

2018-22

POWERLINK QUEENSLAND REVENUE PROPOSAL

APPENDIX 6.02 - PUBLIC

Finity Consulting
Insurance Premium Projections 2017/18 to 2021/22

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Delivering better value



Insurance Premium Projections 2017/18 to 2021/22

Powerlink Queensland

January 2016

28 January 2016

Mr Greg Bolton
Manager Governance & Risk
33 Harold Street
Virginia QLD 4014

Dear Greg

Insurance Premium Projections 2017/18 to 2021/22

In accordance with our proposal of 11 May 2015, we are pleased to enclose our report documenting our actuarial estimate of Powerlink Queensland's projected premiums for the regulatory period 2017/18 to 2021/22.

We confirm that we have made all the inquiries that we believe are desirable and appropriate and that no matters of significance that we regard as relevant have, to our knowledge, been withheld.

Please do not hesitate to contact either of us should you have any queries in relation to the report.

Yours sincerely

Mark Hurst

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Fellows of the Institute of Actuaries of Australia

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Insurance Premium Projections 2017/18 to 2021/22

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Part I Executive Summary

1 Introduction

Finity Consulting Pty Limited (Finity) has been engaged by Powerlink Queensland (Powerlink) to provide a forecast of their insurance premiums payable for the five year regulatory period spanning 2017/18 to 2021/22. Our advice has been prepared pursuant to our proposal dated 11 May 2015. We understand that our report will be provided to the Australian Energy Regulator (AER) as part of Powerlink's Regulatory Proposal.

We acknowledge that we have read, understood and complied with the Federal Court of Australia Practice Note CM7 "Expert Witnesses in Proceedings in the Federal Court of Australia". The advice set out in this report has been prepared by Mark Hurst and Adam Payne of Finity, both of whom are Fellows of the Institute of Actuaries of Australia. Our experience and qualifications are set out in Appendix A of this report. This report has been developed based on material provided by Powerlink, its Brokers, market research and relevant insurance and industry references.

This Executive Summary summarises the key findings of our work. The main body of the report provides a more complete description of our advice, including reliances and limitations, and should be read fully in order to place our findings in their appropriate context.

2 Background

In April 2011, Marsh Consultancy Services and Towers Watson provided Powerlink with the insurance premium forecasts for the 2012/13 to 2016/17 regulatory period, for:

- Professional Lines (contained in the Marsh report), and
- Property, Towers and Lines, and Liability classes of insurance (contained in the Towers Watson report).

We refer to these reports collectively as the previous insurance premium reports. The previous insurance reports formed the basis of Powerlink's submission for insurance costs included in the previous Regulatory Proposal, which was subsequently approved by the AER in its Determination.

3 Approach

Our forecast of Powerlink's insurance premiums for the next regulatory period is based on several sources of information including:

- Analysis of Powerlink's historical premiums by class of insurance, including a comparison of the actual premiums paid in recent years with the forecast premiums from the previous, 2012/13 to 2016/17, AER determination dated April 2012.
- Discussions with Powerlink regarding their proposed insurance arrangements during the regulatory period.
- Discussion with Powerlink's insurance brokers Marsh and CGNMB LLP regarding the potential future insurance arrangements for Powerlink, general market trends and their professional judgement on future premiums.

- A variety of market research which looks at market-wide historical insurance premiums by class of business and provides industry forecasts taking into account the insurance cycle. The research that we have relied on includes Finity and Deutsche Bank's joint publication Pendulum 2015/16, Pacific Insurance Market Report 2015 produced by Marsh and a Willis Insurance Industry Report.

4 Findings

Premium Forecasts

Table 1 shows a summary of our estimated annual cost of Powerlink's insurance premiums split between the various classes of risk that Powerlink intends to purchase insurance for during the next regulatory period (2017/18 to 2021/22).

Table 1 – Expected Insurance Costs (June 2017 dollars)

Insurance Year						Total Premium ¹ (\$000)
2017/18						7,945
2018/19						8,131
2019/20						8,294
2020/21						8,454
2021/22						8,652
Total Reset Premium	15,918	9,502	11,004	3,483	1,570	41,477

¹ Inclusive of stamp duty, GST and broker fees

Our forecast of Powerlink's insurance premiums for the next regulatory period commencing 1 July 2017 in July 2017 dollars is \$41.5 million inclusive of all costs such as GST, stamp duty and broker fees. The equivalent forecast in nominal dollars, assuming future inflation of 2.45% per annum, is \$44.1 million.

Excluding the Cyber premiums (which were not included in the previous Powerlink insurance premium submission), the forecast premiums are \$39.7 million, which is \$1.5 million less than the 2012/13 to 2016/17 determination (on a like for like basis). At the same time Total Insurable Values (TIV) have increased by between 7.5% per annum (in respect of property values) and 5.1% per annum (in respect of towers and lines values). The increase in TIV, together with the reduction in the total forecast premium means that we are forecasting a reduction in premium rates (premium divided by exposure) for 2017/18 to 2021/22 relative to the previous five year period 2012/13 to 2016/17.

The insurance industry is currently undergoing a competitive phase in terms of premiums. We expect the insurance market to remain in the "soft" phase of the cycle for the next two years (in the absence of any significant catastrophe events) before gradually moving towards a "harder" market with modest premium rate increases expected over the regulatory period 2017/18 to 2021/22.

Our estimate of the annual premium cost starts at \$8.0 million for 2017/18 and is expected to increase to \$8.7 million in 2021/22. The growth in the estimated premium reflects modest premium increases of around 2.2% per annum made up of 0.2% growth in real asset values and 2.0% increase in premium rates over the regulatory period.

