

Powerlink 2027-32 Revenue Proposal

Appendix 5.02

Forecast Operating Expenditure Methodology and Model



1. Purpose

Powerlink's operating expenditure (opex) enables the safe and reliable operation and maintenance of our network and other assets, as well as the business activities required to support those areas of work.

This chapter sets out our intended approach to forecasting operating expenditure in a manner that meets the requirements of the National Electricity Rules.

1.1. Operating expenditure categories

To forecast our operating expenditure, we have retained the same broad categories of operating expenditure as adopted for the 2022-27 regulatory period with the addition of Australian Energy Market Operator (AEMO) participant and cyber security fees in the Other operating expenditure category. This should assist the Australian Energy Regulator (AER) and stakeholders in understanding the nature of the forecast for the 2027-32 regulatory period. Figure 1 shows how our operating expenditure categories fit within the total operating expenditure framework.

Figure 1 - Operating expenditure categories

Total operating expenditure (opex)		
Controllable opex		Non-controllable opex
Direct operating and maintenance expenditure	Other controllable opex	Other operating expenditure
Field maintenance Operational refurbishment Maintenance support Network operations	Asset management support Corporate support	Insurances AEMC levy Debt raising Network support AEMO participant & cyber security fees

Our operating expenditure model presents the AER's allowance, historical and forecast operating expenditure consistent with the categories described in Figure 1.

1.2. Controllable – direct operating and maintenance expenditure

Controllable operating expenditure is the largest component of operating expenditure and relates to costs directly associated with maintaining and operating the network and key business support functions. The four elements of direct operating and maintenance costs are broken down for business-as-usual reporting and have been maintained for forecasting purposes.

1.2.1. Field maintenance

1. Includes all field activities to ensure plant can perform its required functions. There are four types of field maintenance: Routine maintenance - is defined by maintenance plans implemented in our corporate asset management system (SAP) for routine inspection, testing or servicing of plant and equipment.
2. Condition-based maintenance - usually evolves out of routine maintenance, where it is identified that the condition of plant or equipment is such that action must be taken to avoid future defects (e.g. equipment operating outside of tolerance limits).
3. Corrective maintenance - involves rectification of defects in plant or equipment that must be attended to preserve (personal or equipment) safety, manage environmental issues or return plant to service to reduce the impacts of network outages on customers.

Our Asset Maintenance Standard sets out the overarching principles which determine maintenance needs, plans and work program.

1.2.2. Operational refurbishment

Operational refurbishment involves activities that return an asset to its pre-existing condition or function, or activities undertaken on specific parts of an asset to return these parts to their pre-existing condition or function. These refurbishment activities do not involve increasing the capacity or capability of the plant or extending its working life beyond its original design (which would then be defined as capital reinvestment).

Operational refurbishment typically involves quite extensive works performed only once or twice over an asset's life which are of such complexity that they are delivered as an integrated project.

Our Asset Refurbishment Standard sets out the overarching principles which determine operational refurbishment needs, plans and projects.

1.2.3. Maintenance support

Maintenance support includes activities where maintenance service providers undertake asset support functions in the field such as engineering technical support and management of safety and environmental compliance, as well as non-field functions supporting maintenance activities for the operate/maintain phase of the asset life cycle, such as developing maintenance strategies, maintenance auditing and overall performance management.

1.2.4. Network operations

Network operations include the control centre functions as well as those additional activities required to ensure the safe, reliable and efficient operational management of the Queensland transmission network. There are four main functions carried out within network operations:

1. Real-time control room function - this is a 24-hour continuous requirement. Network operators provide the functions of network operation, coordination and support switching sheet preparation for all plant outages.
2. Operational planning and engineering support - includes operational planning, system security analysis, contingency and outage planning, customer negotiation on outages and switching sheet preparation for plant and network outages.
3. Technical support - for the Energy Management System (EMS) and supporting systems, and Supervisory Control and Data Acquisition (SCADA) systems – support functions such as EMS maintenance configuration, database management, hardware installation, software upgrade and maintenance.

