



# Customer & Consumer Panel

25 February 2016



# Agenda

- Introductions
- Key aspects of Powerlink's Revenue Proposal
- Afternoon tea
- Group discussion on Revenue Proposal
- Engagement topics for 2016
- Group discussion to identify and prioritise engagement topics





# 2018-22 POWERLINK QUEENSLAND REVENUE PROPOSAL

# Overview

- Revenue and price
- Forecast operating expenditure
- Forecast capital expenditure
  - Repex modelling
- Consumer engagement
- Overall snapshot

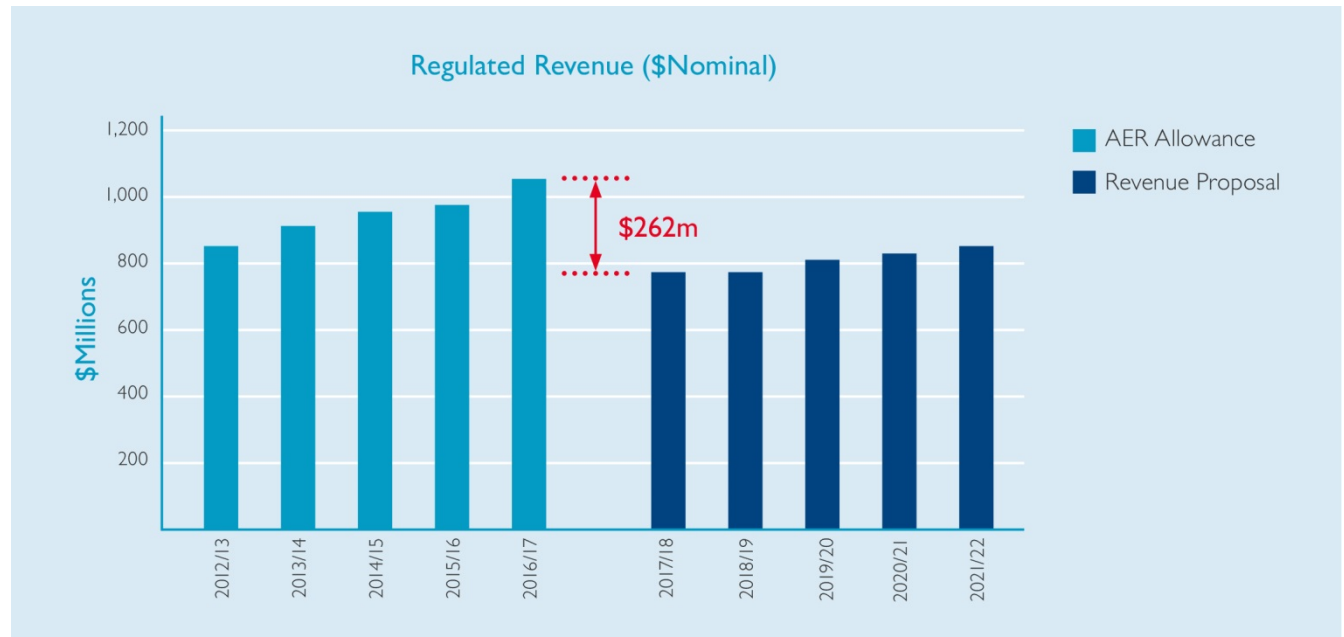
# Maximum Allowed Revenue



## Maximum Allowed Revenue

↓ **14%** lower in the 2018-22 regulatory period compared to the 2013-17 regulatory period

↓ **25%** lower regulated revenue in the first year of the 2018-22 regulatory period



# Indicative Transmission Price



## Electricity Prices

↓ **28%** drop in indicative transmission price in the first year of the 2018-22 regulatory period

Between  
↓ **\$22 and \$37** savings for the average Queensland residential household annual electricity bill

		Current Regulatory Period		Next Regulatory Period
		2015/16	2016/17	2017/18
Average annual residential electricity bill* (based on annual usage range of 2,500kWh and 5,173 kWh)	Transmission Component	\$77 - \$129	\$80 - \$134	\$58 - \$97 (-28%)
Average annual business electricity bill* (based on annual usage range of 10,000kWh and 20,000 kWh)	Transmission Component	\$270 - \$470	\$280 - \$488	\$203 - \$353 (-28%)

\*The transmission component represents around 9% of the total delivered cost of electricity for the typical Queensland residence and business

# Key Drivers



## Rate of Return

↓ **8.61%** in 2013-17 regulatory period

↓ **6.04%** estimate for start of 2018-22 regulatory period



## Forecast Capital Expenditure

↓ **31%** lower compared to actual capital expenditure in the 2013-17 regulatory period



