



ISBN 978-1-869454-79-1
Project no. 15.01 / 12683

Public version

Further amendments to input methodologies for electricity distributors subject to price-quality regulation

Incremental Rolling Incentive Scheme (IRIS)

Date of publication: 25 November 2015

Associated documents

Publication date	Reference	Title
25 November 2015	ISSN 1178-2560	Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015 [2015] NZCC32
27 February 2015	ISBN 978-1-869454-27-2	How we propose to implement further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme
27 February 2015	ISSN 1178-2560	Draft Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015
27 November 2014	ISBN 978-1-869454-11-1	Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme
27 November 2014	ISSN 1178-2560	Incremental Rolling Incentive Scheme Input Methodology Amendments Determination [2014] NZCC32
20 October 2014	ISSN 1178-2560	Draft Incremental Rolling Incentive Scheme Input Methodology Amendments Determination 2014
18 July 2014	ISBN 978-1-869453-85-5	Proposed amendments to input methodologies: Incremental Rolling Incentive Scheme
18 July 2014	ISSN 1178-2560	Draft Incremental Rolling Incentive Scheme input methodology amendments 2014
20 September 2013	ISBN 978-1-869453-24-4	Incentives for suppliers to control expenditure during a regulatory period: Process and issues paper
30 April 2013	N/A	Notice of intention: Potential amendments to input methodologies for electricity distribution services, gas pipeline services, and Transpower

Regulation Branch, Commerce Commission
Wellington, NEW ZEALAND

Contents

1. INTRODUCTION	1
2. INCENTIVES UNDER AN IRIS PRIOR TO A CUSTOMISED PRICE-QUALITY PATH.....	3
3. REVISED APPROACH PRIOR TO CUSTOMISED PRICE-QUALITY PATHS	9
4. OTHER MATTERS RAISED IN SUBMISSIONS	19
5. REVISED APPROACH FOR CALCULATING IRIS RECOVERABLE COSTS.....	23

Please note: On 25 November 2015 we corrected paragraph 5.3.

1. Introduction

Purpose of paper

- 1.1 This paper outlines the final decision on the further amendments to input methodologies affecting the incentives electricity distributors have to control expenditure when their prices are regulated.

Amendments to input methodologies – Incremental Rolling Incentive Scheme

- 1.2 The input methodologies include an Incremental Rolling Incentive Scheme (or 'IRIS').¹ The IRIS provides a mechanism by which suppliers that are subject to price-quality regulation can retain the benefits of efficiency gains beyond the end of a regulatory period.
- 1.3 We previously amended input methodologies that affected the IRIS on 27 November 2014. These amendments addressed situations in which distributors move from one default price-quality path to another. The amendments outlined in this paper are intended to complement those previous amendments and address situations in which a distributor transitions to and from a customised price-quality path.²
- 1.4 We originally delayed the publication of the IRIS amendments relating to customised price-quality paths in order to focus on introducing the amendments that affected the default price-quality paths, and individual price-quality path, that were set in November 2014.
- 1.5 On 27 February 2015 we published a technical consultation on the proposed amendments to input methodologies that would affect the situations in which a distributor transitions onto a customised price-quality path.³

¹ This IRIS was set under s 52T (1) (c).

² The new amendments focus on situations in which suppliers transition onto a customised price-quality path. However, some IM clauses have also been amended for the situation in which suppliers transition off a customised price-quality path (ie, onto a default price-quality path), to the extent that the amendments made in November 2014 had not covered all circumstances (eg, the existence of opex and capex forecasts at the expiration of a customised price-quality path).

³ Commerce Commission "How we propose to implement further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme (IRIS)" 27 February 2015.

Overview of consultation process

- 1.6 There has been an extensive consultation process on the introduction of an IRIS for distributors and its impact on situations in which a distributor transitions on to a customised price-quality path. The original notice of intention was published in April 2013 and the previous consultation steps included:
- 1.6.1 A process and issues paper in September 2013;⁴
 - 1.6.2 A draft decision in July 2014;⁵ and
 - 1.6.3 A technical consultation in February 2015.⁶
- 1.7 Further information on this consultation process can be found in the associated documents set out at the beginning of this decision paper.

Feedback from stakeholders

- 1.8 In reaching the decisions outlined in this paper, we have taken into account submissions received from stakeholders in response to our technical consultation and previous draft decision.
- 1.9 We explain our decision to change from the approach proposed in the technical consultation to an approach proposed by Powerco Limited. This approach uses the assumption that all incremental changes in the penultimate year prior to a customised price-quality path are temporary in nature.

Material released alongside this paper

- 1.10 Alongside this paper, we have published:
- 1.10.1 An input methodology amendment determination;⁷ and
 - 1.10.2 Models that show the impact of applying the proposed amendments, and which follow a similar format as the models released alongside the technical consultation.

⁴ Commerce Commission “Incentives for Suppliers to Control Expenditure during a Regulatory Period: Process and Issues Paper” 20 September 2013.

⁵ Commerce Commission “Proposed amendments to input methodologies: Incremental Rolling Incentive Scheme” 18 July 2014.

⁶ Commerce Commission “How we propose to implement further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme (IRIS)” 27 February 2015.

⁷ Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015 [2015] NZCC 32.

2. Incentives under an IRIS prior to a customised price-quality path

Purpose of chapter

- 2.1 This chapter:
- 2.1.1 Briefly summarises the amendments made to input methodologies in November 2014;⁸
 - 2.1.2 Summarises the proposed amendments, outlined in the February 2015 technical consultation;⁹ and
 - 2.1.3 Summarises submissions to that technical consultation with a focus on the way in which we determine IRIS adjustment payments, following the transition onto a customised price-quality path, and the associated incentive properties.¹⁰

Amendment in November 2014

- 2.2 The IRIS mechanism for operating expenditure described in the input methodologies, and which applies to electricity distributors, was amended in November 2014.¹¹
- 2.3 This amendment:
- 2.3.1 Applied an IRIS mechanism to distributors subject to a default price-quality path;¹² and
 - 2.3.2 Amended the IRIS so that incentives to control expenditure are time consistent and 'symmetric'.¹³

⁸ Commerce Commission "Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme" 27 November 2014.

⁹ Commerce Commission "How we propose to implement further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme (IRIS)" 27 February 2015.

¹⁰ Draft Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015, cl 3.3.7.

¹¹ Commerce Commission "Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme" 27 November 2014.

¹² Prior to this amendment the IRIS only applied to distributors who were subject to a customised price-quality path.

