Jemena Electricity Networks (Vic) Ltd

2016-20 Electricity Distribution Price Review Regulatory Proposal

Attachment 1-2

Statement of interdependencies for regulatory proposal

Public

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1. STATEMENT OF INTERDEPENDENCIES

This attachment provides JEN's assessment of key interrelationships between elements of our 2016-20 regulatory proposal.

Table 1–1: Statement of interdependencies

Proposal element	Chapter Reference	Interdependency
Forecast capital expenditure (capex) and depreciation		
All capex categories	Chapters 5, 6, 7, 8, 9 & 11	• **Forecast inflation** – will impact conversion of real/nominal capex amounts for all categories. • **Forecast real price escalation** – will impact capex reported in each year of the regulatory period, for all categories. • **Forecast unit rates** – will impact any capex forecasts which are estimated using unit rates. This can include capital such as connections and metering. • **Classification of expenditure** – capitalisation policy, including for overheads, will determine whether expenditure is classified as capex or operating expenditure (**opex**). • **Base year capitalised overheads / rate of change** – used to forecast capitalised overheads for all capex categories. • **Opex / capex trade-offs** – approach to trade-off will influence the balance between opex and capex. For example, reducing maintenance opex may lead to higher capex requirements. • **Depreciation** – forecast (and historical) capex will influence the forecast depreciation building block. • **Rate of return** – capacity to fund proposed capex projects depends on there being an acceptable/adequate rate of return (WACC). The WACC also affects the depreciation allowance, as it is used to gross up capex before it is added to the RAB. • **Service classification –** service classification will impact on forecast capex for standard control services.
New connection capex	Chapter 7	• **Forecast new connections** – will drive the requirement to expand the network and therefore new connection capex.
Augmentation capex	Chapter 7	• **Peak demand forecasts** – localised non co-incident peak demand forecasts influence decisions on

Proposal element	Chapter Reference	Interdependency
		augmentation projects • **Reliability obligations and customer preferences** – safety, reliability and quality of supply objectives and obligations, as well as customer preferences for service reliability, can influence capex plans.
Replacement capex	Chapter 7	• **Opex / maintenance expenditure** – forecast maintenance expenditure may influence the requirement to undertake asset replacement expenditure.
Depreciation	Chapter 6	• **Asset lives** – adopted economic lives will impact actual and forecast depreciation. • **Forecast inflation** – will impact conversion of real/nominal capex amounts.

Proposal element	Chapter Reference	Interdependency
Forecast opex		
Required step changes from base year	Chapter 8	• **Base year choice** – step change proposals will be influenced by the sustainability of base year opex.
Total allowance	Chapters 6, 7, 8, 9, and 11	• **Forecast inflation** – will impact conversion of real/nominal capex amounts for all opex categories. • **Forecast real price escalation** – will impact forecast opex in each year of the regulatory period, for all categories. • **Rate of change assumptions** – the forecast rate of change in opex requirements is based on forecasts of customer numbers and other network characteristics. • **Opex / capex tradeoffs** – approach to trade-off will influence the balance between opex and capex. • **Replacement capex** – replacement/refurbishment capex strategy may influence the level of forecast maintenance requirements. If the allowance for replacement/refurbishment capex is lower, then maintenance requirements for existing assets that are not refurbished or replaced are likely to be higher. • **Classification of expenditure** – capitalisation policy will determine whether expenditure is classified as capex or opex. • **Rate of return** – capacity to fund the opex program depends on there being an appropriate rate of return. • **Service classification –** service classification will impact on forecast opex for standard control services.
Demand forecast		
Demand	Chapters 6, 7 and 10	• **Price path** – the price path for electricity services will influence forecast demand. • **Gas / electricity price relativities** – forecast retail electricity prices and gas prices and electricity/gas price relativities will influence demand. • **Price relativities between tariff classes** – forecast price relativities between tariff classes may influence forecast tariff uptake.
Allowed rate of return		
Equity risk parameters (beta etc)	Chapter 9	• **Gearing** – used to re-lever the asset beta. A higher level of gearing implies a higher equity beta, for a given asset beta.

Proposal element	Chapter Reference	Interdependency
Return on equity	Chapter 9	• **Return on debt** – return on equity should be greater than return on debt for the same firm. • **Time horizon** – the time horizon used to estimate parameters within a cost of equity model should be internally consistent. For example, if the risk-free rate assumes a ten-year investment horizon, then estimates of the market return should be based on the same assumption. • **Value of imputation credits (gamma)** – the value of imputation credits estimate is related to the allowed return on equity. Under the imputation tax system, the value of imputation credits forms part of the overall return to equity-holders (along with dividends and capital gains). Therefore the required return on equity therefore needs to be estimated inclusive of the assumed value of imputation credits. A higher assumed value for imputation credits implies a higher value for the return on equity.
Benchmark credit rating	Chapter 9	• **Gearing** – relevant to establishing the benchmark credit rating. A higher level of gearing may give rise to perceptions of greater financial risk, and therefore a lower credit rating.
Capital raising costs	Chapter 9	• Adjustment to any building block may impact equity and debt raising costs through the re-calculation of allowed revenues in the forecast revenue model.
Building Block Revenue Requirement		
Corporate income tax	Chapter 6	• **Revenue requirement** – Changes to the elements in a building block proposal will impact the calculation of corporate income tax within the building block proposal and ultimately impact the revenue requirement.
Forecast Price Path		
Capital Contributions	Chapter 6	• **X-Factors** – The price path determined by the AER will impact the amount of customer contributions for new connections.
Incentive Schemes		
Capital Expenditure Sharing Scheme (CESS)	Chapter 5	• **Reliability improvements capex** – should be excluded from the CESS scheme
Service Target Performance Incentive Scheme (STPIS)	Chapter 5	• **Reliability improvements capex** – should be excluded from determining the incentive rates