Response to Clause 6A.11.1 Information Request

2008/09 – 2013/14

SP AusNet
A member of Singapore Power Group

About SP AusNet

SP AusNet is a major energy network business that owns and operates key regulated electricity transmission and electricity and gas distribution assets located in Victoria, Australia. These assets include:

- A 6,574 kilometre electricity transmission network indirectly servicing all electricity consumers across Victoria;
- An electricity distribution network delivering electricity to approximately 580,000 customer supply points in an area of more than 80,000 square kilometres of eastern Victoria; and
- A gas distribution network delivering gas to approximately 510,000 customer supply points in an area of more than 60,000 square kilometres in central and western Victoria.

SP AusNet's vision and mission are to be the best networks business delivering energy and associated services safely, reliably, responsibly and efficiently. The SP AusNet company values are:

- Commitment to the highest standards of service and performance when creating value for customers, the public, employees and shareholders
- Integrity to act with honesty and to practise the highest ethical standards
- Passion to take pride and ownership in all that we do
- Teamwork, to support, respect and trust each other, with continual learning through sharing of ideas and knowledge

The Victorian electricity transmission network is a key strategic asset servicing Australia's second largest economy and the National Electricity Market (NEM). The network serves in excess of 1.8 million households and 280,000 businesses transferring over 45 million megawatt hours of energy annually.

For more information visit: www.sp-ausnet.com.au

Contact

This document is the responsibility of the Regulatory and Business Strategy Division, SP AusNet. Please contact the officer below with any inquiries.

Thomas Hallam
Manager Transmission Regulation
SP AusNet
Level 31, 2 Southbank Boulevard
Melbourne Victoria 3006
Ph: (03) 9695 6000

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NOTE: NUMBERS IN TABLES MAY NOT ADD TO TOTAL DUE TO ROUNDING.

1 Response to Clause 6A.11.1 Request for Further Information

1.1 Introduction

This document constitutes SP AusNet's response to the AER's Request for Further Information under Clause 6A.11.1 of the NER. A list of attached documentation is attached to the back of this response.

1.2 Historic Capital Expenditure

This section and related supporting documentation supplied separately provides the additional analysis or information on the historic capital expenditure requested by the AER in order to comply with Section 4.3.3 of the Submission Guidelines.

1.2.1 Variations between actual capital expenditure and the approved forecast in 2002 Decision

SP AusNet has supplied a high level analysis of the variation between the expenditure forecast in the 2002 Decision and actual capital expenditure during the current regulatory period in Section 3.5 of the Proposal. This is reproduced below.

"The completed program has not been identical to that approved in the 2002 Decision as priorities, problems and solutions have changed. Nonetheless, the majority of the program forecast in 2002 has been rolled out. The comparison between forecast and actual capex over the period is shown in Table 3.5.1.

Table 3.5.1: Capital Expenditure 2002/03 to 2007/08 (Nominal $m)

Year	2002/03	2003^	2003/04	2004/05	2005/06	2006/07*	2007/08*	Total
Decision (CPI Adjusted)	73.1	17.7	73.4	69.0	58.7	82.0	85.2	441.5
Actual Capex	38.2	30.4	52.4	71.2	102.1	108.9	116.3	489.1
Actual Disposals	-0.8	-0.7	-1.0	-2.2	-1.6	-0.8	-0.8	-7.1
Actual Net Capex	37.4	29.7	51.4	69.0	100.5	108.1	115.6	481.9
Difference	**-35.7**	**11.9**	**-22.0**	**0.0**	**41.7**	**26.1**	**30.3**	**40.5**

^ Stub period from 1 January to 31 March 2003.

* Forecasts

Source: SP AusNet Roll-forward Model

While the quantum of capital expenditure forecast has been spent in total, the profile has differed from what was forecast to achieve a managed increase in the capex program. This was done to:

- allow the lessons learnt from managing some of the initial station rebuilds to be used in later projects. This was important, as rebuilds had not been performed on the system before 2000. In particular, new standards and processes had to be developed and tested on early projects before being rolled out across the program;
- allow a steady increase in resourcing to help maintain a competitive environment for service providers of design and construction services. This avoided large jumps in tendered work which can increase supplier pricing power;

- allow rescheduling to incorporate new higher priority work programs not forecast at the last reset, i.e. the tower safe access program addressing newly identified health and safety risks and resulting standards; and
- allow rescheduling to integrate the program with the modified augmentation plans of VENCorp and the Distributors, i.e. the Kerang Terminal Station refurbishment was delayed so it could be integrated with a Powercor transformer augmentation."

Further information request

Section 4.3.3(a)(7) of the Submission Guidelines states a TNSP must include:

> (7) An explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

SP AusNet believes this Clause clearly sets out that a TNSP must explain capex variation between the current and forecast regulatory control periods. This was done in Chapter 5 of its original Proposal in compliance with this Clause.

The AER has indicated it has interpreted this clause to mean reconciliation in detail between projects assumed in the original allowance for the current decision and actual outturns. This includes an explanation of variances in costs and timing at this level of detail.

This level of detailed analysis is not possible in the time frame for this response as the original 2002 forecasts from the 2002 Decision (involving over 1700 individual equipment items) are not entered in SP AusNet's financial systems. SP AusNet has indicated that it would take considerable additional effort to perform this analysis. Therefore, we agreed that SP AusNet would supply this commentary for the core station rebuild program only.

Station Rebuilding and Refurbishment Program

Table 1.1.1 shows a comparison of costs as forecast in the 2002 Decision and the actual expenditure. Figure 1.1.1 shows the relative time frames for station rebuilds.