4. Network performance - monitoring and reporting on network asset performance and condition, which includes response management, auditing network configurations and performing fault diagnosis.

1.3. Controllable - other controllable expenditure

1.3.1. Asset management support

Asset Management (AM) support includes those operational activities required to support the strategic development and ongoing asset management of the network. AM Support has three major sub-elements:

1. Network planning - includes analysing future network capability requirements to meet load driven risks and risks arising from the condition and performance of existing assets, developing network investment plans and joint planning activities;
2. Network development and regulatory support - includes our direct connect customer management, network pricing and regulatory functions; and
3. Operational support - includes the costs associated with the development of strategies, policies and procedures for the operational and security aspects of our network assets, and the management of land and community relationships.

1.3.2. Corporate support

Corporate support encompasses the support activities required by Powerlink to ensure adequate and effective corporate governance. Corporate Support has four major sub-elements:

1. Corporate support - provision of business administrative services to support our corporate operations.
2. Direct corporate support charges - direct charges component of corporate support incorporates the costs associated with corporate governance and corporate support.
3. Revenue reset costs - costs associated with the preparation of our Revenue Proposal and determination process.
4. IT support - includes the costs associated with the future strategy development, planning and support of our information technology infrastructure.

1.4. Non-controllable - other operating expenditure

Other operating expenditure is predominantly driven by exogenous factors that are generally outside our control (e.g. borrowing and insurance costs). Currently, other operating costs comprise five categories.

1.4.1. Insurances

Insurance includes both insurance premiums and a self-insurance allowance to provide cover for below deductible losses contained in our insurance portfolio, for which it is not efficient to procure additional insurance coverage.

1.4.2. Network support

Network support refers to costs associated with non-network solutions used by Powerlink as an efficient alternative to network augmentation or reinvestment. These costs can be for various services including inertia provision and system strength. From 2025/26, Powerlink will incorporate forecast system strength network

support payments in its prescribed transmission service prices for the relevant year, subject to the AER's approval via an annual network support pass-through application.

1.4.3. Debt raising

Debt raising costs relate to costs incurred by Powerlink over and above the benchmark debt margin approved by the AER. These costs are encountered when new debt is raised, or current lines of credit are renegotiated or extended.

1.4.4. Australian Energy Market Commission (AEMC) Levy

Since 2014/15, the *Electricity Act 1994*¹ has required electricity transmission networks in Queensland to pay a share of the State's cost to fund the AEMC.

