

29 August 2014



★ wellington electricity

John McLaren
Chief Advisor
Regulation Branch
Commerce Commission
P.O. Box 2351
WELLINGTON, 6140
NEW ZEALAND

Wellington Electricity
Lines Limited

75 The Esplanade
Petone, PO Box 31049
Lower Hutt 5040
New Zealand

Tel: +64 4 915 6100

Fax: +64 4 915 6130

www.welectricity.co.nz

Dear John McLaren

Draft Determination for 2015-2020 Default Price-quality Path and Compliance matters

1. Introduction

Wellington Electricity Lines Limited (**WELL**) welcomes the opportunity to make a submission in response to the Commerce Commission's (**Commission**) consultations papers published on 18 July 2014:

- "*Electricity Distribution Services Default Price-Quality Path Draft Determination 2015*" (**Draft Determination**);
- "*Proposed Compliance Requirements for the 2015-2020 Default Price-Quality Paths for Electricity Distributors*" (**Compliance paper**);
- "*Proposed Electricity Distribution Input Methodology Amendments*" (**Draft IM amendments**);
- "*Proposed Amendments to Input Methodologies for Electricity Distribution Services*" (**IM amendments policy paper**).

WELL has also made submissions on the following of the Commission's consultation papers:

- 15 August 2014 – DPP Draft Decision and Low cost forecasting approaches;
- 29 August 2014 – Quality Targets and Incentives;
- 29 August 2014 – Incremental Rolling Incentives Schemes and IM amendments;
- 29 August 2014 – Draft Decision to amend the WACC percentile.

This submission covers the following key issues:

- Section 2 – Executive summary
- Section 3 – Compliance requirements quality path;
- Section 4 – Treatment of pass through and recoverable costs;
- Section 5 – New recoverable costs;
- Section 6 – Pre-approval of recoverable costs;
- Section 7 – Time value of money for pass through and recoverable costs.

Some of the issues covered in this submission are discussed in more detail in other submissions made by WELL. Since the Commission's consultation papers, cover some issues, to varying degrees, across multiple consultation papers, WELL expects that the Commission will take into consideration all of the matters raised in each of WELL's submissions both individually and collectively as appropriate.

2. Executive summary

In summary, WELL recommends the following:

- Clauses 9.1 and 9.2 of the DPP Determination are amended such that non-compliance with the quality standard only occurs when an Electricity Distribution Business (**EDB**) exceeds the SAIDI or SAIFI cap (mean plus one standard deviation) in both the current year and in one of the two immediately preceding years (as per the status quo). The Commission's proposed quality standard (based on the mean) is not appropriate given the 50 per cent probability of non-compliance simply due to normal variation around a mean compared with the seriousness of the enforcement actions available to the Commission under the *Commerce Act 1986 (Act)*.
- The Commission recognise the interrelationship between reliability performance and expenditure allowances and take into consideration the price-quality trade-off when making its decision on quality compliance requirements and expenditure forecasting methods. If the Commission determines that improved reliability performance is required, as proposed in the Draft Decision, it must increase the expenditure allowances and provide a transition period for EDBs to make the necessary investments to achieve improved reliability.
- Clauses 8.4 to 8.6 of the DPP Determination are amended to ensure full recovery of all pass through and recoverable costs by implementing WELL's proposed revenue control formula for pass through and recoverable costs as set out in Appendix 1 of this submission. The Commission's proposed hybrid mechanism is unnecessarily complicated and does not ensure full recovery of non-transmission pass through and recoverable costs and does not remove forecasting risk for transmission charges.
- The definition of catastrophic event allowance is amended such that clause 1.1.4(2) sub-clause (a) does not explicitly exclude revenue losses resulting from catastrophic events. It is not necessary for the Commission to explicitly exclude foregone revenue in sub-clause (a) as the drafting of this clause clearly relates only to additional net expenditure.
- The definition of catastrophic event allowance is amended such that clause 1.1.4(2) new sub-clause (c) provides for the recovery of revenue losses that occur between the time when a catastrophic event occurs and when the new DPP or CPP applies. This is necessary to ensure that EDBs have an ex ante expectation of full recovery of efficient costs. The reason given by the Commission for not providing either ex ante or ex post recovery of revenue losses is simply incorrect. Investor diversification can only reduce variability around an expected value but cannot change the expected value of an investment. Consequently, EDBs currently have an ex ante expectation of less than full recovery of efficient costs.

