

24 May 2013

Mr Warwick Anderson  
AER  
GPO Box 520  
Melbourne VIC 3001

Dear Warwick

Thank you for the opportunity to offer views on SP Ausnet's proposal for regulated revenues for the three years from 1 July 2014. The EUAA's members are significantly affected by SP Ausnet's charges and we look forward to working with SP Ausnet and the AER in this review.

We welcome further discussion with the AER and SP Ausnet on this submission.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Phil Barresi". The signature is fluid and cursive, with a distinct loop at the end.

Phil Barresi

**Chief Executive Officer**

Energy Users Association of Australia  
ABN 83 814 086 707

Suite 1, Level 2, 19-23 Prospect Street, Box Hill, Victoria, 3128  
Phone: (03) 9898 3900 Fax: (03) 9898 7499 Email: [euaa@euaa.com.au](mailto:euaa@euaa.com.au)  
[www.euaa.com.au](http://www.euaa.com.au)

---

**Submission to the Australian Energy Regulator (AER)  
on  
SPI PowerNet Pty Ltd Electricity Transmission Revenue  
Proposal**

**2014/15 - 2016/17**

---

**Acknowledgement & Disclaimer**

This project was partially funded by the Consumer Advocacy Panel ([www.advocacypanel.com.au](http://www.advocacypanel.com.au)) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and natural gas.

The views expressed in this document are those of the EUAA and do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

---

## Table of Contents

<b>1. Introduction</b> .....	<b>5</b>
<b>2. Weighted average cost of capital</b> .....	<b>7</b>
<b>3. Capex</b> .....	<b>9</b>
<b>3.1. Incentives</b> .....	<b>10</b>
<b>3.2. Demand forecasts</b> .....	<b>10</b>
<b>3.3. Asset ageing</b> .....	<b>10</b>
<b>3.4. Additional Comments</b> .....	<b>11</b>
<b>4. Opex</b> .....	<b>13</b>
<b>5. Service incentives</b> .....	<b>16</b>

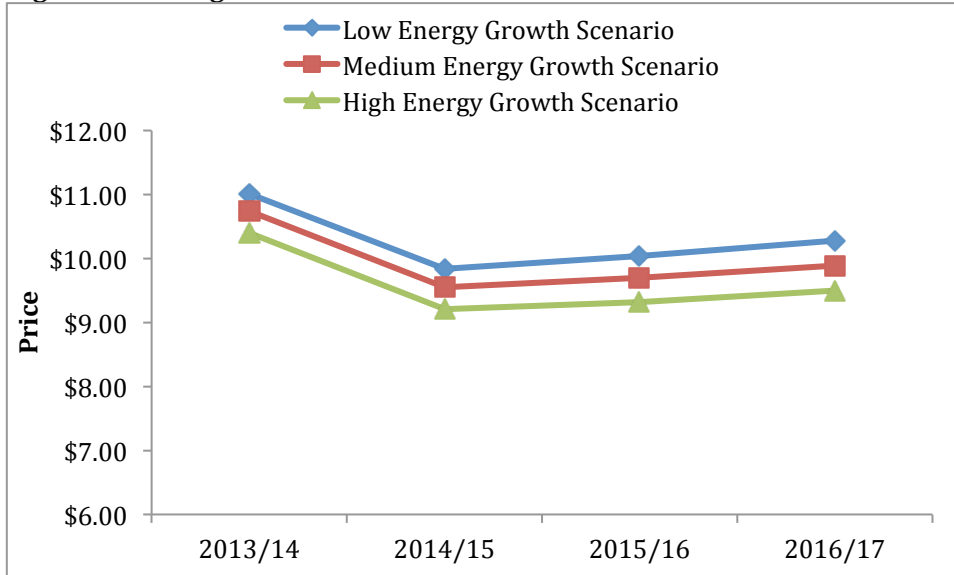
## Table of Figures

Figure 1: Average Price Path.....	5
Figure 2: Revenue Path.....	5
Figure 3. AER WACC decisions compared to the decisions of other regulators.....	8
Figure 4: Capital Expenditure.....	9
Figure 5. Remaining asset life by asset category.....	11
Figure 6. Opening Asset Value (OAV) by asset category.....	11
Figure 7: Operational Expenditure.....	13
Figure 8: Circuit Availability Comparison.....	16
Figure 9: Peak Critical Circuit Availability.....	17

