Appendix Q:

SPI PowerNet Pty Ltd

Transmission Revenue Reset (TRR) 2014/15 – 2016/17

Insurance Premium Forecast 2014/15 to 16/17 - SP AusNet Transmission – AON

Public Version



Insurance Premium Forecast

SP AusNet Transmission

September 2013

PUBLIC VERSION



Contents

Exe	Executive Summary				
1.	Background and Approach Summary of Results Analysis by Risk Class		2		
2.			5		
3.			6		
	3.1	Liability	6		
	3.2	Property	13		
	3.3	Motor	19		
	3.4	Other Classes	21		
	3.5	New Policies	22		

Appendix 1 Insurance Premium Forecast

Appendix 2 Motor Loss Forecast

Appendix 3 Liability Limit Benchmarking

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Executive Summary

SP AusNet Transmission ("SP AusNet") has requested Aon Risk Solutions ("Aon") to provide an independent forecast of their insurance premiums for the upcoming regulatory period. This is in response to the Australian Energy Regulator's ("AER's") draft decision on SP AusNet's 2014-17 revenue proposal and a report provided by the AER's expert consultant for insurance, am actuaries.

Table 1 below sets out Aon's insurance premium forecast for SP AusNet for the upcoming regulatory period.

Table 1 - Insurance Premium Forecast - 2014-17 (\$'000)

C-I-C

The approach to determine this forecast was to estimate exposure growth and premium rate growth for the forecast period. Using this information, base premiums for the relevant forecast policy periods could be estimated. Statutory charges were then applied to those base premiums. Total costs were calculated and then allocated to the relevant financial year using a straight monthly pro-rata approach.

Details of the premium calculations and all assumptions made are outlined in the following sections of the report.



1. Background and Approach

1.1 Background

SP AusNet Transmission ("SP AusNet") has requested Aon Risk Solutions ("Aon") to provide an independent forecast of their insurance premiums for the upcoming regulatory period (2014/15 – 2016/17).

Aon provided a brief report that commented on the reasonableness of the forecast premiums developed by SP AusNet which was submitted to the Australian Energy Regulator's ("AER's") AER in February 2013.

Following the AER's draft decision on SP AusNet's insurance premium forecast and a report provided by the AER's expert consultant for insurance, am actuaries, SP AusNet has sought an independent forecast of its likely insurance premium costs from Aon.

Aon has therefore developed a comprehensive forecast for the 2014/15 to 2016/17 regulatory period, which is explained and set out in this report. This forecast reflects Aon's expert view of what SP AusNet can reasonably expect in relation to its insurance premium costs given Aon's understanding and knowledge of SP AusNet's specific circumstances and the likely insurance market conditions which will apply in the next regulatory period. Aon has relied upon the latest insurance costs incurred by SP AusNet as the base cost of its forecast as actual costs represent the most accurate and reliable starting point for developing a forecast. SP AusNet has adopted Aon's forecast in its Revised Proposal.

In this report, Aon also responds to a number of specific insurance matters raised in the AER's draft decision and in AM Actuaries' report, where Aon considers there may be a material error of fact or a view taken which does not adequately take into account SP AusNet's specific circumstances. This report also provides further information on particular matters where the AER considered that SP AusNet did not provide sufficient evidence to support its forecast.

1.2 Scope of Services

The scope of services for this consultancy is to provide an independent forecast of SP AusNet's insurance premiums for the upcoming 2014-17 regulatory period and to respond on any areas where Aon considers the AER and/or its consultant may have made a material error of fact in the draft decision on SP AusNet's insurance forecast.