3. Quality path compliance requirements

The Compliance paper and Draft Determination propose that:

- The quality standard will be based on the target SAIDI and SAIFI values where the target is the mean historical value;
- If an EDB exceeds the SAIDI or SAIFI target it is non-compliant with the quality standard and must include in the annual compliance statement an explanation for why it did not comply and the actions taken to mitigate non-compliance;
- If an EDB exceeds the target but does not exceed the cap it will not be subject to enforcement action, except in exceptional circumstances where the Commission may still seek pecuniary penalties or criminal sanctions under the Act.

Notably, the quality targets and incentives consultation paper, however, states it is only in the case of unintentional breaches that no enforcement action will be taken when quality outcomes lie between the target and the cap.

The Compliance paper and Draft Determination are silent on what actions the Commission will take when an EDB has exceeded the SAIDI or SAIFI cap. By virtue of omission, it is presumed that the Commission will be inclined to seek pecuniary penalties or criminal sanctions under the Act. The Compliance paper does not provide any guidelines explaining what process the Commission will follow to assess the reasons for non-compliance or under what circumstances it is likely to take enforcement actions.

WELL does not support the proposed approach to quality compliance and considers it to be extremely unreasonable and inappropriate for the reasons outlined below.

The proposed enforcement threshold is significantly stricter than the current DPP, where an EDB must exceed the mean plus one standard deviation in the current year and in one of the two immediately preceding years.

Given a normal distribution of variation around a mean value, the probability of an EDB exceeding the quality target in any given year is 50 per cent. Therefore, EDBs can expect to be non-compliant in 2 to 3 years of the regulatory period and the Commission should expect approximately 50 per cent of EDBs to be non-compliant in any given year. This result would simply be due to natural variation around a mean value largely due to weather variations and would not represent a material deterioration in the underlying quality performance.

The proposal creates considerable uncertainty for EDBs because the Commission has retained its ability to take enforcement action under the Act when the target is reached and it is unclear what exceptional circumstances would involve.

The proposal also introduces an administrative burden on EDBs, as non-compliance would require EDBs to submit additional information explaining why the mean value was exceeded and what actions were taken to mitigate this reoccurring. It is not clear what mitigating actions EDBs are expected to take when exceeding the mean is simply due to natural variation and will occur 50 percent of the time on average.

The proposal also significantly increases the risk of reputational damage to EDBs and increases the costs to EDBs of managing internal and external stakeholders. This includes explaining to media and Board Directors that non-compliance is not actually a breach of the requirements, has little risk (but not no risk) of enforcement action and should be expected every two years on average.

Further, under the proposed financial incentive scheme EDBs would have already incurred a financial penalty for exceeding the mean value. The proposed financial incentive scheme provides an automatic deterrent to EDBs and is therefore a stronger mechanism than the current situation. It is therefore unclear what the Commission is trying to achieve by proposing that it would seek to take additional enforcement action in some circumstances.

WELL also does not support the proposal that the Commission could take enforcement action any time an EDB exceeds the SAIDI or SAIFI cap. This is because the probability of exceeding the cap in any given year simply due to natural variation is approximately 17 percent or once in the five year regulatory period. This proposed enforcement criterion is stricter than the current regime where enforcement action is only possible if an EDB exceeds one standard deviation above the mean in the current year and in one of the two immediately preceding years.

It is already difficult for the Commission to identify breaches resulting from natural variation or uncontrollable, unintentional adverse events as opposed to deliberate actions taken by management which reduce underlying network performance. The proposed approach will only make this more difficult as there is a higher probability of reaching the enforcement criterion simply due to natural variation.

Further, the Commission has proposed that any financial penalties it imposes under its enforcement proceedings would be additional to the financial penalties already incurred by an EDB under the incentive scheme. WELL considers that this is highly inappropriate as it is effectively double punishment for the same reliability event(s). WELL recommends that the Commission explicitly provide for financial penalties incurred under the incentive scheme to be counted toward any financial penalty incurred under subsequent enforcement action relating to the same reliability event(s).