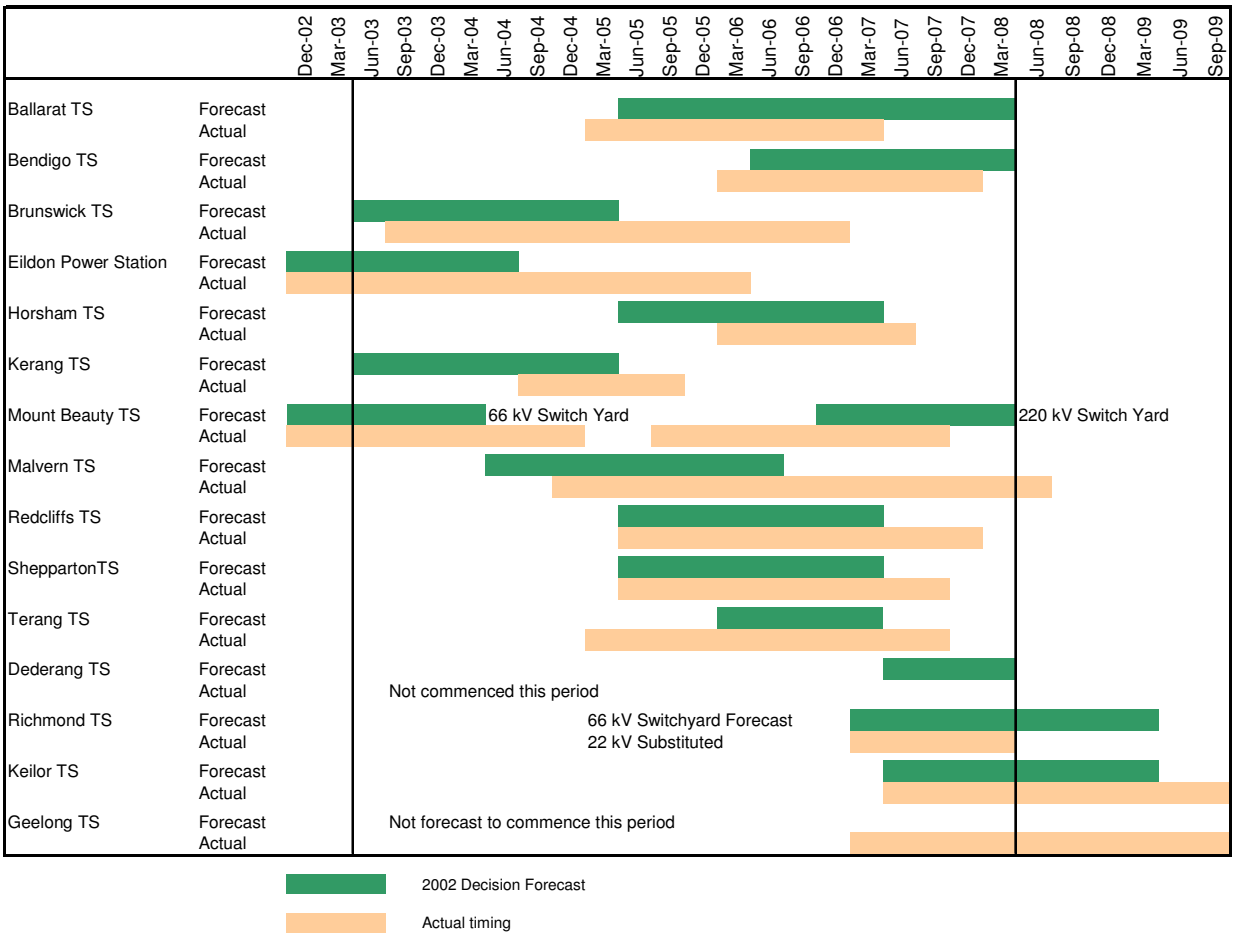
Table 1.1.1 Station Refurbishment Program Costs proposed by SP AusNet in 2002

		Value ($M)	Comments
Ballarat TS	Forecast	15.4	
	Actual	14.6	
Bendigo TS	Forecast	15.6	
	Actual	14.4	
Brunswick TS	Forecast	18.6	
	Actual	22.1	
Eildon Power Station	Forecast	8.6	
	Actual	10.7	
Horsham TS	Forecast	9.7	
	Actual	10.3	
Kerang TS	Forecast	9.3	
	Actual	10.1	
Mount Beauty TS	Forecast	10.4	
	Actual	12.1	
Malvern TS	Forecast	27.1	
	Actual	38.6	
Redcliffs TS	Forecast	10.6	
	Actual	15.0	
SheppartonTS	Forecast	12.9	
	Actual	10.5	
Terang TS	Forecast	15.3	
	Actual	17.6	
Dederang TS	Forecast	7.5	
	Actual	0.0	Not commenced this period
Richmond TS	Forecast	5.8	66 kV Switchyard Forecast
	Actual	6.0	22 kV Substituted
Keilor TS	Forecast	12.8	
	Actual	2.1	WIP
Geelong TS	Forecast	0.0	Not forecast to commence this period
	Actual	11.3	WIP

Note: this information is a 'best endeavours' analysis with-in the timeframe generated from records that have not been audited. In particular the escalation into dollars of the day for 2002 Forecasts does not reflect the latest CPI information and therefore will not directly correspond to the actuals totals for each project. Nonetheless, the comparison is indicative.

Source: SP AusNet

Figure 1.1.1 Timing of Station Refurbishment Program proposed by SP AusNet in 2002



Note: this information is a 'best endeavours' analysis with-in the timeframe generated from records that have not been audited.

Source: SP AusNet

Eildon Power Station Switchyard

Eildon power station was the first station rebuild attempted by SP AusNet and was underway before the start of the last regulatory period. It was completed in 2005/06 (forecast to be completed in the 2003/04).

The station experienced a considerable delay for two major reasons:

- firstly, outages were difficult to obtain because the Southern Hydro generation connected at the station was required to operate on most days; and
- secondly, the steel bus conductors required replacement, which was not forecast in the 2002 Decision. Additional work was required to segment the bus so that the generator could be kept on supply while replacement of other sections of the bus could proceed. This resulted in shorter outages, more often to complete the work.

The negotiation over these outages severely disrupted the program and caused delays. These delays increased the costs of the project.

The lessons learnt from this project, especially coordination with the relevant Generator and the methodology for bus conductor replacement from this project were used over the other similar projects in this period allowing costs to be minimised over the forward program.