For each major class of insurable risk, we will outline:

- The systematic drivers of each insurance class;
- Review the historical premium costs and circumstances that have influenced any changes over the current regulatory period;
- Provide a premium forecast for the 2014-17 regulatory period, including outlining:
 - The quantification method adopted including forecast changes to exposure and premium rates;
 - All the assumptions and data relied upon in undertaking that quantification, and where those data / assumptions have been sourced from;
 - A specific assessment as to how costs should be properly allocated to the transmission network, and what this allocation should be; and
- Aon's independent assessment of future insurance premiums;
- A response to the AER's draft decision;



1.3 Approach

The approach to calculate the insurance premium forecast is outlined below:

- Determine the base premium costs for all risk classes for all of SP AusNet's business (transmission and distribution) in the current policy period.
- Estimate future changes to exposure and premium rates.
- Using the changes to exposure and premium rates, calculate forecast base premiums for the relevant future policy vears.
- Apply the appropriate allocation amount to the overall base premium to determine the base premium that relates to the transmission business.
- Add estimated statutory charges based on expected rates for the forecast period.
- Calculate nominal policy year premium forecast for each risk class, including statutory charges.
- Calculate the nominal financial year premium forecast for each risk class, by splitting the premium according to the number of months contributing from each policy year.
- Remove the costs relating to the non-regulated part of the transmission business (assumed to be C-I-C%).
- The result provides the nominal and real insurance premium forecast for 2014-17.

1.4 Factors that Affect the Cost of Insurance

When pricing insurance underwriters will typically consider the risk that is being insured. Pricing for major classes is usually determined as a premium rate multiplied by a measure of exposure (ie. declared asset values, annual revenue, number of vehicles etc.). Whilst exposure is largely determined by the insured, premium rates are determined by the insurer and are largely out of control of the insured.

It is important to recognise that insurance premium rates (and therefore insurance premiums) are subject to external factors that SP AusNet's other operating costs are not. Whilst insurance premiums largely reflect the risk that is being insured, other factors have considerable bearing on insurance pricing, particularly for low frequency, high severity risks. These include:

- recent claims activity;
- global natural catastrophes;
- insurer competition;
- market capacity (amount of available insurer capital); and
- capital requirements.

Policy limits and deductibles also influence the cost of insurance. Unless otherwise stated, insurance policy limits and deductibles are assumed to remain constant for the purpose of this analysis.

In addition to this, taxes and statutory charges need to be paid by the insured. These are determined by the government and can change quite regularly. A perfect example of this is the recent change to the fire services levy; which is now recovered through property rates rather than Property insurance premiums.

All commentary in this report relates to changes to base premiums in nominal values (unless otherwise stated). Additional calculations have been applied to determine statutory charges, taking into consideration expected statutory charges in the upcoming regulatory period.



1.5 Allocation of Costs to the Transmission Business

For all classes of insurance considered in this analysis, SP AusNet purchases a policy that covers them for their entire business: distribution and transmission. As such, only a portion of the overall costs are allocated to the transmission business. In line with the different split in risks, that allocation will be different for each risk class.

The determination of that allocation is a matter for SP AusNet's internal review, however, we have commented on the reasonableness of the projected allocation based on our understanding of SP AusNet's risk profile between the different parts of the business.

Aon notes that the AER's final decision in relation to insurance premiums does influence (up or down) the allocation of costs to the Transmission business, and that this will have an equal and opposite impact on the Distribution business.

In Aon's vast experience in advising clients on premium allocation methodologies and its impact on prudent risk management, we recommend that any decision around allocation should remain with the business, without the influence of external parties (unless requested). The proviso is that the allocation amount should not be unreasonable and the methodology should remain consistent when the regulatory proposal for the Distribution business is submitted.

1.6 Data

The following data was relied upon in determining historical and forecast insurance premiums:

- Historical insurance premiums:
 - Prior to 2011: provided by SP AusNet
 - 2011 onwards: provided by Aon premium summary sheets and reconciled with actual invoices
- Historical exposure:
 - Property: based on declared asset schedule updated annually by SP AusNet
 - Motor: based on historical underwriting submissions
- Self-insurance Risk Quantification Report, 2012.
- Motor Vehicle Claims Analysis, 2012 (Appendix 2).
- Bushfire Liability Limit Benchmarking (Appendix 3).