WELL notes that the stricter approach to quality compliance is being proposed by the Commission at the same time that it proposes to limit capex and opex allowances below levels that EDB's have indicated in their Asset Management Plans is necessary to maintain current performance. It is important that the Commission recognise the interrelationship between reliability performance and expenditure and consider the price-quality trade-off when making decision on quality compliance requirements. If the Commission determines that improved reliability performance is required, as proposed in the Draft Decision, it must increase the expenditure allowances and provide a transition period for EDBs to make the necessary investments to achieve improved reliability. This interrelationship is discussed in more detail in WELL's submission on the Quality Targets and Incentives paper dated 29 August 2014.

WELL recommends that the Commission revise the enforcement criteria in clause 9.1 and 9.2 of the DPP Determination such that non-compliance only occurs when an EDB exceeds the mean plus one standard deviation in both the current year and in one of the two immediately preceding years (as per the status quo). Additionally, it is both fair and reasonable that the mean plus standard deviation should be calculated from historical data applying the same normalisation process that will be applied in the future. It would be unfair and unreasonable for additional artificial caps to be applied in the calculation of the mean plus standard deviation that will not be applied in the future assessment of non-compliance.

Subject to changing the definition of non-compliance as proposed above, WELL supports the proposal in clause 11.5 of the Draft Determination that EDBs include in the Annual Compliance Statement additional information on the cause of the non-compliance and mitigating actions taken.

4. Treatment of pass through and recoverable costs

WELL has a number of concerns with the price path compliance formula in clause 8 of the Draft Determination. In essence, WELL supports the principle that compliance with the DPP price path be assessed independently of pass through and recoverable costs. WELL also supports the principle that EDBs should be able to fully recover pass through and recoverable costs without any risk of accidentally breaching the price path or failing to fully recover the costs. These costs are third party charges beyond the control of EDBs. However, WELL notes the mechanism proposed to fulfil these objectives is deficient.

The Compliance paper, Draft Determination and supporting proposed IM amendments propose a hybrid mechanism for the recovery of pass through and recoverable costs. First transmission charges are to be treated independently of the DPP price path compliance test and a separate compliance test is applied. Second, all other pass through and recoverable costs must be 'ascertainable' before being passed onto customers.

WELL consider this two stage approach is unnecessarily complex and does not enable EDBs to fully recover these third party costs. This is because:

- EDBs never recover one full year of non-transmission pass through and recoverable costs that are not ascertainable at the time that prices are set. This is because there is always a one year delay in recovering the non-ascertainable costs which is never corrected.
- There is a degree of judgement regarding what is an 'ascertainable' cost.
- The proposed transmission balance does not allow for negative balances to be carried over into the next regulatory period;
- Forecasting risk is not removed in the transmission balance approach because in clause 8.6(c) TB_{t-1} is not known when TB_t is calculated for the purpose of setting prices in period t ;
- The Commission proposes to apply the costs of debt as the time value of money and therefore EDBs cannot expect to recover the true time value of money on delayed cost recovery;
- Different charges are to be treated differently depending on the combination of categories the costs fall into. This creates a matrix of outcomes as costs are to be categorised as each of:
 - Ascertainable or not ascertainable;
 - Transmission or non-transmission;
 - Pass through or recoverable;
 - Requiring Commission pre-approval or not.

Therefore, WELL does not support Draft IM amendments or clauses and schedules in the Draft Determination that would facilitate the proposed hybrid approach. Rather WELL proposes an alternative approach as outlined in Appendix 1 that:

- Addresses all of the concerns raised by the EDB's, particularly unintentional price path breaches;
- Creates a transparent process for the Commission to observe compliance.

WELL recommends that clauses 8.4 to 8.6 of the Draft Determination be replaced with the formulae set out in Appendix 1 of this submission.

5. New recoverable costs

5.1. Catastrophic event allowance

The Draft IM amendments and associated IM amendments policy paper introduce a new recoverable cost term to provide compensation to EDBs for net additional costs incurred in the course of responding to catastrophic events, including any recoverable and pass through costs that were not recovered due to the catastrophic event.

As discussed in WELL's submission on 15 August 2014, WELL supports the principle of compensating EDBs for net additional costs incurred following a catastrophic event but before the DPP is reset, including any under-recovered pass through or recoverable costs. WELL also supports these additional costs being recovered through the DPP price path as a recoverable cost.

WELL does not support the Draft IM amendment to the definition of catastrophic event in clause 1.1.4(2) sub-clause (a) which explicitly excludes foregone revenue in the definition of catastrophic event allowance. It is not necessary for the Commission to explicitly exclude foregone revenue in sub-clause (a) as the drafting of this clause clearly relates only to additional net expenditure.

