

Overview of Wellington Electricity CPP Model

An overview of the Wellington Electricity CPP Model (the Model) is provided on this worksheet

Overview

Following the Kaikoura earthquake in November 2016 the Government asked key infrastructure providers in the Wellington region what could be done to improve readiness to respond to a major earthquake event. Wellington Electricity Lines Limited (Wellington Electricity or WE) has undertaken work to identify a programme of prudent short-term options aimed at improving the network's readiness to respond to a major earthquake event. Funding those options, which constitute the earthquake readiness expenditure, is the purpose of the proposed 'streamlined' CPP application.

The proposed streamlined CPP will involve additional expenditure of \$32.6 million (capex and opex) over the three years to enhance Wellington Electricity's readiness to respond in the event of a major earthquake (earthquake readiness expenditure).

The purpose of this workbook (the Model) is to calculate Wellington Electricity's proposed maximum allowable revenue (MAR) for Regulatory Year (RY)19 - RY21.

For the first two regulatory years of the CPP (RY19 and RY20) the building block costs used to set the CPP MAR will comprise:

- the approved maximum allowable revenue (MAR) in the current default price-quality path (DPP) determination as applicable to Wellington Electricity (DPP MAR); plus
- the building block costs of the earthquake readiness expenditure (CPP BBAR) relevant to each year.

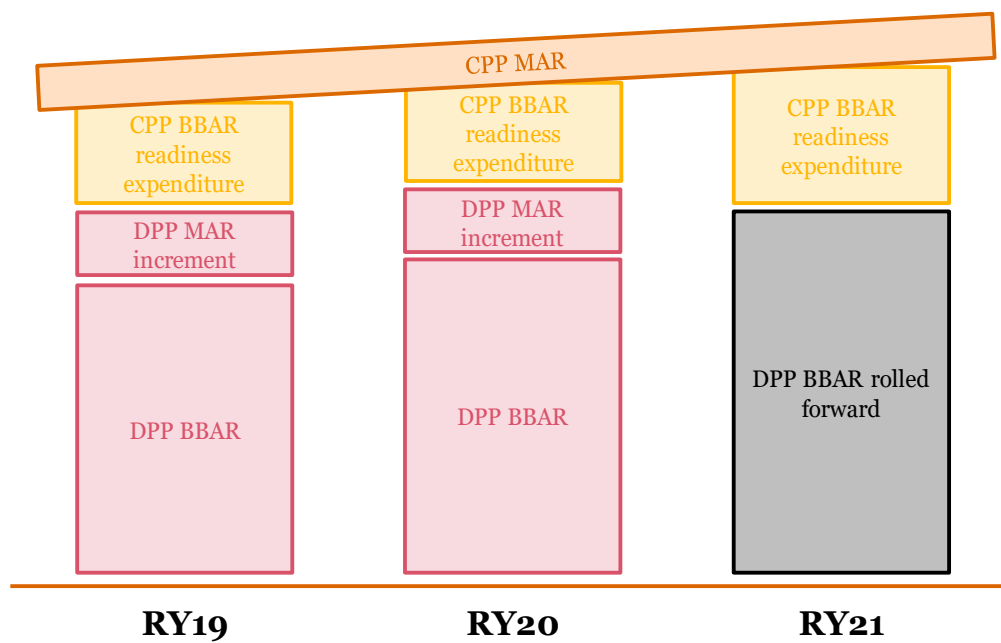
For the third regulatory year of the CPP (RY21) the building block costs used to set the CPP MAR allowed revenues will comprise:

- a roll forward of the building block values from the current DPP period using projected RY21 business as usual capital and operating expenditure; plus
- the relevant CPP BBAR costs.

The form of control will be by way of a revenue cap (consistent with the CPP IMs). This requires the determination of Wellington Electricity's MAR in each year of the CPP, using a smoothing process.

Figure 1 provides an illustrative overview of the approach to calculating MAR.

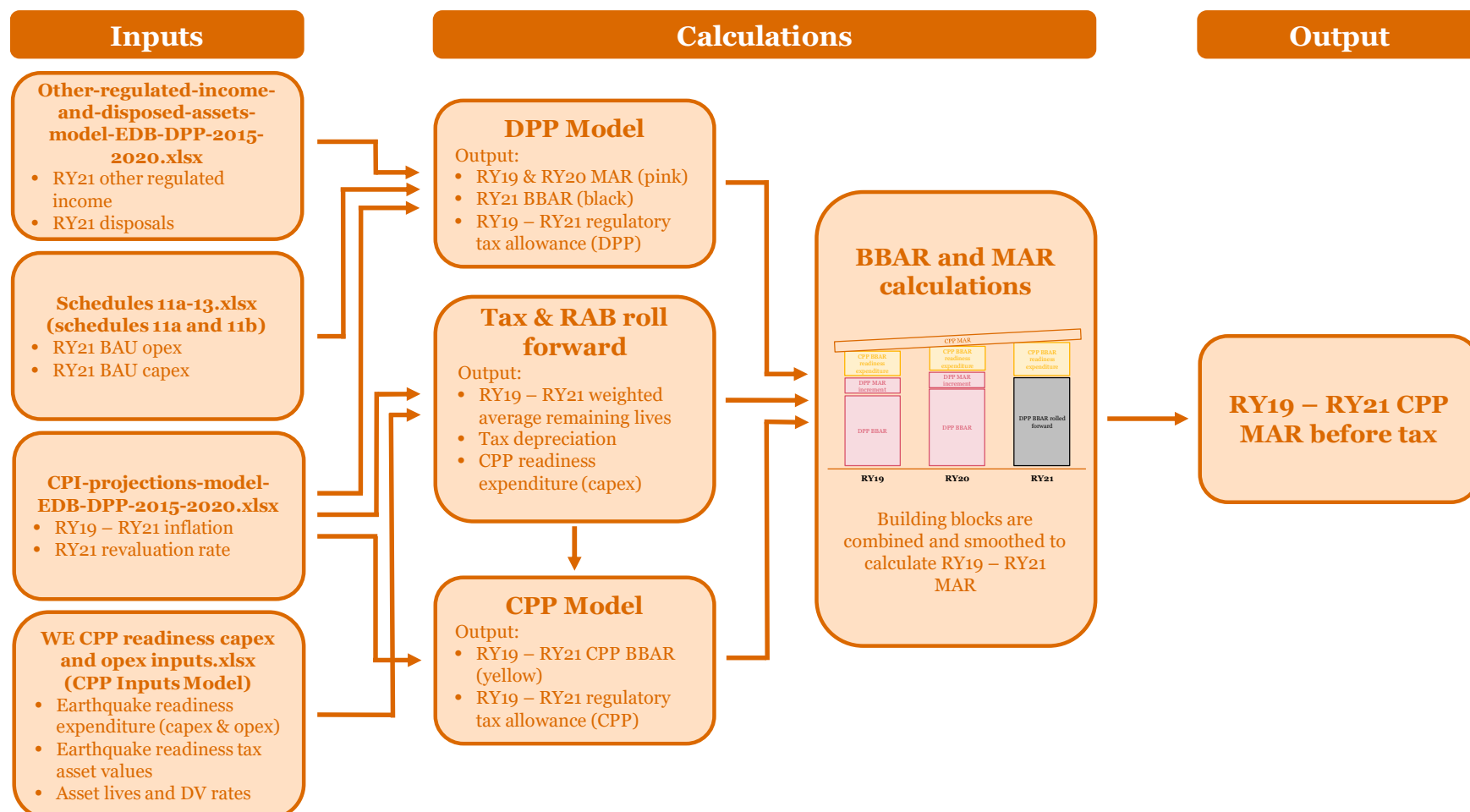
Figure 1: Streamline CPP Revenue Path Approach



Structure

Figure 2 provides an illustrative overview of the structure of the Model.

Figure 2: Model structure



Calculations

As illustrated above, the key calculations in the Model are separated into three sections:

1. DPP Model

The DPP Model is used to calculate the DPP BBAR for RY21. The RY19 and RY20 DPP MAR are also taken from the DPP Model - these are unchanged from the Commission's 2014 determination.

The DPP Model is based on the final 2015 DPP financial model for electricity distribution 2015-2020 for Wellington Electricity, rolled forward to RY21.

2. Tax & RAB roll forward

The tax and RAB roll forward provides the detailed RAB and tax asset base roll forwards for the CPP readiness expenditure. The outputs from these calculations are used as inputs in the CPP modelling.

- The RAB roll forward is consistent with the RAB roll forward in the 2013 CPP model.
- The tax asset base roll forward is consistent with current tax rules IM 5.3.20 (3).

3. CPP Model

The CPP Model is used to calculate the CPP readiness expenditure BBAR and the CPP MAR.

The CPP Model is based on the final model for Orion's customised price-quality path for 2014-2019, updated to reflect the three year CPP period and changes to the IMs since 2013. A section has also been added to the 'BBARx' sheet which combines the outputs from the DPP Model with the CPP readiness expenditure BBAR.

Table 1 outlines where the calculations for each component in Figure 1 are within the Model.

Table 1: Calculation directory

Component	Relevant section	Comment
DPP BBAR RY19 and RY20	DPP Model	Unchanged from 2015 DPP financial model for Wellington Electricity
DPP MAR Increment RY19 & RY20	DPP Model	Unchanged from 2015 DPP financial model for Wellington Electricity
DPP BBAR (rolled forward) RY21	DPP Model	Consistent with 2015 DPP financial model
CPP BBAR Readiness Expenditure	CPP Model	Consistent with 2013 CPP model, updated for the following IM amendments: - excluded other regulated income IM 5.3.2 (1) - updated notional deductible interest formula IM 5.3.16 (2).
CPP MAR	CPP Model	Consistent with 2013 CPP model, updated for the following IM amendment: - removed change in quantities as not required for a revenue cap IM 5.3.4 (6).

Inputs

Input model	Description
Supporting Model - Other regulated income and disposed assets	Other regulated income and disposals for RY21 are sourced from the 2015 DPP model 'Other-regulated-income-and-disposed-assets-model-EDB-DPP-2015-2020.xlsx' published on 28 November 2014.
Supporting Model - AMP 2017 schedules	Source of BAU commissioned assets and operating expenditure for RY21.
Supporting Model - CPI projections	Inflation for RY19 - RY21 and revaluations rate for RY21 are sourced from the 2015 DPP model 'CPI-projections-model-EDB-DPP-2015-2020.xlsx' published on 28 November 2014.
Supporting Model - CPP readiness capex and opex	Source of earthquake readiness expenditure (opex and capex), earthquake readiness tax asset values, and asset life and DV rates.

Definitions

Term	Definition
2015 DPP financial model	Refers to the Commerce Commission's final financial model for the DPP for electricity distribution 2015-2020. Titled "Financial-model-EDB-DPP-2015-2020". Available at " http://www.comcom.govt.nz/regulated-industries/electricity/electricity-default-price-quality-path/default-price-quality-path-from-2015/ "
2013 CPP model	Refers to the Commerce Commission's final model for Orion's CPP for 2014-2019. Titled "Orion Customised Price-Quality Path Model 29 November 2013". Available at " http://www.comcom.govt.nz/regulated-industries/electricity/cpp/cpp-proposals-and-decisions/orions-2014-2019-cpp/orion-customised-price-quality-path-final-decision/ "
IM variation proposal	Refers to proposed IM variations set out in section 2.4 of Regulatory Compliance Schedules of the CPP Proposal.

Shading

Colour	Interpretation
	Identifies cells where calculations have been edited or added
	Identifies output that is used elsewhere in the workbook

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WELLINGTON ELECTRICITY CPP OUTPUTS MODULE

Ref.	Output Name	Discrete Output	CPP Regulatory Period			Description	Logic explanation
			2019	2020	2021		
OUT1	CPP regulatory period		2019	2020	2021	The period of continuous disclosure years in respect of which the customised price-quality path applies, and which follows the assessment period.	No change in logic from 2013 CPP model.
OUT2	Allowed Controllable Opex		-	-	-	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the allowance for operating expenditure for that year in categories specified by the Commission as controllable by the supplier.	Not required - as the CPP commences after 27 November 2014 as per IM 3.3.15.
OUT3	Building Blocks Allowable Revenue Before Tax		106,015	109,711	113,357	A series of values (\$000) for the next period where a single value for a disclosure year represents the revenue required to be generated by a supplier in that year in compensate it for its economic costs for that year expressed in nominal terms and excluding claw-back or pass through or recoverable costs.	Updated to reflect total BBAR before tax consistent with IM variation proposal.
OUT4	Building Blocks Allowable Revenue After Tax		96,594	99,724	102,778	A series of values (\$000) for the next period where a single value for a disclosure year represents the Building Blocks Allowable Revenue Before Tax less the forecast regulatory tax allowance for that year.	Updated to reflect total BBAR after tax consistent with IM variation proposal.
OUT5	Maximum Allowable Revenue Before Tax		107,414	109,637	111,830	A series of values (\$000) which determine the revenue path for a supplier for the CPP regulatory period whereby a single value for a disclosure year represents the maximum allowable revenue in nominal terms that the supplier may recover from customers through prices for that year allowing for claw-back amounts, and net of pass through costs and recoverable costs.	No change in logic from 2013 CPP model.
OUT6	Maximum Allowable Revenue After Tax		97,993	99,650	101,250	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the maximum allowable revenue that the supplier may recover through prices for that year, less a forecast amount of tax.	No change in logic from 2013 CPP model.
OUT7	'X' factor	0.000%				A single value (percentage 3 d.p.) representing the rate of change allowed for the maximum allowable revenue path where the path is expressed in 'CPI-X' terms.	No change in logic from 2013 CPP model.
OUT8	Pass-Through Costs		-	-	-	Future uncontrollable costs of the supplier which are to be treated as pass-through costs in each year of the CPP regulatory period in addition to those rates or levies already specified in cl. 3.1.2 of the EDB input methodologies.	Set to zero as none proposed.
OUT9	Recoverable Costs		-	-	-	A series of values (\$000) which are the nominal amounts of verifier fees, auditor's costs or engineer fees associated with the CPP process that are treated as recoverable costs for each of the disclosure years of the CPP regulatory period.	Set to zero. Final amounts to be determined, post application.