## 1. Introduction

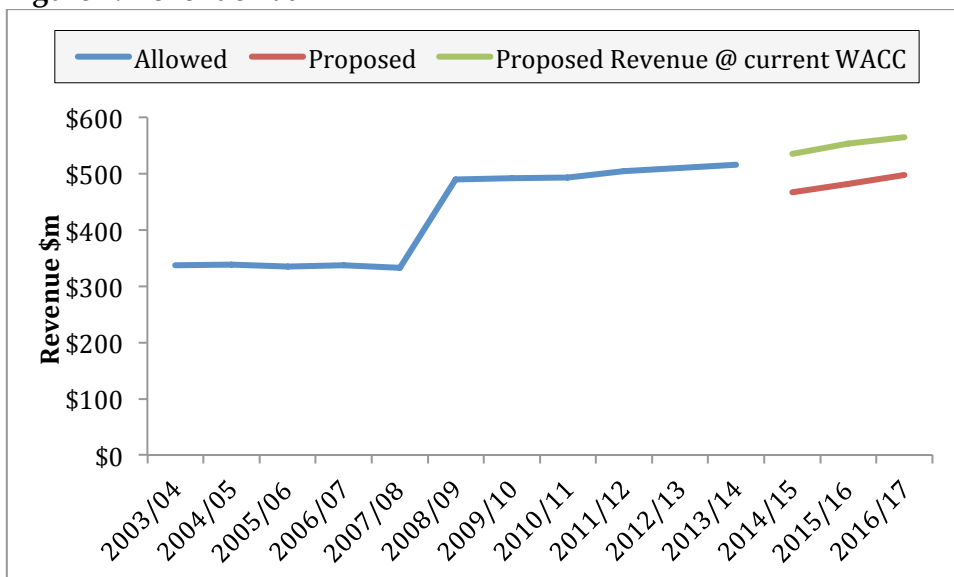
SP Ausnet's revenue proposal will result in price reductions of around \$0.5/MWh over the three year regulatory period, possibly slightly more or less depending on energy transmitted.

**Figure 1: Average Price Path**



The main reason for the decrease is the lower allowed returns as a result of the large decline in the risk free rate. Without this change, SP Ausnet's revenues – based on their proposal - would continue to increase as they have since 2007/8 as shown in Figure 2.

**Figure 2: Revenue Path**



The main reason for the increase is higher capital expenditure (on switchgear and transformers) and also significantly higher operating expenditure.

---

This document is the EUAA's first attempt to understand SP Ausnet's proposal and to communicate this initial understanding to its members and also to SP Ausnet and the AER. We have identified the issues that have caught our attention so far, and that we intend to pursue further (and encourage the AER to do likewise).

SP Ausnet has been proactive in engaging with the EUAA in this determination and has been responding to the inquiries of our advisors, CME, for further information and explanation. We commend SP Ausnet for this approach and look forward to working with them, the AER and other energy user advocates in reaching a satisfactory outcome for SP Ausnet and for Victoria's electricity users, in the revenue controls that the AER will establish. The rest of this submission sets out our comments on the weighted average cost of capital, capex, opex and service standards.

---

## 2. Weighted average cost of capital

SP Ausnet have proposed a WACC of 7.19% consisting of a 3.14% risk free rate and a 3.28% cost of debt. The allowed WACC for the current period is 9.76%. We have three comments to make in relation to the WACC:

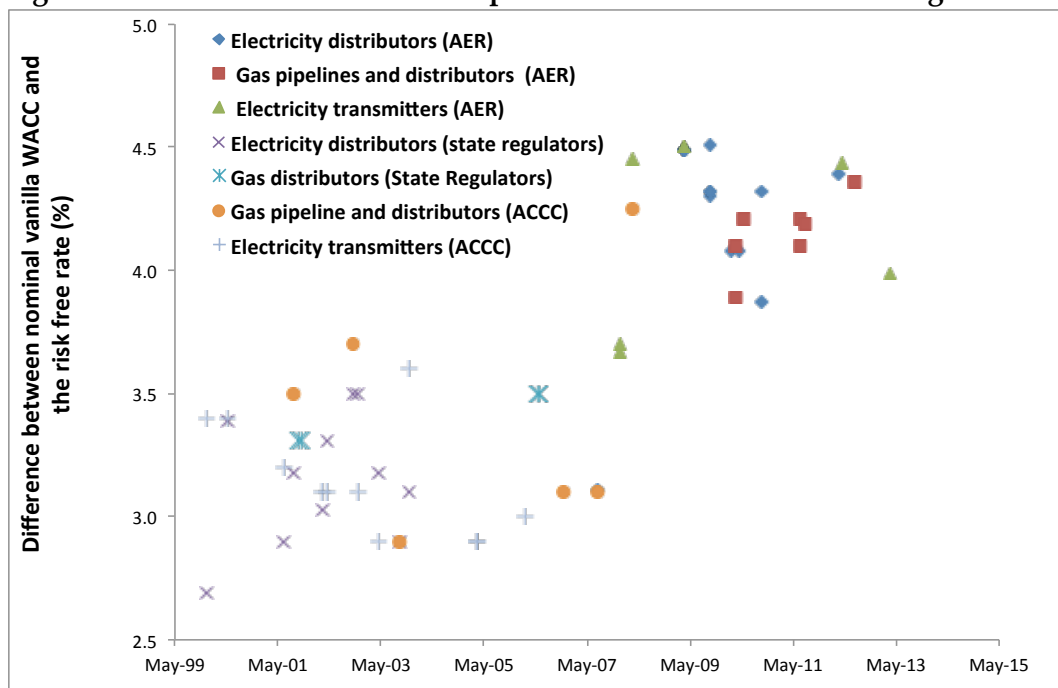
1. We call on the AER to ensure that it sets the WACC parameters within its control so that in aggregate a reasonable outcome is delivered. Figure 3 shows the difference between the nominal vanilla WACC and the risk free rate for all decisions by jurisdictional regulators, the AER and ACCC since 1999. It shows that the AER has typically set a higher WACC than other regulators. We note the AER's determination for Electranet is towards the lower end of the range, and we call on the AER to deliver a similar or better outcome for users in SP Ausnet's decision.

2. SP Ausnet has proposed that the determination of the averaging period or the risk free rate be kept confidential. We do not agree with this. There is nothing that SP Ausnet can do to affect the risk free rate and so we can see no good reason that its proposals – and the AER's consideration of its proposals – should not be publicly available. As the AER and SP Ausnet know, the risk free rate is a key regulatory variable and we would like to offer our views on the appropriate averaging period for it.

3. We call on the AER to have particular regard to the debt risk premium manifest in the debt that SP Ausnet (or its parent) have achieved in its debt raising. We have asked SP Ausnet to provide relevant information to us (and they have done so). We understand the current Rules' requirement in relation to the determination of the DRP, but also consider it very important that the AER is aware of how the DRP that it determines pursuant to the Rules, compares to the DRP evident from SPI's debt portfolio. In this regard, we request that the AER has particular regard to the price of debt issued by SP Ausnet over the last few years. For example in February it issued 7 and 10 year bonds with yields at 160-175bp over swap. SP Ausnet has also issued a significant amount of debt in international markets and the AER should have regard to this.

We suggested it is very important that the AER is aware of SP Ausnet's actual debt costs and that any disparity between actual debt costs and the "benchmark" debt cost is made clear – SP Ausnet's customers are having their electricity delivered by SP Ausnet, not a hypothetical benchmark NSP. This calculation should be straight-forward to do since SP Ausnet's debt portfolio for each year of the regulatory period is predicted. We intend to discuss such calculations with SP Ausnet and we also call on the AER to produce a clear and transparent analysis of this.

**Figure 3. AER WACC decisions compared to the decisions of other regulators**



Source: Regulatory determinations, EUAA analysis



### 3. Capex

SP Ausnet has proposed capex of \$547.3<sup>1</sup>m ((2012\$). SP Ausnet expects to underspend its allowed capex in the current regulatory period by 13 percent. A comparison of the allowed and actual capex, and SP Ausnet’s proposal for the coming regulatory period is shown in Figure 4 below.