## Forecast Operating Expenditure

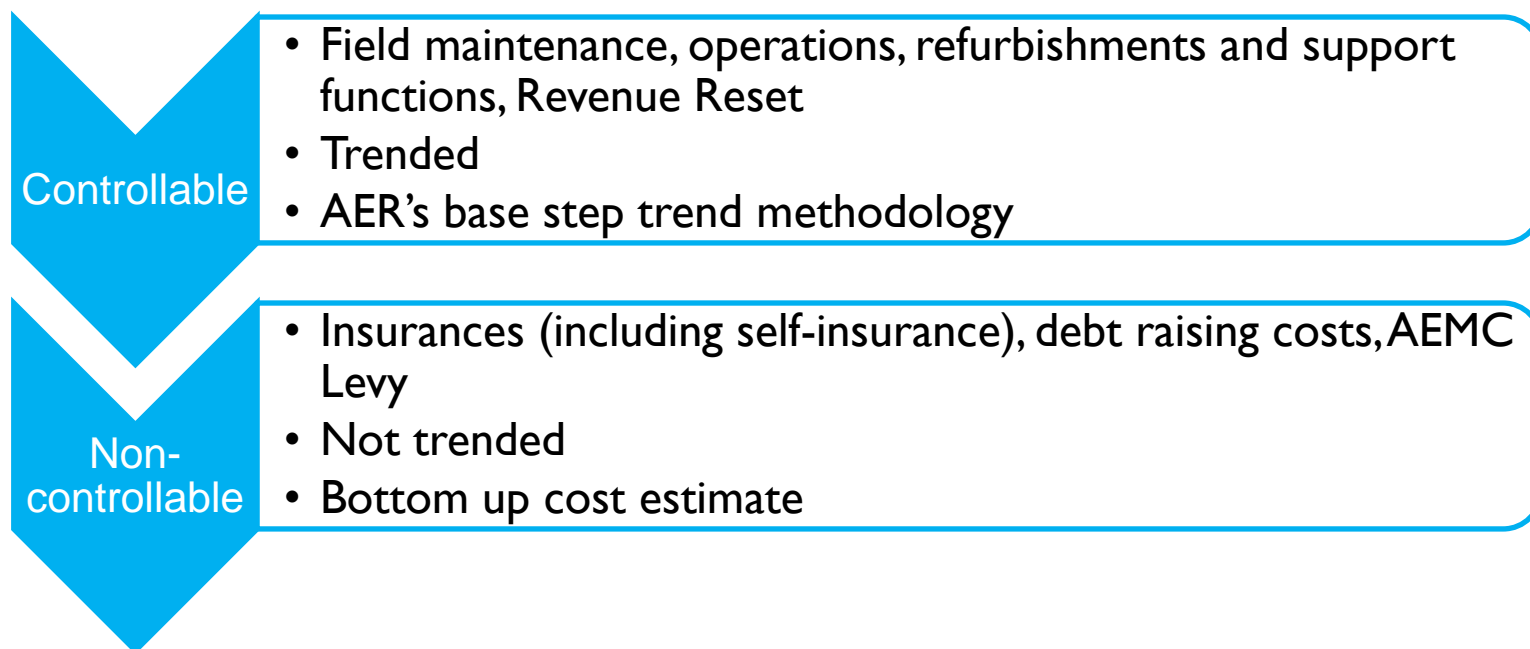
↓ **7%** lower compared to actual operating expenditure in the 2013-17 regulatory period