1.4.5. AEMO Participant and Cyber Security Fees

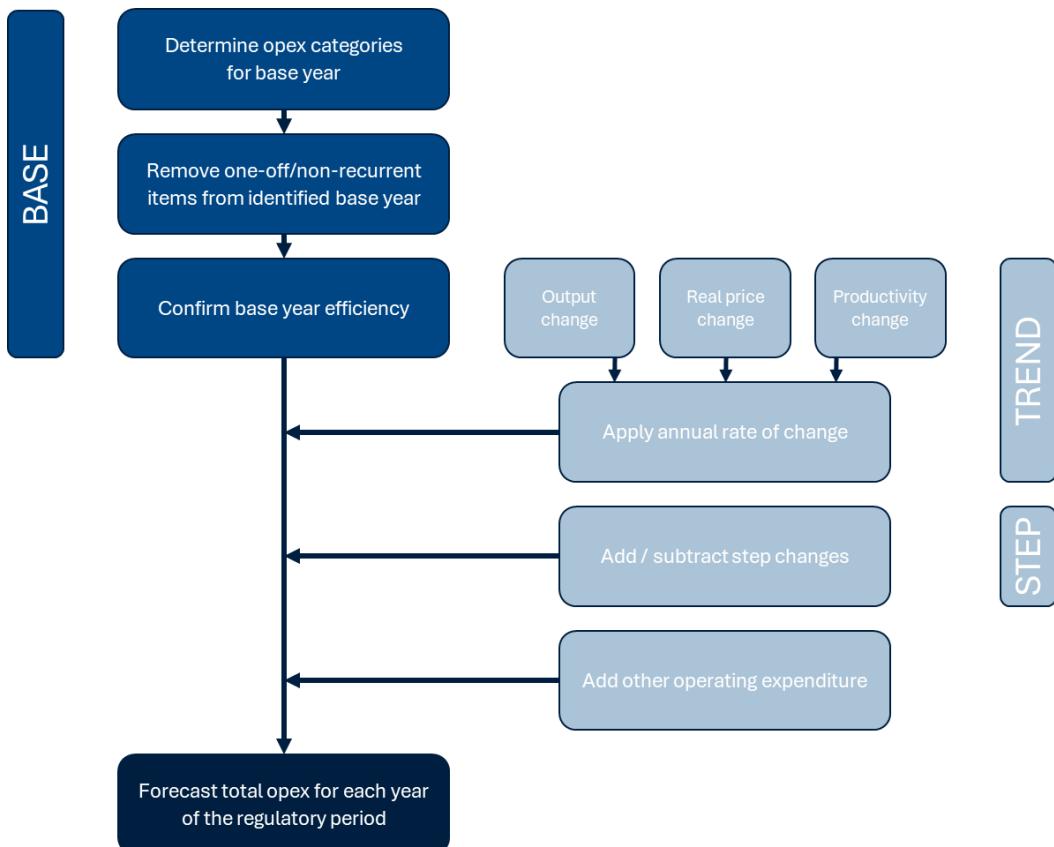
The AEMO participant fee is a charge imposed by AEMO to recover its efficient associated with performing core National Electricity Market (NEM) functions. It applies to all registered participants, including TNSPs. The AEMO cyber security fee is a charge introduced to recover the efficient costs of fulfilling its expanded cyber security responsibilities under the Rules.

¹ *Electricity and Other Legislation Amendment Bill 2014*, Queensland Government, Part 2, Amendment of Electricity Act 1994.

2. Operating expenditure forecasting methodology

The methodology used to prepare our operating expenditure forecast is summarised in Figure 2 and explained in the following sections.

Figure 2 - Powerlink's operating expenditure forecasting methodology



2.1.1. Overview of the base-trend-step model

The application of the base-trend-step approach first requires the selection of a base year that reflects the expenditure a prudent operator would require, considering a realistic expectation of the demand forecast and cost inputs to achieve the operating expenditure objectives.²

One-off or non-recurrent expenditure items are removed from the base year and further analysis of the recurrent expenditure undertaken (including trend analysis, category analysis and external benchmarking) to determine any adjustments required to the base year to establish an efficient level of ongoing recurrent expenditure.

We add or subtract any other costs (as base year adjustments or other operating (category-specific) expenditure) not captured in the base operating expenditure that are required to meet the operating objectives. An annual real rate of change factor is then applied to the controllable operating expenditure categories from the efficient base year, for each year of the forecast regulatory period. The annual real rate of change is a function of the forecast

² National Electricity Rules, clause 6A.6.6(c)

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change in real input costs (labour and materials), the forecast change in productivity, and the forecast change in network output.

An assessment of new or reduced requirements and other factors that may require a step change in controllable operating expenditure and zero-based estimates established for items in the other operating expenditure category. We have included three step changes for the 2027-32 regulatory period:

1. Uplift physical security
2. Transition to cloud-based computing solutions, and
3. Enhance overnight network monitoring.

The forecast of other operating (category-specific) expenditure is then added to the expenditure forecast established under the base-trend-step approach for controllable operating expenditure to produce total forecast operating expenditure for the 2027-32 regulatory period.

2.1.2. Application of forecasting methodology

Our forecasting methodology is based on the approach set out in the AER's Expenditure Forecast Assessment Guideline (EFA Guideline)³. The AER's base-trend-step methodology has been used for most operating expenditure categories, including the AEMC levy and insurances, with category-specific (or bottom-up) forecasts developed for the AEMO participant and cyber security fees, network support costs and debt raising costs.

