

Project no. 14.07/13714:15.01/12683

**Public version** 

# Electricity and Gas Input Methodology Determination Amendments (No. 2) 2012

Decision No. [2012] NZCC 34

Amendments made under s52X of the Commerce Act 1986 to the timing of cash flows in the input methodologies applicable to customised price-quality path proposals for electricity and gas distribution businesses and gas transmission businesses contained in Decisions [2012] NZCC 26, [2012] NZCC 27 and [2012] NZCC 28.

The Commission:

S Begg

P Duignan

Dr S Gale

Date of Decision: 15 November 2012

# Electricity and Gas Input Methodology Determination Amendments (No. 2) 2012

Pursuant to Part 4 of the Commerce Act 1986 (the Act) the Commerce Commission makes the following determination:

#### 1. DETERMINATION AMENDED

This determination amends the following determinations:

- 1.1 Electricity Distribution Services Input Methodologies Determination 2012, [2012] NZCC 26 (the **EDB Determination**);
- 1.2 Gas Distribution Services Input Methodologies Determination 2012, [2012] NZCC 27 (the GDB Determination); and
- 1.3 Gas Transmission Services Input Methodologies Determination 2012, [2012] NZCC 28 (the **GTB Determination**).

#### 2. COMMENCEMENT

This determination comes into force on the day following notice of the determination is given in the New Zealand Gazette under section 52X of the Commerce Act 1986.

### 3. INTERPRETATION

- 3.1 Terms in bold type term have the meaning given to those terms in the Determination. Terms used in this determination that are defined in the Act, but not this determination, have the same meaning as in the Act.
- 3.2 Nothing in this determination limits the **Commission's** authority to amend the Determination in accordance with the Act.

#### 4. EDB IM AMENDMENTS

- 4.1 In the EDB Determination, replace clause 5.3.2 with:
  - 5.3.2 <u>Building blocks allowable revenue before tax</u>
  - (1) Building blocks allowable revenue before tax for each **disclosure year** of the **next period** is determined in accordance with the formula-
    - (regulatory investment value  $\times$  cost of capital + total value of commissioned assets  $\times$  ( $TF_{VCA}$  1) + term credit spread differential allowance  $\times$  TF total revaluation)  $\div$  ( $TF_{rev}$  corporate tax rate  $\times$  TF)
    - + (total depreciation  $\times$  (1 corporate tax rate  $\times$  *TF*)
    - + forecast operating expenditure  $\times$  *TF*  $\times$  (1 corporate tax rate)
    - other regulated income  $\times$  *TF*  $\times$  (1 corporate tax rate)
    - + (closing deferred tax opening deferred tax)  $\times$  (TF 1)

- + (permanent differences + regulatory tax adjustments utilised tax losses)  $\times$  corporate tax rate  $\times$  *TF*)  $\div$  (*TF*<sub>rev</sub> corporate tax rate  $\times$  *TF*)).
- (2) 'Regulatory investment value' means the amount obtained in accordance with the formula
  - total opening RAB value + opening deferred tax.
- (3) For the purpose of subclause (1) 'total value of commissioned assets' means, in relation to a **disclosure year**, the sum of **closing RAB values** for all **commissioned** assets calculated in accordance with clause 5.3.6(3)(b).
- (4) For the purpose of subclause (1)
  - (a) 'TF' is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{182/365}$$
;

(b) 'TF<sub>rev</sub>' is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{148/365}$$
; and

(c) 'TF<sub>VCA</sub>' is determined in accordance with the formula-

 $PV_{VCA} \times (1 + cost \ of \ capital) \div total \ value \ of \ commissioned assets.$ 

- (d) 'PV<sub>VCA</sub>' means the sum of the present value of closing RAB values for commissioned assets calculated in accordance with clause 5.3.6(3)(b), where each present value is determined by discounting each closing RAB value by the cost of capital from the relevant commissioning date to the commencement of the relevant disclosure year;
- (5) For the purpose of this clause, 'cost of capital' means the **75th**percentile estimate of WACC published most recently prior to
  submission of the CPP proposal, in respect of the term that the

  Commission has determined is the appropriate duration of the CPP.
- (6) 'Forecast operating expenditure' means, in relation to a CPP proposal—
  - (a) that has not been assessed by the Commission, the amount of operating expenditure for the relevant disclosure year included by the CPP applicant in its opex forecast; or
  - (b) undergoing assessment by the Commission, the amount of operating expenditure determined for the relevant disclosure year by the Commission after assessment of the amount in paragraph (a) against the expenditure objective.
- (7) 'Other regulated income' means income associated with the **supply** of **electricity distribution services** other than-
  - (a) through prices;
  - (b) investment-related income;