# **FORECAST OPERATING EXPENDITURE**

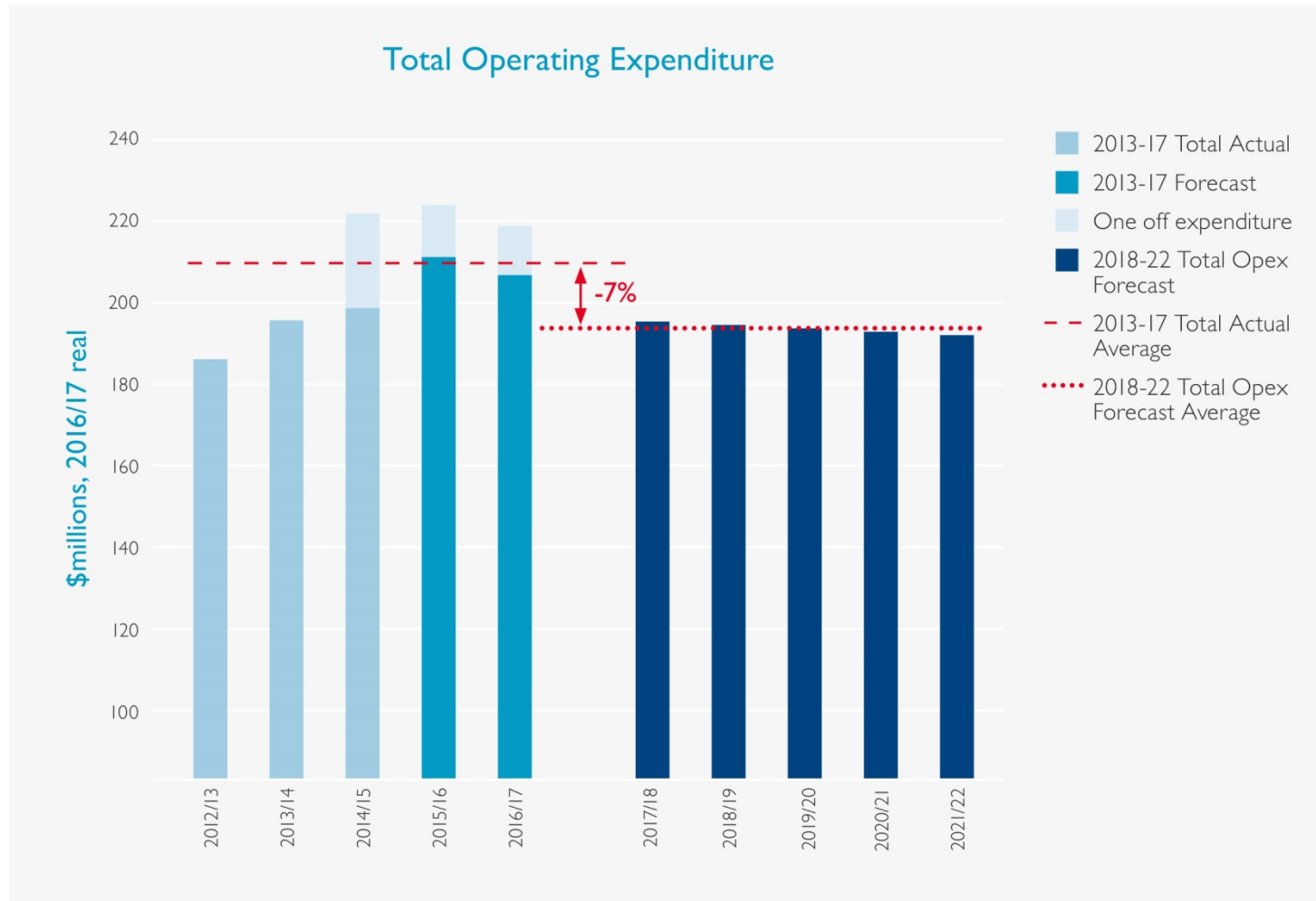


# Approach



- **Base-step-trend methodology** approach:
  - Determine an efficient base year
  - Rates of change applied annually to base year for trending
  - Step changes above this trend separately identified and justified