Kerang Terminal Station

Work on Kerang was commenced in early 2004/05, later than forecast (start of 2003/04). The station was completed in mid 2004/05 for approximately the same costs as forecast in the 2002 Decision.

The delay in commencement was planned following a detailed review on work scheduling with Powercor (local DB) to allow coordination with a Powercor augmentation at the site. A new third transformer was installed coincident with the rebuild project. Treating both replacement and augmentation projects a s a single work program achieved efficiencies in the delivery of the overall work project, thereby reducing the overall project costs.

Brunswick Terminal Station

Brunswick was the first metropolitan station rebuild planned by SP AusNet and was underway at the beginning of the current regulatory period. It was completed in late 2006/07 (forecast to be completed in the 2004/05). The station was completed for a cost above that forecast in the 2002 Decision.

The Brunswick rebuild involved transformer replacements and required additional work to maintain reliable supply to customers while replacing transformers. This was unanticipated in the original forecasts, as SP AusNet had not planned in detail for a metropolitan rebuild before. The finalised plan involved establishing a new location for transformers, including foundations, to ensure reliable supply. This delayed the project and increased the costs. A further delay was encountered when a decision was taken that no work should occur in metropolitan Terminal Stations before or during the Commonwealth Games in 2006 to minimise the possibility of unplanned outages. This delayed the project a further 4 months and increased the costs.

The lessons learnt on this project, particularly the large amount of temporary work required to maintain a reliable supply, were factored into the Malvern rebuild and have been factored into the planning for the metropolitan rebuilds in the upcoming program.

Ballarat Terminal Station

Work on Ballarat was completed faster than forecast for slightly lower costs to those forecast in the 2002 Decision.

Shepparton Terminal Station

Work on Shepparton was completed in a similar timeframe as forecast for slightly lower costs to those forecast in the 2002 Decision.

Horsham Terminal Station

Work on Horsham was completed in a similar timeframe as forecast for a higher cost than forecast in the 2002 Decision.

Minor adjustments were made to the project to coordinate with a transformer augmentation project at the station. The bus replacement work, associated outages and higher than expected installation and material costs increased the overall project costs above those forecast in the 2002 Decision.

There were also additional costs associated with establishing new bays. This allowed the replacement plant to be installed while leaving the existing plant in place. The new plant could then be energised before the decommissioning and removal of the old plant. This staged cut over from the old equipment to the new equipment minimised outages and risk of customers losing supply.

Dederang Terminal Station

Considerable work in the Dederang 220 kV switchyard was forecast for the current regulatory period. However, a detailed review of station risk showed that the replacement of the current transformers (CT) achieved the desired risk outcomes without the need to replace the circuit breakers. Therefore, the rebuild did not proceed. The CTs were replaced as part of the instrument transformer replacement program.

Bendigo Terminal Station

Work on Bendigo was completed faster than forecast for slightly lower costs to those forecast in the 2002 Decision.

Redcliffs Terminal Station

The Redcliffs rebuild project was commenced in 2005/06 as forecast in the 2002 Decision. It is expected to be completed in late 2007/08 (forecast to be completed in late 2006/07). The station is expected to be completed for a cost considerably above the forecast in the 2002 Decision.

The Redcliffs rebuild project costs increased due to higher than expected installation and material costs, some driven by the remote location of the site (original 2002 Decision forecasts were done on a standard bay basis with no adjustment for site specific factors). An independent SKM report on the station rebuild found that the original forecasts should have been adjusted upwards by 30% (brownfields factor) to account for the site-specific costs for this type of work.

In addition, difficulties with the Murraylink installation at the site caused further delays and required additional works and costs during the rebuild that were not anticipated in the 2002 Forecasts.

Project timing was changed to allow was coordination with a Powercor (local DB) transformer augmentation.

Terang Terminal Station

Terang was commenced in 2004/05 considerably before forecast in the 2002 Decision (late 2005/06). It was completed in late 2006/07 (forecast to be completed in mid 2006/07). The station is expected to be completed for a cost considerably above the forecast in the 2002 Decision.

Again this was a remote site with associated additional installation costs and lost work for travel time. The scope of work also was greater than anticipated in the 2002 Decision forecasts. In particular, the following costs were not included in the 2002 Decision forecasts:

- the necessity for a new control building and associated communications and secondary work;
- large increases in transformer prices seen towards the end of the current regulatory period; and
- a catastrophic current transformer failure and resulting fire during the installation period.

Mount Beauty Terminal Station

The rebuild of 66kV switchyard at Mount Beauty was commenced in 2002/03 as forecast in the 2002 Decision. It was completed in 2004/05 (forecast to be completed in late 2003/04).

The rebuild of 220kV switchyard at Mount Beauty was commenced in 2005/06, before forecast in the 2002 Decision (2006/07). It is expected to be completed in mid 2007/08 (forecast to be completed in late 2007/08).

The Mount Beauty project outages for the 66 kV works were complicated by the generation connections and radial supplies to the Distributor. The 220 kV project was commenced early following failure of the 220/66 kV transformer at the site. The costs were greater than originally forecast mainly due to higher than expected installation and material costs and additional work caused by the transformer failure.

Malvern Terminal Station

Malvern was commenced in 2004/05 as forecast in the 2002 Decision. It is expected to be completed in early 2008/09 (forecast to be completed in the 2006/07). The station is expected to be completed for a cost considerably above the forecast in the 2002 Decision.

The scope of works for Malvern rebuild was significantly greater than originally forecast. The original forecast was done on a like-for-like basis, however the detailed constructability analysis showed the rebuild could not proceed on this basis because of the site restrictions. In particular, the actual rebuild costs included to following costs not in the original forecast:

- a new control building;
- a new building to house the indoor 22 kV switchyard;
- integration of the communications replacement program at the station with the rebuild;
- extensive tempory work to allow the relocation and correct sequencing of work on the outdoor switchyards; and
- sound enclosures on the transformers due to the proximity of residential areas.