5 Reliances and Limitations

Our estimates are based on best estimate assumptions and represent our current assessment of the likely future experience of Powerlink. Although the estimates we have prepared are best estimates, deviations of the actual experience from our estimates are normal and to be expected.

The reader's attention is drawn to the reliances and limitation of our advice as set out in Section 8 of this report.

Part II Detailed Findings

1 Introduction

Finity Consulting Pty Limited (Finity) has been engaged by Powerlink Queensland (Powerlink) to provide a forecast of their insurance premiums payable for the five year regulatory period spanning 2017/18 to 2021/22. Our advice has been prepared pursuant to our proposal dated 11 May 2015. We understand that our report will be provided to the Australian Energy Regulator (AER) as part of Powerlink's Regulatory Proposal.

In April 2011, Marsh Consultancy Services and Towers Watson provided Powerlink with the insurance premium forecasts for the 2012/13 to 2016/17 regulatory period, for:

- Professional Lines (contained in the Marsh report), and
- Property, Towers and Lines, and Liability classes of insurance (contained in the Towers Watson report).

We refer to these reports collectively as the previous insurance premium reports. The previous insurance reports formed the basis of Powerlink's submission for insurance costs included in the previous Regulatory Proposal, which was subsequently approved by the AER in its Determination.

1.1 Background

Powerlink is a government-owned organisation that owns Queensland's high-voltage electricity transmission network. The network extends 1,700 km from the northern NSW border up to far-north Queensland. Powerlink's main activity is transportation of electricity on its high-voltage transmission network from generators to an electricity distribution network and major high voltage customers. The AER sets allowable maximum revenue for TNSPs for each five year regulatory period.

1.2 Scope

The scope of our review is to provide estimates of the total premium payable by Powerlink across the five year period 2017/18 to 2021/22, with separate estimates for each year. The estimated costs provided are the insurance premiums payable plus an estimate of taxes, levies, GST and broker fees.

Our estimates include allowance for the following insurance classes:

- Industrial Special Risks (ISR)
- Towers and Lines
- General and Products Liability (combined liability)
- Financial Professional lines (FINPRO) including:
 - ▶ Directors and Officers
 - ▶ Employment Practices
 - ▶ Professional Indemnity
 - ▶ Corporate Practices Protection (Inquiry Costs & Statutory Liability)

- ▶ Cyber Insurance
- Other ancillary classes of insurance, including:
 - ▶ Motor Vehicle
 - ▶ Marine Cargo
 - ▶ Business Travel.

We have excluded the premiums for a number of other insurable risks for which Powerlink currently purchases insurance. Specifically, we have excluded the following groups of insurance:

- Contract Works and Construction Liability (Principal Controlled Insurance)
- Income Protection for Redundant Staff
- Workers Compensation.

1.3 Basis of Estimates

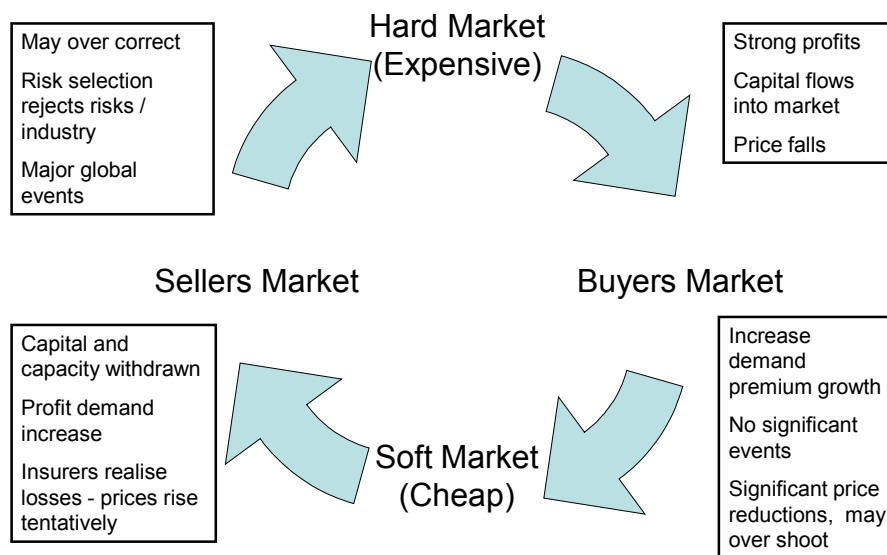
We have prepared our annual estimated premiums for Powerlink on the basis that they:

- In accordance with Australian actuarial professional standards the forecasts included in this report are central estimates (i.e. intended to be the mean value of the range of possible outcomes).
- Include an allowance for the projected growth in the asset values of Powerlink's insurable asset values over the regulatory period. The projected asset values were provided by Powerlink and show minimal to no growth over the regulatory period 2017/18 to 2021/22.
- Generally assume a relatively soft insurance market over the regulatory period 2017/18 to 2021/22 (see Section 1.4 below for more details). We have also assumed the absence of any significant catastrophe events that would likely have a significant effect on future premiums. The complex risk and specialised nature of energy industries mean that the insurance market is heavily influenced by global market trends, particularly with regards to catastrophic events.
- Include an allowance for all reasonably expected professional service costs (brokerage), statutory taxes, levies and GST. Our allowance for these costs has been based on the level of these costs included in the historical premiums. Powerlink use the services of two insurance brokers (Marsh and CGNMB LLP) for advice on the appropriateness of their insurance program and to source the most competitive rates available in the global market. Therefore, it is appropriate to include an allowance for these associated costs in the projected cost of insurance during the regulatory period.