MAXIMUM ALLOWABLE REVENUE (MAR) MODULE

	CPP Regulatory Period			Input reference	Logic explanation
	2019	2020	2021		
Maximum Allowable Revenue Before Tax (MAR Before Tax)					
Prior year's MAR		107,414	109,637	CALC	No change in logic from 2013 CPP model.
multiply by (1 + ΔCPI)		1.021	1.020	INPUT7 CALC	No change in logic from 2013 CPP model.
multiply by (1 - X)		1.000	1.000	INPUT3 CALC	No change in logic from 2013 CPP model.
multiply by (1 + ΔQ)					Removed as not required for a revenue cap as per IM 5.3.4 (6).
MAR before tax	107,414	109,637	111,830	CALC	Updated. Consistent with IM 5.3.4 (6).
Maximum Allowable Revenue After Tax (MAR After Tax)					
MAR before tax	107,414	109,637	111,830	MAR	No change in logic from 2013 CPP model.
less Forecast regulatory tax allowance	9,421	9,986	10,580	TAX, BBAR	Updated to include DPP BBAR tax allowance. Consistent with IM variation proposal.
MAR after tax	100,791	102,496	104,141	INPUT13 CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (7).
Claw-back					
Claw-back	-			INPUT9	No change in logic from 2013 CPP model.
TF_{rev}					
TF _{rev}	1.029	1.029	1.029	INPUT12	No change in logic from 2013 CPP model.
Validation					
Check that NPV of BBAR after tax agrees to NPV of MAR after tax					
MAR after tax	100,791	102,496	104,141	MAR	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
Number of years used to discount to present value	1.00	2.00	3.00	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
Present Value of MAR after tax using WACC	94,030	89,207	84,559	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
NPV of MAR after tax (A) [3 year regulatory period]	267,795				No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
BBAR after tax	99,352	102,572	105,712	INPUT12 CALC I-BBAR	Updated to link to total BBAR after tax.
Number of years used to discount to present value	1.00	2.00	3.00		No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
Present Value of BBAR after tax using WACC	92,688	89,273	85,835	INPUT6 CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
NPV of BBAR after tax [3 year regulatory period]	267,795			CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
less/(add) Claw-back	-				No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
NPV of BBAR after tax including Clawback (B) [3 year regulatory period]	267,795			MAR	No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).
A-B (difference should be nil)	0				No change in logic from 2013 CPP model. Consistent with IM 5.3.4 (1).

Calc. MAR
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BUILDING BLOCKS ALLOWABLE REVENUE (BBAR) MODULE

	CPP Regulatory Period			Input reference	Logic explanation
	2019	2020	2021		
Building Blocks Allowable Revenue Before Tax (BBAR Before Tax)					
Calculation A					
Regulatory investment value x Cost of capital	-	598	1,387	BBAR, INPUT6 CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
add (Total value of commissioned assets x (TF _{vca} - 1))	146	195	208	RAB CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
add (Term credit spread differential allowance x TF)	-	-	-	INPUT10, INPUT11 CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
less Total revaluation	-	171	388	RAB	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
	146	622	1,207	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
divide by TF _{rev} - Corporate tax rate x TF	0.74	0.74	0.74	INPUT12, TAX, INPUT11 C	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
Subtotal A	197	842	1,634	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
Calculation B					
add Total depreciation x (1 - Corporate tax rate x TF)	-	165	442	RAB, TAX, INPUT11 CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
add Forecast operating expenditure x TF x (1 - Corporate tax rate)	170	294	451	INPUT13, TAX, INPUT11 C	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
less Other regulated income x TF x (1 - Corporate tax rate)	-	-	-		Excluded. Consistent with IM amendments to IM 5.3.2 (1).
add (Closing deferred tax - Opening deferred tax) x (TF - 1)	-	(4)	(13)	DTAX, DTAX, INPUT11 CA	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
add					
Permanent differences	-	-	-	TAX	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
add Regulatory tax adjustments	(54)	(289)	(574)	TAX	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
less Utilised tax losses	-	-	-	TAX	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
	(54)	(289)	(574)	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
multiply by (Corporate tax rate x TF)	0.290	0.290	0.290	TAX, INPUT11 CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
	(16)	(84)	(166)	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
Subtotal	154	372	713	CALC	
divide by (TF _{rev} - Corporate tax rate x TF)	0.739	0.739	0.739	INPUT12, TAX, INPUT11 C	Updated formula to exclude other regulated income. Consistent with IM amendments to IM 5.3.2 (1).
Subtotal B	209	503	966	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
BBAR before tax (A+B)	406	1,345	2,599	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (1).
Building Blocks Allowable Revenue After Tax (BBAR After Tax)					
BBAR before tax	406	1,345	2,599	BBAR	No change in logic from 2013 CPP model.
less Forecast regulatory tax allowance	35	120	224	TAX	No change in logic from 2013 CPP model.
BBAR after tax	371	1,225	2,376	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.3.
Regulatory Investment Value					
Total opening RAB value	-	8,319	19,404	RAB	No change in logic from 2013 CPP model.
add Opening deferred tax	-	-	(114)	DTAX	No change in logic from 2013 CPP model.
Regulatory investment value	-	8,319	19,290	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.2 (2).
BBAR After Tax, DPP Model					
MAR before tax, revenue date terms	105,609	108,365		DPP MAR	2019 & 2020 DPP MAR for Wellington Electricity from the DPP financial model.
FY21 BBAR before tax, revenue date terms			110,758	DPP BBAR	2021 BBAR for Wellington Electricity from the DPP financial model.
BBAR before tax, DPP Model	105,609	108,365	110,758	CALC	BBAR before tax, revenue date terms, from the DPP financial model consistent with IM variation proposal.
BBAR before tax, DPP Model	105,609	108,365	110,758	BBAR	BBAR before tax, revenue date terms, from the DPP financial model.
less Forecast regulatory tax allowance	9,387	9,866	10,356	DPP BBAR	Forecast regulatory tax allowance from the DPP financial model.
BBAR after tax, DPP Model	96,223	98,499	100,402	CALC	BBAR after tax, revenue date terms, from DPP financial model.
Building Blocks Allowable Revenue before Tax (BBAR Before Tax), Total					
BBAR before tax, 2013 CPP model	406	1,345	2,599	BBAR	Calculation added consistent with IM variation proposal.
BBAR before tax, DPP Model	105,609	108,365	110,758	BBAR	Calculation added consistent with IM variation proposal.
BBAR before tax, Total	106,015	109,711	113,357	CALC	Calculation added consistent with IM variation proposal.
Building Blocks Allowable Revenue After Tax (BBAR After Tax), Total					
BBAR after tax, 2013 CPP model	371	1,225	2,376	BBAR	Calculation added consistent with IM variation proposal.
BBAR after tax, DPP Model	96,223	98,499	100,402	BBAR	Calculation added consistent with IM variation proposal.
BBAR after tax, Total	96,594	99,724	102,778	CALC	Calculation added consistent with IM variation proposal.

REGULATORY TAX MODULE

	CPP Regulatory Period			Input reference	Logic explanation
	2019	2020	2021		
Forecast regulatory tax allowance					
Regulatory taxable income	124	429	799	TAX	No change in logic from 2013 CPP model.
less Utilised tax losses	-	-	-	TAX	No change in logic from 2013 CPP model.
Adjusted regulatory taxable income (nil if <0)	124	429	799	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.13 (1).
multiply by Corporate tax rate	28%	28%	28%	TAX	No change in logic from 2013 CPP model.
Forecast regulatory tax allowance	35	120	224	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.13 (1).
Regulatory taxable income					
Regulatory profit/(loss) before tax	178	718	1,372	TAX	No change in logic from 2013 CPP model.
add permanent differences	-	-	-	TAX	No change in logic from 2013 CPP model.
add regulatory tax adjustments	(54)	(289)	(574)	TAX	No change in logic from 2013 CPP model.
Regulatory taxable income	124	429	799	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.13 (3)
Regulatory profit / (loss) before tax					
Building blocks allowable revenue before tax	406	1,345	2,599	BBAR	No change in logic from 2013 CPP model.
add Other regulated income	-	-	-	-	Excluded. Consistent with IM amendments and IM 5.3.13 (4).
less Forecast operating expenditure	228	395	605	INPUT13	No change in logic from 2013 CPP model.
less Total depreciation	-	232	622	RAB	No change in logic from 2013 CPP model.
Regulatory profit/(loss) before tax	178	718	1,372	CALC	Updated formula to exclude other regulated income. Consistent with IM 5.3.13 (4).
Utilised tax losses					
Opening tax losses	-	-	-	INPUT16 CALC	RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with 5.3.14 (3).
add Regulatory taxable income losses	-	-	-	TAX	No change in logic from 2013 CPP model.
less Utilised tax losses	-	-	-	TAX	No change in logic from 2013 CPP model. Consistent with 5.3.14 (1).
Closing tax losses	-	-	-	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.14 (5).
Permanent differences					
Positive permanent differences	-	-	-	INPUT17	No change in logic from 2013 CPP model.
less Discretionary discounts and customer rebates	-	-	-	INPUT18	No change in logic from 2013 CPP model.
less Negative permanent differences	-	-	-	INPUT19	No change in logic from 2013 CPP model.
Permanent Differences	-	-	-	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.15 (1)
Regulatory tax adjustments					
Amortisation of initial differences in asset values	-	-	-	TAX	No change in logic from 2013 CPP model.
add:					
Amortisation of revaluations					
Total depreciation	-	232	622	RAB	No change in logic from 2013 CPP model.
less Adjusted Depreciation	-	232	617	RAB	No change in logic from 2013 CPP model.
Amortisation of revaluations	-	-	5	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.18.
less:					
Notional deductible interest					
regulatory investment value	-	8,319	19,290	BBAR	No change in logic from 2013 CPP model.
add RAB proportionate investment	2,080	2,786	2,970	RAB	No change in logic from 2013 CPP model.
Asset Base	2,080	11,106	22,261	CALC	No change in logic from 2013 CPP model.
multiply by Company Debt leverage	44%	44%	44%	INPUT20	No change in logic from 2013 CPP model.
Proportion of Asset base funded by Debt	915	4,887	9,795	CALC	No change in logic from 2013 CPP model.
multiply by cost of debt	6.090%	6.090%	6.090%	INPUT21	No change in logic from 2013 CPP model.
Notional interest	56	298	596	CALC	No change in logic from 2013 CPP model.
add term credit spread differential	-	-	-	INPUT10	No change in logic from 2013 CPP model.
divide by (1+ cost of debt)^(1/2)	1.030	1.030	1.030	-	Added to reflect IM amendments. Consistent with IM 5.3.16 (2).
Notional deductible interest	54	289	579	CALC	Updated to reflect IM amendments. Consistent with IM 5.3.16 (2).
Regulatory tax adjustments	(54)	(289)	(574)	-	No change in logic from 2013 CPP model. Consistent with IM 5.3.16.
Amortisation of initial differences in asset values					
Opening unamortised initial difference in asset values	-	-	-	INPUT22 CALC	RY19 linked to input sheet. Consistent with IM 5.3.17 (2).
less Amortisation based on weighted average remaining useful life of relevant assets	-	-	-	INPUT24 CALC	Formula updated to remove error when dividing by zero. Consistent with IM 5.3.17 (1)
add Adjustment to opening unamortised initial differences in asset values for sold or acquired assets	-	-	-	INPUT23	No change in logic from 2013 CPP model. Consistent with 5.3.17 (6).
Closing unamortised initial difference in asset values	-	-	-	CALC	No change in logic from 2013 CPP model. Consistent with 5.3.17 (5).
Corporate Tax Rate					
Corporate Tax Rate	28%	28%	28%	INPUT15	No change in logic from 2013 CPP model.

DEFERRED TAX MODULE

	CPP Regulatory Period			Input reference	Logic explanation
	2019	2020	2021		
Opening Deferred Tax	-	-	(114)	INPUT25 CALC	RY19 linked to input sheet. Consistent with IM 5.3.19.
<i>Less:</i>					
tax effect of amortisation of initial difference in asset values	-	-	-	TAX CALC	No change in logic from 2013 CPP model. No opening balance for earthquake readiness expenditure incurred during CPP period. Consistent with IM 5.3.17.
<i>Add:</i>					
Tax Effect of Temporary Differences					
Adjusted Depreciation	-	65	173	RAB, TAX CALC	No change in logic from 2013 CPP model. Consistent with tax effect definition in IM 1.1.4.
less Tax depreciation	-	179	547	INPUT26, TAX CALC	No change in logic from 2013 CPP model. Consistent with tax effect definition in IM 1.1.4.
Tax effect of Depreciation temporary differences	-	(114)	(375)	CALC	No change in logic from 2013 CPP model.
Tax effect of positive temporary differences	-	-	-	INPUT27, TAX CALC	No change in logic from 2013 CPP model. Consistent with tax effect definition in IM 1.1.4.
less Tax effect of negative temporary differences	-	-	-	INPUT28, TAX CALC	No change in logic from 2013 CPP model. Consistent with tax effect definition in IM 1.1.4.
tax effect of temporary differences	-	(114)	(375)	CALC	No change in logic from 2013 CPP model.
deferred tax balance relating to assets acquired in the disclosure year in question	-	-	-	INPUT29	No change in logic from 2013 CPP model.
cost allocation adjustment	-	-	-	INPUT30	No change in logic from 2013 CPP model.
Closing Deferred Tax	-	(114)	(488)	CALC	No change in logic from 2013 CPP model. Consistent with IM 5.3.19.