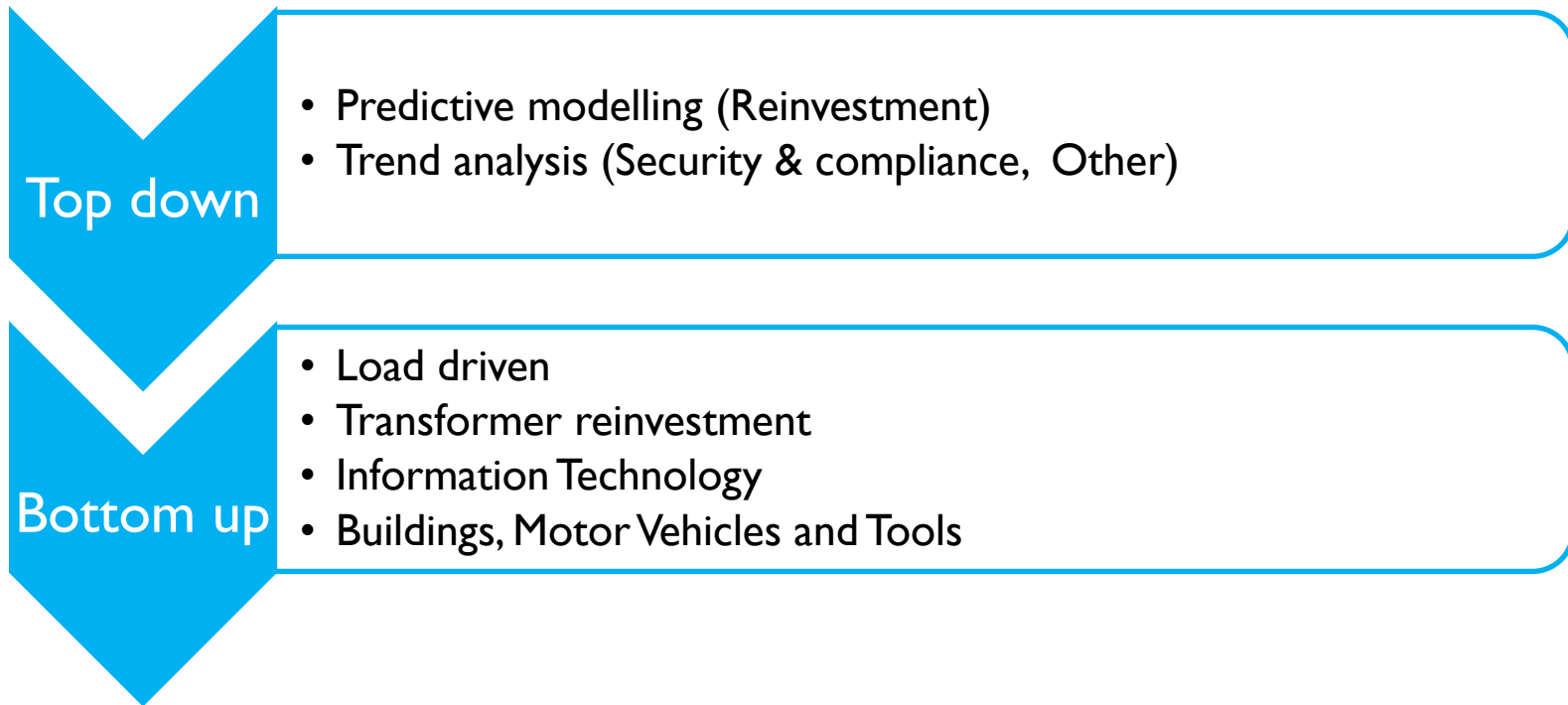
# Forecast Operating Expenditure



# FORECAST CAPITAL EXPENDITURE

# Approach