WELL therefore recommends that the Commission remove the words '*..., other than costs that are foregone revenue, ...*' from sub-clause (a) of the definition of catastrophic event allowance in the IM amendments.

In addition, WELL fundamentally disagrees with the Commission's decision not to provide either an ex ante allowance for the risk of revenue losses caused by catastrophic events or ex post recovery of revenue losses directly caused by catastrophic events. The basis for the Commission's current position not to provide compensation either ex ante or ex post is incorrect for the following reasons:

- The Commission has previously stated and continues, in the DPP Draft Decision, to apply the argument that diversified investors can minimise the impact of catastrophic risk by diversifying their investments such that risks specific to one investment are offset by unexpected positive benefits from other investments. As previously explained, catastrophic risk is a type 1 asymmetric risk for which there is no potential countervailing upside event of the same magnitude. Asymmetric risks therefore cannot be diversified through investment as there is no equivalent offsetting investment available. Even if an EDB invested in every single other EDB around the world, which is impracticable, there is still no guarantee that all the demand from the EDB that experienced the catastrophic risk eventuates elsewhere. Some demand losses may occur due to household composition changes leading to less consumption per person or economic activity that dissolves rather than relocating.

Further, as noted by Incenta¹, diversification is a tool used by investors to alter the variability of returns. As such a well-diversified investor can reduce volatility of returns around the expected value compared with an undiversified investor, however it cannot alter the expected return. Consequently, WELL considers that the level of diversification of the investor of an EDB that experiences catastrophic event should have no bearing on the principle that each individual EDB should have an ex ante expectation of full cost recovery.

¹ Incenta, '*Rationale for setting the regulatory WACC above the mid-point value – Response to Draft Decision*', report to the Electricity Networks Association, August 2014, page 17.

- If the Commission does not enable EDBs to recover revenue losses associated with catastrophic events either ex ante or ex post then EDBs can only expect to recover less than their efficient costs as there is a real risk of significant revenue losses associated with catastrophic events. For some EDBs the ex ante probability of the risk eventuating is greater than for others. As noted by Professor Yarrow:²

“Looking at matters ex ante, it is reasonable to anticipate that a regulator will allow for the recovery of efficiently incurred, expected costs (where by expected costs is meant the mathematical expectation or mean of probabilistic cost projections). Expected costs caused by catastrophic events are properly included in this calculation.”

Therefore, EDBs must be compensated for catastrophic risk either ex post or ex ante. WELL notes that it is uneconomic for EDBs to be fully insured against revenue losses resulting from catastrophic events due to the prohibitive costs of this insurance as acknowledged by Aon.³ Further the DPP provides no compensation for EDBs to self-insure against revenue losses. It is therefore necessary for the Commission to provide ex post recovery of revenue losses following catastrophic events otherwise EDBs cannot have an ex ante expectation of recovering efficient costs.

WELL strongly recommends that the Commission include in the proposed catastrophic event allowance the ability for EDBs to recover revenue losses associated with catastrophic events that are incurred before the price path is reset.

WELL therefore recommends that the definition of catastrophic event allowance in clause 1.1.4(2) of the IMs include a sub-clause (c) which provides for the recovery of lost revenue resulting from the catastrophic events.

WELL and other stakeholders have made numerous submissions on this matter in relation to the Commission's consideration of Orion's CPP proposal. WELL's submissions dated 27 June 2013 and 20 September 2013 are attached. The Commission should consider all the analysis presented to it in regards to Orion's CPP proposal and the current WACC review when it makes its final decision on the catastrophic event allowance.

Notwithstanding, if the Commission does not explicitly provide for the recovery of lost revenue, it should at least not explicitly exclude it from the IM amendment. This would leave the IM neutral to the recovery of lost revenue and thereby reserve the Commission's position on whether an EDB should be able to recover lost revenue until the time in which it makes a decision on the DPP re-opener, CPP application or undertakes a full IM review in 2017. This is important because under different circumstances to Orion's or simply through learnings over time, the Commission could come to the view that it is appropriate to allow an EDB to recover lost revenue resulting from a catastrophic event.

² Professor Yarrow, 'The Orion CPP Determination', report prepared for the Commerce Commission, June 2013, Page 4.