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
RAB AGGREGATED INFORMATION						
Total Opening RAB value						
Opening RAB value	-	8,319	19,404	=(INPUT31) CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	232	622	=(RAB)		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	=(INPUT32)		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	171	388	=(RAB)		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	8,319	11,146	11,882	=(INPUT33)		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	8,319	19,404	31,052	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
RAB roll-forward without revaluations						
Opening RAB value without revaluations	-	8,319	19,233	=(INPUT37) CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	232	617	=(INPUT36) CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	=(INPUT32)		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	8,319	11,146	11,882	=(RAB)		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	8,319	19,233	30,498	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
TF_{VCA}						
PV _{VCA}	7,897	10,580	11,279	INPUT34		No change in logic from 2013 CPP model.
multiply by (1 + Cost of capital)	1,072	1,072	1,072	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.2 (4)(c).
divide by Total value of commissioned assets	8,319	11,146	11,882	=(INPUT33)		No change in logic from 2013 CPP model. Consistent with IM 5.3.2 (4)(c).
TF _{VCA}	1,018	1,018	1,018	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.2 (4)(c).
RAB proportionate investment						
RAB proportionate investment	2,080	2,786	2,970	INPUT38		No change in logic from 2013 CPP model.
RAB BREAKDOWN BY ASSET CLASS						
Total Opening RAB value						
Opening RAB value	-	8,319	19,404	INPUT31 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	232	622	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT32		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	171	388	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	8,319	11,146	11,882	INPUT33		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	8,319	19,404	31,052			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation						
Opening RAB value	-	8,319	19,404	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT40		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT32		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	8,319	19,404	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT35		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	171	388	CALC RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation						
Opening RAB value	-	8,319	19,404	RAB		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b).
multiply by (1 / Remaining asset life)	0.0000	0.0279	0.0321	INPUT36 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b).
Total depreciation	-	232	622			No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b).
Total opening RAB value without revaluations						
Opening RAB value without revaluations	-	8,319	19,233	INPUT37 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	232	617	RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT39		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	8,319	11,146	11,882	INPUT33		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	8,319	19,233	30,498	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation						
Opening RAB value	-	8,319	19,233	INPUT37 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0279	0.0321	INPUT36 CALC		Linked to input sheet. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	232	617			No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Two						
Total Opening RAB value (Two)						
Opening RAB value	-	-	-	INPUT31 CALC		
less Depreciation	-	-	-	=(RAB)		
less Disposals	-	-	-	INPUT32		

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
<i>add</i> Revaluation	-	-	-	I-RAB4	2	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	2	
Closing RAB value	-	-	-		2	
Total Revaluation (Two)					2	
Opening RAB value	-	-	-	I-RAB1	2	
<i>less</i> Fully depreciated assets	-	-	-	INPUT40	2	
<i>less</i> Disposals	-	-	-	INPUT32	2	
Adjusted RAB value	-	-	-	CALC	2	
<i>multiply by</i> Revaluation rate	-	-	-	INPUT35	1	
Total Revaluation	-	-	-	CALC O-RAB4	2	
Total depreciation (Two)					2	
Opening RAB value	-	-	-	I-RAB1	2	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	2	
Total depreciation	-	-	-	O-RAB5	2	
Total opening RAB value without revaluations (Two)					2	
Opening RAB value without revaluations	-	-	-	INPUT37 CALC	2	
<i>less</i> Adjusted depreciation	-	-	-	I-RAB6	2	
<i>less</i> Disposals without revaluations	-	-	-	INPUT39	2	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	2	
Closing RAB value without revaluations	-	-	-	CALC	2	
Total adjusted depreciation (Two)					2	
Opening RAB value	-	-	-	INPUT37	2	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	2	
Total depreciation	-	-	-	O-RAB6	2	
Three					3	
Total Opening RAB value (Three)					3	
Opening RAB value	-	-	-	INPUT31 CALC	3	
<i>less</i> Depreciation	-	-	-	I-RAB5	3	
<i>less</i> Disposals	-	-	-	INPUT32	3	
<i>add</i> Revaluation	-	-	-	I-RAB4	3	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	3	
Closing RAB value	-	-	-		3	
Total Revaluation (Three)					3	
Opening RAB value	-	-	-	I-RAB1	3	
<i>less</i> Fully depreciated assets	-	-	-	INPUT40	3	
<i>less</i> Disposals	-	-	-	INPUT32	3	
Adjusted RAB value	-	-	-	CALC	3	
<i>multiply by</i> Revaluation rate	-	-	-	INPUT35	1	
Total Revaluation	-	-	-	CALC O-RAB4	3	
Total depreciation (Three)					3	
Opening RAB value	-	-	-	I-RAB1	3	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	3	
Total depreciation	-	-	-	O-RAB5	3	
Total opening RAB value without revaluations (Three)					3	
Opening RAB value without revaluations	-	-	-	INPUT37 CALC	3	
<i>less</i> Adjusted depreciation	-	-	-	I-RAB6	3	
<i>less</i> Disposals without revaluations	-	-	-	INPUT39	3	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	3	
Closing RAB value without revaluations	-	-	-	CALC	3	
Total adjusted depreciation (Three)					3	
Opening RAB value	-	-	-	INPUT37	3	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	3	
Total depreciation	-	-	-	O-RAB6	3	
Four					4	
Total Opening RAB value (Four)					4	
Opening RAB value	-	-	-	INPUT31 CALC	4	
<i>less</i> Depreciation	-	-	-	I-RAB5	4	
<i>less</i> Disposals	-	-	-	INPUT32	4	
<i>add</i> Revaluation	-	-	-	I-RAB4	4	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	4	
Closing RAB value	-	-	-		4	
Total Revaluation (Four)					4	
Opening RAB value	-	-	-	I-RAB1	4	
<i>less</i> Fully depreciated assets	-	-	-	INPUT40	4	
<i>less</i> Disposals	-	-	-	INPUT32	4	
Adjusted RAB value	-	-	-	CALC	4	
<i>multiply by</i> Revaluation rate	-	-	-	INPUT35	1	
Total Revaluation	-	-	-	CALC O-RAB4	4	
Total depreciation (Four)					4	
Opening RAB value	-	-	-	I-RAB1	4	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	4	
Total depreciation	-	-	-	O-RAB5	4	
Total opening RAB value without revaluations (Four)					4	
Opening RAB value without revaluations	-	-	-	INPUT37 CALC	4	
<i>less</i> Adjusted depreciation	-	-	-	I-RAB6	4	
<i>less</i> Disposals without revaluations	-	-	-	INPUT39	4	
<i>add</i> Total value of commissioned assets	-	-	-	INPUT33	4	
Closing RAB value without revaluations	-	-	-	CALC	4	
Total adjusted depreciation (Four)					4	
Opening RAB value	-	-	-	INPUT37	4	
<i>multiply by</i> (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC	4	
Total depreciation	-	-	-	O-RAB6	4	

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Five						
Total Opening RAB value (Five)						
Opening RAB value	-	-	-	INPUT31 CALC		
less Depreciation	-	-	-	I-RAB5		
less Disposals	-	-	-	INPUT32		
add Revaluation	-	-	-	I-RAB4		
add Total value of commissioned assets	-	-	-	INPUT33		
Closing RAB value	-	-	-			
Total Revaluation (Five)						
Opening RAB value	-	-	-	I-RAB1		
less Fully depreciated assets	-	-	-	INPUT40		
less Disposals	-	-	-	INPUT32		
Adjusted RAB value	-	-	-	CALC		
multiply by Revaluation rate	-	-	-	INPUT35		
Total Revaluation	-	-	-	CALC O-RAB4		
Total depreciation (Five)						
Opening RAB value	-	-	-	I-RAB1		
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		
Total depreciation	-	-	-	O-RAB5		
Total opening RAB value without revaluations (Five)						
Opening RAB value without revaluations	-	-	-	INPUT37 CALC		
less Adjusted depreciation	-	-	-	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT39		
add Total value of commissioned assets	-	-	-	INPUT33		
Closing RAB value without revaluations	-	-	-	CALC		
Total adjusted depreciation (Five)						
Opening RAB value	-	-	-	INPUT37		
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		
Total depreciation	-	-	-	O-RAB6		
Six						
Total Opening RAB value (Six)						
Opening RAB value	-	-	-	INPUT31 CALC		
less Depreciation	-	-	-	I-RAB5		
less Disposals	-	-	-	INPUT32		
add Revaluation	-	-	-	I-RAB4		
add Total value of commissioned assets	-	-	-	INPUT33		
Closing RAB value	-	-	-			
Total Revaluation (Six)						
Opening RAB value	-	-	-	I-RAB1		
less Fully depreciated assets	-	-	-	INPUT40		
less Disposals	-	-	-	INPUT32		
Adjusted RAB value	-	-	-	CALC		
multiply by Revaluation rate	-	-	-	INPUT35		
Total Revaluation	-	-	-	CALC O-RAB4		
Total depreciation (Six)						
Opening RAB value	-	-	-	I-RAB1		
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		
Total depreciation	-	-	-	O-RAB5		
Total opening RAB value without revaluations (Six)						
Opening RAB value without revaluations	-	-	-	INPUT37 CALC		
less Adjusted depreciation	-	-	-	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT39		
add Total value of commissioned assets	-	-	-	INPUT33		
Closing RAB value without revaluations	-	-	-	CALC		
Total adjusted depreciation (Six)						
Opening RAB value	-	-	-	INPUT37		
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		
Total depreciation	-	-	-	O-RAB6		
Seven						
Total Opening RAB value (Seven)						
Opening RAB value	-	-	-	INPUT31 CALC		
less Depreciation	-	-	-	I-RAB5		
less Disposals	-	-	-	INPUT32		
add Revaluation	-	-	-	I-RAB4		
add Total value of commissioned assets	-	-	-	INPUT33		
Closing RAB value	-	-	-			

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Total Revaluation (Seven)						7
Opening RAB value	-	-	-	I-RAB1		7
less Fully depreciated assets	-	-	-	INPUT40		7
less Disposals	-	-	-	INPUT32		7
Adjusted RAB value	-	-	-	CALC		7
multiply by Revaluation rate	-	-	-	INPUT35		1
Total Revaluation	-	-	-	CALC O-RAB4		7
Total depreciation (Seven)						7
Opening RAB value	-	-	-	I-RAB1		7
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		7
Total depreciation	-	-	-	O-RAB5		7
Total opening RAB value without revaluations (Seven)						7
Opening RAB value without revaluations	-	-	-	INPUT37 CALC		7
less Adjusted depreciation	-	-	-	I-RAB6		7
less Disposals without revaluations	-	-	-	INPUT39		7
add Total value of commissioned assets	-	-	-	INPUT33		7
Closing RAB value without revaluations	-	-	-	CALC		7
Total adjusted depreciation (Seven)						7
Opening RAB value	-	-	-	INPUT37		7
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		7
Total depreciation	-	-	-	O-RAB6		7
Eight						8
Total Opening RAB value (Eight)						8
Opening RAB value	-	-	-	INPUT31 CALC		8
less Depreciation	-	-	-	I-RAB5		8
less Disposals	-	-	-	INPUT32		8
add Revaluation	-	-	-	I-RAB4		8
add Total value of commissioned assets	-	-	-	INPUT33		8
Closing RAB value	-	-	-			8
Total Revaluation (Eight)						8
Opening RAB value	-	-	-	I-RAB1		8
less Fully depreciated assets	-	-	-	INPUT40		8
less Disposals	-	-	-	INPUT32		8
Adjusted RAB value	-	-	-	CALC		8
multiply by Revaluation rate	-	-	-	INPUT35		1
Total Revaluation	-	-	-	CALC O-RAB4		8
Total depreciation (Eight)						8
Opening RAB value	-	-	-	I-RAB1		8
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		8
Total depreciation	-	-	-	O-RAB5		8
Total opening RAB value without revaluations (Eight)						8
Opening RAB value without revaluations	-	-	-	INPUT37 CALC		8
less Adjusted depreciation	-	-	-	I-RAB6		8
less Disposals without revaluations	-	-	-	INPUT39		8
add Total value of commissioned assets	-	-	-	INPUT33		8
Closing RAB value without revaluations	-	-	-	CALC		8
Total adjusted depreciation (Eight)						8
Opening RAB value	-	-	-	INPUT37		8
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		8
Total depreciation	-	-	-	O-RAB6		8
Nine						9
Total Opening RAB value (Nine)						9
Opening RAB value	-	-	-	INPUT31 CALC		9
less Depreciation	-	-	-	I-RAB5		9
less Disposals	-	-	-	INPUT32		9
add Revaluation	-	-	-	I-RAB4		9
add Total value of commissioned assets	-	-	-	INPUT33		9
Closing RAB value	-	-	-			9
Total Revaluation (Nine)						9
Opening RAB value	-	-	-	I-RAB1		9
less Fully depreciated assets	-	-	-	INPUT40		9
less Disposals	-	-	-	INPUT32		9
Adjusted RAB value	-	-	-	CALC		9
multiply by Revaluation rate	-	-	-	INPUT35		1
Total Revaluation	-	-	-	CALC O-RAB4		9
Total depreciation (Nine)						9
Opening RAB value	-	-	-	I-RAB1		9
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		9
Total depreciation	-	-	-	O-RAB5		9
Total opening RAB value without revaluations (Nine)						9
Opening RAB value without revaluations	-	-	-	INPUT37 CALC		9
less Adjusted depreciation	-	-	-	I-RAB6		9
less Disposals without revaluations	-	-	-	INPUT39		9
add Total value of commissioned assets	-	-	-	INPUT33		9
Closing RAB value without revaluations	-	-	-	CALC		9
Total adjusted depreciation (Nine)						9
Opening RAB value	-	-	-	INPUT37		9
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT36 CALC		9
Total depreciation	-	-	-	O-RAB6		9