1.4 Insurance Cycle

Insurance markets tend to move in cycles as characterised by the following diagram.

Figure 1.1 – Insurance Cycle



Periods of high premiums and high profits for insurers (a hard market) encourages more capital and new insurers into the market as more investors are attracted to the high returns on offer. This, in turn, increases competition in the market until premiums start to fall as insurers try to maintain market share by dropping rates. Rates are squeezed until profits start to dry up and capital is withdrawn from the market as investors look for “easier” money elsewhere (a soft market).

Generally, premium rates have been falling for most commercial classes of insurance since circa 2004 – i.e. a softening of the market. An absence of any significant catastrophic events and excess capacity in the market means that competition remains strong. This is good news for insurance buyers as:

- The supply of capital and appetite to take on risk remains strong. This means competition for business, particularly in commercial lines, is likely to remain a feature of the market.
- Insurers are now starting to offer enhanced coverage, lower deductibles and long-term agreements as further incentives for clients to purchase insurance.
- Financial security of insurers remains strong.

We expect that the insurance market will remain “soft” for the next couple of years (in the absence of any significant catastrophic events) before transitioning to a “harder” market and premium rate increases. On this basis we have assumed modest premium increases during the regulatory period 2017/18 to 2021/22 for most classes of insurance.

1.5 Structure of Report

Our premium forecasts are set out under the following headings:

- Section 2 – Industrial Special Risks
- Section 3 – Towers and Lines
- Section 4 – Public Liability

- Section 5 – Professional Lines (FINPRO)
- Section 6 – Ancillary Cover.
- Section 7 – Total Insurance Premiums
- Section 8 – Reliances and Limitations

2 Industrial Special Risks

Industrial Special Risks insurance provides cover for loss or damage to Powerlink owned property (including machinery breakdown).

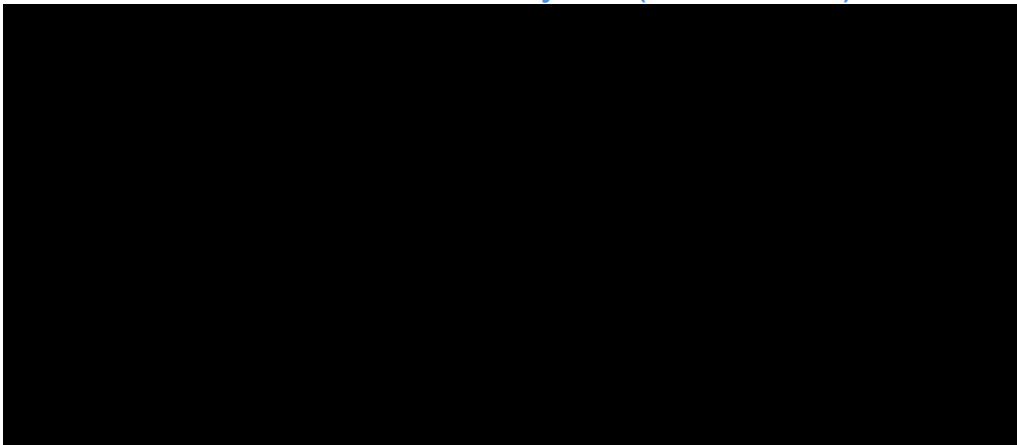
We understand from discussions with Powerlink's insurance broker CGNMB LLP (CGNMB) that Powerlink has a positive reputation with insurers with regards to its risk mitigation practices and has consequently successfully avoided many of the policy exclusions imposed on other TNSPs as a result of its lower risk profile relative to that of other TNSPs.

2.1 Historical Premiums

The following table summarises the details of the ISR policy over the last five years to 30 June 2015. The base premium is the amount payable to the insurer prior to the addition of stamp duty and GST. The total premium includes stamp duty, GST as well as broker fees.

Premium rates have been expressed as a percentage of Total Insurable Value (TIV). TIV is the total value of Powerlink's regulated property assets that are covered under the ISR policy. It is the total value of all Powerlink buildings and property (including substations); with the value directly affected by inflation, capital expenditure and asset write-off. TIV is considered a reasonable measure of exposure as claims experience and changes in premiums are related to movements in the assets underlying the exposure.

Table 2.1 – Insurance Summary – ISR (nominal dollars)



2.1.1 Deductible

The ISR policy is characterised by a [REDACTED] which means that Powerlink has a material interest in minimising claims costs through risk minimisation and risk mitigation strategies. Its claims experience also materially impacts the insurance premiums paid through the underwriting process undertaken by insurers.

2.1.2 Policy Limit

[REDACTED] The reduction in the limit of insurance followed a detailed modelling exercise by Powerlink that demonstrated that the Probable Maximum Loss (i.e. the PML, or the estimated value of the largest loss that could result from a disaster) was less than [REDACTED]. Powerlink took the decision to reduce the insurance limit on the back of this modelling on the grounds that the additional cover (and cost of insurance premiums) was not considered efficient and prudent.

2.1.3 Premium Rates

[REDACTED]

2.1.4 Comment on Insurance Program

[REDACTED]

[REDACTED]

Based on this analysis, we consider the current ISR insurance program to be adequate and provide an efficient and prudent coverage against Powerlink’s property exposures.

2.2 Insurance Losses

[REDACTED]

2.3 Premium Forecasts

Our ISR premium forecasts are derived by applying forecast premium rates to the projected TIV.