**Figure 4: Capital Expenditure**

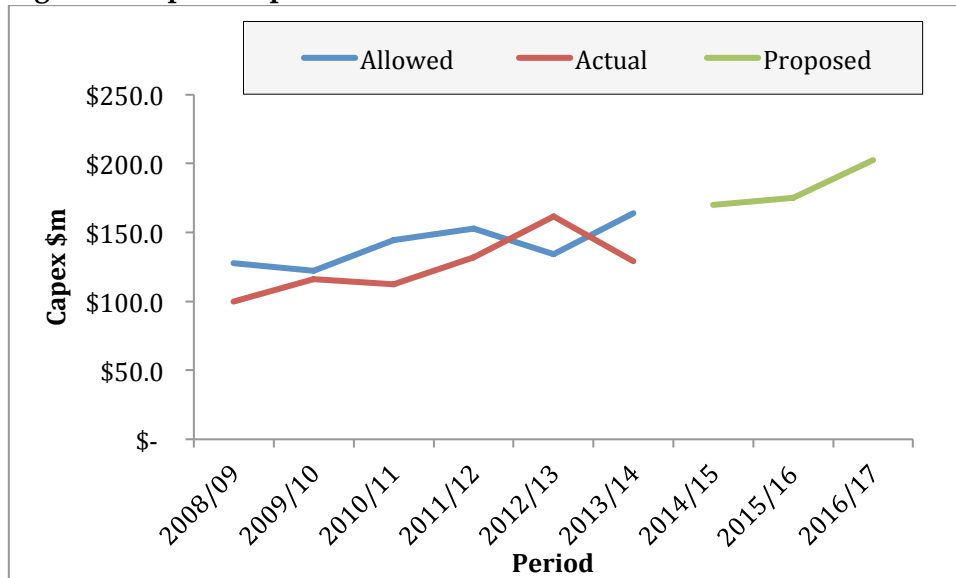


Table 1 shows a breakdown of the proposed capital expenditure program by category and compared to the expected total expenditure from 2014 to 2017.

**Table 1: Capex Breakdown**

Capex Category	Total Spend 2014-2017 (2011-12 \$m)	Average Annual Spend 2009-2014	Average Annual Spend 2014-2017	% Change Average Annual Spend
CBD Rebuilds	\$ 176.9	\$0	\$59	n/a
Major Station Replacement	\$ 152.9	\$ 55.8	\$ 51.0	-8.8%
Asset Replacement	\$ 115.3	\$ 34.6	\$ 38.4	10.9%
Non-network Capex	\$ 59.5	\$ 15.1	\$ 20.9	38.3%
Safety & Security	\$ 42.5	\$ 17.6	\$ 14.2	-19.4%
<b>Total</b>	<b>\$ 547.3</b>	<b>\$ 125.1</b>	<b>\$ 182.4</b>	<b>45.8%</b>

The rest of this section sets out some of our initial comments on SP Ausnet’s capex proposals

<sup>1</sup> 2011-12 \$million

---

### 3.1. Incentives

We understand that the management contract between SP Ausnet and Singapore Power International contains incentives related to profits (as might reasonably be expected) and also incentives related to the size of the regulated asset base. By implication it would appear that there are managerial incentives to expand the regulated asset base. This might have affected SP Ausnet's expenditure proposals. We will be seeking to understand this better and call on the AER to do likewise.