WELLINGTON ELECTRICITY EXTERNAL INPUTS MODULE

Ref.	Input Name	Discrete Input	CPP Regulatory Period			Description	Input explanation
			2019	2020	2021		
INPUT1	CPP regulatory period	3	2019			The period of continuous disclosure years in respect of which the customised price-quality path applies. Input the number of years in the regulatory period and the first year in the regulatory period.	3 year CPP regulatory period starting RY19 consistent with IM variation proposal.
INPUT2	Allowed controllable opex		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the allowance for operating expenditure for that year in categories specified by the Commission as controllable by the supplier.	N/A. CPP commences after 27 November 2014 consistent with IM 3.3.15.
INPUT3	'X' factor	0.000%				A single value (percentage 3 d.p.) representing the rate of change allowed for the maximum allowable revenue path where the path is expressed in 'CPI-X' terms.	Set to zero. No X-Factor price smoothing proposed.
INPUT4	Pass-through costs					Future uncontrollable costs of the supplier which are to be treated as pass-through costs in each year of the CPP regulatory period in addition to those rates or levies already specified in cl. 3.1.2 of the EDB input methodologies.	Set to zero as none proposed.
INPUT5	Recoverable costs					A series of values (\$000) which are the nominal amounts of verifier fees, auditor's costs or engineer fees associated with the CPP process that are treated as recoverable costs for each of the disclosure years of the CPP regulatory period.	Set to zero. Final amounts to be determined, post application.
INPUT6	Cost of capital	7.19%				Discount rate (equivalent to the 67 th 75 th percentile estimate of cost of capital).	Input sourced from DPP cost of capital determination consistent with IM 5.3.22. Adjusted description to remove reference to 67th percentile.
INPUT7	Inflation rate		2.125%	2.069%	2.000%	Series of values (percentage 3 d.p.) defined in cl. 3.3.4 (9) of the EDB input methodologies.	CPI used for MAR smoothing. CPI inputs sourced from 'Supporting Model - CPI projections' consistent with IM 5.3.4 (9) formula. Use of DPP CPI inputs consistent with definition of forecast CPI set out in IM 1.1.4.
INPUT8	ΔQ					A series of values (percentage 3 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the forecast weighted average growth in quantities from the preceding disclosure year to the current disclosure year.	Not required for CPP revenue cap under IM 5.3.4 (6).
INPUT9	Claw-back	0				A value (\$000) representing the amount of shortfall (negative amount) or over-recovery (positive amount) of revenues relating to prices previously charged by the supplier to be recovered or returned from consumers during the CPP regulatory period. It is expressed in present value terms as at the commencement of the CPP regulatory period.	Set to zero.
INPUT10	Term Credit Spread Differential Allowance		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year relates to financing costs from long term debt.	Set to zero. No incremental allowances arising from earthquake readiness expenditure.
INPUT11	TF		1.035	1.035	1.035	A series of values (3 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the timing factor for cash flows, calculated as: (1 + cost of capital) ^{182/365}	Calculated using cost of capital consistent with IM 5.3.2 (4)(a).
INPUT12	TF _{rev}		1.029	1.029	1.029	A series of values (3 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the timing factor for revenue cash flows, calculated as: (1 + cost of capital) ^{148/365}	Calculated using cost of capital consistent with IM 5.3.2 (4)(b).
INPUT13	Forecast operating expenditure		228	395	605	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the EDB's operating expenditure for that disclosure year expressed in nominal terms.	Inputs sourced from 'Supporting Model - CPP readiness capex and opex' in nominal terms consistent with IM 5.3.2 (6). Inputs represent earthquake readiness operating expenditure.
INPUT14	Other regulated income		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the EDB's other regulated income for that disclosure year expressed in nominal terms.	Not required for CPP revenue cap. IM 5.3.2(1) and 5.3.13(4).
INPUT15	Corporate tax rate		28.000%	28.000%	28.000%	A series of values (3 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the rate of taxation applying to companies in that year.	Set to 28% consistent with current expectation of corporate tax rate defined in IM 1.1.4.
INPUT16	Opening tax losses in the first year of the CPP regulatory period		0			A value (\$000) for the first year of the CPP regulatory period which represents the carry forward tax losses from prior years that the Commission is satisfied that an EDB has incurred.	Set to zero. No opening tax losses associated with earthquake readiness expenditure as per IM 5.3.14.
INPUT17	Positive permanent differences		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents amounts of income which are permanently taxable but not included as regulatory profit / (loss) before tax, or amounts of expenditure which are permanently not tax deductible, in nominal terms for that year.	Set to zero. No income permanently taxable but not in regulatory profit, or expenditure that is permanently not taxable consistent with IM 5.3.15.
INPUT18	Discretionary discounts and customer rebates		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the sum of expenditure allowed as a tax deduction in respect of payments or credits given to persons by an EDB because of those person's direct or indirect ownership in the EDB, in nominal terms for that year.	Set to zero. No discretionary discounts or customer rebates as per IM definition in 2.3.3 (6).
INPUT19	Negative permanent differences		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents amounts of income which are permanently not taxable, or amounts of expenditure which are permanently tax deductible but not included as regulatory profit / (loss) before tax, in nominal terms for that year.	Set to zero. No income permanently not taxable, or expenditure permanently taxable but not in regulatory profit consistent with IM 5.3.15.
INPUT20	Leverage	44%				A value (percentage 0 d.p.) representing the assumed ratio of debt capital to total capital of the supplier, specified in the input methodologies for all EDBs as 44%.	Input sourced from 2015 DPP cost of capital determination consistent with WACC.
INPUT21	Cost of debt		6.090%	6.090%	6.090%	A value (percentage 3 d.p.) representing the assumed cost of debt to the supplier for the CPP regulatory period, comprised of the risk free rate plus the debt premium.	Input sourced from 2015 DPP cost of capital determination consistent with WACC.
INPUT22	Opening unamortised initial differences in asset values for most recent ID year		0			A value (\$000) which represents the amount of the opening unamortised initial differences in asset values for a supplier for the first disclosure year in the CPP regulatory period.	Set to zero. No unamortised initial differences in the value of assets commissioned as a result of the earthquake readiness expenditure. Consistent with IM 5.3.17.
INPUT23	Adjustment to opening unamortised initial differences in asset values for sold or acquired assets		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the adjustment required to the opening unamortised initial differences in asset values to account for assets sold or acquired in that year calculated with effect from their date of sale or acquisition.	Set to zero. No assets acquired or sold in CPP period.
INPUT24	Weighted average remaining useful life of relevant assets		0.00	0.00	0.00	A series of values (2 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the weighted average remaining useful life of all asset at the commencement of the year.	Set to zero. Assets are commissioned as a result of earthquake readiness expenditure. Consistent with IM 5.3.17.
INPUT25	Opening deferred tax for most recent ID year		0			A value (\$000) which represents the amount of the opening deferred tax balance for a supplier for the first disclosure year of the CPP regulatory period.	Set to zero. No RY19 opening deferred tax balance for expenditure incurred during the CPP regulatory period. Consistent with IM 5.3.19 (2).
INPUT26	Tax depreciation		0	639	1,955	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the sum of the amounts determined for all assets of the EDB of the tax depreciation rules to the regulatory tax asset value for each asset in that disclosure year.	Inputs sourced from, and calculated in, 'Tax roll forward' sheet.
INPUT27	Positive temporary differences		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents amounts of income which are temporarily taxable but not included as regulatory profit / (loss) before tax, or amounts of expenditure which are temporarily not tax deductible, in nominal terms for that year.	Set to zero. No positive temporary differences associated with earthquake readiness expenditure. Consistent with IM 5.3.20 (4).
INPUT28	Negative temporary differences		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents amounts of income which are temporarily not taxable, or amounts of expenditure which are temporarily tax deductible but not included as regulatory profit / (loss) before tax, in nominal terms for that year.	Set to zero. No negative temporary differences associated with earthquake readiness expenditure. Consistent with IM 5.3.20 (5).

WELLINGTON ELECTRICITY EXTERNAL INPUTS MODULE

Ref.	Input Name	Discrete Input	CPP Regulatory Period			Description	Input explanation
			2019	2020	2021		
INPUT29	Deferred tax balance relating to assets acquired in disclosure year		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the sum of the adjustment required to the opening deferred tax balance to account for assets that have been acquired by an EDB from another regulated supplier, in nominal terms for that year.	Set to zero. No assets will be acquired during the CPP regulatory period as per definition in IM 5.3.19 (3).
INPUT30	Cost allocation adjustment		0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the tax effect of the change in the opening deferred tax balance to account for the effect of changes in cost allocation on tax asset values, in nominal terms for that year.	Set to zero. No change in cost allocations during the CPP regulatory period. IM 5.3.19 (5) and 5.3.21(1) and 2.1.1.
INPUT31	Opening or closing RAB values for ID years	Number of Asset Classes (1 to 9) One	1	0		A series of values (\$000) for the first year of the CPP regulatory period where a value for that disclosure year represents the opening regulatory asset value in nominal terms of all regulated assets held by a supplier for that disclosure year. Up to nine separate classes of assets can be entered.	Set to zero. No opening values apply to assets arising from earthquake readiness expenditure.
INPUT32	Disposals	One	0	0	0	A series of values (\$000) for the CPP regulatory period, where a single value represents the opening RAB value of the relevant asset category that are forecast to be disposed of in that year.	Set to zero. No disposals associated with assets arising from earthquake readiness expenditure.
INPUT33	Total value of commissioned assets	One	8,319	11,146	11,882	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the actual or forecast cost of all assets to be acquired for that year.	Input sourced from 'RAB roll forward' sheet. See sheet for further information.
INPUT34	PV _{VCA}		7,897	10,580	11,279	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the sum of the present value of each item making up the Total Value of Commissioned Assets, where each present value is determined by discounting each closing RAB value by the cost of capital from its relevant commissioning date to the commencement of the disclosure year.	Calculated consistent with IM 5.3.2 (4) (d). Assumes assets are commissioned on 31 December (ie 75% through the year).
INPUT35	Revaluation rate	One	2.111%	2.056%	2.000%	Defined in cl. 5.3.10(4) of the EDB input methodologies.	Calculated consistent with IM 5.3.10 (4). CPI inputs and calculation sourced from 'Supporting Model - CPI projections'. Use of DPP CPI consistent with 5.3.10 (5).
INPUT36	Remaining asset lives	One	0.00	35.82	31.19	A series of values (2 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the term remaining of an asset's or group of asset's physical asset life at the commencement of the disclosure year as specified by cl. 2.2.8 of the EDB input methodologies.	Input sourced from 'RAB roll forward' sheet. Represents a weighted average remaining life of commissioned assets arising from earthquake readiness expenditure.
INPUT37	Opening or closing RAB values for ID years without revaluations	One	0			As for Opening or closing RAB values for ID years (INPUT31) but is a series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the total depreciation amount for all assets for that year as if no indexed revaluation had ever been applied in respect of any asset.	Set to zero. No opening values apply to assets arising from earthquake readiness expenditure.
INPUT38	RAB proportionate investment		2,080	2,786	2,970	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the proportion of the value of assets commissioned or disposed.	Calculated consistent with IM 5.3.16 (3-4). Assumes assets arising from earthquake readiness expenditure are commissioned on 31 December (ie 75% through the year).
INPUT39	Disposals without revaluations	One	0	0	0	A series of values (\$000) for the CPP regulatory period, where a single value for an asset or aggregated asset group for a disclosure year represents the opening RAB value of those assets that are disposed of in that year. The value is calculated such that it does not include any revaluation amount which has been added to the RAB since the initial RAB date (31 March 2009).	Set to zero. No disposals associated with assets arising from earthquake readiness expenditure.
INPUT40	Fully depreciated assets	One	0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for an asset or aggregated asset group for a disclosure year represents the opening RAB value of those assets that are fully depreciated in that year.	Set to zero. No fully depreciated assets within CPP regulatory period.

