	19.0	This is the overall increase in annual opex between the base year and the first year of RCP3 attributable to step changes in underlying costs. It compares to steps of ca. \$27m per year in our original calculation.

Our assessment shows that underlying costs step up \$19 million between the RCP2 base year and RCP3. The RCP3 opex profile should be stepped down by this amount before fitting a trend line, back-casting and determining the adjustment term.

### Outcome can be Sense-Checked

The draft IBAT decision is not consistent with the information that has been provided to the Commission about our past efficiency gains and future cost pressures. Our view is that to reach a robust decision the Commission should complete both a detailed step cost assessment and a high-level sense-check of the efficiency and cost story implied by the IBAT decision.

Below we compare sense-checks of the draft IBAT decision and our updated position.

#### Sense check of draft IBAT decision

The table below sets out the elements that we considered in a sense-check interpretation of the IBAT assessment.

Component	RCP2	RCP3	Comment
Underlying Costs	-	-	There are no step changes in underlying costs. There is a general upwards trend of 1.64% (nominal) in RCP3, which is consistent across the entire period from RCP1 to RCP3.
Permanent Efficiency	6% (\$17m pa)	-	Transpower has managed to achieve a 6% (or \$17m pa) reduction in annual operating costs over the course of RCP2.  The NPV of this gain is \$447m and the incentive share (at 26%) should be \$116m. Transpower will have already recovered \$111m by the end of RCP2, so a correction is required in RCP3 to offset other positive IRIS components. <sup>8</sup>

The draft IBAT decision does not align to the information about our efficiency performance that we have provided to the Commission and stakeholders. In particular, the draft IBAT decision:

- excludes any step changes in underlying costs, even though the draft allowance decision accepts several such steps,
- uses a trend rate for underlying costs of 1.64%, even though the combined impact of real price effects, productivity gains and general inflation accepted in the draft allowance decision would give a trend rate of 2.1% for RCP3, and

<sup>8</sup> These NPV figures are based on notional permanent and temporary costs and savings that are consistent with this view of our forecast opex.

- is consistent with a view that almost all the efficiency gains achieved during RCP2 were temporary and reverse out again in RCP3. This position does not reconcile to the scale of change we have delivered within our \$8m transformation programme.

In addition, the trend line shows a relatively poor fit to our opex path and has a trend line that is well below the assumed CPI path.

#### Sense Check of Updated Position

The table below sets out the elements we considered in a sense-check interpretation of our updated IBAT assessment.

Component	RCP2	RCP3	Comment
Permanent Efficiency	13% (\$35m pa from business improvement initiatives including T1 and T2)	-	Transformation initiatives (including T1 and T2) reduced our cost base by 13% (or \$35m per annum) and this is permanently built into how we operate. After accounting for the \$8m cost of T1 and T2, the NPV of this gain is \$808m. We should retain 26% (\$210m) and the rest progressively flows into lower prices. <sup>8</sup>
Temporary Efficiency (total)	\$9m	(\$9m)	Some of the savings achieved in RCP2 relate to deferring work into RCP3. Related incentives will reverse out, leaving Transpower (and consumers) with the timing benefit only.
Underlying Costs (annualised)	-	+6% (\$19m pa)	Our more efficient cost base is helping dampen what would have been a bigger upward movement in opex due to factors including asset lifecycle (esp. ageing conductor) and trends in our input costs (incl. insurance).  We bear a portion of the step changes that begin in RCP2, but from RCP3 the underlying cost increases should be fully funded.

Our updated assessment:

- provides a trend line with a superior fit, and with a growth rate very close to projected CPI (which is consistent with real price effects and productivity gains being included as steps),
- is consistent with most of the gains made during RCP2 being permanent efficiency improvements, which ties in with the scale and scope of the transformation programmes we have executed, and
- lines up with draft allowance decisions on increases in underlying costs.

#### **Decision must Provide Clear Guidance**

The draft IBAT decision would leave us with considerable uncertainty regarding the operation of our future opex incentive arrangements. The final IBAT decision provides an opportunity to set a clear precedent that provides confidence in this fundamental feature of our regulatory settings.

We expressed significant reservations about the potentially subjective nature of the IBAT mechanism when it was first introduced. However, we proceeded in good faith throughout RCP2 to optimise our business. This has included extensive opex reduction programmes, asset management strategies that rebalance capex and opex to optimise lifecycle costs, and proactive work directed at managing down long-term RAB pressures.

While we will always seek to act in both a principled way and seek business efficiencies, the draft IBAT decision would penalise us for such initiatives. This is not in the long-term interests of consumers because it deters furthering such efforts. In addition, we are left in a position where revenue path uncertainty will provide forecast uncertainties in our key ratings-sensitive credit metrics.

We accept that IRIS and IBAT are complex, but there are two ways in which a clear and constructive precedent set out in the final IBAT decision can provide confidence:

1. Substance – it is essential that the final IBAT decision recognises underlying cost movements in a way that is coherent and consistent with allowance decisions and considers high level sense checks.
2. Guidance – through the Commission setting out how it has considered step and trend factors.

## Appendix

The following table provides an annual breakdown of the Category 3a items described in the table on pages 10-11 of the submission.

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	RCP3	RCP3 annual average
<b>Original steps</b>	<b>12.4</b>	<b>17.2</b>	<b>24.4</b>	<b>23.6</b>	<b>28.4</b>	<b>32.8</b>	<b>27.9</b>	<b>137.1</b>	<b>27.4</b>
Service provider cost base	2.3	2.3	3.0	2.9	3.1	3.2	3.2	15.3	3.1
Maintenance cycle	2.4	3.1	5.5	4.8	6.5	8.9	8.0	33.7	6.7
Renewal optimisation	0.0	2.6	5.5	4.1	5.2	6.7	5.3	26.8	5.4
Digitisation	0.9	1.1	1.6	2.4	2.3	2.4	2.5	11.1	2.2
Insurance cover	1.3	2.4	3.2	3.8	4.4	5.1	5.7	22.2	4.4
Debt raising costs	0.0	0.0	2.4	2.5	2.6	2.6	2.7	12.8	2.6
Minor items	0.0	0.0	0.4	0.6	0.2	(0.8)	(2.4)	(2.0)	(0.4)
	<b>7.0</b>	<b>11.6</b>	<b>21.7</b>	<b>21.0</b>	<b>24.2</b>	<b>28.1</b>	<b>24.9</b>	<b>119.8</b>	<b>24.0</b>
Deliverability	0.0	0.0	(4.7)	(4.5)	(5.0)	(5.6)	(5.2)	(25.0)	(5.0)
<b>Updated position</b>	<b>7.0</b>	<b>11.6</b>	<b>17.0</b>	<b>16.5</b>	<b>19.2</b>	<b>22.6</b>	<b>19.6</b>	<b>94.8</b>	<b>19.0</b>