Our forecasting approach is largely consistent with that used in our 2023-27 Revenue Proposal. The methodology for forecasting our insurance costs differs from what was proposed in our Expenditure Forecasting Methodology submitted to the AER in June 2025 (refer Appendix 4.03 Expenditure Forecasting Methodology). Following engagement with our customers, we decided to trend our insurance costs instead of including them as a category specific forecast.

The breakdown of operating expenditure categories by forecasting method is shown in *Figure 3*.

Figure 3 - Operating expenditure category by forecasting method

		Total operating expenditure (opex)		
High-level operating expenditure categories	Controllable opex		Non-controllable opex	
	Direct operating and maintenance expenditure	Other controllable opex	Other operating expenditure	
Forecasting method	Base year trended			Category specific
	Field maintenance Operational refurbishment Maintenance support Network operations	Asset management support Corporate support	Insurances AEMC levy	Debt raising Network support AEMO participant & cyber security fees

³ Expenditure Forecast Assessment Guideline for Electricity Transmission, Australian Energy Regulator, October 2024-.

3. Forecast operating expenditure model

3.1. General model inputs

Our operating expenditure model includes several general inputs for the purposes of modelling forecast expenditure:

1. *Inflation (Input/Inflation and Input/Rate of change)* - To enable the forecast and historical data to be presented on the same basis, the Operating Expenditure Model applies Consumer Price Index (CPI) (June - June) to convert, as required, from:
 - real to real (end-of-year); and
 - nominal (mid-year) to real (end-of-year).
2. *AER allowance (Input/Reported opex – Opex allowances)* - the Operating Expenditure Model incorporates the AER's operating expenditure allowance for the current 2022-27 regulatory period (expressed in end year \$2021/22).
3. *Historical operating expenditure (Input/Reported opex – Reported opex)* - the forecast operating expenditure model presents actual operating expenditure for the current regulatory period (expressed in nominal \$'s), including the proposed 2025/26 base year.

3.2. Establishing the efficient base year

Consistent with our operating expenditure forecasting methodology, we have selected the 2025/26 financial year as the base year for our forecast operating expenditure. This base year has been selected as it is reflective of a typical year of operations. A forecast of our base year has been used for this Revenue Proposal. We will reflect the revealed cost for our base year in our Revised Revenue Proposal in December 2026, as is the AER's preference.

Expenditure in the base year has been reviewed and items removed that are non-recurrent or not considered to reflect an efficient level of recurrent controllable operating expenditure based on a range of analysis techniques (including trend analysis, category analysis and independent benchmarking advice).

Adjustments that have been made include:

- A minor adjustment of \$0.26m (nominal 2026) has been made to remove non-recurrent expenditure associated with operational technology licences which will no longer be needed in the future.
- An adjustment of \$5.8m (nominal 2026) has been made to remove additional costs included in the base year for preparing the revenue proposal.

In the forecast operating expenditure model, the worksheet *Input/Reported opex* in Figure 4 records the adjustment made to controllable operating expenditure. These adjustments are reported in nominal \$.

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Figure 4 - Base Year Adjustments

Input Adjustments				Jun 2026	Jun 2027
Adjustment	Source	Unit	Basis		
OT Licensing adjustment	External	\$millions	nominal	-0.26	-0.27
Revenue Reset adjustment	External	\$millions	nominal	-5.76	-5.94
	External	\$millions	nominal		
	External	\$millions	nominal		
	External	\$millions	nominal		
Non-recurrent efficiency gain in the base year	External	\$millions	nominal		
Efficiency adjustment	External	Per cent			

Source: Powerlink operating expenditure model

3.3. Final Year Increment

Final year operating expenditure was calculated by adding the final year increment to the efficient base year. The final year increment is the difference between the operating expenditure allowance for the final year of the 2022-27 regulatory period (considering only base-trend-step expenditure categories) and the operating expenditure of the efficient base year within the 2022-27 regulatory period (2025/26). The final year increment is -\$0.03m (real \$, 2027).

3.4. Determine annual real rate of change

This section describes how the annual real rate of change is determined within the Operating Expenditure Model and applied to establish forecast controllable operating expenditure. The real annual rate of change function is described in Figure 5.