¹³ I.e., the rewards for incurring lower expenditure than forecast are equal to the penalties for incurring higher expenditure than forecast.

- 2.4 The amended IRIS allows distributors to retain the benefit of permanent efficiency savings for 5 years after the saving takes place. This enables the distributor to retain approximately 35% of the total value to saving, ie, the 'retention factor' is ~35%.¹⁴
- 2.5 Amongst other things, the benefits of applying this 'time consistent' incentive are that:
- 2.5.1 Distributors are no longer exposed to the full cost of responding to external events that have a temporary impact on expenditure; and
 - 2.5.2 Distributors are unable to increase profits by inflating costs in a particular year.
- 2.6 The amendments introduced on 27 November 2014 only affected situations in which distributors move from one default price-quality path to another. We have now made further amendments which are intended to address situations in which a distributor transitions back and forth between default and customised price-quality paths.

Proposal to equalise retention factors under a customised price-quality path

- 2.7 We have previously outlined how, under a customised price-quality path, a different approach is required to calculate the appropriate IRIS rewards than under a default price-quality path.¹⁵
- 2.8 This is because, for a customised price-quality path, the baseline for operating expenditure is not determined by projecting forward an initial level of operating expenditure from a single year. A discontinuity therefore arises that breaks the link between expenditure in one period and the next.
- 2.9 The result is that the IRIS mechanism incorrectly treats temporary cost savings (or over-runs) in the penultimate year of the regulatory period as permanent.
- 2.10 A similar discontinuity is seen under individual price-quality paths. Our proposal in the February 2015 consultation was to implement a similar approach to determining the 'baseline' adjustment for customised price-quality paths to that introduced for individual price-quality paths in November 2014.

¹⁴ The exact retention factor equivalent to 5 years of savings depends on the level of the WACC. The relevant retention factor is 34% for the WACC applied to the 2015-2020 default price-quality path.

¹⁵ Commerce Commission "Proposed amendments to input methodologies: Incremental Rolling Incentive Scheme" 18 July 2014, paragraph 140.

- 2.11 Under this proposal, an adjustment is required to re-establish the link between expenditure in one period and the next. The required adjustment depends on the extent to which any under- or over-expenditure in the penultimate year of the regulatory period was permanent or temporary in nature.
- 2.12 In particular the relevant adjustment amount needs to be equal to the value of any temporary (or ‘non-recurrent’) differences between forecast and actual expenditure in the penultimate year of the regulatory period preceding the customised price-quality path. This enables the adjustment to ‘reverse out’ the impact of any temporary saving (or over-run) that has been inaccurately identified as permanent.
- 2.13 We have referred to this adjustment amount as a ‘baseline’ adjustment because it has the effect of re-establishing the link between the expenditure baseline and expenditure in the previous period.
- 2.14 The approach would determine the relevant adjustment amount (ie, the value of any temporary differences) by consulting with interested parties in advance of any customised price-quality path being set.
- 2.15 A potential method to determine this amount would be to identify the differences between a forecast set under a customised price-quality path and an equivalent forecast set using a ‘step and trend’ methodology more consistent with the setting of a default price-quality path. This type of assessment was suggested as a possible method in the February 2015 consultation.¹⁶

Submissions on the baseline adjustment term

- 2.16 The majority of the submissions in response to the February 2015 consultation focussed on our determination of the ‘baseline’ adjustment outlined above.
- 2.17 A number of submissions from distributors questioned the level of judgement and discretion allowed to the Commission in determining the baseline adjustment under the proposed amendment. In particular it was suggested that this would undermine the certainty of future IRIS adjustments that are required to provide an effective incentive. For example, the ENA noted that:¹⁷

¹⁶ Commerce Commission “How we propose to implement further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme (IRIS)”, 27 February 2015, paragraphs 3.10-3.11.

¹⁷ Electricity Networks Association, “Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme” 20 March 2015, paragraph 28.

The ENA has serious concerns about this proposed approach because we consider it is inconsistent with the objective of IMs (which is to provide regulatory certainty). Without certainty, the incentive properties of the IRIS are undermined. We also note that this proposal increases the uncertainties facing ENBs when deciding whether to apply for a CPP. The section 52A purpose of Part 4 will not be met if ENBs are discouraged from applying for a CPP in situations where it may be in the long term interests of their consumers for alternative price or quality standards to apply to them.

2.18 Other comments from submissions included:

2.18.1 Orion suggested that the input methodologies would need to set out the basis on which a saving is considered non-recurring or recurring;¹⁸

2.18.2 Powerco suggested that an objective formula would be required in order to provide sufficient certainty;¹⁹ and

2.18.3 Vector suggested the proposed solution gives the Commission broad discretion to estimate temporary savings for penultimate year operating expenditure.²⁰

2.19 A further set of concerns outlined in submissions was the practical difficulty of determining the non-recurrent differences required to calculate the baseline adjustment term. In particular submissions suggested that:

2.19.1 The proposed methodology relies on the assumption that any distortion between the forecast for the customised price-quality path and a forecast using a default price-quality path-style is as a result of non-recurrent differences in the penultimate year of the regulatory period. There were concerns that this would not be a reasonable assumption when a distributor moves onto a customised price-quality path;²¹

¹⁸ Orion "Submission on the proposal to implement further amendments to Input methodologies (IRIS)" 20 March 2015, paragraph 13.

¹⁹ Powerco "Re: Proposed approach to further amendments to incremental rolling incentive scheme (IRIS) for electricity distributors" 20 March 2015, page 4.

²⁰ Vector "Commission proposal to implement further amendments to input methodologies (IM) for electricity distributors subject to price-quality regulation" 20 March 2015, paragraph 5.

²¹ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraph 30.

- 2.19.2 Any inaccurate determination of the temporary (or non-recurrent) differences could result in significant variability in the IRIS adjustments, compared to the scenario under which perfect information was available;²² and
- 2.19.3 An accurate assessment of whether cost changes are permanent or temporary is only likely to become clear after a certain amount of time. This may be after the point at which distributors must calculate the baseline adjustment term.²³

Alternative options proposed in submissions

- 2.20 The submissions proposed a number of different options as to how the implementation of IRIS for distributors transitioning onto a customised price-quality path could be improved. These proposals included:
 - 2.20.1 The removal of all IRIS adjustments when a distributor moves onto a customised price-quality path;²⁴
 - 2.20.2 Assuming that all of the difference between forecast operating expenditure and out-turn operating expenditure in the penultimate year of the previous period is due to temporary savings;²⁵
 - 2.20.3 Allowing distributors to submit themselves the level of temporary savings in the penultimate year of the previous regulatory period;²⁶
 - 2.20.4 Reverting to an asymmetric IRIS;²⁷ and
 - 2.20.5 Delaying the implementation of the IRIS for customised price-quality paths until the concerns listed above are resolved.²⁸

²² Powerco "Re: Proposed approach to further amendments to incremental rolling incentive scheme (IRIS) for electricity distributors" 20 March 2015, page 3.