2. Summary of Results

Table 2.1 below outlines Aon's view of an appropriate insurance premium forecast for SP AusNet for the upcoming regulatory period.

C-I- C

These amounts are for both the regulated and non-regulated part of the Transmission business.

Non-regulated costs are assumed to be C-I-C% of total costs and are removed from the total to determine the regulated forecast. Table 2.2 shows nominal and real values of the regulated insurance premium forecast.

Table 2.2 - Nominal and Real Insurance Premium Forecast - 2014-17 (\$'000)



3. Analysis by Risk Class

3.1 Liability

3.1.1 Systematic drivers

Liability insurance provides SP AusNet with cover for third party personal injury, third party property damage and third party financial loss. Liability risk can largely be split between two levels of severity:

- Attritional one-off third party personal injury, property damage or financial loss. This relates to losses that would usually be below \$250k, but even in extreme circumstance would still be below \$5m
- Catastrophic significant third party personal injury, property damage or financial loss resulting from a major event, such as a bushfire, gas pipeline explosion or major unplanned outage. This relates to losses that could potentially be well above \$5m, but have a low likelihood of occurrence.

Attritional losses do not really have a material impact on premium changes. These losses are inherently consistent and are already priced into the insurance premium in the primary layer. Catastrophic losses, however, are the real focus of underwriters and are therefore the real drivers behind any changes to premiums.

C-I- C

3.1.2 Review of Current Regulatory Period

Base premium costs have increased by almost six times between the 2008/09 policy year and the 2013/14 policy year.

There are a number of reasons that have contributed to this substantial increase:

- C-I-C
- C-I-C
- C-I-C
- C-I-C
- Insurance market factors have contributed to steady increases over the period and are expected to continue to influence premiums in the future (as outlined in Section 3.1.5).



3.1.3 Exposure

Unlike many other policies, Liability premiums are not necessarily correlated with a measure of exposure. Whilst you might expect that network size or annual revenue may be appropriate drivers for changes to premiums, the extent of these changes are immaterial in comparison to the real factors that influence Liability premiums (as discussed in Section 3.1.6).

Due to this, an exposure forecast is not included in the analysis of Liability premiums.

3.1.4 Premium Rates

General Overview

C-I-C

Market Factors

C-i-C

In response to a catastrophic event, the insurance market will look to re-rate a risk, particularly if the event was unexpected. The re-rating of a risk will take time to reach a steady state as the full quantum of the event becomes known. For a property risk, the lag between the occurrence of an event and the quantification of the cost is relatively short, leading to a short lag before rates reach a steady state. For a liability risk, the lag between occurrence of an event and the quantification of the cost is much longer (perhaps between five and 10 years) because the matter goes through legal action.



SP AusNet's specific factors

C-I-C

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3.1.5 Allocation to Transmission

C-I-C

3.1.6 Insurance Premium Forecast Calculations

Aon believe that it is most likely for premiums to increase up to C-I-C per annum over the upcoming regulatory period. This is based on a number of reasons (as outlined in Section 3.1.5), namely:

- C-I-C
- C-I-C
- C-I-C
- the lack of available cost-effective capacity; and
- reducing cost-effective capacity

Based on this, it would not be unreasonable for SP AusNet to

C-IC



The table below outlines the calculation of the insurance premium forecast based on a C-I-C per annum premium increase.

Table 3.1.6 Insurance Premium Forecast - Liability

• C-I-C

3.1.7 Response to Draft Decision

C-I-C

• C-I-C

The AER has rejected SP AusNet's forecast of liability insurance cost for the next regulatory period for a number of reasons. Aon's response to the main issues raised by the AER is outlined in the table below.



Table 3.1.7 Aon's response to AER's reasons for rejecting SP AusNet's proposal - Liability

AER reasons	Aon response
C-I-C	
	C-I-C
C-I-C	
	C-I-C
C-I-C	
	C-I-C
C-I-C	
	C-I-C



C-I-C

C-I-C

p.237 "Figure B.3 ... shows that premiums levelled off in 2012-13".