Powerlink provided us with a forecast of TIV for the regulatory period 2017/18 to 2021/22. The year on year increase in TIV represents replacement value (expected to increase with inflation) plus the increased value of the additional capital expenditure amounts during the year. The projected asset values form the exposure unit for our premium projections.

For the purpose of our projections, [REDACTED]

[REDACTED] Beyond that period, modest premium increases are expected as the market transitions from a “soft” to a “hard” phase in the insurance cycle.

¹ Pendulum July 2015 –industry analysis of insurance markets prepared by Finity Consulting and Deutsche Bank Markets Research
Pacific Insurance Market Report 2015 – Marsh Risk Management Research February 2015
Insurance News – Reinsurance rates to fall further: Guy Carpenter 20 July 2015

Table 2.2 – Premium Projection – Fire ISR (2017 dollars)

TIV is expected to increase in real terms by 2.2% in 2017/18 and around 0.5% per annum thereafter over the regulatory period. Real growth in the TIV,

Figure 2.2 shows the historical premiums for ISR and our forecast premiums for the upcoming regulatory period 2017/18 to 2021/22. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.

Figure 2.1 – ISR Premiums Forecast (nominal dollars)



Regulatory period
2017/18 to
2021/22

■ Historical Premium ■ Expected Premium ■ Forecast Premium

3 Towers and Lines

Towers and Lines insurance provides cover for loss or damage to Powerlink owned electricity towers, poles and lines (referred to as Towers and Lines).

3.1 Historical Premiums

The following table summarises the details of the Towers and Lines policy over the last five years to 30 June 2015. The base premium is the amount payable to the insurer prior to the addition of stamp duty and GST. The total premium includes stamp duty, GST as well as broker fees.

Premium rates have been expressed as a percentage of Total Insurable Value (TIV). TIV is the total value of Powerlink regulated electricity towers, poles and lines assets; with the value directly affected by inflation, capital expenditure and asset write-offs. The replacement value of the towers and lines assets is considered a reasonable measure of exposure as claims experience and changes in premiums are related to movements in the value of the assets underlying the exposure.

Table 3.1 – Insurance Summary – Towers and Lines (nominal dollars)

3.1.1 Deductible

The Towers and Lines policy is characterised by a [redacted] which means that Powerlink has a material interest in minimising claims costs through risk minimisation and mitigation strategies. We understand from discussions with Powerlink’s insurance brokers that their claims experience with regards to claims in excess of the deductible is likely to materially impact the insurance premiums paid.

3.1.2 Policy Limit

The policy limit has been [redacted] Powerlink will be on risk for the cost of these claims; subject to potential pass through provisions.

To assess above limit losses, we have estimated the individual cost of specific extreme events that would result in the Towers and Lines policy limit being exceeded based on the current replacement costs of towers and lines.

[redacted]

[redacted] Historically:

[redacted]

[Redacted]

[Redacted]

3.1.3 Premium Rates

[Redacted]

3.1.4 Comment on Insurance Program

[Redacted]

Based on the above commentary regarding the appropriateness of Powerlink's Towers and Lines deductibles and limits, we conclude that the cover is adequate and provides an efficient and prudent coverage against Powerlink's Towers and Lines exposures.

3.2 Insurance Losses

[Redacted]

[Redacted]

[Redacted]

3.3 Premium Forecasts

Our Towers and Lines premium forecasts are based on forecast premium rates applied to the projected TIV.

Powerlink provided us with a forecast of TIV for the regulatory period 2017/18 to 2021/22. The year on year increase in TIV represents replacement value plus the increased value of the additional capital expenditure amounts during the year. The projected asset values form the exposure unit for our premium projections and show that the value of Towers and Lines are expected to decrease by an average 1.6% per annum in real values as the value of the assets are not expected to keep pace with expected inflation.

For the purpose of our projections, [Redacted]

[Redacted text]

Table 3.2 – Premium Projection – Towers and Lines (2017 dollars)

[Redacted table content]

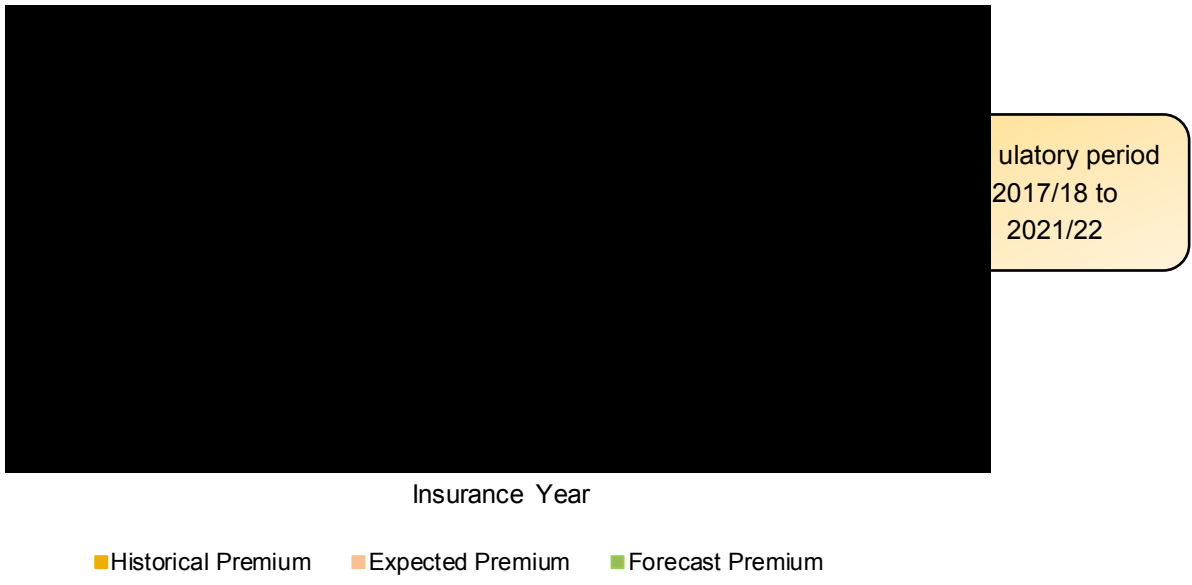
¹ Inclusive of stamp duty, GST and broker fees