³ AON, 'Orion & Risk Financing', Letter to Commerce Commission, 24 July 2013.

5.2. Other new recoverable costs

WELL supports the proposed introduction of recoverable costs for the:

- Energy efficiency and demand incentive allowance. WELL's views on the operation of the energy efficiency and demand-side management initiatives are discussed in section 7 of its submission on the DPP Draft Decision dated 15 August 2014;
- Incremental rolling incentives schemes for opex and capex. WELL views on the operation of these expenditure incentives schemes are discussed in its submission on Expenditure Incentives and associated IM amendments dated 29 August 2014;
- Quality incentive adjustment, subject to changes to the targets, caps, collars, normalisation method and enforcement regime as discussed in WELL's submission on Quality Targets and Incentives dated 29 August 2014 and the DPP Draft Decision on 15 August 2014.

6. Pre-approval for recoverable costs

WELL does not consider it necessary for the Commission to require pre-approval for the recovery of the following recoverable costs:

- New investment contracts payable to Transpower;
- Avoided cost of transmission payments to owners of distributed generation;
- Automatic under-frequency load shedding allowance.

These costs are relatively simple to validate and there is no subjectivity regarding the magnitude of the costs involved. In assessing EDBs compliance statements, auditors and Directors will undertake the necessary due diligence to ensure that the costs are an accurate reflection of those incurred. The proposed pre-approval process introduces unnecessary uncertainty and administrative burden for EDBs for no apparent benefit.

Notwithstanding, and while unnecessary, if the Commission remains concerned it could require that evidence is submitted alongside the annual compliance statement.

WELL recommends that DPP Determination and proposed IMs amendments are amended such that pre-approval is not required for the above listed recoverable costs.

7. Time value of money for pass through and recoverable costs

The Commission has proposed that the cost of debt be applied as the time value of money for the delayed recovery of all recoverable costs and for adjusting the transmission balance. As previously submitted, WELL does not support the Commission applying the costs of debt as the time value of money. The WACC is the opportunity cost of capital for both EDBs and customers.

The time value of money is a function of the riskiness of cash flows and is independent of the party who is receiving or paying the cash. The time value of EDB distribution revenue cash flows must be equivalent to the time value of customer distribution charge cash flows because these cash flows are equal and opposite and have the same level of risk associated with them. The time value of money associated with cash flows for an EDB has been calculated by the Commission as the WACC. The time value of money associated with cash flows for a BBB+ EDB bond has been calculated by the Commission as the cost of debt. The cash flow risk for an investor in a BBB+ EDB bond is not the same as that for an investor in an EDB, and is therefore not a relevant measure of the time value of money for EDB revenue or charges.

Applying the WACC as the time value of money for delayed revenue recovery is also required for consistency with the Commission's DPP financial model. The DPP financial model consistently assumes that the WACC is the time value of money for an EDB, for instance:

- Any cash flows which occur at mid-year which are required to be escalated to the end of the year are escalated by half a year's WACC;
- The smoothing of maximum allowable revenue to recover building block costs is performed using WACC as the time value of money.

In the DPP financial model, any asset owned by the EDB earns a WACC return, including fixed assets and deferred tax assets. There is no reason why a deferred revenue asset (e.g. unrecovered pass through costs) should be treated any differently.

Additionally, unlike the cost of debt, applying the WACC as the time value of money for pass through and recoverable costs would ensure that EDBs are neutral to under or over-recovering these costs in any given year.

WELL strongly recommends that the Commission consistently apply the WACC as the time value of money across all situations. The Commission's current approach is not supported by economic theory and is inconsistent.

8. Closing

WELL appreciates the opportunity to provide a submission on the Commission's Draft Determination, Compliance Paper, Draft IM amendments and accompanying IM amendments policy paper.

Given that many issues relating to the 2015-20 DPP reset are covered, to varying degrees, across a number of the Commission's consultation papers, WELL's expectation is that the Commission will consider all of WELL's submissions in relation to each issue.

WELL would welcome the opportunity to discuss with the Commission any of the matters raised in this submission. Please do not hesitate to contact Megan Willcox, Senior Regulatory Economist, on MWillcox@welectricity.co.nz if you have any queries.