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TAX ASSET MODULE

	CPP Regulatory Period			Input reference	Logic explanation
	2019	2020	2021		
TAX DEPRECIATION					
Tax depreciation	-	639	1,955	CALC	Calculation added.
REGULATORY TAX ASSET VALUE AGGREGATED INFORMATION					
Total Opening regulatory tax asset value					
Average DV rate	-	7.68%	10.38%	CALC	Calculation added.
Opening regulatory tax asset value	-	8,319	18,826	Σ(INPUT11) CALC	Calculation added.
less Tax depreciation	-	639	1,955	Σ(DTAXx)	Calculation added.
add Total value of commissioned assets	8,319	11,146	11,882	Σ(INPUT12)	Calculation added.
Closing regulatory tax asset value	8,319	18,826	28,754	CALC	Calculation added.
REGULATORY TAX ASSET VALUE BREAKDOWN BY ASSET CLASSES					
0% DV assets					
Total Opening regulatory tax asset value					
DV rate	-	-	-	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	2,741	6,324	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	-	-	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	2,741	3,583	4,525	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	2,741	6,324	10,849	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
8% DV assets					
Total Opening regulatory tax asset value					
DV rate	8.00%	8.00%	8.00%	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	4,188	7,667	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	335	613	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	4,188	3,814	6,431	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	4,188	7,667	13,485	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
10% DV assets					
Total Opening regulatory tax asset value					
DV rate	10.00%	10.00%	10.00%	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	-	1,925	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	-	193	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	-	1,925	-	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	-	1,925	1,733	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
20% DV assets					
Total Opening regulatory tax asset value					
DV rate	20.00%	20.00%	20.00%	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	874	699	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	175	140	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	874	-	-	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	874	699	559	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
25% DV assets					
Total Opening regulatory tax asset value					
DV rate	25.00%	25.00%	25.00%	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	516	387	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	129	97	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	516	-	-	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	516	387	290	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
50% DV assets					
Total Opening regulatory tax asset value					
DV rate	50.00%	50.00%	50.00%	INPUT10	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Opening regulatory tax asset value	-	-	1,824	INPUT11 CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
less Tax depreciation	-	-	912	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
add Total value of commissioned assets	-	1,824	926	INPUT12	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).
Closing regulatory tax asset value	-	1,824	1,838	CALC	Calculation added consistent with tax depreciation rules IM 5.3.20 (3).

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
RAB AGGREGATED INFORMATION						
Remaining life						
Remaining life	-	35.82	31.19	CALC		Calculation added.
Total Opening RAB value						
Opening RAB value	-	8,319	19,404	I(INPUT2) CALC		Updated to include additional asset classes.
less Depreciation	-	232	622	I(RAB)		Updated to include additional asset classes.
less Disposals	-	-	-	I(INPUT3)		Updated to include additional asset classes.
add Revaluation	-	171	388	I(RAB)		Updated to include additional asset classes.
add Total value of commissioned assets	8,319	11,146	11,882	I(INPUT4)		Updated to include additional asset classes.
Closing RAB value	8,319	19,404	31,052	CALC		Updated to include additional asset classes.
RAB roll-forward without revaluations						
Opening RAB value without revaluations	-	8,319	19,233	I(INPUT7) CALC		Updated to include additional asset classes.
less Adjusted depreciation	-	232	617	I(INPUT6) CALC		Updated to include additional asset classes.
less Disposals without revaluations	-	-	-	I(INPUT3)		Updated to include additional asset classes.
add Total value of commissioned assets	8,319	11,146	11,882	I(RAB)		Updated to include additional asset classes.
Closing RAB value without revaluations	8,319	19,233	30,498	CALC		Updated to include additional asset classes.
RAB BREAKDOWN BY ASSET CLASSES						
One						
RY19 earthquake readiness expenditure - Subtransmission lines						
Total Opening RAB value (RY19 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	2,495	2,501	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	45	46	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	51	50	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	2,495	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	2,495	2,501	2,505			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY19 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	2,495	2,501	RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	2,495	2,501	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	51	50	CALC RAB		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY19 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	2,495	2,501	RAB		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0182	0.0185	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	45	46			No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY19 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value without revaluations	-	2,495	2,450	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	45	45	RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	2,495	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	2,495	2,450	2,405	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY19 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	2,495	2,450	INPUT7 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0182	0.0185	INPUT6 CALC		Linked to input sheet. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	45	45			No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Two						
RY20 earthquake readiness expenditure - Subtransmission lines						
Total Opening RAB value (RY20 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	2,110	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	38	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	42	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	2,110	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	2,110	2,114			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY20 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	2,110	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	2,110	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	42	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY20 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	2,110	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0182	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	38	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY20 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value without revaluations	-	-	2,110	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	38	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	2,110	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	2,110	2,071	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY20 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	2,110	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0182	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	38	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Three						
RY21 earthquake readiness expenditure - Subtransmission lines						
Total Opening RAB value (RY21 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	-	-	I-RAB4		
add Total value of commissioned assets	-	-	-	INPUT4		
Closing RAB value	-	-	-			
Total Revaluation (RY21 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	-	-	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	-	-	CALC O-RAB4		
Total depreciation (RY21 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		
Total depreciation	-	-	-	O-RAB5		
Total opening RAB value without revaluations (RY21 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	-	-	-	INPUT4		
Closing RAB value without revaluations	-	-	-	CALC		
Total adjusted depreciation (RY21 earthquake readiness expenditure - Subtransmission lines)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		
Total depreciation	-	-	-	O-RAB6		
Four						
RY19 earthquake readiness expenditure - Subtransmission cables						
Total Opening RAB value (RY19 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	85	85	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	2	2	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	2	2	I-RAB4		
add Total value of commissioned assets	85	-	-	INPUT4		
Closing RAB value	85	85	85			
Total Revaluation (RY19 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	85	85	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	85	85	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	2	2	CALC O-RAB4		
Total depreciation (RY19 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	85	85	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0182	0.0185	INPUT6 CALC		
Total depreciation	-	2	2	O-RAB5		
Total opening RAB value without revaluations (RY19 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value without revaluations	-	85	84	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	2	2	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	85	-	-	INPUT4		
Closing RAB value without revaluations	85	84	82	CALC		
Total adjusted depreciation (RY19 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	85	84	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0182	0.0185	INPUT6 CALC		
Total depreciation	-	2	2	O-RAB6		
Five						
RY20 earthquake readiness expenditure - Subtransmission cables						
Total Opening RAB value (RY20 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	-	189	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	3	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	-	4	I-RAB4		
add Total value of commissioned assets	-	189	-	INPUT4		
Closing RAB value	-	189	190			
Total Revaluation (RY20 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	-	189	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	-	189	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	-	4	CALC O-RAB4		
Total depreciation (RY20 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	-	189	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0182	INPUT6 CALC		
Total depreciation	-	-	3	O-RAB5		
Total opening RAB value without revaluations (RY20 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value without revaluations	-	-	189	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	3	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	-	189	-	INPUT4		
Closing RAB value without revaluations	-	189	186	CALC		
Total adjusted depreciation (RY20 earthquake readiness expenditure - Subtransmission cables)						
Opening RAB value	-	-	189	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0182	INPUT6 CALC		
Total depreciation	-	-	3	O-RAB6		

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Nine						
RY21 earthquake readiness expenditure - Zone substations						
Total Opening RAB value (RY21 earthquake readiness expenditure - Zone substations)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	-	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	-	6,632	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	-	6,632			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY21 earthquake readiness expenditure - Zone substations)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	-	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	-	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY21 earthquake readiness expenditure - Zone substations)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	-	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY21 earthquake readiness expenditure - Zone substations)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	-	6,632	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	-	6,632	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY21 earthquake readiness expenditure - Zone substations)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	-	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Ten						
RY19 earthquake readiness expenditure - Distribution and LV lines						
Total Opening RAB value (RY19 earthquake readiness expenditure - Distribution and LV lines)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	-	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	-	-			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY19 earthquake readiness expenditure - Distribution and LV lines)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	-	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	-	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY19 earthquake readiness expenditure - Distribution and LV lines)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0167	0.0169	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	-	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY19 earthquake readiness expenditure - Distribution and LV lines)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	-	-	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY19 earthquake readiness expenditure - Distribution and LV lines)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0167	0.0169	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	-	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Seventeen						
RY20 earthquake readiness expenditure - Distribution substations and transformers						
Total Opening RAB value (RY20 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	2,248	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	50	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	45	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	2,248	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	2,248	2,243			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY20 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	2,248	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	2,248	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	45	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY20 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	2,248	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0222	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	50	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY20 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value without revaluations	-	-	2,248	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	50	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	2,248	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	2,248	2,198	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY20 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	2,248	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0222	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	50	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Eighteen						
RY21 earthquake readiness expenditure - Distribution substations and transformers						
Total Opening RAB value (RY21 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	-	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	-	2,710	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	-	2,710			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY21 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	-	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	-	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY21 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	-	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY21 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	-	2,710	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	-	2,710	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY21 earthquake readiness expenditure - Distribution substations and transformers)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	-	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Nineteen						
RY19 earthquake readiness expenditure - Distribution swirchgear						
Total Opening RAB value (RY19 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	248	247	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	6	6	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	5	5	I-RAB4		
add Total value of commissioned assets	248	-	-	INPUT4		
Closing RAB value	248	247	246			
Total Revaluation (RY19 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	248	247	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	248	247	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	5	5	CALC O-RAB4		
Total depreciation (RY19 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	248	247	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0250	0.0256	INPUT6 CALC		
Total depreciation	-	6	6	O-RAB5		
Total opening RAB value without revaluations (RY19 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value without revaluations	-	248	242	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	6	6	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	248	-	-	INPUT4		
Closing RAB value without revaluations	248	242	236	CALC		
Total adjusted depreciation (RY19 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	248	242	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0250	0.0256	INPUT6 CALC		
Total depreciation	-	6	6	O-RAB6		
Twenty						
RY20 earthquake readiness expenditure - Distribution swirchgear						
Total Opening RAB value (RY20 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	253	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	6	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	-	5	I-RAB4		
add Total value of commissioned assets	-	-	253	INPUT4		
Closing RAB value	-	-	252			
Total Revaluation (RY20 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	253	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	-	253	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	-	5	CALC O-RAB4		
Total depreciation (RY20 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	253	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0250	INPUT6 CALC		
Total depreciation	-	-	6	O-RAB5		
Total opening RAB value without revaluations (RY20 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value without revaluations	-	-	253	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	6	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	-	-	253	INPUT4		
Closing RAB value without revaluations	-	-	247	CALC		
Total adjusted depreciation (RY20 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	253	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0250	INPUT6 CALC		
Total depreciation	-	-	6	O-RAB6		
Twenty-one						
RY21 earthquake readiness expenditure - Distribution swirchgear						
Total Opening RAB value (RY21 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		
less Disposals	-	-	-	INPUT3		
add Revaluation	-	-	-	I-RAB4		
add Total value of commissioned assets	-	-	258	INPUT4		
Closing RAB value	-	-	258			
Total Revaluation (RY21 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		
less Disposals	-	-	-	INPUT3		
Adjusted RAB value	-	-	-	CALC		
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		
Total Revaluation	-	-	-	CALC O-RAB4		
Total depreciation (RY21 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		
Total depreciation	-	-	-	O-RAB5		
Total opening RAB value without revaluations (RY21 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		
less Disposals without revaluations	-	-	-	INPUT8		
add Total value of commissioned assets	-	-	258	INPUT4		
Closing RAB value without revaluations	-	-	258	CALC		
Total adjusted depreciation (RY21 earthquake readiness expenditure - Distribution swirchgear)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		
Total depreciation	-	-	-	O-RAB6		

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Twenty-five						
RY19 earthquake readiness expenditure - Non-network asset						
Total Opening RAB value (RY19 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	1,390	1,326	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	93	95	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	29	27	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	1,390	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	1,390	1,326	1,258			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY19 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	1,390	1,326	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	1,390	1,326	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	29	27	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY19 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	1,390	1,326	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0667	0.0714	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	93	95	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY19 earthquake readiness expenditure - Non-network asset)						
Opening RAB value without revaluations	-	1,390	1,297	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	93	93	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	1,390	-	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	1,390	1,297	1,205	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY19 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	1,390	1,297	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0667	0.0714	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	93	93	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Twenty-six						
RY20 earthquake readiness expenditure - Non-network asset						
Total Opening RAB value (RY20 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	3,145	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	210	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	63	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	3,145	-	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	3,145	2,999			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY20 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	3,145	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	3,145	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	63	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY20 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	3,145	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0667	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	210	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY20 earthquake readiness expenditure - Non-network asset)						
Opening RAB value without revaluations	-	-	3,145	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	210	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	3,145	-	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	3,145	2,936	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY20 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	3,145	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0667	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	210	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.