²³ PWC "Submission to the Commerce Commission on proposed further amendments to input methodologies: Incremental Rolling Incentive Scheme, Made on behalf of 19 Electricity Distribution Businesses" 20 March 2015, paragraph 24.

²⁴ Vector "Commission proposal to implement further amendments to input methodologies (IM) for electricity distributors subject to price-quality regulation" 20 March 2015, paragraphs 8-14.

²⁵ Powerco "Re: Proposed approach to further amendments to incremental rolling incentive scheme (IRIS) for electricity distributors" 20 March 2015, pages 4-5.

²⁶ Vector "Commission proposal to implement further amendments to input methodologies (IM) for electricity distributors subject to price-quality regulation" 20 March 2015, paragraphs 15-17.

²⁷ Transpower "Incremental Rolling Incentive Scheme" 20 March 2015, page 2.

²⁸ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20

Submissions on other topics

- 2.21 Submissions on aspects of the determination not related to the baseline adjustment term are covered in Chapter 4.

March 2015, paragraph 41, and PWC “Submission to the Commerce Commission on proposed further amendments to input methodologies: Incremental Rolling Incentive Scheme, Made on behalf of 19 Electricity Distribution Businesses” 20 March 2015, paragraph 32.

3. Revised approach prior to customised price-quality paths

Purpose of chapter

- 3.1 After considering submissions to the February 2015 technical consultation we have revised our approach to the IRIS for distributors transitioning on to a customised price-quality path.
- 3.2 This chapter explains:
 - 3.2.1 The context of a customised price-quality path in determining the appropriate approach for IRIS;
 - 3.2.2 Why implementing Powerco's proposal provides the most appropriate retention factors on suppliers in the context of a customised price-quality path;²⁹ and
 - 3.2.3 Why some alternative suggestions from submissions have been rejected.

IRIS in the context of a customised price-quality path

- 3.3 The situation in which a distributor transitions onto a customised price-quality path provides different incentives compared to the situations under a default price-quality path and individual price-quality path.
- 3.4 Incentives on suppliers are particularly affected by the following aspects of a supplier's circumstance prior to a customised price-quality path:
 - 3.4.1 A distributor has an option over whether or not to apply for a customised price-quality path;
 - 3.4.2 A customised price-quality path application can often occur mid-way through a period and so the incentive effects may be different prior to any application; and

²⁹ The proposal assumes all of the difference between forecast operating expenditure and out-turn operating expenditure in the penultimate year of the previous regulatory period is due to temporary savings.

3.4.3 A distributor is likely to be applying for a customised price-quality path because it expects that the revenue allowance under its default price-quality path is insufficient to cover its costs.³⁰ Therefore, all other things being equal, in a period prior to a customised price-quality path a distributor may expect that its costs are more likely to be above its allowance than below its allowance.³¹

3.5 Given these particular circumstances, we agree with Transpower's submission that the issues raised should therefore be considered in the context of a customised price-quality path and that we should not necessarily use the same approach for IRIS that was applied for individual price-quality paths.³²

Although there are many similarities between the CPP and IPP, the one-off (and often extraordinary circumstances surrounding) transition from DPP to CPP differ from the continuous, multi-period dynamic between IPPs. This may mean different approaches are warranted between IPP and DPP-CPP firms.

3.6 In particular the specific context surrounding a customised price-quality path application is likely to include an increase in costs and expenditure that is higher than permitted under a default price-quality path. As a result we consider that moving away from a time consistent incentive for permanent efficiencies may be appropriate in these circumstances. I.e, it may be appropriate to move away from the constant retention rate (~34%) that is seen under default price-quality paths.

Incentives related to the determination of the baseline adjustment term

3.7 Submissions also suggested that there is significant uncertainty in determining the level of temporary differences required to calculate the baseline adjustment term.³³ This element of uncertainty exists because the actual level of temporary savings is unobservable and so it needs to be estimated.³⁴

3.8 Under our previous proposal we envisaged that setting out a process for determining temporary differences, and allowing consultation by interested parties, would mean that the impact on incentives to apply for a customised price-quality path would be minimal.

³⁰ Note however that customised price-quality path can also be set at a level that is lower than the default price-quality path.

³¹ This point was noted by Powerco. Powerco "Re: Proposed approach to further amendments to incremental rolling incentive scheme (IRIS) for electricity distributors" 20 March 2015, pages 4.

³² Transpower "Incremental Rolling Incentive Scheme" 20 March 2015, page 5.

³³ See earlier paragraphs 2.16 to 2.19.

³⁴ Either by us, using a pre-specified approach, the regulated supplier or an external assessor.

- 3.9 However, following submissions we recognise that, to the extent that distributors perceive the suggested approach increases the uncertainty associated with a customised price-quality path application, it may have an impact on the incentive for distributors to apply for a customised price-quality path. This could be detrimental if it discourages applications for customised price-quality paths which provide long term benefits to consumers.

We have applied Powerco's proposed approach

- 3.10 After considering the options proposed by submitters we have determined that retaining an IRIS and implementing the approach proposed by Powerco is most appropriate given the circumstances of a customised price-quality path as it provides the most beneficial incentives on suppliers.

Incentives under the Powerco approach

- 3.11 In its submission, Powerco suggested an approach in which the temporary savings in the penultimate year are assumed to be the difference between forecast and actual operating expenditure in that year.³⁵
- 3.12 We have previously described the need to identify temporary savings in the penultimate year prior to a customised price-quality path in order to determine the correct IRIS adjustment.³⁶ Identifying these savings is important for operation of the IRIS mechanism because it needs to make subsequent adjustments that reduce rewards or penalties for temporary savings that are otherwise treated as permanent.³⁷
- 3.13 IRIS adjustments of this type are implemented through the baseline adjustment term, which ensures that temporary savings in the penultimate year are not excessively rewarded or penalised. In the absence of this adjustment the temporary savings in the penultimate year would be inaccurately rewarded as if they were permanent savings.
- 3.14 Under the Powerco approach, the correct adjustments are made through the baseline adjustment term for any temporary savings in the penultimate year (eg, Year 4).