### 3.2. Demand forecasts

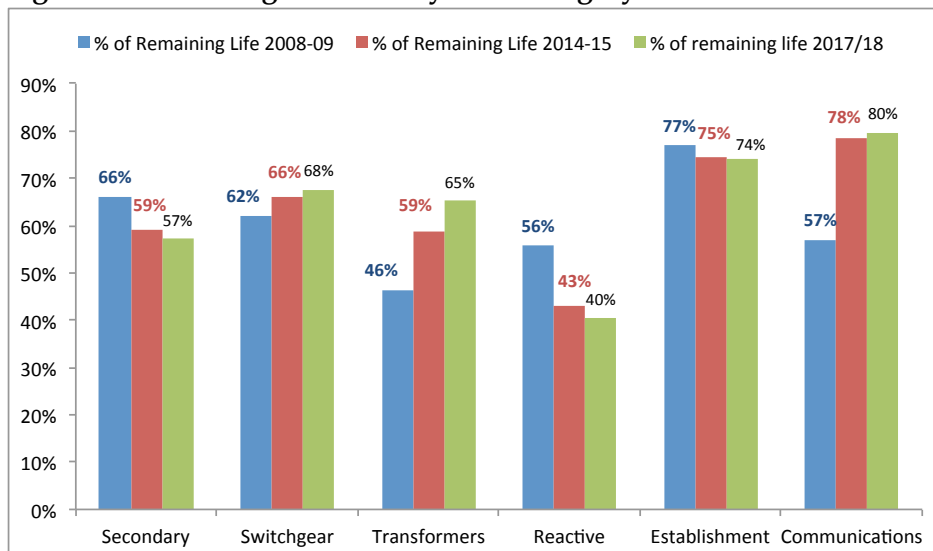
SP Ausnet's capital expenditure program is affected by demand forecasts inasmuch as this affects their assumptions of network loading and the value at risk in the case of failures. SP Ausnet's planning uses terminal station demand forecasts. These were consistent with a Victoria-wide simultaneous peak demand of 9,690 MW, and growth of 1.6% per annum thereafter. By implication, at the end of the coming regulatory control period, SP Ausnet is projecting peak demand of 10,325 MW.

However Victorian simultaneous maximum demand in 2012 has been 9,410 MW and this is very unlikely to be exceeded in the few remaining weeks of the financial year. In addition, the trend rate of demand growth from 2007 to 2012, has been a decline of 17 MW per year. Assuming this trend rate of decline continues (which in itself may be an optimistic assumption), the peak demand at the end of the coming regulatory period will be 9342 MW. This is 983 MW or more than 10% below SP Ausnet's planning assumption. This should be sufficiently large as to affect, to some meaningful extent, the timing of some significant capital projects. We will be seeking to understand this better and call on the AER to do likewise.

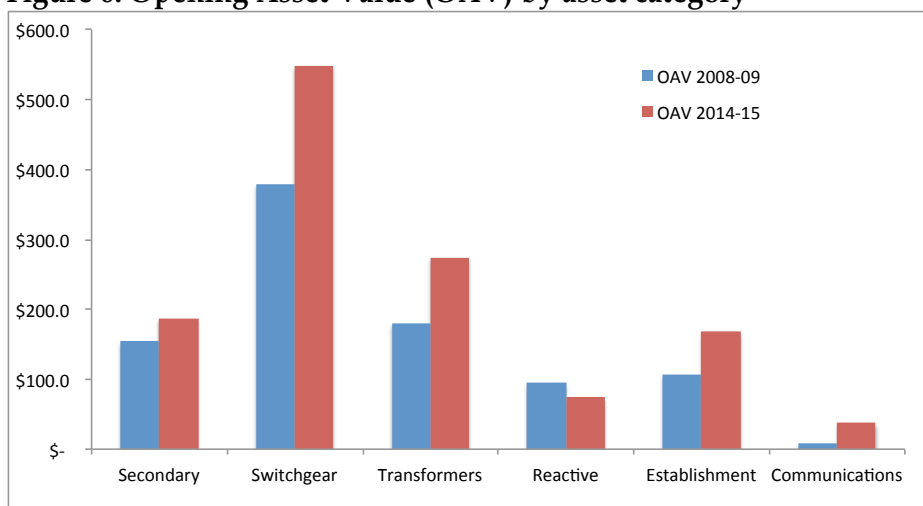
### 3.3. Asset ageing

As shown in Figure 5, at the start of the current regulatory control period, the remaining asset life, by asset category was above 50% for all assets, except transformers. At the end of the current regulatory control period, the remaining lives of all asset types (except the very long-lived structures and conductors (not shown) reactive and secondary assets) will be longer than at the start of the current regulatory control period. This trend continues in the coming regulatory control period, as shown. This reflects the significant level of expenditure during the current and coming regulatory period. The two asset categories where the remaining asset life is shorter at the end of the regulatory period than at the start (secondary and reactive) comprise a small proportion of the value of the RAB (as shown in Figure 5).