REGULATORY ASSET BASE (RAB) MODULE

	CPP Regulatory Period			Input reference	Asset Category for formatting purposes	Logic explanation
	2019	2020	2021			
Twenty-seven						
RY21 earthquake readiness expenditure - Non-network asset						
Total Opening RAB value (RY21 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	-	INPUT2 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Depreciation	-	-	-	I-RAB5		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Revaluation	-	-	-	I-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
add Total value of commissioned assets	-	-	926	INPUT4		No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Closing RAB value	-	-	926			No change in logic from 2013 CPP model. Consistent with IM 5.3.6.
Total Revaluation (RY21 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Fully depreciated assets	-	-	-	INPUT9		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
less Disposals	-	-	-	INPUT3		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Adjusted RAB value	-	-	-	CALC		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
multiply by Revaluation rate	2.11%	2.06%	2.00%	INPUT5		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total Revaluation	-	-	-	CALC O-RAB4		No change in logic from 2013 CPP model. Consistent with IM 5.3.10.
Total depreciation (RY21 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	-	I-RAB1		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total depreciation	-	-	-	O-RAB5		No change in logic from 2013 CPP model. Consistent with 5.3.7 (2)(b)
Total opening RAB value without revaluations (RY21 earthquake readiness expenditure - Non-network asset)						
Opening RAB value without revaluations	-	-	-	INPUT7 CALC		RY19 linked to input sheet. No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Adjusted depreciation	-	-	-	I-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
less Disposals without revaluations	-	-	-	INPUT8		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
add Total value of commissioned assets	-	-	926	INPUT4		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Closing RAB value without revaluations	-	-	926	CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total adjusted depreciation (RY21 earthquake readiness expenditure - Non-network asset)						
Opening RAB value	-	-	-	INPUT7		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
multiply by (1 / Remaining asset life)	0.0000	0.0000	0.0000	INPUT6 CALC		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Total depreciation	-	-	-	O-RAB6		No change in logic from 2013 CPP model. Consistent with adjusted depreciation definition in IM 1.1.4.
Works Under Construction						

WELLINGTON ELECTRICITY EXTERNAL INPUTS MODULE

Ref.	Input Name	Discrete Input	CPP Regulatory Period			Description
			2019	2020	2021	
INPUT1	CPP regulatory period	3	2019			The period of continuous disclosure years in respect of which the customised price-quality path applies. Input the number of years in the regulatory period and the first year in the regulatory period.
INPUT2	Opening or closing RAB values for ID years	Number of Asset Classes 27				A series of values (\$000) for the first year of the CPP regulatory period where a value for that disclosure year represents the opening regulatory asset value in nominal terms of all regulated assets held by a supplier for that disclosure year.
		One	0			
		Two	0			
		Three	0			
		Four	0			
		Five	0			
		Six	0			
		Seven	0			
		Eight	0			
		Nine	0			
		Ten	0			
		Eleven	0			
		Twelve	0			
		Thirteen	0			
		Fourteen	0			
		Fifteen	0			
		Sixteen	0			
		Seventeen	0			
		Eighteen	0			
		Nineteen	0			
		Twenty	0			
		Twenty-one	0			
		Twenty-two	0			
		Twenty-three	0			
		Twenty-four	0			
		Twenty-five	0			
		Twenty-six	0			
		Twenty-seven	0			
INPUT3	Disposals	One	0	0	0	A series of values (\$000) for the CPP regulatory period, where a single value represents the opening RAB value of the relevant asset category that are forecast to be disposed of in that year.
		Two	0	0	0	
		Three	0	0	0	
		Four	0	0	0	
		Five	0	0	0	
		Six	0	0	0	
		Seven	0	0	0	
		Eight	0	0	0	
		Nine	0	0	0	
		Ten	0	0	0	
		Eleven	0	0	0	
		Twelve	0	0	0	
		Thirteen	0	0	0	
		Fourteen	0	0	0	
		Fifteen	0	0	0	
		Sixteen	0	0	0	
		Seventeen	0	0	0	
		Eighteen	0	0	0	
		Nineteen	0	0	0	
		Twenty	0	0	0	
		Twenty-one	0	0	0	
		Twenty-two	0	0	0	
		Twenty-three	0	0	0	
		Twenty-four	0	0	0	
		Twenty-five	0	0	0	
		Twenty-six	0	0	0	
		Twenty-seven	0	0	0	
INPUT4	Total value of commissioned Assets	One	2,495	0	0	A series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the actual or forecast cost of all assets to be acquired for that year.
		Two	0	2,110	0	
		Three	0	0	0	
		Four	85	0	0	
		Five	0	189	0	
		Six	0	0	40	
		Seven	1,100	0	0	
		Eight	0	1,437	0	
		Nine	0	0	6,632	
		Ten	0	0	0	
		Eleven	0	0	0	
		Twelve	0	0	0	
		Thirteen	1,156	0	0	
		Fourteen	0	1,160	0	
		Fifteen	0	0	1,317	
		Sixteen	1,845	0	0	
		Seventeen	0	2,248	0	
		Eighteen	0	0	2,710	
		Nineteen	248	0	0	
		Twenty	0	253	0	
		Twenty-one	0	0	258	
		Twenty-two	0	0	0	
		Twenty-three	0	604	0	
		Twenty-four	0	0	0	
		Twenty-five	1,390	0	0	
		Twenty-six	0	3,145	0	
		Twenty-seven	0	0	926	
INPUT5	Revaluation rate		2.111%	2.056%	2.000%	Defined in cl. 5.3.10(4) of the EDB input methodologies. Uses current Statistics New Zealand data and RBNZ forecasts.
INPUT6	Remaining asset lives	One	0.00	55.00	54.00	A series of values (2 d.p.) for the CPP regulatory period where a single value for a disclosure year represents the term remaining of an asset's or group of asset's physical asset life at the commencement of the disclosure year as specified by cl. 2.2.8 of the EDB input methodologies.
		Two	0.00	0.00	55.00	
		Three	0.00	0.00	0.00	
		Four	0.00	55.00	54.00	
		Five	0.00	0.00	55.00	
		Six	0.00	0.00	0.00	
		Seven	0.00	45.00	44.00	
		Eight	0.00	0.00	45.00	
		Nine	0.00	0.00	0.00	
		Ten	0.00	60.00	59.00	
		Eleven	0.00	0.00	60.00	
		Twelve	0.00	0.00	0.00	
		Thirteen	0.00	55.00	54.00	
		Fourteen	0.00	0.00	55.00	
		Fifteen	0.00	0.00	0.00	
		Sixteen	0.00	45.00	44.00	
		Seventeen	0.00	0.00	45.00	
		Eighteen	0.00	0.00	0.00	
		Nineteen	0.00	40.00	39.00	
		Twenty	0.00	0.00	40.00	
		Twenty-one	0.00	0.00	0.00	
		Twenty-two	0.00	25.00	24.00	
		Twenty-three	0.00	0.00	25.00	
		Twenty-four	0.00	0.00	0.00	
		Twenty-five	0.00	15.00	14.00	
		Twenty-six	0.00	0.00	15.00	
		Twenty-seven	0.00	0.00	0.00	

Input explanation

3 year CPP regulatory period starting RY19 consistent with CPP proposal.

No opening RAB balances consistent with IM 5.3.6 for earthquake readiness expenditure.

Asset class description:

- RY19 earthquake readiness expenditure - Subtransmission lines
- RY20 earthquake readiness expenditure - Subtransmission lines
- RY21 earthquake readiness expenditure - Subtransmission lines
- RY19 earthquake readiness expenditure - Subtransmission cables
- RY20 earthquake readiness expenditure - Subtransmission cables
- RY21 earthquake readiness expenditure - Subtransmission cables
- RY19 earthquake readiness expenditure - Zone substations
- RY20 earthquake readiness expenditure - Zone substations
- RY21 earthquake readiness expenditure - Zone substations
- RY19 earthquake readiness expenditure - Distribution and LV lines
- RY20 earthquake readiness expenditure - Distribution and LV lines
- RY21 earthquake readiness expenditure - Distribution and LV lines
- RY19 earthquake readiness expenditure - Distribution and LV cables
- RY20 earthquake readiness expenditure - Distribution and LV cables
- RY21 earthquake readiness expenditure - Distribution and LV cables
- RY19 earthquake readiness expenditure - Distribution substations and transformers
- RY20 earthquake readiness expenditure - Distribution substations and transformers
- RY21 earthquake readiness expenditure - Distribution substations and transformers
- RY19 earthquake readiness expenditure - Distribution swirchgear
- RY20 earthquake readiness expenditure - Distribution swirchgear
- RY21 earthquake readiness expenditure - Distribution swirchgear
- RY19 earthquake readiness expenditure - Other network assets
- RY20 earthquake readiness expenditure - Other network assets
- RY21 earthquake readiness expenditure - Other network assets
- RY19 earthquake readiness expenditure - Non-network asset
- RY20 earthquake readiness expenditure - Non-network asset
- RY21 earthquake readiness expenditure - Non-network asset

No disposals associated with assets arising from earthquake readiness expenditure as per definition of disposed asset in IM 1.1.4.

Inputs sourced from 'Supporting Model - CPP readiness capex and opex'. See notes in spreadsheet for additional information

Calculated consistent with IM 5.3.10 (4). CPI inputs and calculation sourced from DPP Financial Model. Use of DPP CPI consistent with definition of Forecast CPI for CPP Revaluation defined in 5.3.10 (5).

Inputs sourced from 'Supporting Model - CPP readiness capex and opex'. Inputs determined consistent with IM Schedule A Table A.2. "Asset lives for CPP commissioned assets" as defined in IM 1.1.4.

WELLINGTON ELECTRICITY EXTERNAL INPUTS MODULE

Ref.	Input Name	Discrete Input	CPP Regulatory Period			Description	Input explanation
			2019	2020	2021		
INPUT7	Opening or closing RAB values for ID years without revaluations	One	0			As for Opening or closing RAB values for ID years (INPUT31) but is a series of values (\$000) for the CPP regulatory period where a single value for a disclosure year represents the total depreciation amount for all assets for that year as if no indexed revaluation had ever been applied in respect of any asset.	There are no Opening RAB balances consistent with IM 5.3.6 for assets arising from earthquake readiness expenditure. Consistent with IM 5.3.9.
		Two	0				
		Three	0				
		Four	0				
		Five	0				
		Six	0				
		Seven	0				
		Eight	0				
		Nine	0				
		Ten	0				
		Eleven	0				
		Twelve	0				
		Thirteen	0				
		Fourteen	0				
		Fifteen	0				
		Sixteen	0				
		Seventeen	0				
		Eighteen	0				
		Nineteen	0				
		Twenty	0				
		Twenty-one	0				
Twenty-two	0						
Twenty-three	0						
Twenty-four	0						
Twenty-five	0						
Twenty-six	0						
Twenty-seven	0						
INPUT8	Disposals without revaluations	One	0	0	0	A series of values (\$000) for the CPP regulatory period, where a single value for an asset or aggregated asset group for a disclosure year represents the opening RAB value of those assets that are disposed of in that year. The value is calculated such that it does not include any revaluation amount which has been added to the RAB since the initial RAB date (31 March 2009).	No disposals associated with asset arising from earthquake readiness expenditure as per definition of disposed asset in IM 1.1.4.
		Two	0	0	0		
		Three	0	0	0		
		Four	0	0	0		
		Five	0	0	0		
		Six	0	0	0		
		Seven	0	0	0		
		Eight	0	0	0		
		Nine	0	0	0		
		Ten	0	0	0		
		Eleven	0	0	0		
		Twelve	0	0	0		
		Thirteen	0	0	0		
		Fourteen	0	0	0		
		Fifteen	0	0	0		
		Sixteen	0	0	0		
		Seventeen	0	0	0		
		Eighteen	0	0	0		
		Nineteen	0	0	0		
		Twenty	0	0	0		
		Twenty-one	0	0	0		
Twenty-two	0	0	0				
Twenty-three	0	0	0				
Twenty-four	0	0	0				
Twenty-five	0	0	0				
Twenty-six	0	0	0				
Twenty-seven	0	0	0				
INPUT9	Fully depreciated assets	One	0	0	0	A series of values (\$000) for the CPP regulatory period where a single value for an asset or aggregated asset group for a disclosure year represents the opening RAB value of those assets that are fully depreciated in that year.	No fully depreciated assets associated with assets arising from earthquake readiness expenditure as assets all new with useful lives in excess of 3
		Two	0	0	0		
		Three	0	0	0		
		Four	0	0	0		
		Five	0	0	0		
		Six	0	0	0		
		Seven	0	0	0		
		Eight	0	0	0		
		Nine	0	0	0		
		Ten	0	0	0		
		Eleven	0	0	0		
		Twelve	0	0	0		
		Thirteen	0	0	0		
		Fourteen	0	0	0		
		Fifteen	0	0	0		
		Sixteen	0	0	0		
		Seventeen	0	0	0		
		Eighteen	0	0	0		
		Nineteen	0	0	0		
		Twenty	0	0	0		
		Twenty-one	0	0	0		
Twenty-two	0	0	0				
Twenty-three	0	0	0				
Twenty-four	0	0	0				
Twenty-five	0	0	0				
Twenty-six	0	0	0				
Twenty-seven	0	0	0				
INPUT10	DV rate	0.00%					Input sourced from 'Supporting Model - CPP readiness capex and opex' consistent with IM 5.3.20 (3) and IRD tax depreciation rules.
		8.00%					
		10.00%					
		20.00%					
		25.00%					
		50.00%					
INPUT11	Opening regulatory tax asset value	One	0				No opening regulatory tax asset value balances for assets arising from earthquake readiness expenditure IM 5.3.20 (3).
		Two	0				
		Three	0				
		Four	0				
		Five	0				
		Six	0				
INPUT12	Value of commissioned assets for tax	One	2,741	3,583	4,525		Input sourced from 'Supporting Model - CPP readiness capex and opex'. Consistent with IM 5.3.20 (3).
		Two	4,188	3,814	6,431		
		Three	0	1,925	0		
		Four	874	0	0		
		Five	516	0	0		
		Six	0	1,824	926		
INPUT13	Opening works under construction		0			Set to zero. There is no opening works under construction balance for earthquake readiness expenditure.	
INPUT14	Capital expenditure		8,319	11,146	11,882	Input sourced from 'Supporting Model - CPP readiness capex and opex'.	

