

# 2017/18 – 2021/22 Revenue Proposal

## Capital Expenditure Forecasting Methodology An Overview | June 2015



### What is Capital Expenditure?

Powerlink's capital expenditure (or capex) is spending for new assets that increase network capacity, reinvestment in existing assets that are reaching the end of their serviceable life, and spending on other supporting assets such as business IT and vehicles. Powerlink's capital expenditure categories are detailed below.

#### Capital Expenditure Categories

**Load-driven (network)** – to comply with mandated reliability obligations as electricity demand grows and/or to deliver net benefits to the market.

**Non-load-driven (network)** – primarily associated with the reinvestment in assets to maintain the required capacity or capability of the network.

**Non-network** – comprising mostly business information technology and support for assets required in the normal day-to-day course of business.

### Forecasting Methodology

Powerlink will adopt a mix of both top-down and bottom-up forecasting methods to determine its total forecast capital expenditure. The bottom-up method includes individual project needs that are costed. The top-down method includes a variety of approaches that rely on historical information and established trends to forecast future needs.

This hybrid approach provides the required information for the AER to apply its preferred assessment approach, as per the Expenditure Forecast Assessment (EFA) Guideline, and will be prepared in accordance with the National Electricity Rules.

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For more information about Powerlink's expenditure forecasting methodologies (including operating expenditure), refer to Powerlink's 2017/18 – 2021/22 Revenue Proposal Expenditure Forecasting Methodology.

#### Asset Development

Powerlink's forecasting approach is tailored across three stages of development:

**Assets under construction** – projects that have already received full financial approval consistent with Powerlink's corporate governance framework.

**Confirmed investment need** – projects that are not yet approved but the need for investment has been confirmed and options are being assessed in preparation for seeking project approval.

**Future investment needs** – investment needs that are not yet confirmed or ready to seek project approval, but are expected to be required in the future.

#### Bottom-up Forecasting

Capital expenditure projects that are under construction or have a confirmed investment need at the time Powerlink submits its Revenue Proposal (January 2016), will be forecast using a bottom-up method. This includes developing specific project scopes and estimates and analysis of project progress and expected out turn costs.

A bottom-up approach will also be used to forecast expenditure for specific and/or one-off projects.

#### Top-down Forecasting

Powerlink will adopt a variety of top-down forecasting methods for future investment needs that are not yet confirmed at the time its Revenue Proposal is lodged. This approach is proposed as specific project details and estimates are not ordinarily available this far in advance in the normal course of business for much of this forecast expenditure. As this expected need is for recurring investment or reinvestment projects, Powerlink is able to use predictive modelling or trend analysis techniques by identifying an efficient base trend from historical project expenditure.

Powerlink will supplement this top-down approach with additional supporting information for a sample of expected future investments. We are working with customers and consumers to develop criteria to select these sample investments.

Detailed bottom-up analysis and justification is required and developed to support investment approval as part of business as usual once these investment needs are confirmed.