Figure 5 - Real annual rate of change function



We have defined the parameters and calculation of the annual real rate of change in the *Input/Rate of Change* worksheet in the forecast operating expenditure model.

3.4.1. Forecast output growth change

Output change is the expected change in the following measures of network output identified by the AER in its EFA Guideline:

- energy throughput;
- ratcheted maximum demand;
- number of customers; and
- circuit length.

These network output measures are utilised in AER benchmarking and are exclusive of productivity and price impacts.

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In the *Input/Rate of Change* worksheet, we developed a forecast for these quantities over the 2027-32 regulatory period, described as output measures. The annual rate of change for each of these quantities is calculated within the *Input/Rate of Change* worksheet, to derive the growth factor for each year of the forecast.

The methodology applied to derive each output measure forecast quantity is described below.

Energy throughput

Our energy forecasts are based on Australian Energy Market Operator's (AEMO's) 2025 Electricity Statement of Opportunities (ESOO) report.

Ratcheted maximum demand

Ratcheted Maximum Demand is the ratcheted coincident maximum demand is the greatest total demand at any one time, measured in MW. This information is sourced from the Step Change Scenario of AEMO's 2025 ESOO report.

Number of Customers

Powerlink's customer numbers are based on an aggregate of customers from the Distribution Network Service Providers (DNSP), Ergon Energy and Energex, identified in the AER's 2025-30 Final Decision models. For 2026-27, Ergon Energy and Energex's customer numbers were trended based on a simple linear regression. We then added our own directly connected customers for the 2027-32 regulatory period.

Circuit length

We have forecast a small increase in circuit length over the 2027-32 regulatory period and have adjusted the forecast of circuit kilometre length to reflect planned line decommissioning over the 2027-32 regulatory period.

In the *Input/Rate of Change* worksheet (Figure 6), weightings are applied to each growth rate in accordance with the factors described by the AER in its Multilateral Total Factor Productivity (MTFP) analysis.⁴ This results in a weighted annual forecast of output growth change for the 2027-32 regulatory period.

⁴ Annual Benchmarking Report – Electricity Transmission Network Service Providers, Australian Energy Regulator, November 2025.

Figure 6 - Output growth

Input Forecast output growth									
Output measure	Source	Unit	Basis	Jun 2027	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Energy throughput (GWh)	external	number	n/a	51447806	51603226	51994306	53022476	54945666	57713150
Ratcheted Maximum Demand (MW)	external	number	n/a	11214	11332	11504	11694	11980	12414
Customer numbers (#)	external	number	n/a	2490051	2516341	2542425	2568204	2594966	2621337
Circuit Length (km)	external	number	n/a	14479	14479	14479	14479	14481	14488
Check	calculated	Ok/Check	n/a	OK	OK	OK	OK	OK	OK
Growth rate	Source	Unit	Basis	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032	
Energy throughput (GWh)	calculated	number	n/a	0.30%	0.76%	1.96%	3.56%	4.91%	
Ratcheted Maximum Demand (MW)	calculated	number	n/a	1.04%	1.51%	1.64%	2.42%	3.58%	
Customer numbers (#)	calculated	number	n/a	1.05%	1.03%	1.01%	1.04%	1.01%	
Circuit Length (km)	calculated	number	n/a	0.00%	0.00%	0.00%	0.01%	0.05%	
Output weights	Source	Unit	Basis	MPPF					
Energy throughput (GWh)	external	number	n/a	9.45%					
Ratcheted Maximum Demand (MW)	external	number	n/a	28.69%					
Customer numbers (#)	external	number	n/a	9.32%					
Circuit Length (km)	external	number	n/a	52.54%					
Check	calculated	Ok/Check	n/a	OK					
Forecast output growth	Source	Unit	Basis	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032	
MPPF	calculated	number	n/a	0.43%	0.60%	0.75%	1.13%	1.60%	

Source: Powerlink Operating Expenditure Model

3.4.2. Forecast price change

In determining aggregate real input escalation forecasts, we applied a weighting of 70.4% for labour and 29.6% for materials. These weightings reflect those that have been applied by the AER and their consultant (Economic Insights) in Annual TNSP Benchmarking Reports since 2017⁵. We have investigated the appropriateness of this weighting and found that this is consistent with the split of labour and materials costs in our historical controllable operating expenditure. Accordingly, we have applied these weightings to develop our real input escalation forecasts for the 2027-32 regulatory period. Application of these weightings to the real labour and materials price growth results in an average real price change of 0.78% over the 2027-32 regulatory period.