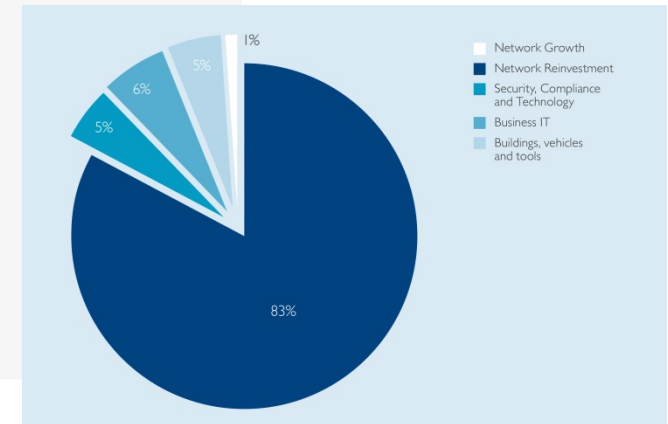
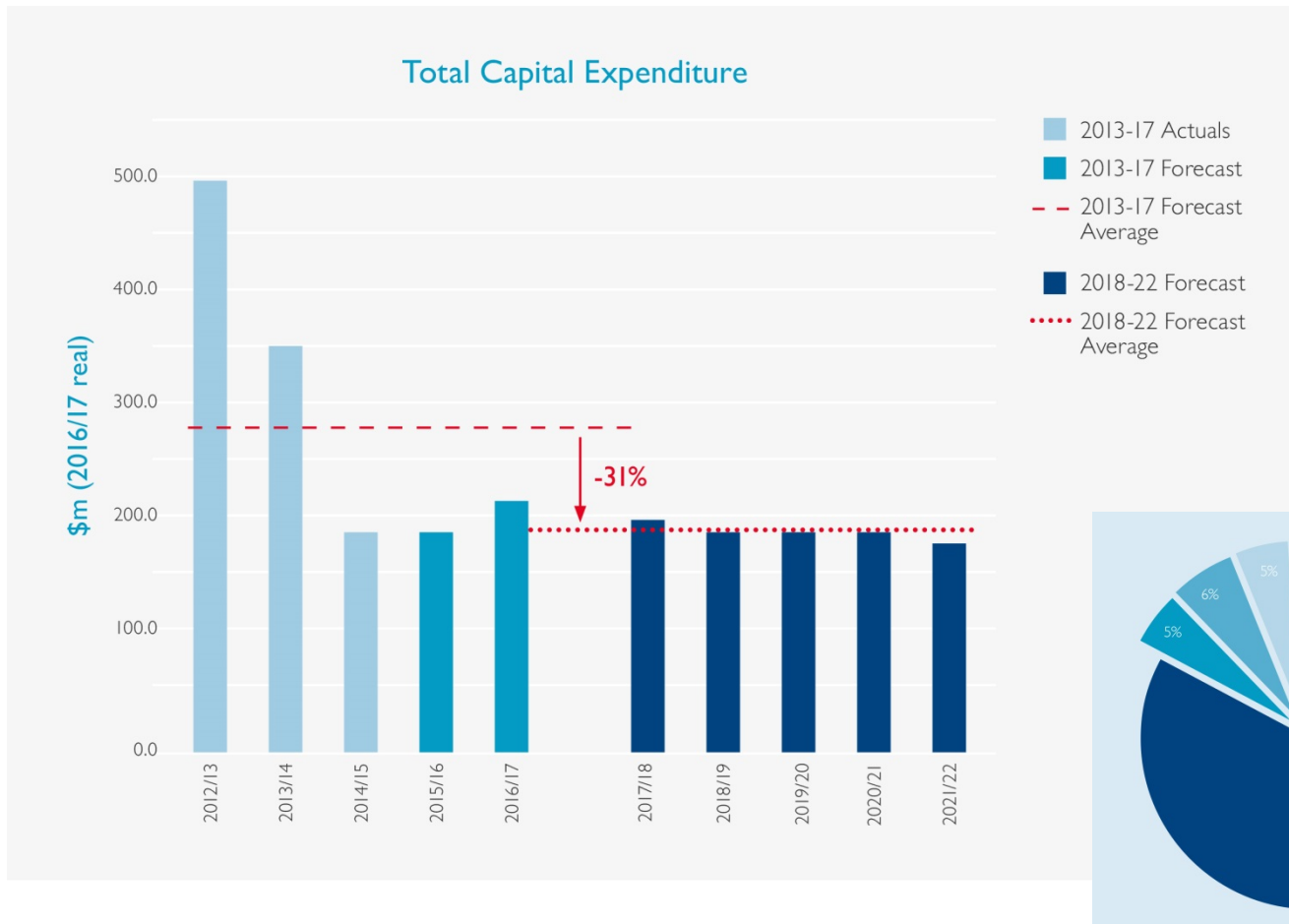
- Hybrid forecasting approach