This change in scope was negotiated with and approved by customers (VENCorp and DBs). The project is now proceeding on time to a revised schedule.

Keilor Terminal Station

Work on Keilor was forecast to begin during the current regulatory period. Keilor is underway in the current period with approximately $2 million work in progress forecast for the end of 2007/08. This rebuild was moved back in the overall capex program in order to bring the higher priority Geelong Terminal Station rebuild forward. This reprioritisation is to be expected for projects towards the end of a regulatory period where the original forecasts will be based on preliminary rather than detailed information.

Geelong Terminal Station

Work on Geelong was not forecast to begin during the current regulatory period. However, Geelong was brought forward in the capex program and is underway in the current period with approximately $11 million work in progress forecast for the end of 2007/08. This reprioritisation is to be expected for projects towards the end of a regulatory period where the original forecasts will be based on preliminary rather than detailed information.

Richmond Terminal Station

A small amount of work on Richmond 66kV yard was forecast to commence towards the end of the current regulatory period (Start of 2007). However, given the condition of the 22 kV yard at Richmond it was deemed a higher priority replacement and has been rebuilt during the current

period (see Section 3.5.5 of the Proposal) instead and the 66 kV yard is forecast to be to be completed during the current regulatory period.

1.2.2 Project Specific Commentary

SP AusNet has provided the AER with program/project summaries for all ex post projects and reconciliation between the summaries and the templates. These summaries provide:

- the main reasons for each project being undertaken (eg demand growth);
- the main reasons for material cost variances for each particular project and whether these variances were foreseeable and any material variance in the commissioning date of a project and whether the variance was foreseeable;
- how each project aligns with SP AusNet's asset management strategy/plan; and
- major project risks and strategies undertaken to mitigate them.

These fulfil the requirements of Section 4.3.3 of the Submission Guidelines.

SP AusNet has supplied a spreadsheet showing the original 'Business Case' cost estimates where these have varied from final revised estimates published in the Historic Capex templates. A brief explanation has been provided for the variation between the actual costs and the original estimates. This document is part of the attached material to this response.

SP AusNet would expect a more detailed review of specific projects would be undertaken during the AER's review of the historic expenditure.

1.2.3 Management induced efficiencies

As outlined in the proposal, SP AusNet has achieved capex efficiencies through:

- various cost control measures including increased use of long-term purchasing contracts with suppliers, partnering with various providers, and optimising the mix of insourcing and outsourcing of resources in response to quoted prices;
- improvements to asset management systems and processes; and
- close integration of the program with customer augmentation where possible to achieve cost synergies.

Specifically SP AusNet has identified the following management induced efficiencies that have helped to control costs or improve delivery of the capex program during the current period:

Design

- Creation of a design manual – this was developed to reduce design costs by reducing the design effort for each design service provider and to ensure that each service provider is tendering on an equal footing. This ensures that the most efficient tenderer can be identified and the final delivered product is consistent;
- Creation of standard drawings for use by designers – the introduction of number of standard drawings for primary and secondary works reduced the cost of designs, achieved consistent project outcomes and reduced the number of different drawing and plant and equipment types so that drawing costs can be reduced, inventories reduced and projects delivered more efficiently;
- Creation of standard work packages for design – this has enabled design service providers and SP AusNet to reduce the costs and time taken to tender work;

- Development of a design service provider panel – a panel of design service providers was established by tendering sample work packages and the responses were then evaluated against a number of criteria including costs and quality measures. From this evaluation a number of service providers have been established and this will reduce the costs and time of tendering work;

Installation

- Development of installation service provider panel – a panel of approved service providers was created in order to reduce tendering times and costs and to control quality of the works;
- Introduction of more detailed job scopes and a new estimating system – this package introduced more detailed work scopes and detailed cost estimates using the new estimating system. This enables tenderers to be evaluated more consistently and enables SP AusNet to ensure that appropriate prices are being charged for the work. This also reduces the opportunity for contractors to submit claims for additional costs due to lack of clarity in the original scope;
- Introduction of a project execution manual – the documented project execution manual enables SP AusNet to quickly introduce contractors. This enables SP AusNet to deal efficiently in peaks and troughs for the different types of projects;
- Introduction of constructability analysis for projects – this was introduced at the start of the project development phase to ensure that the design and layout is constructible and is efficient in terms of outages and the use of resources;

Cost control

- Establishment of a Logistics Group – the logistics group was established due to concerns regarding increasing price pressures. The group is developing strategies to minimise the upward movement in prices due to the current market conditions;
- Internal Station Refurbishment Studies – major station refurbishment studies are now performed in house at a considerably reduced price to those previously done by Consultants. This also retains important knowledge in house.
- Introduction of dead tank circuit breakers that reduced the cost of switchbays – these reduced the cost of replacing a circuit breaker and current transformer combination and also reduced the consequences of a failure;
- Change to polymeric insulators – this reduced the cost of replacing the existing line porcelain insulators;
- Development of electronic approval processes – this was introduced to enable better tracking of project approvals and to reduce wasted time and effort in manual systems;

Integration with customer plans

- Integration of customer augmentation requirements with asset replacement – this involves aligning work timing to ensure that the work is undertaken in a time to suit customer requirements and to ensure that any increased capacity requirements of customers can be provided cost effectively. For example, allowing for the installation of a customer transformer augmentation before undertaking a refurbishment program provides increased flexibility in outages required for asset replacement works, lowering installation costs;

- Station Reconfiguration – by integration of asset replacement work at a site together with customer requirements and reconfiguring the station it is possible to gain considerable efficiencies in the final redevelopment;
- Introduction of new larger transformer size – this evaluation was done to establish if a larger transformer size was more efficient in certain circumstances than the standard 150MVA transformer. This evaluation led to efficiencies in the Malvern refurbishment project and will lead to efficiencies in the future Richmond Terminal Station project.