[Redacted text]

Depreciation in the TIV in real terms, [Redacted text]

We note that even though we have factored in modest premium rate increases, [Redacted text]

Figure 3.2 shows the historical premiums for Tower and Lines and our forecast premiums for the upcoming regulatory period 2017/18 to 2021/22. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.



4 Public Liability

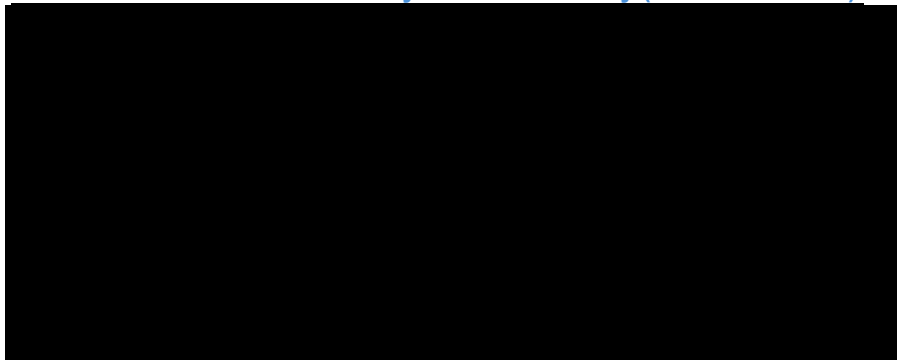
Public Liability insurance provides cover for loss or damage to third parties as a result of the actions of Powerlink.

4.1 Historical Premiums

The following table summarises the details of the Public Liability policy over the last five years to 30 June 2015.

Premium rates have been expressed as a “rate on line”. The rate on line is equal to the total insurance premium divided by the policy limit. A rate on line expresses the insurance premium as a cost per dollar of insurance coverage. Changes in the rate on line demonstrate the relative cost of insurance for each additional dollar of cover.

Table 4.1 – Insurance Summary – Public Liability (nominal dollars)



4.1.1 Deductible



4.1.2 Policy Limit



4.1.3 Premium Rates



4.1.4 Comment on Insurance Program



Our comments regarding Powerlink’s Liability insurance programme are:

- [Redacted]
- [Redacted]
- [Redacted]

4.2 Insurance Losses

[Redacted]

4.3 Premium Forecasts

Our Public Liability premium projections are largely based on historical premium rates and the prevailing market conditions.

[Redacted]

[Redacted]

Table 4.2 – Premium Projection – Public Liability (2017 dollars)

A large black rectangular redaction box covers the entire content of Table 4.2.A black rectangular redaction box covers the content of a table, likely Table 4.1, which is partially visible above the main text.

Figure 4.2 shows the historical premiums for Public Liability and our forecast premiums for the upcoming regulatory period 2017/18 to 2021/22. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.

Figure 4.1 – Public Liability Premiums (nominal dollars)



5 Professional Lines (FINPRO)

Professional Lines includes Directors and Officers Liability (D&O), Professional Indemnity, Employment Practices and Corporate Practices insurances. These various insurances provide cover against liability incurred by Powerlink staff and board members as a result of errors and omissions in performing their professional services. Collectively these lines of insurance plus increasingly cyber insurance are referred to as FINPRO.

[Redacted]

5.1 Historical Premiums

The following table summarises the details of the FINPRO policies over the last five years to 30 June 2015.

Table 5.1 – Insurance Summary – FINPRO (nominal dollars)

[Redacted Table]

Total premiums have [Redacted]

5.1.1 Deductible

[Redacted]

5.1.2 Policy Limits

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

5.1.3 Comment on Insurance Program

To the best of our knowledge these arrangements appear to be reasonably consistent with the rest of the market.

5.2 Insurance Losses

There have been no FINPRO insurance losses in the five years to 30 June 2015.

5.3 Cyber Insurance

We understand that Powerlink plan on including insurance coverage for “cyber risk” in the upcoming regulatory period. Currently, Powerlink do not have a standalone cyber policy but they are in the process of investigating appropriate cover. As cyber threats continue to grow, cyber insurance (currently a standard inclusion in ISR and Liability policies) is increasingly being acquired by utility businesses that operate Industrial Control Systems (ICS). This is reflective of the current insurance market which continues to develop be-spoke, stand-alone cyber insurance offerings. This view is strongly supported by recent Lloyd’s Directives and assessments by Powerlink’s brokers.

Powerlink has implemented a wide range of activities and controls to manage cybersecurity threats and improve operational cyber resilience across both high voltage network operations (Operational Technology) and Corporate Technology ahead of seeking coverage for cyber risk in the insurance market. Cyber risk mitigation is applied across all technology based on level of risk and criticality with control activities spanning the Identify, Protect, Detect, Respond and Recover functions of the National Institute of Standards and Technology (NIST) Cybersecurity framework.

Powerlink continues to increase its cyber risk control environment with new technologies and risk management strategies.