Labour input price change

Our forecast of labour input price changes is based on a simple average of two Wage Price Index (WPI) forecasts:

- An independent forecast of Electricity, Gas, Water and Waste Services (EGWWS) WPI for Queensland developed by Oxford Economics Australia (OEA).
- The Deloitte Access Economics (DAE) National Utilities WPI forecast prepared for the AER for the final decision on Distribution Network Service Providers (DNSPs) Ergon Energy and Energex in March 2025⁶.

Our approach to forecasting WPI is detailed in Chapter 6 Escalation Rates and Project Cost Estimation.

As these forecasts are projections of the changes in the price of labour and not the cost of labour, they do not compensate for any form of labour productivity change.

⁵ Economic Benchmarking Results for the Australian Energy Regulator's 2020 TNSP Annual Benchmarking Report, Economic Insights, October 2020, page 62.

⁶ Labour price growth forecasts, Deloitte Access Economics, March 2025.

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The labour input price changes are recorded as the Average WPI – OEA & DAE in the *Input/Rate of Change* worksheet (Figure 7).

Non-labour input price change

We have applied a real price growth of zero to the non-labour component of the price change, consistent with the AER's preferred approach⁷.

The non-labour input price changes are defined as Non-labour in the *Input/Rate of Change* worksheet.

Based on the weightings determined for labour and non-labour price growth an aggregate forecast for real input growth is derived in accordance with the Real Price Change shown in the *Input/Rate of Change* worksheet (Figure 7).

Figure 7 - Forecast real price change

Input Forecast price change			Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032	
Forecast price change	Source	Unit	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032	
WPI - OEA	external	Per cent	1.30%	1.40%	1.60%	1.60%	1.30%	
WPI - DAE	external	Per cent	0.70%	0.60%	0.90%	0.81%	0.82%	
Average WPI - OEA & DAE	external	Per cent	1.00%	1.00%	1.25%	1.20%	1.06%	
	external	Per cent						
	external	Per cent						
	external	Per cent						
	external	Per cent						
	external	Per cent						
Non-labour	external	Per cent	0.00%	0.00%	0.00%	0.00%	0.00%	
Check	calculated	Ok/Check	n/a	Ok	Ok	Ok	Ok	
Weights	Source	Unit	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032	
WPI - OEA	external	Per cent	0.00%	0.00%	0.00%	0.00%	0.00%	
WPI - DAE	external	Per cent	70.40%	70.40%	70.40%	70.40%	70.40%	
Average WPI - OEA & DAE	external	Per cent						
	external	Per cent						
	external	Per cent						
	external	Per cent						
	external	Per cent						
Non-labour	external	Per cent	29.60%	29.60%	29.60%	29.60%	29.60%	
Check	calculated	Ok/Check	n/a	Ok	Ok	Ok	Ok	
Forecast price growth	Source	Unit	Basis	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Forecast price growth	calculated	Per cent	n/a	0.70%	0.70%	0.88%	0.85%	0.75%

Source: Powerlink Operating Expenditure Model

3.4.3. Forecast productivity change

We have proposed a productivity factor of 0.42% per annum, in accordance with the AER's benchmark industry average⁸.

The annual productivity change factor is defined as Productivity Change in the *Input/Rate of Change* worksheet shown in Figure 8. This productivity measure does not include any productivity change compensated for by the labour price measure used to forecast the change in the price of labour.