- (c) capital contributions; or
- (d) vested assets.
- (8) For the purpose of this clause, all values and amounts are expressed in nominal terms unless otherwise specified.
- 4.2 In the EDB Determination, replace clause 5.3.16 with:

# 5.3.16 Regulatory tax adjustments

- (1) Regulatory tax adjustments are determined in accordance with the formula
  - amortisation of initial differences in asset values + amortisation of revaluations notional deductible interest
- (2) For the purpose of subclause (1), 'notional deductible interest' means the amount determined in accordance with the formula-
  - ((regulatory investment value + RAB proportionate investment) x leverage x cost of debt) + term credit spread differential allowance.
- (3) For the purpose of subclause (2), 'RAB proportionate investment' means the sum of the *proportionate value* of each asset forecast to be **commissioned** less the sum of the *proportionate value* of each **disposed asset**.
- (4) For the purpose of subclause (3), 'proportionate value' means for-
  - (a) an asset forecast to be commissioned, its forecast value of commissioned asset multiplied by the proportion of that disclosure year in question from the forecast commissioning date to the end of that disclosure year out of the whole disclosure year; and
  - (b) a disposed asset, its opening RAB value multiplied by the proportion of that disclosure year from the date of sale or transfer to the end of that disclosure year out of the whole disclosure year.
- 4.3 In the EDB Determination, replace subclause 5.4.7(2) with:
  - (2) A **CPP proposal** must contain all data, information, calculations and assumptions used to determine the amounts required by subclause (1), including but not limited to-
    - (a) amounts or forecasts of-
      - (i) regulatory investment value;
      - (ii) total value of commissioned assets determined in accordance with clause 5.3.2(3);
      - (iii) total depreciation;
      - (iv) total revaluation; and

# (v) other regulated income;

- (b) all data, information, calculations and assumptions used to derive amounts or forecasts of  $TF_{VCA}$ ,  $PV_{VCA}$ , TF, and  $TF_{rev}$  determined in accordance with clause 5.3.2(4);
- (c) all data, information, calculations and assumptions used to derive the forecasts of **other regulated income** provided pursuant to paragraph (a);
- (d) forecast operating expenditure; and
- (e) any proposed term credit spread differential allowance.

## 5. GDB IM AMENDMENTS

- 5.1 In the GDB Determination, replace clause 5.3.2 with:
  - 5.3.2 Building blocks allowable revenue before tax
  - (1) Building blocks allowable revenue before tax for each **disclosure year** of the **next period** is determined in accordance with the formula-

(regulatory investment value  $\times$  cost of capital + total value of commissioned assets  $\times$  ( $TF_{VCA}$  - 1) + term credit spread differential allowance  $\times$  TF - total revaluation)  $\div$  ( $TF_{rev}$  - corporate tax rate  $\times$  TF)

- + (total depreciation  $\times$  (1 corporate tax rate  $\times$  *TF*)
- + forecast operating expenditure  $\times$  *TF*  $\times$  (1 corporate tax rate)
- other regulated income  $\times$  *TF*  $\times$  (1 corporate tax rate)
- + (closing deferred tax opening deferred tax)  $\times$  (TF 1)
- + (permanent differences + regulatory tax adjustments utilised tax losses)  $\times$  corporate tax rate  $\times$  *TF*)  $\div$  (*TF*<sub>rev</sub> corporate tax rate  $\times$  *TF*)).
- (2) 'Regulatory investment value' means the amount obtained in accordance with the formula
  - total opening RAB value + opening deferred tax.
- (3) For the purpose of subclause (1), 'total value of commissioned assets' means, in relation to a **disclosure year**, the sum of **closing RAB values** for all **commissioned** assets calculated in accordance with clause 5.3.6(3)(b).
- (4) For the purpose of subclause (1)
  - (a) 'TF' is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{182/365}$$
;

(b) 'TF<sub>rev</sub>' is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{148/365}$$
; and

(c) 'TF<sub>VCA</sub>' is determined in accordance with the formula-

 $PV_{VCA} \times (1 + cost \ of \ capital) \div total \ value \ of \ commissioned assets.$ 

- (d) 'PV<sub>VCA</sub>' means the sum of the present value of closing RAB values for commissioned assets calculated in accordance with clause 5.3.6(3)(b), where each present value is determined by discounting each closing RAB value by the cost of capital from the relevant commissioning date to the commencement of the relevant disclosure year.
- (5) For the purpose of this clause, 'cost of capital' means the **75th**percentile estimate of WACC published most recently prior to
  submission of the CPP proposal, in respect of the term that the