[Redacted]

5.4 Premium Forecasts

Our FINPRO premium forecasts are largely based on historical premiums and the prevailing market conditions, including the projection of cyber insurance discussed above.

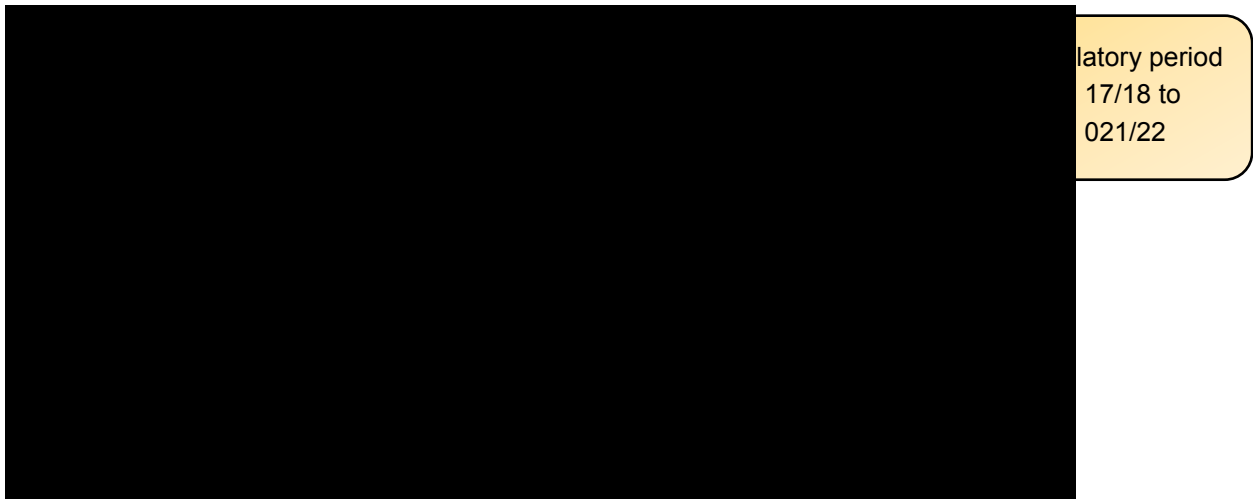
[Redacted]

² Pendulum July 2015 –industry analysis of insurance markets prepared by Finity Consulting and Deutsche Bank Markets Research
Pacific Insurance Market Report 2015 – Marsh Risk Management Research February 2015
Insurance News – Reinsurance rates to fall further: Guy Carpenter 20 July 2015

Table 5.2 – Premium Projection – Professional Lines (2017 dollars)



Figure 5.2 shows the historical premiums for Professional Lines and our forecast premiums for the upcoming regulatory period 2017/18 to 2021/22. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.



The increase in premiums between 2014/15 and 2016/17 is mainly due to the inclusion of cyber cover from 1 January 2016.

6 Ancillary Cover

Ancillary cover includes Motor, Marine, Business Travel and Hospital and Medical (resident and non-resident) insurances.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

6.1 Historical Premiums

The following table summarises the details of the Ancillary premiums over the last five years to 30 June 2015.

Table 6.1 – Insurance Summary – Ancillary (nominal dollars)

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Total Ancillary [REDACTED]

6.2 Insurance Losses

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

We are not aware of Powerlink making any insurance claims on the other ancillary policies.

6.3 Premium Forecast

Our Ancillary premium forecasts are largely based on historical premiums (including historical claims experience) and the prevailing market conditions. Premiums for motor fleet insurance particularly are heavily determined by the fleet loss experience (often referred to as burning cost premiums). Therefore, the recent motor claims experience is expected to have a significant impact on the future premiums.

Our market analysis indicates premiums for the Ancillary lines are expected to remain relatively flat over the next two to three years.

Furthermore, we understand that

At the same time, we have assumed that the number of insured vehicles will reduce in line with forecasts provided by Powerlink.

We have assumed that the number of insured vehicles will remain constant thereafter as shown in the table below.

Table 6.2 – Premium Projection – Ancillary Lines (2017 dollars)