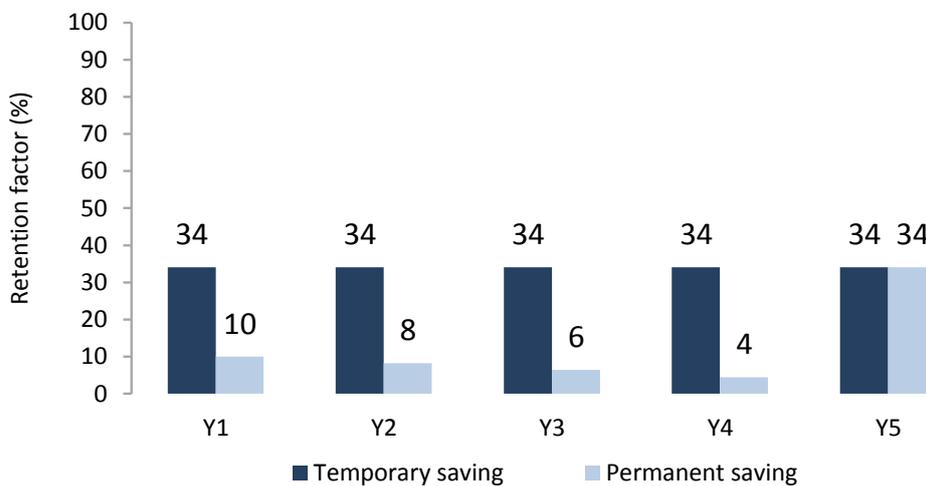
³⁵ For example, the penultimate year would be the Year 4 of the previous regulatory period, if it was a standard 5-year default price-quality path.

³⁶ See paragraph 2.12.

³⁷ Without this adjustment, the IRIS mechanism will significantly over-reward (or over-penalise) this type of saving because it will provide adjustments consistent with it being a permanent saving.

- 3.15 However, additional (incorrect) adjustments are also made for any permanent savings made in that year and any earlier year (eg, Years 1-4) of the regulatory period prior to the customised price-quality path. This is because these permanent savings are incorrectly treated as temporary, due to the assumption that all differences in the penultimate year are due to temporary effects.
- 3.16 As a result of this approach all rewards/penalties to permanent savings in all years other than the final year decrease below 34%, but all temporary savings are rewarded at the desired 34%.³⁸
- 3.17 To illustrate this further, Figure 3.1 shows the retention factors for each type of saving under the revised approach.³⁹

Figure 3.1 – Retention factors for temporary and permanent savings under the revised (Powerco) approach



Low retention factors prior to a customised price-quality path

- 3.18 The revised approach results in lower retention factors for permanent savings than is seen in the 'optimal' IRIS under which all savings have a retention factor of 34%.

³⁸ 34% is the retention factor equivalent to a supplier retaining 5 years of the value of a permanent saving when the WACC is 7.19%. Where 7.19% is the value of the WACC applied to the 2015-2020 default price-quality paths.

³⁹ In determining the retention factors for Figure 3.1 we have made some assumptions in the way the customised price-quality path is set: All permanent savings/costs in Years 1-4 are incorporated into the CPP forecast, while permanent savings/costs in Year 5 are not incorporated into the CPP forecast; and no temporary impacts are incorporated into the CPP forecast (ie, all temporary impacts in historic operating expenditure are identified as such).

- 3.19 Although this reduction is not ideal, in the context of a customised price-quality path we believe it is less significant than for other types of price-quality paths. As noted by submissions, the majority of customised price-quality paths are likely to be in the context of distributors incurring higher levels of expenditure than is allowed under a default price-quality path.
- 3.20 The lower incentive rates for permanent savings in this scenario could lead to concerns that distributors will not bear their fair share of any permanent cost increase. However, because any permanent cost increase will be subject to scrutiny as part of the customised price-quality path evaluation, any permanent cost increase will only be subject to the low retention factor shown above to the extent it is permitted under a customised price-quality path.
- 3.21 A second point that may reduce the impact from the lower incentive rates illustrated in Figure 3.1 is that the lower incentives are only applicable once a supplier knows it will make a customised price-quality path application. Prior to that point the incentive rates will be consistent with an expectation that they remain subject to the IRIS applicable under a default price-quality path (ie, the retention factor is ~ 34%).
- 3.22 The significant advantage of the revised approach compared to some of the other suggested options is that it does not provide a disincentive for suppliers to come in for a customised price-quality path.⁴⁰ For example:
- 3.22.1 If a supplier has been exposed to significant temporary costs (eg, a major storm) it will be expecting positive adjustments under the IRIS that applies to default price-quality paths. These adjustments allow it to share the burden of temporary cost increases with consumers;
- 3.22.2 However if all IRIS adjustments are removed when a distributor moves onto a customised price-quality path, the distributor may be reluctant to apply for a customised price-quality path. This is because those positive adjustments would be removed and the supplier would be exposed to the full costs of the temporary event. This approach would therefore be inconsistent with the approach that would apply if the distributor remained subject to the default price-quality path;
- 3.22.3 This would not be an issue under the Powerco approach as the retention rates for temporary (or one-off) savings or losses remain the same as they are for the default price-quality path.

⁴⁰ Under the assumption that costs in the period prior to a CPP are higher than were forecast under the default price-quality path.

- 3.23 Also, by keeping the retention factor for temporary savings consistent across regulatory periods, we do not provide incentives for expenditure to be delayed in order to gain from diverse incentive rates.⁴¹
- 3.24 The main disadvantage of the Powerco approach is a concern that any supplier applying for multiple consecutive customised price-quality paths will have low incentives to make permanent efficiency savings. As a result we wish to make it clear that alternative options may need to be considered in the future if this type of scenario becomes prevalent.⁴²
- 3.25 However, for the avoidance of doubt, the approach proposed by Powerco and outlined in this paper will apply to *all* customised price-quality paths (including consecutive customised price-quality paths) unless the input methodologies are further amended at a later date.

Approach proposed by Powerco is considered the most appropriate

- 3.26 After considering the overall impact on incentives to make both efficiency savings and apply for customised price-quality paths we decided to apply the approach proposed by Powerco. The reasons for applying this revised approach are that:
- 3.26.1 It has been suggested as a ‘pragmatic approach that would result in a high degree of certainty’;⁴³
- 3.26.2 It provides minimal perverse incentives to incur expenditure in a particular year, or shift expenditure across different time periods; and
- 3.26.3 The retention factor for temporary savings/losses is the same as under a DPP, which means that there are no perverse incentives to apply or not apply for a customised price-quality path, due to the exposure to temporary savings and losses.