Values in Figure B.3 are incorrect for 2012-13.

Based on our calculations, using values from actual invoices (as outlined in Section 1.6), the value for 2012-13 should be $\,$ C-I-C $\,$ and not

C-I-C indicated in the draft decision. It appears the AER or AM actuaries have made an error in calculating this data point in Figure B3.

As such, any decision relying upon this error would be invalid.



3.2 Property

3.2.1 Systematic drivers

Property insurance provides SP AusNet with cover for damage to insured assets. Insured assets largely include substations, terminal stations and any other non-network assets declared under the policy.

Given the size of the policy deductible, insured losses would largely relate to the following:

- **Machinery Breakdown** typically a Power Transformer failure, which has only moderate frequency and expected severity of less than C-I-C.
- Catastrophic Single site fire / explosion or weather event that severely impacts a major site. Low likelihood.
- Catastrophic Multi site weather event that creates an aggregated exposure across multiple sites. Unlikely to lead to major damage at any one site. Remote likelihood.

The key driver of changes to SP AusNet's Property rates will be C-I-C . This is largely what caused rate increases in 2009/10 and 2010/11. In addition to this, other factors that could influence Property rates include:

- General market conditions (insurer competition and market capacity);
- Recent global catastrophes; and
- Recent industry loss experience.

3.2.2 Review of Current Regulatory Period

C-i-C

There are two main reasons that have contributed to this increase:

- C-I-C
- C-I-C



3.2.3 Exposure

C-I-C

A. Standard Price Inflation

Standard price inflation is assumed to be 2.5% per annum.

B. Construction Costs Inflation

Experts from Aon Valuation Services ("AVS") have advised that current construction costs for insured Transmission assets do not exceed standard price inflation. As such, a factor to apply over and above standard price inflation is 0%.



C. Increases Relating to Capex Replacement Progr
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C-I-C

D. Network Growth

SP AusNet has advised no growth for the regulated Transmission business, consistent with its role as owner and operator of the network, and the Australian Energy Market Operator's role as the Victorian transmission augmentation planner. As such, we assume this factor to be 0%.

Conclusion



3.2.4 Premium Rates

Despite increases in premium rates in 2008/09 and 2009/10, Aon expect premium rates to remain relatively flat for the next three years, assuming that loss experience tracks as expected or better. Aon known that premium rates for 2014/15 will be flat (assuming nothing untoward occurs between the writing of this report and renewal); however, future changes to rates will be impacted as outlined below.

C-I-C

3.2.5 Allocation to Transmission

C-I-C

3.2.6 Insurance Premium Forecast Calculations

Based on information provided by SP AusNet and our view of forecast changes to exposure and premium rates (as outlined in the following sections), Aon consider that a prudent organisation would budget for premium increases reflecting:

C-I-C

The table below outlines the calculation of the insurance premium forecast based on the assumptions outlined in the previous section.



Table 3.2.6 Insurance Premium Forecast - Property



3.2.7 Response to Draft Decision

C-I-C

The AER acknowledges that property premiums are derived by multiplying declared asset values by a premium rate.

The AER has rejected SP AusNet's forecast of property insurance cost for the next regulatory period for a number of reasons. Aon's responses to the main issues raised by the AER are outlined in the tale below.

Table 3.2.7 Aon's response to AER's reasons for rejecting SP AusNet's proposal - Property

AER reasons	Aon response
C-I-C	C-I-C
C-I-C	C-I-C



3.3 Motor

3.3.1 Systematic drivers

Motor insurance provides SP AusNet with cover for damage to their own vehicles as well as damage to third party property (where the damage is caused by SP AusNet vehicles).

C-I-C

Motor premiums are driven by loss experience. Given that loss experience is usually reasonably consistent, Motor underwriters will typically look at five years of loss experience and base rates on that loss experience. Due to this, technical pricing (based on actuarial modelling) is typically a good guide to a reasonable premium. If market premiums are materially above technical pricing, then there is usually an opportunity to find another market at a more competitive rate. Similarly, if market premiums are materially below technical pricing, then market pricing will usually increase (unless there is another market willing to offer unsustainable pricing below the technical rate).