- Further information on Capital Expenditure Forecasting Methodology and Repex Model on Powerlink's [website](#)



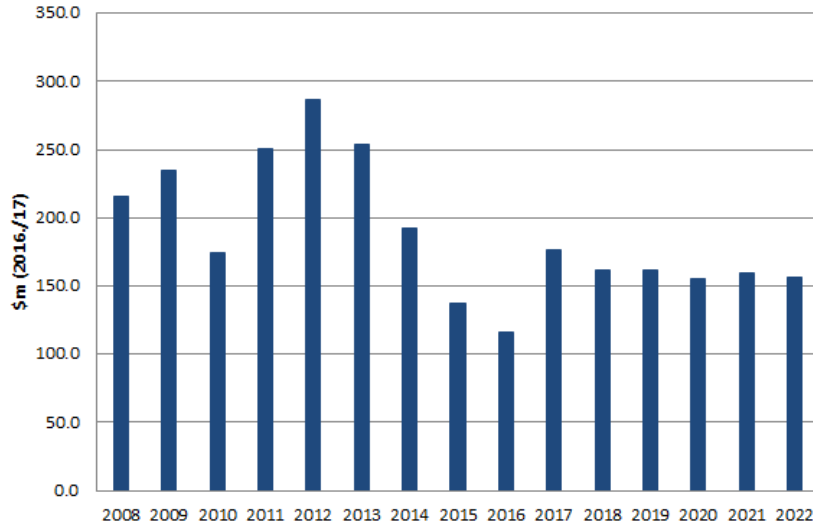
# Forecast Capital Expenditure





# Forecast Reinvestment

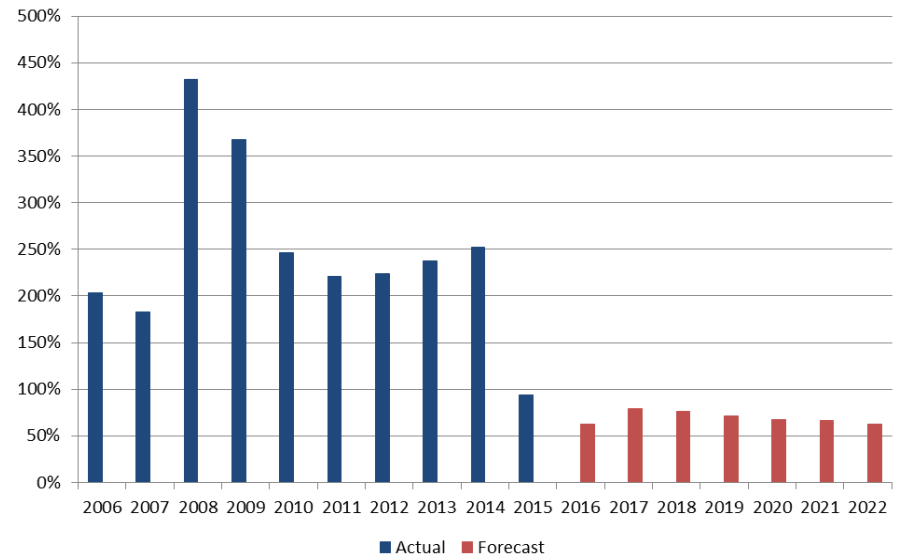
Reinvestment expenditure (\$m, 2016/17)



- Forecast additions to RAB less than straight line depreciation. Real value of RAB is reducing.

- Forecast reinvestment reduced and relatively constant

Additions to RAB/straight-line depreciation (%)



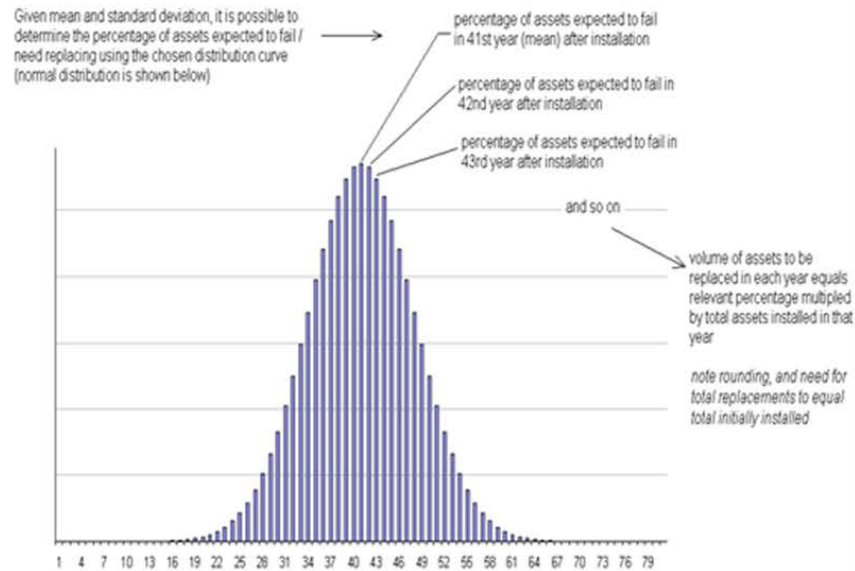


# REPEX MODELLING

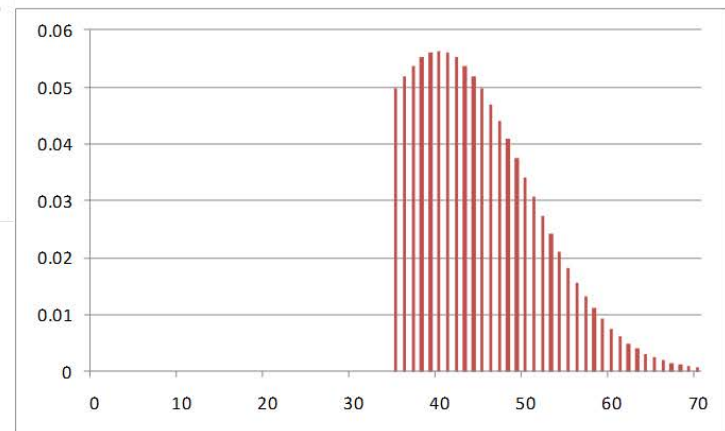
# Repex Model

- Powerlink Repex Model – based on the AER's repex model
- Predictive model of future reinvestments based on statistical analysis.
- For each asset category for each year in the forecast the model analyses the whole population to derive the probability for reinvestment in that year and the quantity for reinvestment.