**Figure 5. Remaining asset life by asset category**



**Figure 6. Opening Asset Value (OAV) by asset category**



The combination of Figures 5 and 6 shows that in the two main non-tower asset categories (i.e. transformers and switchgear) the remaining asset life is longer, significantly so in the case of transformers. These tables show that there is no plausible asset ageing problem that would have justified step-change increases in capex in the previous regulatory period or this regulatory period. The high level of expenditure on switchgear and transformers is making a substantial impact on the average remaining asset life of these assets. Inevitably, taking account of this and also of benign expectations of demand, we question whether such a high level of expenditure is needed, or whether some part of it can be deferred to future periods without jeopardising the quality of supply.

### 3.4. Additional Comments

#### IT capex

SP Ausnet's average non-network capex is expected to increase by 31% for the next regulatory period. The bulk of this expenditure (80%) is allocated to IT expenditure. SP Ausnet have

---

proposed to spend \$45.5 million<sup>2</sup> on capex IT and \$20 million (2012\$) on opex IT, an increase in the average annual spend, compared to the previous period, of 38 percent and 20.3 percent respectively. These are substantial increases and so merit close scrutiny.

We have read SP Ausnet's explanation for this expenditure and at this stage we are unable to assess its merits. We will be seeking to understand this better and call on the AER to do likewise.

### **Effect of historic demand**

SP Ausnet explain that excessive loading occurred on its equipment in the summer of 2008-09 where peak demand in Victoria reached 10,603 MW. It suggests that this historic period of high demand has had a lasting impact on both the reliability and the condition of SP AusNet's power transformers. This is a significant claim. We call on the AER's engineering advisors to assess the evidence that supports this claim.

### **Gas Insulated Switchgear**

SP Ausnet explains that much of their asset replacement does not involve like for like asset replacement, but that in many cases more advanced and sophisticated equipment is being installed. One example is the use of Gas Insulated Switchgear to replace air-insulated switchgear. This is substantially more expensive. We do not fully understand the need for this technology choice. We call on the AER's engineering advisors to have particular regard to this in the case of the West Melbourne rebuild and other possible major projects.

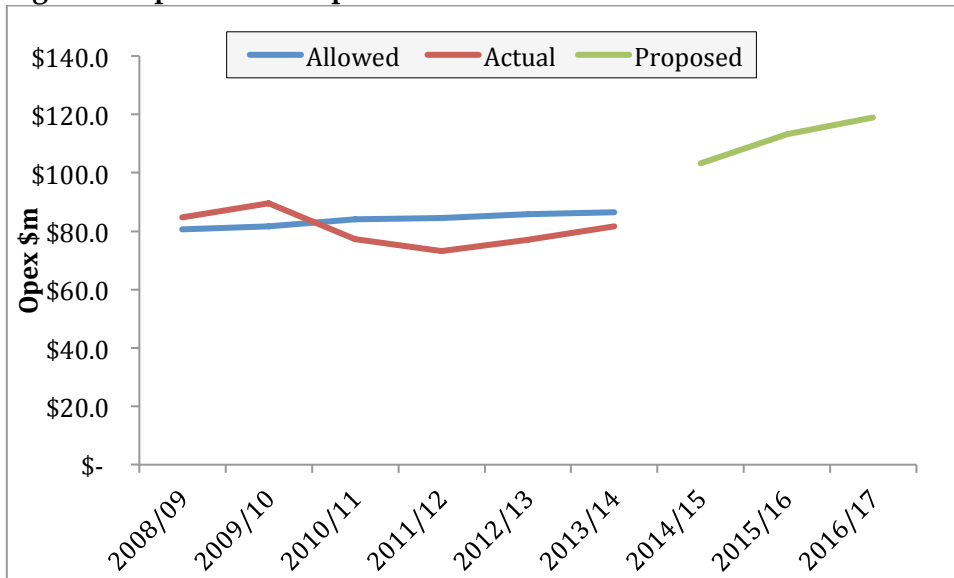
---

<sup>2</sup> 2011-12 \$m.