Alternative options

- 3.27 In applying Powerco’s suggested approach we have rejected some of the alternative options proposed in submissions.⁴⁴

⁴¹ For example, under the scenario in which no IRIS adjustments are made when transitioning onto CPPs, the retention factor for temporary savings will be 100% in Year 5 of the DPP period, but 34% in the first year of the CPP period (assuming the distributor returns to a DPP after the CPP). This would incentivise the supplier to delay as much temporary expenditure as possible to the CPP.

⁴² For example, the IRIS as applied to individual price-quality paths may be more suitable in this type of scenario.

⁴³ Powerco “Re: Proposed approach to further amendments to incremental rolling incentive scheme (IRIS) for electricity distributors” 20 March 2015, pages 2.

3.28 These options include:

- 3.28.1 The removal of all IRIS adjustments when a distributor moves onto a customised price-quality path;
- 3.28.2 Allowing distributors to submit themselves the level of temporary savings in the penultimate year of the previous regulatory period;
- 3.28.3 Reverting to an asymmetric IRIS;
- 3.28.4 Delaying the implementation of the IRIS for customised price-quality paths until the concerns listed above are resolved.

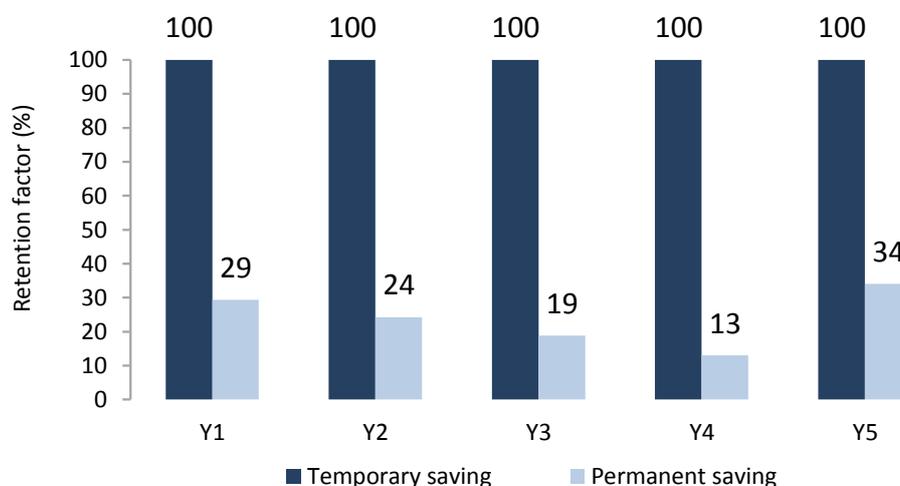
Removing IRIS adjustments

- 3.29 A suggestion from Vector was that all IRIS carry over and adjustment amounts should be removed when a distributor moves onto a customised price-quality path.
- 3.30 Under this scenario suppliers are said to be exposed to the 'natural' incentive. Being exposed to the natural incentive means that suppliers are exposed to 100% of gains or losses from temporary impacts and are exposed to variable incentives for permanent savings, depending on the year in which they occur.
- 3.31 Figure 3.2 illustrates these 'natural' retention factors for permanent and temporary savings/losses in operating expenditure that result from the removal of IRIS rewards and penalties. The incentive for permanent savings is lowest in Year 4 because any permanent savings in that year will typically be used to help inform the customised price-quality path forecast.⁴⁵

⁴⁴ These options were outlined in paragraph 2.20.

⁴⁵ We assume that any permanent savings in Year 5 do not impact the level of the operating expenditure allowance under the customised price-quality path.

Figure 3.2 – Retention factors for temporary and permanent savings if IRIS adjustments are removed following transition onto a customised price-quality path⁴⁶



3.32 The major difference between this option and Powerco’s approach is the strength of the incentive to make any savings in the period prior to the customised price-quality path. The Powerco approach broadly provides a 34% retention factor for all differences between forecast and out-turn expenditure prior to a customised price-quality path, while removing the IRIS provides a 100% retention factor for these differences.

3.33 Given the 100% retention for temporary savings we consider that a significant disadvantage of this option is the potential for it to provide a disincentive for suppliers to come in for a customised price-quality path. This was previously described in paragraph 3.22.⁴⁷

Submitters should not be permitted to determine their own level of temporary savings

3.34 We also have rejected Vector’s suggestion that distributors should be allowed to submit themselves the value of expenditure savings that are due to temporary effects.⁴⁸ There will be clear incentives for firms to classify expenditure changes as either temporary or permanent, depending on whether their out-turn expenditure is higher or lower than the forecast.

3.35 As a result we would require significant auditor and/or approval processes to ensure that appropriate unbiased values were being determined.

⁴⁶ Note that the exact retention factors for permanent savings are dependent on the level of the WACC.

⁴⁷ Under the assumption that costs in the period prior to a CPP are higher than were forecast under the default price-quality path.

⁴⁸ Vector Limited “Commission proposal to implement further amendments to input methodologies (IM) for electricity distributors subject to price-quality regulation” 20 March 2015, paragraph 15.

- 3.36 As a result we consider that this approach:
- 3.36.1 Does not address the perceived uncertainty issue as described in paragraphs 3.7 to 3.9; and
 - 3.36.2 Has the potential to create an administrative burden on the Commission and distributors in verifying the disclosure of temporary savings, which may be disproportionate to the magnitude of the impact on revenue allowances.
- 3.37 As a result we do not think that allowing distributors to determine the value of non-recurrent differences would provide an appropriate outcome in the circumstances of a distributor transitioning onto a customised price-quality path.⁴⁹

Reverting to an asymmetric IRIS is inappropriate

- 3.38 In earlier papers we have illustrated the incentive problems under the asymmetric IRIS that was previously applied to customised price-quality paths. In particular it can result in incentives that can change significantly over time and results in complicated incentives on suppliers.⁵⁰
- 3.39 As a result we do not think it would be appropriate to revert to an asymmetric IRIS in the context of a customised price-quality path.

Delaying the implementation of the IRIS is not an option

- 3.40 Some submissions suggested that we delay the implementation of the IRIS for customised price-quality paths and consider it further.⁵¹
- 3.41 We do not consider that this option is appropriate for the following reasons:

⁴⁹ We may have considered this approach as a way of determining temporary differences if we had retained the methodology outlined in the technical consultation. However, given the decision to move away from that approach, given its perceived uncertainty in the context of applying for a customised price-quality path, we have not considered it as an option here.