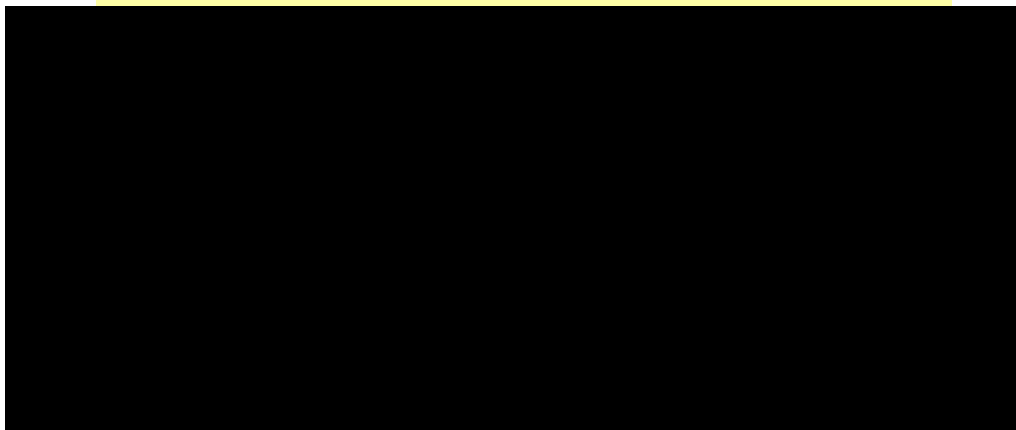
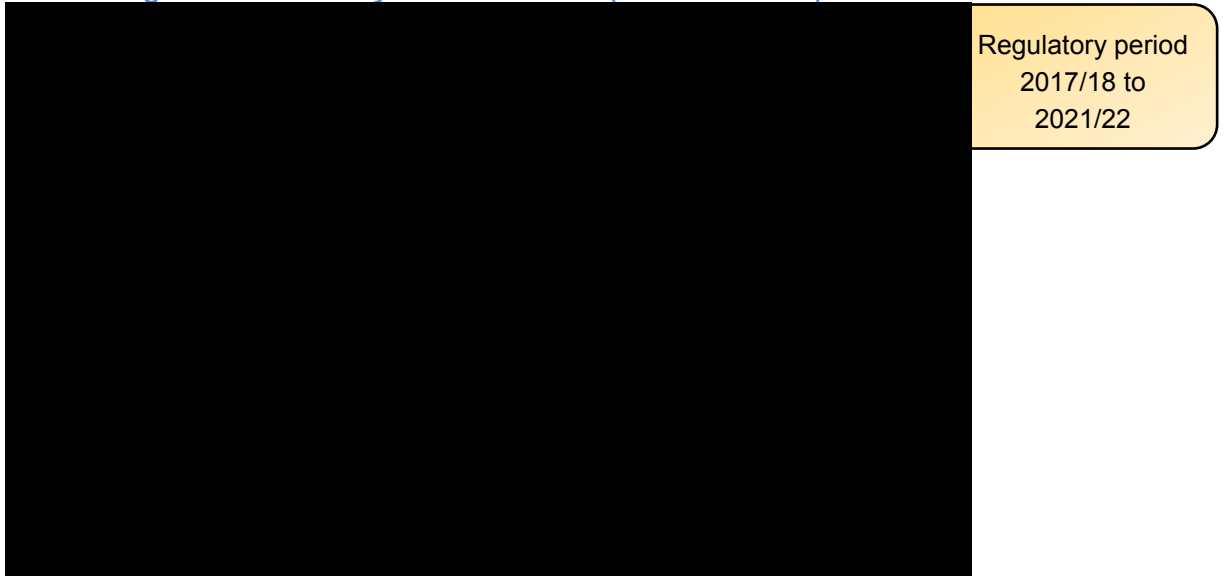


Figure 5.1 shows the historical premiums for Ancillary Lines and our forecast premiums for the upcoming regulatory period 2017/18 to 2021/22. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.

Figure 6.1 – Ancillary Lines Premiums (nominal dollars)



7 Total Insurance Premiums

7.1 Expected insurance premiums

The following table summarises our forecast insurance premiums for the regulatory period.

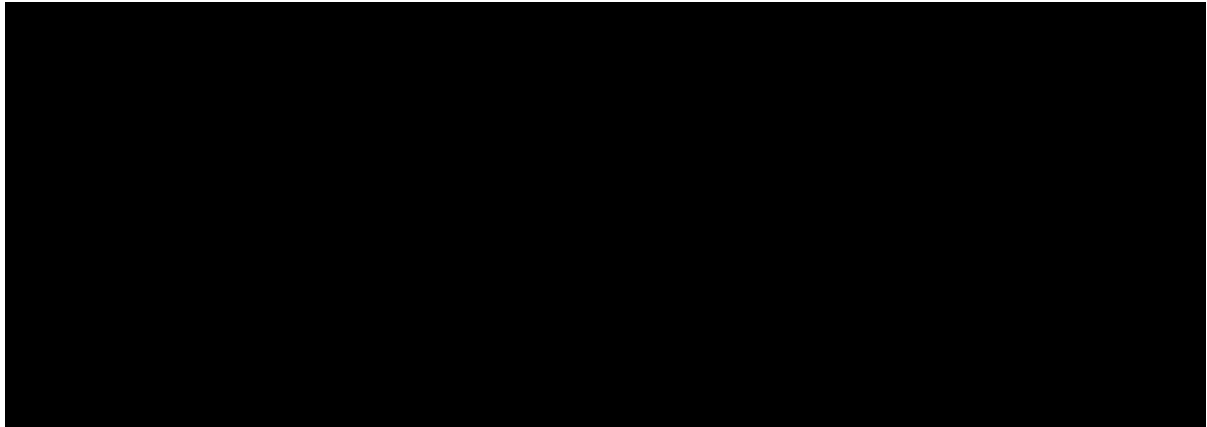
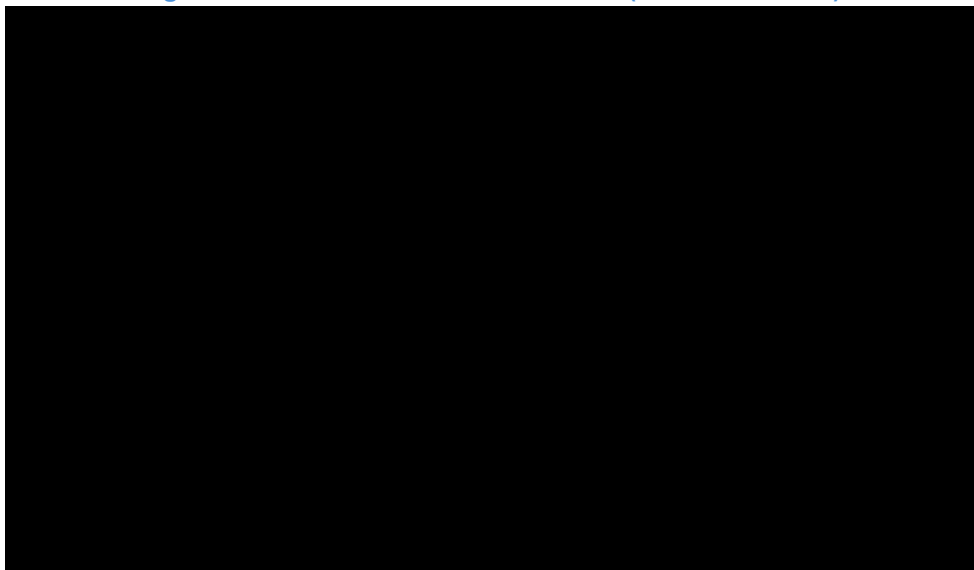