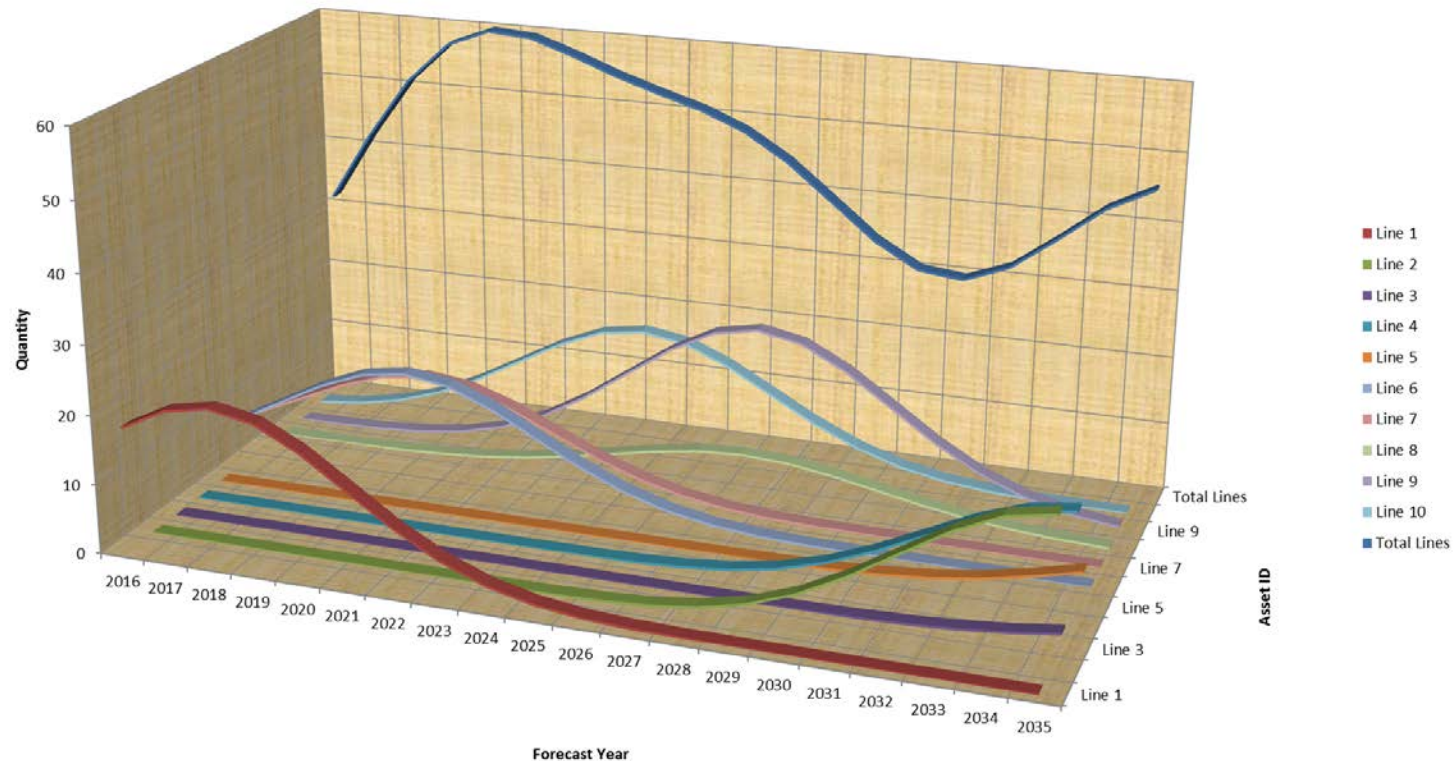
# Repex Model – model for a single asset type of a single asset age



Source: Repex model handbook.