⁵⁰ For further details on the issues related to asymmetric IRIS and why we do not consider it is appropriate please see: Commerce Commission, "Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme", 27 November 2014, paragraphs 4.14-4.19 and Commerce Commission, "Incentives for Suppliers to Control Expenditure During a Regulatory Period: Process and Issues Paper", 20 September 2013, paragraphs 77-82.

⁵¹ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraph 41, and PWC "Submission to the Commerce Commission on proposed further amendments to input methodologies: Incremental Rolling Incentive Scheme, Made on behalf of 19 Electricity Distribution Businesses" 20 March 2015, paragraph 32.

- 3.41.1 Delaying the introduction of an IRIS would not remove incentives on suppliers. The alternative option of no IRIS would result in suppliers being subject to the natural incentives, which we have determined are less in the long term interest of consumers than our revised approach to implementing IRIS;
- 3.41.2 Some distributors are likely to be considering whether to apply for a customised price-quality path. Therefore an earlier decision helps them to understand any impact that IRIS has on their decision on whether to apply for a customised price-quality path;
- 3.41.3 There has been an extensive consultation process on these issues which had given stakeholders significant opportunities to raise an alternative approach; and
- 3.41.4 All of the current input methodologies are currently under review. That process provides us and external stakeholders with an opportunity to review the input methodologies related to the IRIS mechanism and amend them if necessary.

4. Other matters raised in submissions

Purpose of chapter

- 4.1 This chapter responds to other matters affecting the implementation of IRIS for distributors transitioning onto a customised price-quality path that were raised in the technical consultation.
- 4.2 Particular topics raised include:
- 4.2.1 The ability for the operating expenditure and capital expenditure allowances used to calculate IRIS adjustments to be re-considered in the context of a customised price-quality path application;
 - 4.2.2 Distributors potentially not having an operating expenditure forecast that can be used for IRIS adjustments at the expiry of a customised price-quality path when prices are set under s 53X (2);
 - 4.2.3 That there could be significant fluctuations in revenue from large second year adjustments under the IRIS; and
 - 4.2.4 That the names of the adjustment terms are ambiguous and confusing.
- 4.3 Our response to each of the issues raised is outlined in the following sections.⁵²

Ability to reconsider operating and capital expenditure allowances

- 4.4 A distributor may apply for a customised price-quality path for a variety of different reasons. For example, they might apply because they have been subject to a sudden catastrophic event, or they require a short-term boost to capital expenditure for efficiency reasons.
- 4.5 Certain submissions also made it clear that they believed that the ability to adjust certain forecasts following specific circumstances (eg, like a catastrophic event) should be permitted in the input methodologies.⁵³

⁵² We have also corrected an error in the determination that was inconsistent with the published model. See: Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraph 44.

⁵³ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraphs 13-14, and Orion "Submission on the proposal to implement further amendments to Input methodologies (IRIS)" 20 March 2015, paragraphs 22-23.

- 4.6 As a customised price-quality path may be a response to unforeseen circumstances that have a significant impact on a supplier, we believe that some flexibility on the application of IRIS under different circumstances is required.
- 4.7 Although there are strong reasons for providing certainty over the exact value of IRIS rewards in order to encourage efficiency saving measures, we believe that there is similarly a strong justification for us to ensure that the approach to IRIS is consistent with other aspects of a customised price-quality path decision (eg, the level of claw-back applied).
- 4.8 Following a catastrophic event, for example, the previous forecasts of operating and capital expenditure may no longer reasonably reflect the efficient costs of providing the regulated service. For the price-quality path itself, we may, in setting the customised price-quality path, provide for claw-back. We think it is appropriate to provide a similar mechanism to adjust the IRIS recoverable costs in order to maintain incentives for efficient expenditure.
- 4.9 As a result we have introduced a clause to the determination that allows use of an alternative allowance of operating expenditure or capital expenditure for the purposes of calculating IRIS adjustments.⁵⁴ We envisage this clause would be used in certain circumstances to ensure consistency across a customised price-quality path.
- 4.10 The approach is similar to that taken for circumstances in which the price-quality path is amended or subject to certain other events under a default price-quality path.⁵⁵
- 4.11 We also note that all input methodologies can be varied for a customised price-quality path on agreement with the supplier.⁵⁶

⁵⁴ Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015 [2015] NZCC 32, cl 3.3.13 and 3.3.14. Note that we refer to the operating and capital expenditure allowances as 'forecasts' in the determination.

⁵⁵ See also: Commerce Commission "Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme " 27 November 2014, paragraphs B19-B26.

⁵⁶ We may consider whether to vary the IRIS for an individual supplier applying for a customised price-quality path, with the agreement of the supplier, in accordance with s 53V (2) (c) of the Commerce Act.

Forecasts when a customised price-quality path expires

- 4.12 The ENA noted that, under s 53X (2), we are able to advise the suppliers of different starting prices that apply following the expiry of a customised price path. It is possible that these prices may not have an underlying operating expenditure forecast from which to calculate IRIS carry over amounts.⁵⁷
- 4.13 We have addressed this issue through an update to the determination.⁵⁸ Under the new clause, at the expiration of the customised price-quality path, the Commission will notify the party of the forecast operating expenditure and forecast value of commissioned assets to use for the purpose of calculating the IRIS carry over amounts.

Fluctuations in revenue from second year adjustments

- 4.14 Vector raised some concerns about fluctuations in allowable revenue from large IRIS adjustments that take place in the second year of the customised price-quality path.⁵⁹
- 4.15 We note the issue raised by Vector, but for the purposes on this decision we have maintained consistency with the decision for default price-quality paths in which the opex incentive adjustment is made in the second year of a regulatory period.
- 4.16 We believe that this may be something to address for both default and customised price-quality paths as part of the IM review. It does not have an immediate impact on supplier's incentives prior to a customised price-quality path.

Naming of adjustment terms

- 4.17 A number of submissions asked for further explanation of the various adjustment terms that are used in the IRIS mechanism for non-standard scenarios.⁶⁰

⁵⁷ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraph 47.

⁵⁸ Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015 [2015] NZCC 32, cl 3.3.13 (3).

⁵⁹ Vector "Commission proposal to implement further amendments to input methodologies (IM) for electricity distributors subject to price-quality regulation" 20 March 2015, paragraph 18.

⁶⁰ Electricity Networks Association, "Submission on the further amendments to input methodologies for electricity distributors subject to price-quality regulation: Incremental Rolling Incentive Scheme" 20 March 2015, paragraph 22.