Figure 8 - Forecast productivity change

Input Forecast productivity			Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Partial factor productivity	Source	Unit	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Partial factor productivity	external	Per cent	0.42%	0.42%	0.42%	0.42%	0.42%

Source: Powerlink Operating Expenditure Model

⁷ Better Resets Handbook, Australian Energy Regulator, July 2024, p.25.

⁸ Annual Benchmarking Report – Electricity Transmission Network Service Providers, Australian Energy Regulator, November 2025.

3.5. Define step changes and other operating expenditure

3.5.1. Step Changes

Under the EFA Guideline, the AER's approach is to separately assess the prudence and efficiency of forecast cost increases or decreases associated with new regulatory obligations and capital and operating expenditure trade-offs (step changes). Powerlink has assessed the requirement for step changes and has proposed three step changes for the 2027-32 regulatory period. Expenditure identified for step changes in controllable operating expenditure are summarised in the *Input/Step Changes* worksheet (Figure 9). Further details on the calculation of the step changes are included on the *Input/PQ* worksheet.

Figure 9 - Step changes

Source: Powerlink operating expenditure model

3.5.2. Other Operating Expenditure

For other operating expenditure, we have applied a zero-based forecasting approach. A zero-based approach uses an external or bottom-up cost build to estimate the total cost of a particular activity. *Figure 9**Figure 10* illustrates the forecast of other operating expenditure as part of the *Input/Step Changes* worksheet in the forecast operating expenditure model.

Chapter 5 Operating Expenditure of our Revenue Proposal provides further explanation about how these forecasts have been derived.

Figure 10 - Category-specific items

Input Category specific forecasts				Source	Unit	Basis	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Category specific forecasts											
AEMO Participant and Cyber Security Fees	NSP	\$millions	Jun 2027				15.02	15.50	16.00	16.51	17.04
	NSP	\$millions	Jun 2027								
	NSP	\$millions	Jun 2027								
	NSP	\$millions	Jun 2027								
	NSP	\$millions	Jun 2027								
Check	calculated	Ok/Check	n/a				Ok	Ok	Ok	Ok	Ok
Input Debt raising costs				Source	Unit	Basis	Jun 2028	Jun 2029	Jun 2030	Jun 2031	Jun 2032
Debt Raising Costs											
Debt raising costs	PTRM	\$millions	Jun 2027				4.30	4.35	4.41	4.42	4.48
Check	calculated	Ok/Check	n/a				Ok	Ok	Ok	Ok	Ok

Source: Powerlink Operating Expenditure Model

3.6. Total forecast operating expenditure

Total forecast operating expenditure is presented in the *Calc/Opex Forecast* worksheet. This worksheet consolidates the following input data to derive the controllable and total operating expenditure forecast for the 2027-32 regulatory period:

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- *Input/Inflation* – used to adjust the 2025/26 base year nominal (mid-year) operating expenditure to real 2026/27 (end-year);
- *Input/Reported opex* – provides the 2025/26 base year total operating expenditure and other operating expenditure and adjustments for controllable operating expenditure in the 2025/26 efficient base year;
- *Input/Rate of Change* – provides the final year increment and the rate of change factors to be applied to controllable operating expenditure from the 2025/26 efficient base year; and
- *Input/Step Changes* – provides zero-based forecasts for step changes in controllable operating expenditure and other operating expenditure that are added to the underlying trend of controllable operating expenditure.

The following steps are carried out in the *Calc/Opex Forecast*:

1. Other operating expenditure and base year adjustments are identified from the total operating expenditure for the 2025/26 base year to ensure an efficient base year controllable operating expenditure (nominal).
2. Nominal (mid-year) expenditure for the efficient base year controllable operating expenditure is converted to real (end-of-year) 2026/27 using inflation factors derived from the *Input/Rate of change* worksheet.
3. A final year value for operating expenditure is estimated by adding the final year increment to the efficient base year.
4. A total rate of change for output growth, price growth and productivity is applied to the estimated final year operating expenditure from 2027/28 to 2031/32.
5. Step changes and other operating expenditure defined in the *Input/Step Changes* worksheet (Figure 9) are added to the controllable operating expenditure forecast, resulting in total forecast controllable operating expenditure.