# Repex Model – model for a single asset type with varying ages



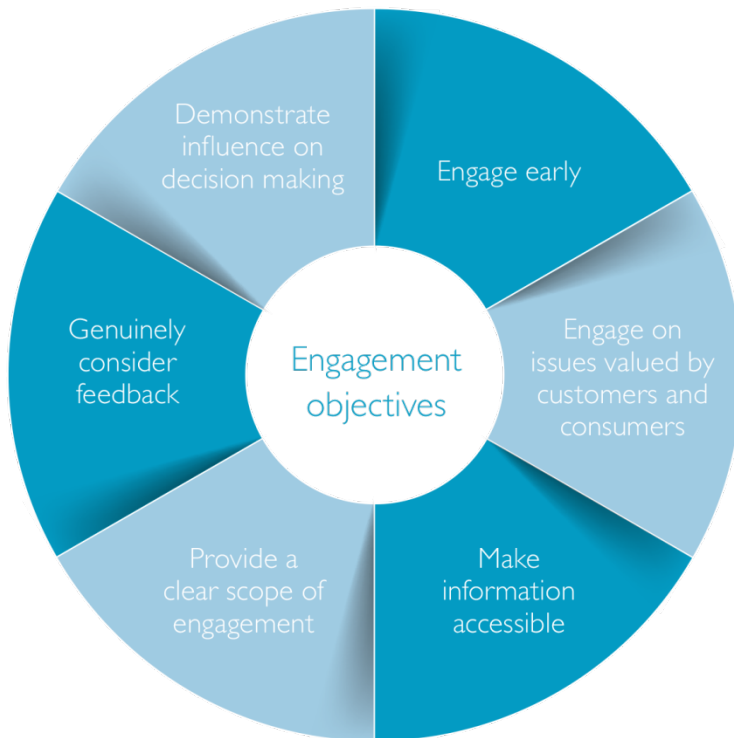


# Repex Model – Powerlink Usage

- Starting point is the audited RIN data
- Data is then transformed to model Powerlink's asset management planning and practices. For example:
  - Transmission towers – categorised into varying environmental zones to model differing rates of deterioration due to corrosion
  - Assets identified as having no enduring need have been removed from the population – can't influence the forecast
  - Historical reinvestment quantities reviewed so that only condition based reinvestment drivers are counted
- These data adjustments reduce the forecast from what the raw RIN data would suggest



# CONSUMER ENGAGEMENT



**Capital expenditure** – enduring need for assets, extent of bottom up supporting information, repex model enhancements

**Operating expenditure** - use of benchmarking, individual line item efficiency analysis and more detailed evaluation of the efficient base year

**Demand and energy forecasting** – improved approach to demand and energy forecasting with impacts of new technology such as battery storage included for the first time

**Network planning** – input to Greater Brisbane area plan with outcome to maintain flexibility at lowest costs in the short to medium term

**Engagement approach** – engage through face-to-face activities with a focus on areas that have greatest impact on electricity prices

# GROUP DISCUSSION

# Group Discussion

Break into two small groups

Want to hear your views on our Revenue Proposal:

“What aspects are and are not in-line with your expectations?”



# REVENUE PROPOSAL SNAPSHOT

Element	Commentary on approach
Consumer engagement	<ul style="list-style-type: none"> <li>• Applied AER guideline and IAP2 principles</li> <li>• Targeted early involvement</li> </ul>
Rate of return	<ul style="list-style-type: none"> <li>• Applied AER Rate of Return Guideline</li> <li>• Reserving rights to update based on Tribunal outcome</li> </ul>
Operating expenditure	<ul style="list-style-type: none"> <li>• Applied AER's base step trend approach</li> <li>• Differences use of revealed costs – links to EBSS</li> <li>• Treatment of non-controllable expenditure</li> </ul>
Capital expenditure	<ul style="list-style-type: none"> <li>• Applied hybrid forecasting approach</li> <li>• Applied AER's Repex Model and base step trend methodology</li> </ul>
Cost escalation	<ul style="list-style-type: none"> <li>• Consistent with AER's approach and decisions               <ul style="list-style-type: none"> <li>• CPI for materials</li> <li>• Simple average of independent labour forecasts</li> </ul> </li> </ul>
Depreciation	<ul style="list-style-type: none"> <li>• Applied standard regulatory depreciation</li> </ul>
Expenditure incentive schemes – current period	<ul style="list-style-type: none"> <li>• Applied AER's EBSS version 1 model</li> <li>• Additional exclusions proposed.</li> </ul>
Expenditure incentive schemes – next period	<ul style="list-style-type: none"> <li>• Consistent with Framework and Approach Paper (EBSS version 2 and CESS version 1)</li> </ul>

Element	Commentary on approach
Service target performance incentive scheme	<ul style="list-style-type: none"> <li>• Consistent with version 5 STPIS released October 2015</li> </ul>
Pass through events	<ul style="list-style-type: none"> <li>• Three events consistent with AER's recent decisions</li> </ul>
Shared assets	<ul style="list-style-type: none"> <li>• Applied AER's Shared Asset guideline</li> </ul>
Pricing methodology	<ul style="list-style-type: none"> <li>• No material change</li> </ul>
Negotiating framework	<ul style="list-style-type: none"> <li>• No material change</li> </ul>

# ENGAGEMENT TOPICS 2016

# Potential engagement topics

- Cost efficiency
- Definition of a 'vulnerable customer'
- Community safety around our infrastructure
- Criteria and options for network planning
- Powerlink's role in renewable energy



# GROUP DISCUSSION

# Group Discussion

Break into two small groups – three tasks

1. What other topics do you want to discuss in 2016?
2. What speakers (both from Powerlink and outside) do you want to hear from?
3. Prioritise your top three topics



Thanks and close