Figure 7.1 shows the historical premiums across all lines of business and our forecast premiums for the upcoming Regulatory period. All premiums are shown in nominal dollars (i.e. allowing for expected future inflation at the rate of 2.45% per annum) for comparison purposes.

Figure 7.1 – Forecast Insurance Costs (nominal dollars)



8 Reliances and Limitations

We have relied on the accuracy and completeness of the data and other information (qualitative, quantitative, written and verbal) provided to us by Powerlink for the purpose of this advice. We have not independently verified or audited the data, but we have reviewed the information for general reasonableness and consistency. The reader of this report is relying on Powerlink and not Finity for the accuracy and reliability of the data. If any of the data or other information provided is inaccurate or incomplete, our advice may need to be revised and the report amended accordingly.

We have prepared our estimates on the basis that they represent our current assessment of the likely future experience of Powerlink. Sources of uncertainty include the uncertain nature of the future insurance market and the propensity for events that are outside the control of Powerlink (such as future catastrophes) to have a significantly impact on the future cost of insurance. Although the estimates we have prepared are best estimates, deviations of the actual experience from our estimates are normal and to be expected.

Projecting future insurance premiums depends on a number of assumptions including the continuation of current insurance coverage (including any policy exclusions) and deductible levels. These assumptions are subject to policy decisions by Powerlink, market forces and regulatory determination. Should there be any variation in these assumptions our results may change and should be reviewed and updated accordingly.

In making our estimates we have placed considerable reliance on the past experience of the portfolios. To the extent that estimates and forecasts are required there is a degree of uncertainty in the analysis particularly with the respect to the future insurance markets. There are no margins included in our results to offset the potential impact of such uncertainty.

This report has been prepared for the sole use of Powerlink for the purpose stated in Section 1. It is not intended, nor necessarily suitable, for any other purpose. Members of Finity staff are available to answer any queries, and the reader should seek that advice before drawing any conclusions or any issues in doubt. The report should be considered as a whole.

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A Experience and Qualifications

MARK HURST - Project Leader

Mark is a consulting actuary and Principal with Finity with 25 years experience in the general insurance industry. Mark has previously led similar projects for Powerlink in 2006 and 2011 and Energex and Ergon Energy in 2009 as well as a broadly similar assignment for Queensland Rail and Aurizon which involved providing the Queensland Competition Authority with an estimate of their annual self insurance costs.

Mark is leader of Finity's self-insurance practice and a member of the workers' compensation team. His general insurance experience includes outstanding claims reserving and providing advice to corporates with regard to their insurance arrangements.

Mark has been involved in a variety of projects for self-insurers, including:

- Valuation of outstanding claim liabilities and calculation of bank guarantees
- Examining the feasibility of organisations considering self-insuring liabilities
- Estimating the self-insured allowance for energy companies for submission to the regulator
- Providing advice to self-insurance pools regarding funding and outstanding claim liabilities
- Allocation of costs between operating divisions
- Assistance with self-insurance licence applications
- Development of key performance indicators
- Analysis of the volatility of claims experience and profits under self-insurance
- Advice regarding risk margins.

Mark has authored, or co-authored, several self-insurance papers including "Assessing the Financial Viability of Moving to Self-Insurance" and "Measuring the success of your self-insurance program".

In addition to Powerlink, Mark's self-insurance clients include Myer, The Star Entertainment Group, Linfox, DHL, Aurizon and Primary Health Care.

Mark has Bachelor of Economics and Science degrees from the Australian National University and is a Fellow of the Institute of Actuaries of Australia.

ADAM PAYNE - Senior Actuary

Adam is a consultant with Finity Consulting and has 15 years experience in actuarial consulting, specialising in the general insurance industry in the last 11 years. Adam worked on the Powerlink self-insurance project in 2011.

Adam has provided advice on reserve levels, pricing, financial projections and reinsurance strategy. Adam is also the APRA Appointed Actuary for a small boutique insurance company.

Adam is heavily involved in Finity's self-insurance practice and provides actuarial advice to a number of workers compensation self-insurers as well as a NSW specialised workers' compensation insurer.

Adam has been involved in valuing the asbestos reserves for a number of insurance companies, including valuing the insurance liabilities for the NRG group of companies as part of the Solvent Scheme of Arrangement. He was also part of the CGU External Peer Review team, specifically charged with reviewing the asbestos liability provisions.

Qualifications

- Fellow of the Institute of Actuaries of Australia, 2003
- Bachelor of Economics (Actuarial), Macquarie University, 1996

Work history

- March 2005 to present: Finity Consulting – Consultant
- 2000 to 2005: Trowbridge Consulting/Trowbridge Deloitte – Consultant specialising in general insurance
- 1996 to 2000: Mercer, Sydney – Actuarial Analyst and Consultant specialising in superannuation