  Commission has determined is the appropriate duration of the CPP.
- (6) 'Forecast operating expenditure' means, in relation to a CPP proposal—
  - (a) that has not been assessed by the Commission, the amount of operating expenditure for the relevant disclosure year included by the CPP applicant in its opex forecast; or
  - (b) undergoing assessment by the Commission, the amount of operating expenditure determined for the relevant disclosure year by the Commission after assessment of the amount in paragraph (a) against the expenditure objective.
- (7) 'Other regulated income' means income associated with the **supply** of **electricity distribution services** other than-
  - (a) through prices;
  - (b) investment-related income;
  - (c) capital contributions; or
  - (d) vested assets.
- (8) For the purpose of this clause, all values and amounts are expressed in nominal terms unless otherwise specified.
- 5.2 In the GDB Determination, replace clause 5.3.16 with:

# 5.3.16 Regulatory tax adjustments

- (1) Regulatory tax adjustments are determined in accordance with the formula
  - amortisation of initial differences in asset values + amortisation of revaluations notional deductible interest
- (2) For the purpose of subclause (1), 'notional deductible interest' means the amount determined in accordance with the formula-
  - ((regulatory investment value + RAB proportionate investment) x leverage x cost of debt) + term credit spread differential allowance.

- (3) For the purpose of subclause (2), 'RAB proportionate investment' means the sum of the *proportionate value* of each asset forecast to be **commissioned** less the sum of the *proportionate value* of each **disposed asset**.
- (4) For the purpose of subclause (3), 'proportionate value' means for-
  - (a) an asset forecast to be commissioned, its forecast value of commissioned asset multiplied by the proportion of that disclosure year in question from the forecast commissioning date to the end of that disclosure year out of the whole disclosure year; and
  - (b) a disposed asset, its opening RAB value multiplied by the proportion of that disclosure year from the date of sale or transfer to the end of that disclosure year out of the whole disclosure year.
- 5.3 In the GDB Determination, replace subclause 5.5.5(2) with:
  - (2) A **CPP proposal** must contain all data, information, calculations and assumptions used to determine the amounts required by subclause (1), including but not limited to-
    - (a) amounts or forecasts of-
      - (i) regulatory investment value;
      - (ii) total value of commissioned assets determined in accordance with clause 5.3.2(3);
      - (iii) total depreciation;
      - (iv) total revaluation
      - (v) regulatory tax allowance; and
      - (vi) other regulated income;
    - (b) all data, information, calculations and assumptions used to derive amounts or forecasts of TF<sub>VCA</sub>, PV<sub>VCA</sub>, TF, and TF<sub>rev</sub> determined in accordance with clause 5.3.2(4);
    - (c) all data, information, calculations and assumptions used to derive the forecasts of **other regulated income** provided pursuant to paragraph (a);
    - (d) forecast operating expenditure; and
    - (e) any proposed term credit spread differential allowance.

#### 6. GTB IM AMENDMENTS

- 6.1 In the GTB Determination, replace clause 5.3.2 with:
  - 5.3.2 Building blocks allowable revenue before tax

(1) Building blocks allowable revenue before tax for each **disclosure year** of the **next period** is, subject to subclause (2), determined in accordance with the formula-

(regulatory investment value  $\times$  cost of capital + total value of commissioned assets  $\times$  ( $TF_{VCA}$  - 1) + term credit spread differential allowance  $\times$  TF - total revaluation)  $\div$  ( $TF_{rev}$  - corporate tax rate  $\times$  TF)

- + (total depreciation  $\times$  (1 corporate tax rate  $\times$  TF)
- + forecast operating expenditure  $\times$  *TF*  $\times$  (1 corporate tax rate)
- other regulated income  $\times$  *TF*  $\times$  (1 corporate tax rate)
- + (permanent differences + positive temporary differences negative temporary differences tax depreciation notional deductible interest utilised tax losses)  $\times$  corporate tax rate  $\times$  *TF*)  $\div$  (*TF*<sub>rev</sub> corporate tax rate  $\times$  *TF*)).
- (2) For the purpose of subclause (1), where **regulatory net taxable income** determined in accordance with clause 5.3.13(2) is negative
  using, for the purpose of clause 5.3.13(4), the amount of building
  blocks allowable revenue before tax determined in accordance with
  subclause (1), building blocks allowable revenue before tax is
  determined in accordance with the formula-