1.2.4 Relevant Annual Planning Reports

SP AusNet's proposal addresses only capital expenditure on the existing network (replacement, compliance, non system), as it is not responsible for augmentation in response to demand growth. VENCorp is the appropriate Victorian TNSP to provide the relevant Annual Planning Reports to the AER underpinning the shared network. The Victorian Distribution Companies are the appropriate bodies to provide the relevant Joint Connection Planning Reports to the AER for specific connection points.

1.2.5 Capital Governance and Approval Processes

SP AusNet has attached a presentation outlining its approval process and key documentation. It has also attached the relevant policy documents.

1.2.6 Capitalisation Policy

SP AusNet has supplied documents outlining the transmission capitalisation policy to the AER. These documents are part of the attached material to this response. These documents were used to prepare the numbers presented in the proposal.

A new capitalisation policy is being prepared as part of the financial consolidation of the three networks which we will make available once finalised. We do not expect any material changes to result from the new policy.

1.3 Forecast Capital Expenditure

This section and related supporting documentation supplied separately provides the additional analysis or information on the ex ante capital expenditure requested by the AER in order to comply with Section 4.3.3 of the Submission Guidelines.

1.3.1 Project Specific Commentary

SP AusNet has provided the AER with program/project summaries for all ex ante projects and reconciliation between the summaries and the templates. These fulfil the requirements of Section 4.3.3 of the Submission Guidelines.

SP AusNet would expect a more detailed review of specific projects would be undertaken during the AER's review of the ex ante capex proposal.

1.3.2 Capital Governance and Approval Processes

This is covered in Section 1.2.5 above.

1.3.3 Relevant Annual Planning Reports

SP AusNet's proposal addresses only capital expenditure on the existing network (replacement, compliance, non system), as it is not responsible for augmentation in response to demand growth. VENCorp is the appropriate Victorian TNSP to provide the relevant Annual Planning Reports to the AER underpinning the shared network. The Victorian Distribution Companies are the appropriate bodies to provide the relevant Joint Connection Planning Reports to the AER for specific connection points.

1.3.4 Consultants Reports on Probabilistic Methodology

SP AusNet's proposal addresses only capital expenditure on the existing network (replacement, compliance, non system), as it is not responsible for augmentation in response to demand growth. Therefore, SP AusNet has not used a probabilistic methodology in preparing its capex forecasts

1.3.5 Reconciliation between Tables 5.5.1, 5.5.2 and 5.5.3

A reconciliation between the as-commissioned values for station rebuilds shown in Table 5.5.1 of the proposal and the individual station rebuilds described in Table 5.5.2 is shown in Table 1.3.1 below.

Table 1.3.1 Station rebuilding and refurbishment project expenditure 2008/09-2013/14 (Real 2007/08 $M)

Station Switchyard to Rebuilt or Refurbished	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Brooklyn TS				16.3	35.6	
Glenrowan TS					3.2	18.1
Geelong TS	21.3		18.4			
Hazelwood TS			0.2	19.2		
Hazelwood Power Station	5.0	12.0	8.8	3.5	5.8	1.6
Keilor TS	8.7	20.8		12.3		
Richmond TS					20.6	69.0
Ringwood TS		16.9	3.2	0.1	1.4	7.8
Thomastown TS		4.8	39.0			
West Melbourne TS						
Total	**35.0**	**54.5**	**69.6**	**51.2**	**66.6**	**96.5**
Malvern TS	4.4	Rebuild completed from previous regulatory period				
Total from Table 5.5.1	**39.5**	**54.5**	**69.6**	**51.2**	**66.6**	**96.5**

Note: As-commissioned Geelong and Keilor Terminal Stations values include expenditure shown in the WIP column of the historical capex templates and the first year of the forecast capex templates (6 months IDC excluded).

Source: SP AusNet

Please note that the original proposal Table 5.5.3 was linked to the wrong information from the capex spreadsheets. A corrected reconciliation will be provided to the AER as quickly as possible.

1.3.6 Reconciliation between Templates and Support Documents

SP AusNet has provided project identification and cross-referencing between the ex-ante summary documents and the templates. The company has also provided cross-referencing

between the ex-post summary documents and the templates. These documents are part of the attached material to this response.

1.4 Operating Expenditure

1.4.1 Factors resulting in an increase in efficient opex requirements

SP AusNet has identified a number factors that together act to increase the efficient operating expenditure requirements in the forthcoming regulatory control period. These factors include:

- the asset failure risks - and the associated increase in maintenance activity - associated with the ageing asset base;
- increased resource requirements associated with compliance with legislation, rules and regulations;
- increasing labour costs created by skilled labour shortages and the current resources boom;
- the increase in prescribed service opex in the forthcoming regulatory period associated with the rolling-in of non-contestable excluded service assets constructed in the current regulatory period; and
- the inclusion of the Company's self-insurance claim.

The majority of SP AusNet's asset work program is driven by asset failure. The asset works program is preventive in nature and can significantly contribute to reducing total life cycle costs associated with asset failure and increased monitoring and maintenance needs. Table 1.4.1(a) outlines the asset works program, which has been driven primarily by asset failure, and the expenditure required over the next regulatory period for each specific program. Please refer to section 6.7.3, 6.7.4 and 6.7.6 of SP AusNet's Electricity Transmission Revenue Proposal, which provides a detailed description of the majority (except for facilities maintenance and miscellaneous works) of the specific asset work projects.

Table 1.4.1 (a) Asset Works Program - 2007/08 to 2013/14

Asset Works Program	Expenditure
Tower Foundation Corrosion	$4.2 million
Tower Ground Level Corrosion	$8.2 million
Tower Painting	$4.8 million
Tower Bolt Replacement	$0.6 million
Replacement of Tower Steelwork	$1.8 million
Replacement of Transmission Line Hardware	$1.2 million
SF6 Circuit Breaker Refurbishments	$10.1 million
Gas Insulated Switchgear Refurbishment	$5.2 million
Power Cable Repairs*	$7.5 million
Power and Instrument Transformer Repairs	$2.3 million
Facilities Maintenance	$2.8 million
Condition Monitoring	$1.0 million
Miscellaneous Works	$6.5 million
Total Expenditure ($2006/07)	**$56.2 million**
Total Expenditure ($2007/08)	**$57.7 million**

*The expenditure specified in SP AusNet's Electricity Transmission Revenue Proposal 2008/09-2013/14 is in ($2006/07), however, the expenditure in the PTRM to determine SP AusNet's Maximum Allowable Revenue is specified in ($2007/08).