- 4.18 The terms themselves are merely separate steps of a mechanical formula, from which we are able to calculate the required retention factor. They have been split into different adjustment terms in order to facilitate the understanding of that formula.
- 4.19 We consider however that the original names were potentially ambiguous in that they may have implied an intuitive rationale behind each separate term. As a result we have changed the names of these terms for the final determination in order to make it clear that they are merely mechanical steps for those scenarios in which there are default price-quality paths of one year in length.
- 4.20 Table 4.1 summarises the new and old names for the terms that have been changed.

Table 4.1 – Change in name of the adjustment terms

New Name	Old Name
<i>One-year adjustment term 1</i>	<i>Roll-over adjustment term 2</i>
<i>One-year adjustment term 2</i>	<i>Penultimate year adjustment term</i>
<i>One-year adjustment term 3</i>	<i>Single year adjustment term</i>
<i>One-year adjustment term 4</i>	<i>Roll-over adjustment term 3</i>
<i>One-year adjustment term 5</i>	<i>Roll-over adjustment term 4</i>
<i>One-year adjustment term 6</i>	<i>Savings adjustment term 1</i>
<i>One-year adjustment term 7</i>	<i>Savings adjustment term 2</i>
<i>One-year adjustment term 8</i>	<i>Savings adjustment term 3</i>
<i>One-year adjustment term 9</i>	<i>Year 5 forecast adjustment term</i>

5. Revised approach for calculating IRIS recoverable costs

Purpose of this chapter

- 5.1 This chapter sets out how we intend to implement the IRIS for operating expenditure for distributors transitioning from a default price-quality path to a customised price-quality path.

General guidance

- 5.2 Consistent with our approach for default price-quality paths, we have implemented an IRIS for electricity distributors transitioning onto customised price-quality paths that:
- 5.2.1 Can be described as 'symmetric'; and
 - 5.2.2 Provides incentives to control operating and capital expenditure.
- 5.3 However, these provisions do not affect Orion New Zealand under its current customised price-quality path.⁶¹

Operating expenditure

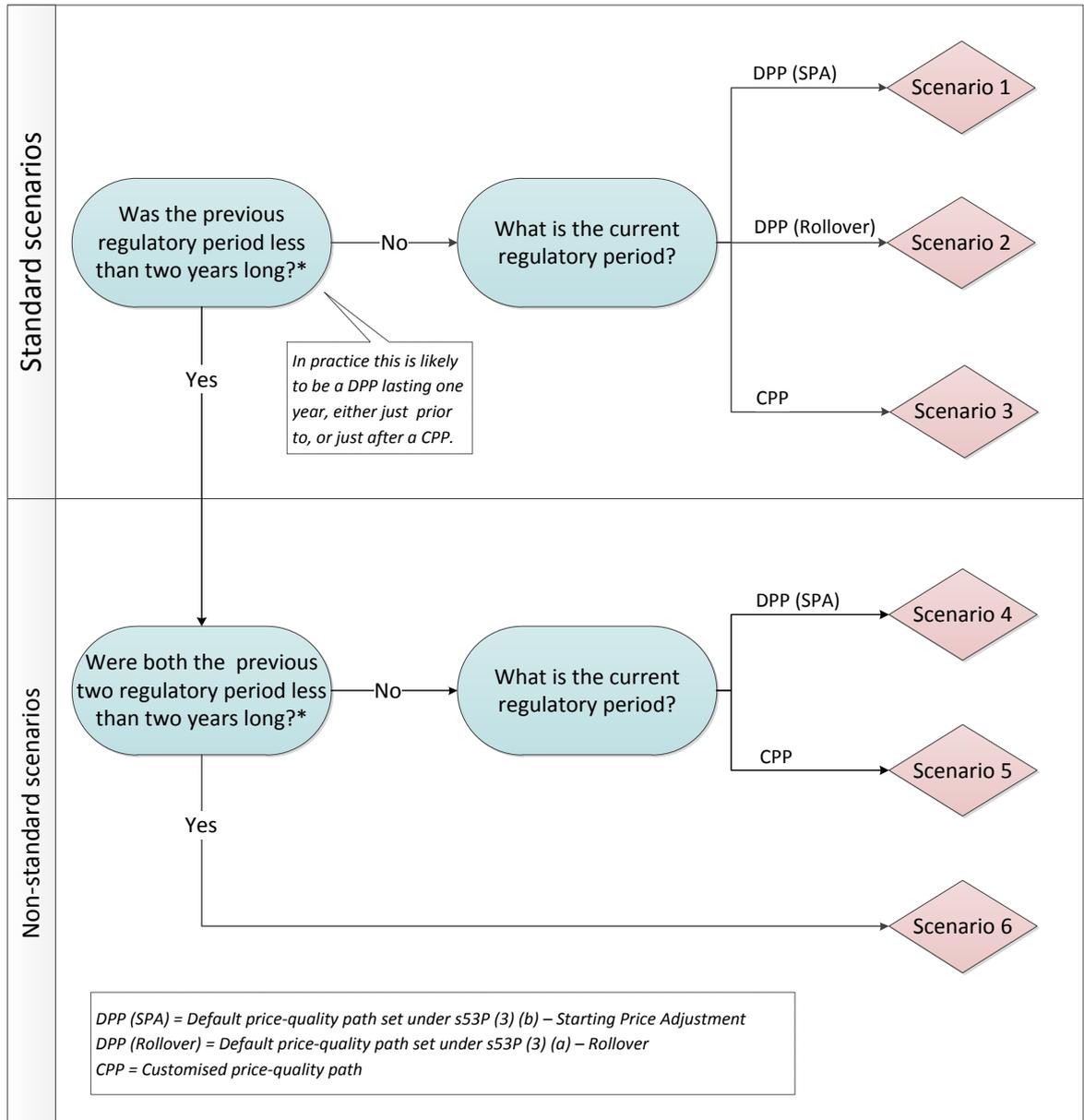
- 5.4 The general approach for calculating recoverable costs is the same for the transitional situations as it is for the situations in which distributors remain on the default price-quality path. In particular, the steps in this method are:
- 5.4.1 Amounts that are generally equal to the incremental change in operating expenditure are carried forward from earlier years in which the savings or losses are made; and
 - 5.4.2 The amounts carried forward into each year are added together to determine the recoverable cost term.
- 5.5 In the second full year after the price-quality path starts to apply to the supplier, a one-off adjustment is made after the carry forward amounts are added together. These 'adjustment terms' are discussed further in the next section.