#### 4. Opex

The proposed opex is \$335.5 million<sup>3</sup> resulting in an average annual spend of \$111.8 million an increase of 40.3% over the average annual spend for the current period. SP Ausnet's proposed opex profile is compared with its actual/forecast spend for the current period in Figure 7.

**Figure 7: Operational Expenditure<sup>4</sup>**



A breakdown of proposed opex for the coming regulatory period compared to spending in the current period is shown in Table 2. This shows substantial increases in Direct Maintenance and IT Capital Works spending, offset only to a minor extent by reductions in Asset Works and Maintenance Support.

**Table 2: Opex Breakdown**

Opex Category	Proposed total Spend 2014-2017 (2011-12 \$m)	Average Annual Spend 2009-2014	Average Annual Spend 2014-2017	% Change Average Annual Spend
Direct Maintenance	\$ 93.8	\$ 25.1	\$ 31.3	24.5%
Asset Works	\$ 23.3	\$ 8.0	\$ 7.8	-2.8%
IT Capital Works	\$ 20.0	\$ 5.5	\$ 6.7	20.3%
Maintenance Support	\$ 16.9	\$ 5.9	\$ 5.6	-4.6%
Controllable Opex	\$ 267.5	\$ 74.9	\$ 89.2	19.4%

We have a number of comments on SP Ausnet's opex proposals, set out in the rest of this section.

<sup>3</sup> 2011-12 \$m; excludes SP Ausnet's easement tax

<sup>4</sup> 2011-12 \$m; excludes easement tax

---

## **EBSS payments**

SP Ausnet has projected remarkably large EBSS payments (\$47.1m) over the three year regulatory period. Considering the small gap between allowed and actual opex in the current regulatory period this is remarkable and while we are not disputing their calculation, it does point to the importance of the AER setting opex allowances that result in a fair distribution of the benefits of efficiency improvement, with users.

## **Base year**

We do not dispute SP Ausnet's base year proposal albeit that we have misgivings about the choice of a single year (as set out in our submission on Electranet's proposals). However, we suggest that the AER should carefully assess the base year allowance for non-recurrent step changes (or other expenditure allowances) that may be reflected in the outturn for the base year.

## **Step ups**

SP Ausnet's proposed increase in SF6 charges has used Treasury's emission price projections. These, even after recent revision seem unrealistically high and with a possible change in Commonwealth Government may not exist at all. We call on the AER to consider this

## **Roll-in of Group 3 prescribed assets**

SP Ausnet has proposed a proportional increase in opex (group three assets as a proportion of RAB) reduced by 30% for economies of scale. We are not convinced by this, considering that these additional assets are new and as such may have a much lower opex requirement than existing assets. Accordingly we call on the AER to conduct a bottom-up assessment of likely opex for these additional assets.

## **Ageing asset profile**

SP Ausnet has proposed additional opex to deal with ageing towers and conductors. While we have no basis to dispute the need for expenditure to maintain towers, it is not clear to us that SP Ausnet has accounted for the reduction in operating expenditure that is likely to result from the substantial expenditure in transformers and related substation works. Our charts earlier showed a substantial improvement in the remaining asset life of SP Ausnet's transformers and switchgear - which accounts for the majority of SP Ausnet's non-tower and conductor assets.

---

## **Operating Expenditure to Support ICT Capital Works**

SP Ausnet has proposed \$2.8m more operating expenditure to support ICT capital expenditure. While in the broader context this is not a significant amount, it needs to be seen as part of SP Ausnet's substantial claim for much higher capital and operating expenditure in ICT than it has incurred historically. We are not in a position to assess this expenditure claim but would like to be convinced that such large additional amounts of IT expenditure are essential, rather than nice to have. In addition, where the additional expenditure results in greater functionality and efficiency, we would have expected to see off-setting reductions in expenditure elsewhere. However SP Ausnet has only identified reductions of \$0.8m in expenditure. This seems inadequate.