3.3.2 Review of Current Regulatory Period

C-I-C

3.3.3 Exposure

The exposure measure for Motor is number of vehicles.

C-I-C

On the basis that historical growth reflects future growth, this approach is not unreasonable.

3.3.4 Premium Rates



3.3.5 Allocation to Transmission

C-I-C

Aon agreed that this is not unreasonable and the AER accepts this allocation.

3.3.6 Insurance Premium Forecast Calculations

Motor premiums are underwritten differently to Other Classes. As such, Aon has considered Motor separately and focussed on estimating changes to exposure and premium rates, as these factors will directly influence premiums going forward.

The table below outlines the calculation of the insurance premium forecast based on the assumptions outlined in the previous section.

Table 3.3.6 Insurance Premium Forecast - Motor



3.3.7 Response to Draft Decision

C-I-C

Motor premiums are underwritten differently to Other Classes. As such, Aon has considered Motor separately and focussed on estimating changes to exposure and premium rates, as these factors will directly influence premiums going forward.

3.4 Other Classes

3.4.1 Systematic drivers

Other classes include a range of ancillary risk classes as outlined in Appendix 1.5.

Premiums for these classes are typically driven by market conditions and recent claims experience.

Given that losses for these policies are usually low frequency, premiums would usually be negotiated as a 'roll-over' (same premium as prior year) in a claims-free year. However, occasionally market factors may cause an increase or decrease in premiums. On other occasions there may be a shift to the exposure or significant premium increases due to recent claims experience.

3.4.2 Review of Current Regulatory Period

C-I-C

3.4.3 Exposure

Underwriting exposure is typically stagnant for types of risks. Whilst the underlying exposure (such as revenue, employee numbers, network size) may be slightly growing, it does not typically have a flow-on effect to insurance premiums.

Due to this, we have assumed 0% exposure growth for the purpose of this analysis.

3.4.4 Premium Rates



3.4.5 Allocation to Transmission

C-I-C

Aon agreed that this is not unreasonable and the AER accepts this allocation.

3.4.6 Insurance Premium Forecast Calculations

The table below outlines the calculation of the insurance premium forecast based on the assumptions outlined in the following sections.

Table 3.4.6 Insurance Premium Forecast - Other Classes

C-I-C

3.4.7 Response to Draft Decision

C-I-C

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Given the low proportion of overall premium costs relating to Other Classes, it would not be unreasonable to forecast based on either SP AusNet's initial proposal or the AER's draft decision. Further commentary and recommendations are outlined in the sections below.



3.5 New Policies

3.5.1 Systematic drivers

C-I-C

3.5.2 Review of Current Regulatory Period

C-I-C

3.5.3 Exposure

Whilst the underlying exposure (such as network size) may be slightly growing, it does not typically have a flow-on effect to insurance premiums.

Due to this, we have assumed 0% exposure growth for the purpose of this analysis.

3.5.4 Premium Rates

Aon suggest that the approach adopted for Other Classes should also be adopted for New Policies.

Aon suggest that SP AusNet budget for a 2.5% increase in line with inflation.

3.5.5 Allocation to Transmission

C-I-C

Aon agreed that this is not unreasonable and the AER accepts this allocation.

3.5.6 Insurance Premium Forecast Calculations



The table below outlines the calculation of the insurance premium forecast based on the assumptions outlined in the following sections.

Table 3.5.6 Insurance Premium Forecast – New Policies

C-I-C

3.5.7 Response to Draft Decision

C-I-C

Aon understands that SP AusNet is able to produce further evidence that supports a case for this being prudent. The overall case is summarised in this report. In Aon's opinion, this insurance is a prudent cost for SP AusNet.



Appendix 1 Insurance Premium Forecast



Appendix 2 Motor Loss Forecast



Appendix 3 Liability Limit Benchmarking





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