Yours faithfully



Greg Skelton
CHIEF EXECUTIVE OFFICER

Appendix 1 – Proposed method for pass through and recoverable costs

The following method is a revenue control formula designed to cover all pass through and recoverable costs, including transmission costs. For simplicity pass through and recoverable costs are collectively termed 'recoverable costs'. By ring fencing recoverable costs and revenues a more transparent and simple approach is provided which ensures full recovery of all recoverable costs and removes forecasting risk.

Clause 1: Maximum retrievable revenue (MRR_t)

Retrievable Revenue (RR_t) is less than or equal to the Maximum Retrievable Revenue (MRR_t):

$$RR_t \leq MRR_t$$

where:

MRR_t is determined by the formula in clause (2); and

RR_t is the total of the EDB's proposed retrievable cost tariffs multiplied by the corresponding forecast quantities for each tariff component of each tariff, in calendar year t .

Clause 2: Maximum Retrievable Revenue (MRR_t)

MRR_t is expressed by the formula as set out below:

$$MRR_t = TC_t - K_t$$

where:

MRR_t is the maximum revenue the EDB is allowed to receive from its retrievable cost tariffs for the calendar year t

TC_t is the aggregate of all retrievable costs which the EDB forecasts it will be required to pay during calendar year t

K_t is a correction factor determined in accordance with clause (3)

Clause 3: Correction factor K_t

K_t is a correction factor to account for any under or over recovery of actual revenue from retrievable cost tariffs. K_t is determined by reference to the formula set out below.

$$K_t = (Ky_t + Kz_t + K_{t-1}) \times (1 + \Delta CPI_t) \times (1 + \text{pretax WACC})$$

where:

Ky_t is calculated in accordance with clause (4)

Kz_t is calculated in accordance with clause (5)

K_{t-1} is the figure calculated for K_t for calendar year $t-1$

pretax WACC is as published by the Commission in accordance with IM clause 4.4.8

ΔCPI_t is the derived change in the CPI to be applied for the Assessment Period ending in year t being equal to:

$$\frac{CPI_{Dec,t-3} CPI_{Mar,t-2} CPI_{Jun,t-2} CPI_{Sep,t-2}}{CPI_{Dec,t-4} CPI_{Dec,t-3} CPI_{Dec,t-3} CPI_{Dec,t-3}} - 1$$

where:

$CPI_{q,t-n}$ is the CPI for the quarter year ending q in the 12 month period n years prior to year t .

For the first year of the assessment period K_t is zero.

Clause 4: Calculation of Ky_t

Ky_t is a correction factor determined with reference to the formula in this clause.

$$Ky_t = TR_{t-1} - TC_{t-1}$$

where:

TR_{t-1} is the total revenue which it is estimated the EDB will earn from its retrievable cost revenues in calendar year $t-1$

TC_{t-1} is the aggregate of all retrievable costs which it is estimated will be payable by the EDB during calendar year $t-1$

Clause 5: Calculation of Kz_t

Kz_t is a correction factor for the difference between the estimates made in clause (4) in calendar year $t-1$ and actual audited values and is expressed by the formula in this clause.

$$Kz_t = [(RRa_{t-2} - RRe_{t-2}) - (RCa_{t-2} - RCe_{t-2})] \times (1 + \Delta CPI_{t-1}) \times (1 + \text{pretax WACC})$$

where:

RRa_{t-2} is the actual audited total revenue earned by the EDB from retrievable costs revenue in respect of all distribution customers in calendar year $t-2$

RRe_{t-2} is the figure used for TR_{t-1} when calculating Ky_t for calendar year $t-2$ under clause (0)

RCa_{t-2} is the audited aggregate of all retrievable charges which were paid by the EDB during calendar year $t-2$

RCe_{t-2} is the figure used for TC_{t-1} when calculating Ky_t for calendar year $t-1$ under clause (4)

ΔCPI_t is the derived change in the CPI to be applied for the Assessment Period ending in year t being equal to:

$$\frac{CPI_{Dec,t-4} CPI_{Mar,t-3} CPI_{Jun,t-3} CPI_{Sep,t-3}}{CPI_{Dec,t-5} CPI_{Dec,t-4} CPI_{Dec,t-4} CPI_{Dec,t-4}} - 1$$

where:

$CPI_{q,t-n}$ is the CPI for the quarter year ending q in the 12 month period n years prior to year t

pretax WACC is as published by the Commission in accordance with IM clause 4.4.8

For the second year of the assessment period Kz_t is zero.