(regulatory investment value  $\times$  cost of capital + total value of commissioned assets  $\times$  ( $TF_{VCA}$  - 1) + term credit spread differential allowance  $\times$  TF - total revaluation + total depreciation)  $\div$   $TF_{rev}$ 

- + forecast operating expenditure  $\times$  TF  $\div$  TF<sub>rev</sub>
- other regulated income  $\times TF \div TF_{rev}$ .
- (3) 'Regulatory investment value' means total opening RAB value.
- (4) For the purpose of subclauses (1) and (2), 'total value of commissioned assets' means, in relation to a **disclosure year**, the sum of **closing RAB values** for all **commissioned** assets calculated in accordance with clause 5.3.6(3)(b).
- (5) For the purpose of subclauses (1) and (2), -
  - (a) TF is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{182/365};$$

(b) TF<sub>rev</sub> is determined in accordance with the formula-

$$(1 + cost \ of \ capital)^{148/365}$$
; and

(c) TF<sub>VCA</sub> is determined in accordance with the formula-

$$PV_{VCA} \times (1 + cost \ of \ capital) \div total \ value \ of \ commissioned \ assets.$$

(d) *PV<sub>VCA</sub>* means the sum of the present value of **closing RAB values** for **commissioned** assets calculated in accordance with clause

- 5.3.6(3)(b), where each present value is determined by discounting each **closing RAB value** by the *cost of capital* from the relevant **commissioning date** to the commencement of the relevant **disclosure year**.
- (6) For the purpose of this clause, 'cost of capital' means the **75th**percentile estimate of WACC published most recently prior to
  submission of the CPP proposal, in respect of the term that the

  Commission has determined is the appropriate duration of the CPP.
- (7) 'Forecast operating expenditure' means, in relation to a **CPP proposal**-
  - (a) that has not been assessed by the **Commission**, the amount of **operating expenditure** for the relevant **disclosure year** included by the **CPP applicant** in its **opex forecast**; or
  - (b) undergoing assessment by the **Commission**, the amount of **operating expenditure** determined for the relevant **disclosure year** by the **Commission** after assessment of the amount in paragraph (a) against the **expenditure objective**.
- (8) 'Other regulated income' means income associated with the **supply** of **gas transmission services** other than-
  - (a) through **prices**;
  - (b) investment-related income;
  - (c) capital contributions; or
  - (d) vested assets.
- (9) For the purpose of this clause, all values and amounts are expressed in nominal terms unless otherwise specified.
- 6.2 In the GTB Determination, replace subclause 5.3.13(5) with:
  - (5) Notional deductible interest means the amount determined in accordance with the formula-
    - (<u>(regulatory investment value + RAB proportionate investment)</u> x leverage x cost of debt) + term credit spread differential allowance.
- 6.3 In the GTB Determination, insert new subclause 5.3.13(6) and (7):
  - (6) 'RAB proportionate investment' means the sum of the *proportionate* value of each asset forecast to be **commissioned** less the sum of the *proportionate value* of each **disposed asset**.
  - (7) 'Proportionate value' means for-
    - (a) an asset forecast to be commissioned, its forecast value of commissioned asset multiplied by the proportion of that disclosure year in question from the forecast commissioning

- **date** to the end of that **disclosure year** out of the whole **disclosure year**; and
- (b) a disposed asset, its opening RAB value multiplied by the proportion of that disclosure year from the date of sale or transfer to the end of that disclosure year out of the whole disclosure year.
- 6.4 In the GTB Determination, replace subclause 5.5.5(2) with:
  - (2) A **CPP proposal** must contain all data, information, calculations and assumptions used to determine the amounts required by subclause (1), including but not limited to-
    - (a) amounts or forecasts of-
      - (i) regulatory investment value;
      - (ii) total value of commissioned assets determined in accordance with clause 5.3.2(4);
      - (iii) total depreciation;
      - (iv) total revaluation;
      - (v) regulatory tax allowance; and
      - (vi) other regulated income;
    - (b) all data, information, calculations and assumptions used to derive amounts or forecasts of  $PV_{VCA_r}$  TF,  $TF_{rev}$  and  $TF_{VCA}$  determined in accordance with clause 5.3.2(5);
    - (c) all data, information, calculations and assumptions used to derive the forecasts of **other regulated income** provided pursuant to paragraph (a);
    - (d) forecast operating expenditure; and
    - (e) any proposed term credit spread differential allowance.

Sue Begg, Deputy Chair

Dated at Wellington this 15<sup>th</sup> day of November 2012.

**COMMERCE COMMISSION** 

# **Explanatory Note**

This amendment introduces more accurate assumptions for the modelling of cash flows for customised price-quality paths.