---

## 5. Service incentives

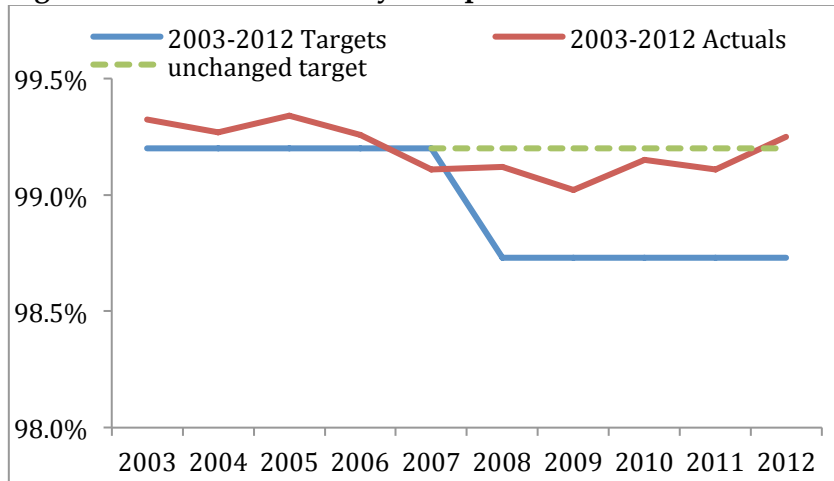
### AIS

SP Ausnet has forecast \$9.9 million for the Availability Incentive Scheme (AIS). To their credit they recognised that AIS payments in addition to the AER's incentive payments is double compensation. We call on the AER to work with AEMO and SP Ausnet to ensure that this does not continue.

### STPIS

SP Ausnet has performed well against its service targets for the nine-year period 2003 to 2012, as shown in Figure 8.

**Figure 8: Circuit Availability Comparison**



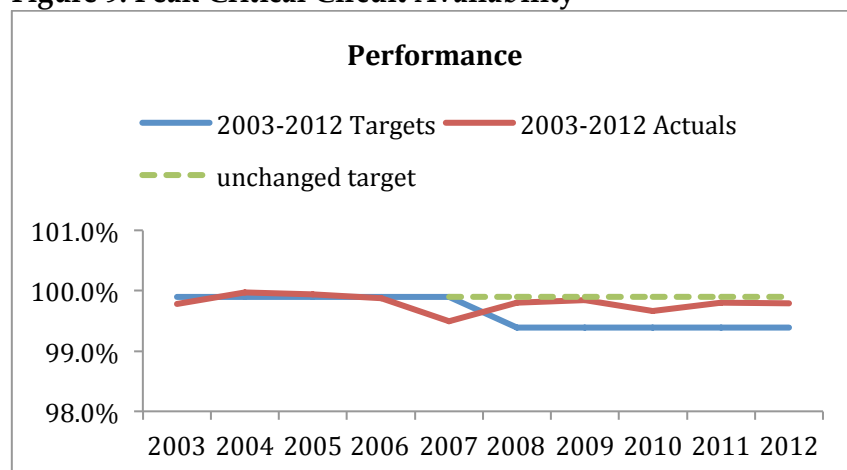
SP Ausnet has exceeded its targets for most of the period with the exception of 2007 where the performance was below the target for the 2002/03 to 2007/08 regulatory period. SP Ausnet exceeded its targets from 2008 to 2012.



---

Similar results are shown for *peak critical circuit availability* in Figure 9.

**Figure 9: Peak Critical Circuit Availability**



SP Ausnet performed sufficiently to meet its targets from 2004 to 2006 with a drop in performance in 2007. The period 2008 to 2012 continued the performance observed before 2007.

In aggregate, SP Ausnet seems to have been fairly remunerated for their performance under the service component of the incentive (around \$2.8m per year). We are more concerned about the remuneration under the market impact incentive. Last year, SP Ausnet was awarded \$4.2m for their performance under the market impact incentive. This seems a problematic especially in view of the concern that the measure does not actually reflect the cost of transmission congestion. We call on the AER to consider this in further detail including reducing the size of the compensation and penalty under this incentive.

Finally, we support SP Ausnet's proposals on the parameters of the Loss of Supply Event incentive.