*The expenditure specified in SP AusNet's Revenue Proposal for Power Cable Repairs is specified as $7 million. This is a drafting mistake and should be $7.5 million

Source: SP AusNet

SP AusNet is required to comply with significant new health and safety, environmental and security obligations in addition to existing obligations. There are a number of asset works programs, which are focused on ensuring compliance with our legislative obligations. Table 1.4.1 (b) outlines the compliance program and the expenditure required over the next regulatory period for each specific program. Please refer to section 6.7.5 of SP AusNet's Electricity Transmission Revenue Proposal, which provides a detailed description of each of the specific compliance projects.

Table 1.4.1 (b) Compliance Programs - 2007/08 to 2013/14

Compliance Program	Expenditure
Asbestos Removal	$2.7 million
Switchyard Resurfacing	$2.5 million
Lead contamination	$0.5 million
Transformer Leaks Repairs and Oil Treatment	$4.3 million
Total Expenditure ($2006/07)	$10 million
Total Expenditure ($2007/08)	**$10.3 million**

*The expenditure specified in SP AusNet's Electricity Transmission Revenue Proposal 2008/09-2013/14 is in ($2006/07), however, the expenditure in the PTRM to determine SP AusNet's Maximum Allowable Revenue is specified in ($2007/08).

Source: SP AusNet

A key driver for the increase in expenditure is the increase in labour costs. SP AusNet has only applied the labour cost escalation factor of 2.83 percent per annum above CPI respectively to the labour component of each respective expenditure item. SP AusNet has adopted BIS Shrapnel's forecasted wage growth index for the electricity industry in Victoria. Please refer to section 1.4.5 for a further explanation on the forecasting methodology.

The rolling-in of the non-contestable excluded service assets constructed in the current regulatory period has resulted in an increase in prescribed service opex in the forthcoming regulatory period by 1.03 percent. The value of 1.03 percent was determined by the increase in the regulated asset base as at 31 March 2007 (90.34 percent) to 31 March 2008 (92.8 percent). The percentage increase in prescribed opex is applied across the total opex in the forthcoming regulatory period not just to the specific non-contestable assets, which are rolled into the asset base at the beginning of the future regulatory period.

SP AusNet's self-insurance claim has resulted in an increase in opex requirements in the forthcoming regulatory control period. In the current regulatory period SP AusNet claimed $0.8 million each year for self-insurance. In the future regulatory period SP AusNet has claimed $2.5 million each year for self-insurance, however, the baseline self-insurance claim is only $0.5 million each year and the deductibles claim is $2 million each year. SP AusNet has included deductibles in the self-insurance claim, as deductibles are no longer pass-through events due to the new materiality threshold for pass-through events established in the new National Electricity Rules.

1.4.2 Description of the forecasting methodology

SP AusNet has distinguished between recurrent and non-recurrent expenditure in forecasting the opex requirements for the forthcoming regulatory period.

SP AusNet has forecasted the opex for recurrent expenditure that is routine maintenance, corporate costs and support costs for asset works for 2008 equal to the 2006 recurrent actual expenditure. It is appropriate that the above-mentioned expenditure categories are treated as recurrent given that the historic expenditure provides a reasonable reflection on the future expenditure. For example, the routine maintenance program for a business remains relatively stable and the required support staff such as SP AusNet's engineers and technical staff remain relatively stable even though the profile for asset works may vary.

SP AusNet has appropriately scoped and taken into account the new functions and activities for the 2006/07 base year. The base year includes the savings generated from the merger between SPI PowerNet (the transmission business) and TXU (the distribution business). The base level as a result has been reduced due to the initial savings experienced during the merger and hence carried forward to customers on a permanent basis. The 2006/07 base year has not been audited. It is expected that the Regulatory Accounts and Statutory Accounts will be audited by the end of July and May respectively. The base year includes 9 months actual expenditure from March 2007 to December 2007 and 3 months forecast expenditure from January 2008 to March 2008.

The asset works expenditure is not recurrent and therefore it is not appropriate to derive forecasts of future requirements from previous experience. The asset works is forecasted on a program basis, which reflects specific works such as Tower Foundation Corrosion and Asbestos Removal. Please refer to Opex Model, which provides a bottom-up build for each specific program. The Opex Model is part of the attached material to this response.

SP AusNet has applied a labour cost escalation factor of 2.83 percent per annum above CPI for only the labour component for each opex category. The expenditure categories that have not been escalated by the labour cost escalation factor are Taxes/Leases, Insurance and Self-Insurance. Table 1.4.2 (a) provides an example of how the labour component for maintenance has been escalated. The methodology for escalating the labour component for each category is identical.

Table 1.4.2 (a) Labour cost escalator applied to each opex category

		Factor	Weighted Escalator
Maintenance	100%		2.00%
Labour	71%	2.83%	
Maintenance	22%	0%	
Materials	5%	0%	
Admin	1%	0%	
Other operating	1%	0%	
Minor equipment	0%	0%	
Support services	0%	0%	

Routine Maintenance	Weighted Escalator	2006/07	2007/08	2008/09
Maintenance	2.00%	17,356	17,703	18,058

Source: SP AusNet

The weighted escalation factor is applied to each opex category in the Opex Model which inturn feeds into the PTRM. The escalation factor has been derived from the sum product of the percentage component for labour and the labour cost escalation factor.

In relation to how the value for Self-Insurance was determined please refer to the SAHA International report attached to SP AusNet's Electricity Transmission Revenue Proposal. In relation to Insurance (under the Routine Maintenance Expenditure category) Table 1.4.2(b) provides the bottom up build for SP AusNet's insurance claim. All the forecast premiums were based on advice from SP AusNet's respective insurance brokers.