This sheet has been deliberately left blank.

Inputs for Wellington Electricity

All input data is entered into this worksheet

Supplier	Scenario
Name	Wellington Electricity
Supplier number	
Supplier number (for output data table)	
Claw-back scenario	

General data

Non business-specific single inputs	Value	
Vanilla WACC (67th percentile)	7.19%	
Cost of debt	6.09%	
Leverage	44%	
Years of remaining life for newly commissioned assets	44	years
Industry-wide X factor	-	
Days in a year	365	days
Days from mid-year to year-end	182	days
Days from revenue date to year-end	148	days
Last day of year 1 of the DPP period	31 Mar 16	

General time-series data

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year in modelling period	1	2	3	4	5	6	7	8
Year in regulatory period			1	2	3	4	5	6
Forecast changes in CPI used for revaluations	1.53%	1.43%	1.74%	2.11%	2.17%	2.11%	2.06%	2.00%
Forecast changes in the CPI element of the price path			1.53%	1.51%	1.77%	2.11%	2.15%	
Company tax rate	28%	28%	28%	28%	28%	28%	28%	28%

Business-specific data

Initial conditions

Opening RAB	555,990
Lost assets	-
Found assets	-
Total depreciation	26,602
Revaluations	8,518
Closing RAB	569,510
Opening RAB excluding revaluations	521,133
Adjusted depreciation	25,003
Tax depreciation	28,397
Opening regulatory tax asset value	345,887
Amortisation of initial differences in asset values	6,154
Term credit spread differential allowance	563
Opening deferred tax balance	(17,901)
Additional allowance in 1 April 2015 PV terms	-
Alternative X factor	-

Operating expenditure

Operating expenditure, 2013/14	29,611
Operating expenditure, 2014/15	29,752
Operating expenditure, 2015/16	30,899
Operating expenditure, 2016/17	31,950
Operating expenditure, 2017/18	32,914
Operating expenditure, 2018/19	33,903
Operating expenditure, 2019/20	34,789
Operating expenditure, 2020/21	33,434

Constant price revenue growth

Constant price revenue growth, 2013/14	0.446%
Constant price revenue growth, 2014/15	0.446%
Constant price revenue growth, 2015/16	0.446%
Constant price revenue growth, 2016/17	0.447%
Constant price revenue growth, 2017/18	0.447%
Constant price revenue growth, 2018/19	0.447%
Constant price revenue growth, 2019/20	0.447%

Value of commissioned assets

Value of commissioned assets, 2013/14	31,581
Value of commissioned assets, 2014/15	33,381
Value of commissioned assets, 2015/16	27,257
Value of commissioned assets, 2016/17	28,408
Value of commissioned assets, 2017/18	34,853
Value of commissioned assets, 2018/19	31,197
Value of commissioned assets, 2019/20	31,209
Value of commissioned assets, 2020/21	32,603

Disposed assets

Value of disposed assets, 2013/14	371
Value of disposed assets, 2014/15	94
Value of disposed assets, 2015/16	96
Value of disposed assets, 2016/17	98
Value of disposed assets, 2017/18	100
Value of disposed assets, 2018/19	102
Value of disposed assets, 2019/20	104
Value of disposed assets, 2020/21	106

Other regulated income

Other regulated income, 2013/14	191
Other regulated income, 2014/15	425
Other regulated income, 2015/16	433
Other regulated income, 2016/17	442
Other regulated income, 2017/18	451
Other regulated income, 2018/19	461
Other regulated income, 2019/20	470
Other regulated income, 2020/21	480

Allowable Notional Revenue

Allowable notional revenue 2014/2015	104,846
Pass-through costs 2014/15	2,907

Claw-back

Claw-back 2014/15	8,051
Claw-back 2015/16	-

Input explanation

EDB selector switch removed as not applicable
Not applicable.
Not applicable.
Not applicable.

Input consistent with 2015 DPP financial model and DPP cost of capital determination. RY21 consistent with IM 5.3.22.
Input consistent with 2015 DPP financial model and DPP cost of capital determination. RY21 cost of debt consistent with WACC.
Input consistent with 2015 DPP financial model and DPP cost of capital determination. RY21 leverage consistent with WACC.
Input consistent with 2015 DPP financial model. RY21 input consistent with IM 4.2.2 (3) (b).
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model. RY21 applied as per previous DPP years.
Input consistent with 2015 DPP financial model. RY21 applied as per previous DPP years.
Input consistent with 2015 DPP financial model. RY21 applied as per previous DPP years.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.

RY14-RY20 inputs consistent with 2015 DPP financial model. RY21 added. RY21 input rolled forward consistent with 2015 DPP financial model.
RY16-RY20 inputs consistent with 2015 DPP financial model. RY21 added. RY21 input rolled forward consistent with 2015 DPP financial model.

RY14-RY20 inputs sourced from 2015 DPP financial model. RY21 added. CPI extracted from 'Supporting Model - CPI projections' consistent with IM 4.2.3 (3) and IM variation proposal.
RY16-RY20 inputs sourced from 2015 DPP financial model. RY21 value not required.
RY14-RY20 inputs consistent with 2015 DPP financial model. RY21 added consistent with 2015 DPP financial model and expected corporate tax rate as per definition in IM 1.1.4.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
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Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
RY21 added. Input sourced from Wellington Electricity's 2017 Asset Management Plan (AMP) schedules 'Supporting Model - AMP 2017 schedules' (schedule 11b) in nominal terms consistent with IM variation proposal. All operating expenditure is 100% directly attributable to regulated electricity distribution services consistent with IM 4.1.1 (1) and IM 2.1.1. All operating expenditure is expensed for the purpose of GAAP consistent with WE's accounting policies.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
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Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
RY21 added. Input sourced from Wellington Electricity's 2017 AMP schedules 'Supporting Model - AMP 2017 schedules' (schedule 11a) in nominal terms consistent with IM variation proposal. Value of commissioned assets assumed to equal capex, consistent with IM 4.2.5. All forecast expenditure is expected to be capitalised in accordance with GAAP, consistent with IM 4.2.5. Assets are 100% directly attributable to electricity distribution services consistent with IM 4.1.1 (2) and IM 2.1.1.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
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Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
RY21 added. Input sourced from 'Supporting Model - Other regulated income and disposed assets' consistent with the IM variation proposal, the 2015 DPP forecasting approach and IM 4.2.6.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.
RY21 added. Input sourced from 'Supporting Model - Other regulated income and disposed assets' consistent with the IM variation proposal, the 2015 DPP forecasting approach and definition in IM 1.1.4.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.

Input consistent with 2015 DPP financial model.
Input consistent with 2015 DPP financial model.

Intra-year timing

Derivation of the five timing factors TFopex, TFtax, TFVCA, TFori and TFrev.

Logic explanation

Inputs

	From	Value
Last day of year 1 of the DPP period	EDB data	31 Mar 16
Days in a year	EDB data	365
Days from mid-year to year-end	EDB data	182
Days from revenue date to year-end	EDB data	148
Vanilla WACC (67th percentile)	EDB data	7.19%

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Calculations

	Value	
Mid-year date	30 Sep 15	
Revenue date	4 Nov 15	As demonstrated below, 12 equal monthly transactions on the 20th of the following month can be approximated by a single payment on the revenue date.
Operating expenditure date	30 Sep 15	i.e. mid-year
Tax date	30 Sep 15	i.e. mid-year
Asset commissioning date	30 Sep 15	i.e. mid-year
Interest date	30 Sep 15	i.e. mid-year
Asset disposal date	30 Sep 15	i.e. mid-year
TF for mid-year cash flows	1.0352	Intra-year timing factors: discount from mid year to end of year values
TFrev	1.0286	Intra-year timing factor: discount from revenue date to end of year values

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Outputs

	Value
TFopex	1.0352
TFtax	1.0352
TFVCA	1.0352
TFori	1.0352
TFrev	1.0286

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Check for timing of revenue receipt

Demonstration that a 4 November receipt date for all revenues in a year ending 31 March is almost identical to receiving 12 equal revenue amounts on the 20th of the month following the provision of service.

Monthly cash flows	31 Mar 15	20 May 15	20 Jun 15	20 Jul 15	20 Aug 15	20 Sep 15	20 Oct 15	20 Nov 15	20 Dec 15	20 Jan 16	20 Feb 16	20 Mar 16	#
Dates of receipt of revenues													
Indexed amount of revenue	-	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Equivalent single cash flow	31 Mar 15	4 Nov 15
Dates of receipt of revenues		
Indexed amount of revenue	-	12.0

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Present value	Value
PV as at 31 Mar 16 of the series of unit amounts	11.5141
PV of the equivalent single amount	11.5125
Difference in PV for a date of 4 Nov	0.0016
Percentage difference	0.014%

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Regulatory asset base

Calculations involving the roll-forward of asset values.

Inputs

	From	Value	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Opening RAB	EDB data	555,990								
Total depreciation	EDB data	26,602								
Revaluations	EDB data	8,518								
Closing RAB	EDB data	569,510								
Disposed assets	EDB data		371	94	96	98	100	102	104	106
Value of commissioned assets	EDB data		31,581	33,381	27,257	28,408	34,853	31,197	31,209	32,603
Remaining life of newly commissioned assets	EDB data	44								
Forecast changes in CPI used for revaluations	EDB data		1.53%	1.43%	1.74%	2.11%	2.17%	2.11%	2.06%	2.00%

Logic explanation

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB data' inputs.
RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB data' inputs.
No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB data' inputs.

Calculations

Roll forward of existing assets

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Remaining asset life of existing assets	20.9	19.9	18.9	17.9	16.9	15.9	14.9	13.9
Opening RAB value of existing assets		569,510	548,910	529,295	510,803	491,534	470,884	448,845
Disposed assets		94	96	98	100	102	104	106
Revaluation of existing assets		8,113	9,523	11,175	11,056	10,365	9,668	8,966
Depreciation of existing assets		28,618	29,042	29,569	30,225	30,914	31,602	32,290
Closing RAB value of existing assets		569,510	548,910	529,295	510,803	491,534	470,884	448,845

RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (3)(a)
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (2).
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(a).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(a).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (3).

Individual roll forward of additional assets

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year in modelling period	1	2	3	4	5	6	7	8
Revaluation rate	1.53%	1.43%	1.74%	2.11%	2.17%	2.11%	2.06%	2.00%
Commissioned assets	31,581	33,381	27,257	28,408	34,853	31,197	31,209	32,603

RY21 added. Calculated consistent with 2015 DPP financial model rolled forward 1 year.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.

Assets commissioned in 2014/15:

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year asset is added during modelling period	2						
Opening RAB	-	-	33,381	33,202	33,132	33,061	32,952
Years of remaining life	46	45	44	43	42	41	40
Revaluation of assets	-	-	580	702	718	698	677
Depreciation of assets	-	-	759	772	789	806	824
Closing RAB	-	33,381	33,202	33,132	33,061	32,952	32,806

No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2015/16:

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year asset is added during modelling period	3					
Opening RAB	-	-	27,257	27,214	27,171	27,098
Years of remaining life	47	46	45	44	43	42
Revaluation of assets	-	-	576	590	574	557
Depreciation of assets	-	-	619	633	647	661
Closing RAB	-	-	27,257	27,214	27,171	27,098

No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2016/17:

	2016/17	2017/18	2018/19	2019/20	2020/21
Year asset is added during modelling period	4				
Opening RAB	-	-	28,408	28,378	28,317
Years of remaining life	48	47	46	45	44
Revaluation of assets	-	-	616	599	582
Depreciation of assets	-	-	646	660	674
Closing RAB	-	-	28,408	28,378	28,317

No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2017/18:

	2017/18	2018/19	2019/20	2020/21
Year asset is added during modelling period	5			
Opening RAB	-	-	34,853	34,797
Years of remaining life	49	48	47	46
Revaluation of assets	-	-	736	715
Depreciation of assets	-	-	792	809
Closing RAB	-	-	34,853	34,797

No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2018/19:

	2018/19	2019/20	2020/21
Year asset is added during modelling period	6		
Opening RAB	-	-	31,197
Years of remaining life	50	49	48
Revaluation of assets	-	-	641
Depreciation of assets	-	-	709
Closing RAB	-	-	31,197

No change
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2019/20:

	2019/20	2020/21
Year asset is added during modelling period	7	
Opening RAB	-	31,209
Years of remaining life	51	50
Revaluation of assets	-	624
Depreciation of assets	-	709
Closing RAB	-	31,209

No change from 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2(3)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b).
RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5).

Assets commissioned in 2020/21:

	2020/21
Year asset is added during modelling period	8
Opening RAB	-
Years of remaining life	52
Revaluation of assets	-
Depreciation of assets	-
Closing RAB	-

Added roll forward for assets commissioned in RY21.
Calculated consistent with 2015 DPP financial model and IM 4.2.1 (4) applied to RY21
Calculated consistent with 2015 DPP financial model and IM 4.2.2 (3)(b) applied to RY21
Calculated consistent with 2015 DPP financial model and IM 4.2.3 (2)(b) applied to RY21
Calculated consistent with 2015 DPP financial model and IM 4.2.2 (2)(b) applied to RY21
Calculated consistent with 2015 DPP financial model and IM 4.2.1 (5) applied to RY21

Aggregate roll forward of additional assets

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Opening RAB of commissioned additional assets	-	-	33,381	60,459	88,754	123,463	154,361
Revaluation of commissioned additional assets	-	-	580	1,278	1,923	2,607	3,173
Depreciation of commissioned additional assets	-	-	759	1,392	2,067	2,905	3,677
Closing RAB of commissioned additional assets	-	33,381	60,459	88,754	123,463	154,361	185,066

Calculation amended to include RY21 roll forward of additional assets.
Calculation amended to include RY21 roll forward of additional assets.
Calculation amended to include RY21 roll forward of additional assets.
Calculation amended to include RY21 roll forward of additional assets.