⁶¹ Existing IRIS provisions, which can be described as 'asymmetric', currently apply for Orion New Zealand (for its customised price-quality path for the five years from 1 April 2014 to 31 March 2019). The amendment determination preserves the existing rules for Orion New Zealand and allows the net IRIS balances to be included as recoverable costs in the years following those price-quality paths.

Adjustment terms are dependent on the situation

- 5.6 To give effect to the IRIS in all situations we have introduced a number of additional adjustment terms to the input methodologies that apply under different scenarios.
- 5.7 We have identified six generic scenarios that may occur under default/customised price-quality regulation. Under each of these scenarios distributors will need to apply one or more of the proposed adjustment terms.

Table 5.1 – Potential scenarios under default/customised price-quality regulation



- 5.8 Scenarios 1, 2, and 3 are the standard scenarios that would be faced by distributors in the majority of situations. Scenarios 4, 5, and 6 apply in more uncommon situations in which a default price-quality path is applied for less than two years.

- 5.9 As an example, a distributor would be in Scenario 1 if it is subject to a default price-quality path set using a starting price adjustment under s 53P (3) (b) of the Act, and if the previous price-quality path was **not** a one year default price-quality path.
- 5.10 Table 5.2 shows which adjustment terms need to be applied in each of the scenarios described above together with references to the clauses that apply in the accompanying determination.⁶² Chapter 4 outlines how we have changed the name of some of the adjustment terms compared to the technical consultation.

Table 5.2 – Adjustment terms used in each of the scenarios

	Scenario					
	1	2	3	4	5	6
Clause reference	3.3.4 (2) (a)	3.3.4 (2) (b)	3.3.4 (3)	3.3.4 (4)	3.3.4 (5)	3.3.4 (6)
Base year adjustment term	✓	✓	✓	✓	✓	
Baseline adjustment term			✓		✓	✓
Roll-over adjustment term		✓		✓		
One-year adjustment term 1				✓	✓	
One-year adjustment term 2				✓	✓	
One-year adjustment term 3				✓	✓	
One-year adjustment term 4						✓
One-year adjustment term 5						✓
One-year adjustment term 6						✓
One-year adjustment term 7						✓
One-year adjustment term 8						✓
One-year adjustment term 9						✓

⁶² Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015 [2015] NZCC 32

- 5.11 We have ‘unpacked’ the formula in each scenario into a number of adjustment terms. On their own, these adjustment terms do not necessarily have any intuitive meaning. However, the adjustment terms applied in each scenario combine to ensure that any savings or losses are appropriately shared between the distributor and consumers consistent with the intention of the IRIS scheme.⁶³

Calculation of the baseline adjustment term

- 5.12 Implementing the revised (Powerco) approach required a change in the definition of the baseline adjustment term compared to that proposed in the draft determination.⁶⁴
- 5.13 The baseline adjustment term is now defined separately for different scenarios. This gives effect to the revised (Powerco) approach when distributors are transitioning onto a customised price-quality path.
- 5.13.1 Under Scenarios 3 and 5 it is defined under clause 3.3.7 (1) of the input methodologies; and
- 5.13.2 Under Scenario 6 it is defined under clause 3.3.7 (2) of the input methodologies.⁶⁵
- 5.14 As described in Chapter 3, the revised approach, implemented through the new definitions of the baseline adjustment term, maintains the retention factor for temporary savings at a constant 34%.
- 5.15 However the revised definition of the baseline adjustment does affect the incentive rates for permanent savings in the regulatory period(s) prior to a customised price-quality path. The incentive rates for permanent savings in different years and under different scenarios are shown in the following tables.
- 5.16 For a standard 5 year default price-quality path (Scenario 3) the retention factor for permanent savings is equivalent to that previously shown in Figure 3.1.

⁶³ For operating expenditure, the desired retention period for savings and losses is five years following the year of the gain and loss, which is equivalent to a retention factor of around 35% for a supplier, see Commerce Commission “Amendments to input methodologies for electricity distribution services and Transpower New Zealand: Incremental Rolling Incentive Scheme” (27 November 2014), paragraph 4.8.1.

⁶⁴ Draft Electricity Distribution Services (Incremental Rolling Incentive Scheme) Input Methodology Amendments Determination 2015, cl 3.3.7.

⁶⁵ Scenario 6 requires a slightly different calculation in order to give effect to the same incentives in the years prior to a customised price-quality path as the other scenarios. The calculation uses the difference between actual operating expenditure of the penultimate year prior to the start of the customised price-quality path and the forecast operating expenditure two years prior to that, due to the existence of two 1-year default-price quality paths.

- 5.17 For 2, 3, and 4-year default price-quality paths prior to a customised price-quality path the results match the equivalent year under a standard 5 year price-quality path.
- 5.18 The incentive rates for permanent savings under all of these situations are shown in Table 5.3.

Table 5.3 – Incentive rates for permanent savings for different length DPPs prior to a CPP (Scenario 3)

	DPP _{t-5}	DPP _{t-4}	DPP _{t-3}	DPP _{t-2}	DPP _{t-1}	CPP Y1 (t)
5-year DPP	10%	8%	6%	4%	34%	
4-year DPP		8%	6%	4%	34%	
3-year DPP			6%	4%	34%	
2-year DPP				4%	34%	

- 5.19 Under Scenario 5 in which there is a 1-year default price-quality path prior to a CPP the result is similar to the approach for the standard 5 year default price-quality path scenario. The main difference is the lower incentives for permanent savings extend for an additional year prior to a customised price-quality path. The retention factors for permanent savings in each year of this scenario are shown in Table 5.4.

Table 5.4– Incentive rates for permanent savings when there is a 1-year DPP prior to a CPP (Scenario 5)

	DPP1 _{t-6}	DPP1 _{t-5}	DPP1 _{t-4}	DPP1 _{t-3}	DPP1 _{t-2}	DPP2 _{t-1}	CPP Y1 (t)
5-year DPP followed by 1-year DPP	12%	10%	8%	6%	4%	34%	

- 5.20 When there are two 1-year DPPs (Scenario 6) prior to a customised price-quality path a similar effect is seen but with one additional year. The retention factors for permanent savings in this scenario are shown in Table 5.5.

Table 5.5 – Incentive rates for permanent savings when there are two 1-year DPPs prior to a CPP (Scenario 6)

	DPP1_{t-7}	DPP1_{t-6}	DPP1_{t-5}	DPP1_{t-4}	DPP1_{t-3}	DPP2_{t-2}	DPP3_{t-1}	CPP Y1 (t)
5-year DPP followed by two 1-year DPPs	13%	12%	10%	8%	6%	4%	34%	