Table 1.4.2(b) Insurance Forecast: 2007/08 –2013/14

Policy *($M)*	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Property	2,250	2,250	2,150	2,150	2,150	2,150
Directors' & Officers' Liability	496	745	930	930	930	930
General Liability & Professional Indemnity	1,851	2,036	2,240	2,463	2,500	2,500
Aviation Non-Ownership	6	6	6	6	6	6
Voluntary Workers	0.6	0.6	0.6	0.6	0.6	0.6
Corporate Travel	5	$5,350	$5,350	$5,350	$5,350	$5,350
Motor Vehicle	116	116	116	116	116	116
Total	**4,724**	**5,159**	**5,448**	**5,671**	**5,708**	**5,708**
Transmission 60%	2,835	3,095	3,269	3,403	3,425	3,425
Real Dollars 2007/08	**2,908**	**3,176**	**3,359**	**3,491**	**3,514**	**3,514**

Source: SP AusNet

In relation to Land Tax (under the Routine Maintenance Expenditure category – distinct from Easement Tax), Table 1.4.2(c) provides the bottom up build for SP AusNet's land tax claim.

NOTE: NUMBERS IN TABLES MAY NOT ADD TO TOTAL DUE TO ROUNDING.

Table 1.4.2(c) Land Tax Forecast: 2007/08 – 2013/14

Land Tax	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Land Valuation ($)	96,523	100,382	104,396	108,570	112,912	117,426
Land Tax (3%)	-48,504	-48,389	-48,268	-48,143	-48,013	-47,877
Council Rates	673,179	700,096	728,090	757,203	787,479	818,967
Water Rates	98,006	101,925	106,000	110,239	114,647	119,231
Total	**722,681**	**753,633**	**785,822**	**819,298**	**854,113**	**890,320**

Source: SP AusNet

A 3 percent land tax is levied as a proportion of the land value, which is based on the 2006 site values, conducted by the State Revenue Office.

SP AusNet has assumed the underpinning land value to increase at 4 percent in real terms. SP AusNet has adopted the Australian Bureau of Statistics (ABS) average real increase in Melbourne house prices over the last 20 years from 1996 to 2006.

1.4.3 Replacement capital expenditure effects on maintenance and asset works costs

SP AusNet's replacement capex program has resulted in a reduction in the maintenance work program. The replacement capex program has been increasing which has an effect on maintenance and is captured in our Maximo systems; however, the capex program is not large enough to have such an impact on the aging of assets to see maintenance costs significantly decrease.

The volume of maintenance work has increased at a faster rate than the increase in maintenance costs. As a result the average maintenance cost per hour has decreased by 8 percent from the current to the future regulatory period. This reflects a greater level of productivity and benefits of economies of scale.

SP AusNet's increased capex program aims to ensure that the aging of our assets are at a sustainable level and is sufficient to offset the deterioration in condition. As deterioration is the principal driver of condition monitoring and preventative maintenance activities the opex requirements for the future regulatory period will not change significantly throughout this period.

The asset works program is preventive in nature and aims to maintain the operational performance of the assets; therefore, there will not be a significant offsetting of the opex requirements. Instead, the program can significantly contribute to reducing total life cycle costs associated with asset failure and increased monitoring and maintenance needs.

Please refer to section 1.9 which provides a more detailed description of the interaction between capex and opex.

1.4.4 Description of merger cost-savings

SP AusNet experienced substantial savings in 2006/07 due to the merger of SPI PowerNet (the transmission business) and TXU (the distribution business). The majority of the initial gains from the merger have been made, however, these savings have been captured in the 2006/07 base year and, as a result, customers will benefit from these savings going forward.

The merger savings can be categorised by the integration of the businesses and the establishment of the management company.

The integration of the businesses involved for example, the:

- establishment of one department for HR, Finance and the Network Services Group, which has resulted in a reduction of overhead costs;
- the integration of the distribution and transmission operating centres; and
- development of the new IT systems, which has resulted in flow on benefits into other areas such as Finance and HR. For example we now have developed a new finance system called Oracle, which has resulted in the finance department being streamlined and a reduction in costs.

The establishment of the management company has resulted in labour overhead costs being stripped out of other areas such as routine maintenance and corporate costs.

A presentation, which illustrates the net savings achieved from these merger effects, is part of the attached material to this response.

1.4.5 Historic Labour Costs

This section provides some analysis of the wage growth experienced by SP AusNet focusing on actual EBA experience.

Headline price movements

The affected changes in the price of labour supplied to SP AusNet under the EBA agreements are set out below.

Table 1.4.3 EBA outcomes 2002 to 2006

Transmission members	ASU 225	ETU 58	CPI Average	Weighted Nominal	Real Increase
2002	4.4%	4.4%	2.9%	4.4%	1.5%
2003	4.0%	4.0%	3.1%	4.0%	0.9%
2004	4.8%	4.5%	2.4%	4.7%	2.3%
2005	4.8%	3.5%	2.4%	4.5%	2.1%
2006	4.5%	3.0%	3.2%	4.2%	1.0%
Straight Price effect.				**4.4%**	**1.6%**

Source: SP AusNet

The changes in EBA terms and conditions, including wage escalation, to be fully priced into operating costs, during 2007 are still subject to commercial negotiation. SP AusNet believes it would be inappropriate, and potentially detrimental to those negotiations, to comment on any possible outcome from that commercial process.

Both BIS Shrapnel and Access Economics concur that a tightening of the labour markets pertaining to the Utilities sector will push the price of labour up in the near term. This tightening of the labour market indicates that real increases in the costs of labour, above those experienced in the recent past, are to be expected for the years 2007 through to 2009.

SP AusNet does not believe there to be sufficient evidence to confidently forecast these pressures will mitigate post 2009 to such an extent that labour market pressures result in prices rising at lower rates than experienced since 2002.

Furthermore, these headline labour price figures supplied above do not include the effects, on the price of labour, driven by changes in the terms of employment and associated benefits.