Combined roll forward of existing and additional assets

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Aggregate opening RAB value	555,990	569,510	582,291	589,755	599,558	614,997	625,245	633,911
Total revaluation	8,518	8,113	10,103	12,453	12,979	12,972	12,841	12,667
Total depreciation	26,602	28,618	29,801	30,961	32,292	33,819	35,280	36,754
Aggregate closing RAB value	569,510	582,291	589,755	599,558	614,997	625,245	633,911	642,321
Check that closing value is as expected. Should = 0								

RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.

Outputs

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Remaining asset life of existing assets	21	20	19	18	17	16	15	14
Total depreciation	26,602	28,618	29,801	30,961	32,292	33,819	35,280	36,754
Aggregate opening RAB value	555,990	569,510	582,291	589,755	599,558	614,997	625,245	633,911
Total revaluation	8,518	8,113	10,103	12,453	12,979	12,972	12,841	12,667
Aggregate closing RAB value	569,510	582,291	589,755	599,558	614,997	625,245	633,911	642,321

RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.
RY21 added. Calculated consistent with 2015 DPP financial model.

Building blocks allowable revenue

Derivation of BBAR present value, opening investment value, and TCSD allowance.

Logic explanation

Inputs

	Source	Value	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year in regulatory period	EDB data				1	2	3	4	5	6
Tax rate	EDB data		28%	28%	28%	28%	28%	28%	28%	28%
Other regulated income	EDB data		191	425	433	442	451	461	470	480
Term credit spread differential allowance	EDB data		563							
Value of commissioned assets	EDB data		31,581	33,381	27,257	28,408	34,853	31,197	31,209	32,603
Operating expenditure	EDB data		29,611	29,752	30,899	31,950	32,914	33,903	34,789	33,434
Vanilla WACC (67th percentile)	EDB data	7.19%								
TFopex	TIMING	1.0352								
TFtax	TIMING	1.0352								
TFVCA	TIMING	1.0352								
TFori	TIMING	1.0352								
TFrev	TIMING	1.0286								
Aggregate opening RAB value	RAB		555,990	569,510	582,291	589,755	599,558	614,997	625,245	633,911
Total revaluation	RAB		8,518	8,113	10,103	12,453	12,979	12,972	12,841	12,667
Total depreciation	RAB		26,602	28,618	29,801	30,961	32,292	33,819	35,280	36,754
Opening deferred tax	TAX		(17,901)	(20,575)	(22,902)	(25,127)	(27,139)	(28,961)	(30,700)	(32,286)
Closing deferred tax	TAX		(20,575)	(22,902)	(25,127)	(27,139)	(28,961)	(30,700)	(32,286)	(33,713)
Regulatory tax adjustments	TAX		(6,793)	(6,568)	(6,424)	(6,022)	(5,543)	(5,171)	(4,644)	(4,064)

RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB Data' inputs.
 RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB Data' inputs.
 RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB Data' inputs.
 No change from 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB Data' inputs.
 RY21 added. Calculated consistent with 2015 DPP financial model and 'EDB Data' inputs.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.

Calculations

Term credit spread differential allowance

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Asset base scaling factor	1.00	1.02	1.05	1.06	1.08	1.11	1.12	1.14
Term credit spread differential allowance	563	577	590	598	608	623	634	642

RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.4.7 (2).
 RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.4.7 (2).

Return on capital

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Opening investment value	538,088	548,935	559,389	564,627	572,418	586,036	594,545	601,626
Value of commissioned assets	31,581	33,381	27,257	28,408	34,853	31,197	31,209	32,603
Term credit spread differential allowance	563	577	590	598	608	623	634	642
Total revaluation	8,518	8,113	10,103	12,453	12,979	12,972	12,841	12,667
Return on capital	31,847	33,109	31,667	29,742	30,013	30,886	31,640	32,381

RY21 added. Calculated consistent with 2015 DPP financial model and IM 4.3.3 (4).
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.

Operating expenditure

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Operating expenditure	29,611	29,752	30,899	31,950	32,914	33,903	34,789	33,434
Operating expenditure allowance	30,654	30,800	31,988	33,075	34,073	35,098	36,014	34,612

RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.

Building block allowable revenue before tax (BBAR before tax)

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Increase in deferred tax asset, ΔDT	(2,673)	(2,328)	(2,225)	(2,012)	(1,822)	(1,739)	(1,585)	(1,428)
BBAR before tax in revenue date terms, calculation not referencing tax	95,579	99,236	99,634	99,361	102,168	105,957	109,479	110,758
Regulatory tax allowance before considering possibility of tax losses	9,174	9,722	9,224	8,644	8,924	9,387	9,866	10,356
Regulatory tax allowance	9,174	9,722	9,224	8,644	8,924	9,387	9,866	10,356
BBAR before tax in year-end terms, direct simple calculation	98,308	102,069	102,479	102,198	105,085	108,982	112,605	113,920
BBAR before tax in revenue date terms	95,579	99,236	99,634	99,361	102,168	105,957	109,479	110,758
Difference between the two BBAR calculations (should = 0)	-	-	-	-	-	-	-	-

RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.

Present value of the building block allowable revenue before tax

	Value	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Number of years to discount the year-end values to start of the present value period				1	2	3	4	5
BBAR before tax in year-end terms, i.e. Rev * TFrev				102,479	102,198	105,085	108,982	112,605
PV at 1 Apr 2015 of BBAR before tax for each year				95,605	88,948	85,325	82,554	79,577
PV at 1 Apr 2015 of BBAR before tax over the regulatory period	432,008							

No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.
 No change from 2015 DPP financial model.

Outputs

	Value	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Opening investment value		538,088	548,935	559,389	564,627	572,418	586,036	594,545	601,626
PV at 1 Apr 2015 of BBAR before tax over the regulatory period	432,008								
Term credit spread differential allowance		563	577	590	598	608	623	634	642
BBAR before tax in revenue date terms, calculation not referencing tax		95,579	99,236	99,634	99,361	102,168	105,957	109,479	110,758

RY21 added. Calculated consistent with 2015 DPP financial model.
 No change from 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.
 RY21 added. Calculated consistent with 2015 DPP financial model.

Revenue growth index

Derivation of the normalised profile of the maximum allowable revenue before tax values.

Logic explanation

Inputs

	Source	Value	2015/16	2016/17	2017/18	2018/19	2019/20	
Constant price revenue growth	EDB data		0.446%	0.447%	0.447%	0.447%	0.447%	No change from 2015 DPP financial model.
Industry-wide X factor	EDB data	–						No change from 2015 DPP financial model.
Alternative X factor	EDB data	–						No change from 2015 DPP financial model.
Forecast changes in the CPI element of the price path	EDB data		1.53%	1.51%	1.77%	2.11%	2.15%	No change from 2015 DPP financial model.

Calculations

Index of price path with industry-wide X factor of 0.0%

	Value	2015/16	2016/17	2017/18	2018/19	2019/20	
X value applied	–						No change from 2015 DPP financial model.
Index of price path		1.0000	1.0151	1.0331	1.0548	1.0775	No change from 2015 DPP financial model.
Index of constant price growth		1.0000	1.0045	1.0090	1.0135	1.0180	No change from 2015 DPP financial model.
Indexed maximum allowable revenue before tax		1.0000	1.0196	1.0423	1.0690	1.0969	No change from 2015 DPP financial model.

CPI minus X revenues with applicable X factor (alternate X factor of 0.0%)

	Value	2015/16	2016/17	2017/18	2018/19	2019/20	
X value applied	–						No change from 2015 DPP financial model.
Index of price path		1.0000	1.0151	1.0331	1.0548	1.0775	No change from 2015 DPP financial model.
Index of constant price growth		1.0000	1.0045	1.0090	1.0135	1.0180	No change from 2015 DPP financial model.
Indexed maximum allowable revenue before tax		1.0000	1.0196	1.0423	1.0690	1.0969	No change from 2015 DPP financial model.

This data block calculates maximum allowable revenues for the regulatory period for the 2014/15 X value that has been applied. These maximum allowable revenues are set PV equivalent to the corresponding maximum allowable revenues for the industry-wide X CPI - X revenues.

Outputs

	Misc.	2015/16	2016/17	2017/18	2018/19	2019/20	
Indexed maximum allowable revenue before tax—industry wide X factor		1.0000	1.0196	1.0423	1.0690	1.0969	No change from 2015 DPP financial model.
Indexed maximum allowable revenue before tax—applicable X factor		1.0000	1.0196	1.0423	1.0690	1.0969	No change from 2015 DPP financial model.

Maximum allowable revenue

Derivation of starting prices.

Logic explanation

Inputs

	Source	Value	2015/16	2016/17	2017/18	2018/19	2019/20
Year in regulatory period	EDB data		1	2	3	4	5
Industry-wide X factor	EDB data	–					
Additional allowance in 1 April 2015 PV terms	EDB data	–					
Alternative X factor	EDB data	–					
Vanilla WACC (67th percentile)	EDB data	7.19%					
TFrev	TIMING	1.0286					
Constant price revenue growth 2015	EDB data	0.446%					
Constant price revenue growth 2016	EDB data	0.446%					
PV at 1 Apr 2015 of BBAR before tax over the regulatory period	BBAR	432,008					
Indexed maximum allowable revenue before tax—industry wide X factor	REV		1.0000	1.0196	1.0423	1.0690	1.0969
Indexed maximum allowable revenue before tax—applicable X factor	REV		1.0000	1.0196	1.0423	1.0690	1.0969

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
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No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

Calculations

CPI minus X revenues with industry-wide X factor of 0.0%

	PV at 1-Apr-15	2015/16	2016/17	2017/18	2018/19	2019/20
PV at 1 Apr 2015 of BBAR before tax over the regulatory period	432,008					
Additional allowance	–					
PV at 1 Apr 2015 of maximum allowable revenue before tax	432,008					
Indexed maximum allowable revenue before tax		1.0000	1.0196	1.0423	1.0690	1.0969
Present value of indexed maximum allowable revenue for each year		0.9329	0.8874	0.8463	0.8098	0.7752
Present value of indexed revenue	4,2517					
Maximum allowable revenue before tax in first year of the regulatory period	101,609					
Maximum allowable revenue before tax in year-end terms		101,609	103,601	105,910	108,625	111,460
Maximum allowable revenue before tax in revenue-date terms		98,788	100,725	102,970	105,609	108,365
PV at 1 Apr 2015 of maximum allowable revenue before tax in year-end terms in each year		94,793	90,169	85,995	82,283	78,767
PV at 1 Apr 2015 of maximum allowable revenue before tax	432,008					
Error check for PV equivalence (should = 0)	–					
ΔD	1.0089					
ANR 2016 (industry-wide X-factor)	428,180					

No change from 2015 DPP financial model.
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No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.

CPI minus X revenues with applicable X factor (alternate X factor of 0.0%)

	PV at 1-Apr-15	2015/16	2016/17	2017/18	2018/19	2019/20
PV at 1 Apr 2015 of BBAR before tax over the regulatory period	432,008					
Additional allowance	–					
PV at 1 Apr 2015 of maximum allowable revenue before tax	432,008					
Indexed maximum allowable revenue before tax		1.0000	1.0196	1.0423	1.0690	1.0969
Present value of indexed maximum allowable revenue for each year		0.9329	0.8874	0.8463	0.8098	0.7752
Present value of indexed revenue	4,2517					
Maximum allowable revenue before tax in first year of the regulatory period	101,609					
Maximum allowable revenue before tax in year-end terms		101,609	103,601	105,910	108,625	111,460
Maximum allowable revenue before tax in revenue-date terms		98,788	100,725	102,970	105,609	108,365
PV at 1 Apr 2015 of maximum allowable revenue before tax in year-end terms in each year		94,793	90,169	85,995	82,283	78,767
PV at 1 Apr 2015 of maximum allowable revenue before tax	432,008					
Difference from PV equivalence (incentives etc.)	–					
ΔD	1.0089					
ANR 2016 (applicable X-factor)	93,953					

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
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No change from 2015 DPP financial model.

This data block uses the applicable 2014/15 X factor to calculate the maximum allowable revenues for the regulatory period. These allowed revenues are PV-equivalent to the corresponding revenues calculated with the industry-wide X factor in the previous data block.

Outputs

	2015/16	2016/17	2017/18	2018/19	2019/20
Maximum allowable revenue before tax in revenue-date terms for industry wide X factor	98,788	100,725	102,970	105,609	108,365
Maximum allowable revenue before tax in revenue-date terms for applicable X factor	98,788	100,725	102,970	105,609	108,365
Starting price for industry-wide X factor	98,788				
Starting price for applicable X factor	98,788				
PV at 1 Apr 2015 of MAR before tax over the regulatory period (industry X)	432,008				
PV at 1 Apr 2015 of MAR before tax over the regulatory period (Applicable X)	432,008				
ΔD	1.0089				
ANR 2016 (applicable X-factor)	93,953				

No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.
No change from 2015 DPP financial model.