These often-piecemeal changes in the benefits and terms of employment can have significant impacts on the price of labour.

Supplementary changes to the terms of employment

- Effective since January 2004 – the term to long service leave maturity was shortened from 10 to 7 years. This has an effect the equivalent of a 0.7 percent increase in the price of labour.
- Effective on certification (April 2002) – SPI introduces income protection cover for all employees (up to 2 years cover if an employee is ill or injured, to a weekly amount of $1,500). This is a self-insured scheme, but claims history over last 5 years indicates an average yearly cost equivalent to a 0.47 percent increase in the price of labour.
- Effective from 1 January 2003 - Superannuation increased to 10 percent for those in accumulation fund (up from 9 percent) and those in defined benefit fund receive a 1 percent contribution into the accumulation fund on their behalf. This represents an effective1 percent increase in the price of labour.
- Effective 1 September 2005 – introduction of 36 hour week for ETU EBA employees. This change will require 1.5 hrs of weekly work to be undertaken at double time. This represents a 4.17 percent increase in the price of ETU supplied labour.

The movement in the price of labour inclusive of these changes in the terms of and benefits from the EBA arrangements is set out below.

Table 1.4.4 EBA outcomes 2002 to 2006 – modified for supplementary changes

Transmission members	ASU 225	Chages in terms	ETU 58	Chages in terms	CPI Average	Weighted Nominal	Real Increase
2002	4.4%	0.5%	4.4%	0.5%	2.9%	4.8%	1.9%
2003	4.0%	1.0%	4.0%	1.0%	3.1%	5.0%	1.9%
2004	4.8%	0.7%	4.5%	0.7%	2.4%	5.4%	3.0%
2005	4.8%		3.5%	4.2%	2.4%	5.3%	2.9%
2006	4.5%		3.0%		3.2%	4.2%	1.0%
Price effect including terms						**4.9%**	**2.1%**

Source: SP AusNet

Furthermore, there have been other changes to the terms and benefits, which although piecemeal and difficult to value do create substantial increases in the costs associated with the labour provided under EBA agreements. These are set out below.

- Effective January 2002 – all overtime for call out paid at double time for first 2 hours (previously paid at time and a half). This change has not been valued separately but does impact the costing of the shorter working week as discussed above.
- Effective 1 January 2002 – Meal allowance increase from $8 to $11 per occurrence. Further increase to $12 in meal allowance effective 1 January 2003.
- Effective on certification (April 2002) – SPI annualises Power Industry Allowance into base salaries (average annual increase of $3,000 - $4,000). This increase is marginal as the allowance previously was paid separately any way – the increase it causes is linked to salary on-costs such as payroll tax, worker's compensation, all purpose allowances and superannuation.
- Effective January 2002 – First Aid allowance increases by $4 from $20 to $24.
- Effective January 2002 – Living away from home allowance for country location increases from $109 to $130 and for city locations from $33 to $190. Increases

beyond this original adjustment are then in accordance with the same percentage movement as the ATO rates. Country rate increases to $136 in November 2002 and remains unchanged until July 2003, when it moves to $141. Next adjustment May 2004 to $149, then in July 2005 to $156 adjusted in July 2006 to current rate of $163. City rate adjusted in July 2003 to $193, and moves to $196 in May 2004. Adjusted again in Jul 2005 to $198, and adjusted in July 2006 to current rate of $201.

- Effective December 2004 – Meal allowances to increase to $13, then $14 a year later and $15 a year after that.
- Effective December 2004 – Availability payments to be included for the purpose of calculating superannuation as superable salary.
- Effective December 2004 – Broken bones and dental cover – estimated cost $41,600.
- Effective December 2004 – Workcover "make up pay" for average weekly earnings for the duration of the claim.

In this light the average real increase in the price of labour in the five years to 2006 has been in excess of 2.1 percent per annum. SP AusNet concurs with both BIS Shrapnel and Access Economics that it is likely to face wage pressures in excess of those experienced in the five-year period to 2006 over the coming years.

1.4.6 Easement Land Tax

The proposal assumed the easement valuation underlying the tax assessment would be subject to a detailed revaluation by the Victorian Valuer-General every second year with the value subject to an indexation in the alternate years between the valuations.

The calculation was based on the 2007/08 assessment of $78,436,630 levied on a detailed easement valuation of $1,570,335,000. The current assessment is part of the attached material to this response. This assessment does not breakdown easements into commercial, industrial, residential and rural areas. However, SP AusNet records show approximately 25 percent of easements are urban and 75 percent rural.

The forecast assumes that the underlying easement value (and therefore the tax) increases at the same rate as the average annual increase in Melbourne house prices over the last 20 years (*ABS Publication 6416.0 House Prices Indexes: Eight Capital Cities*). This increase was 4.0 percent in real terms. In addition:

- No change to the easement land tax rate was assumed in the forthcoming regulatory control period.
- No purchases or disposals of easements were assumed to occur in the forthcoming regulatory control period.

Since the proposal was lodged the Victorian State Revenue Office has indicated to SP AusNet that the indexation in alternate years will no longer be performed due to changes in the **Land Tax Act 2005** and **Valuation of Land Act 1960**. This makes the likely profile in the tax step like, increasing only every second year. The new profile is shown in Table 1.4.5 below.

Table 1.4.5 New Easement Land Tax Profile (2007/08 $m)

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Easement Land Tax (Proposal profile)	81.6	84.8	88.2	91.8	95.4	99.2
Easement Land Tax (New profile)	78.4	84.8	84.8	91.8	91.8	99.2

Source: SP AusNet

As stated in the proposal, over the period, any positive or negative variation between the actual tax paid and the forecast approved by the AER will be recovered/reimbursed via the pass-through mechanism outlined in Clause 6A.7.3 of the NER. Therefore, notwithstanding the assumptions described above, SP AusNet will only recover the actual tax paid over the period.

1.5 Availability Incentive Scheme

As stated on the proposal SP AusNet's revenue provides for a continuation of the allowance to fund the expected value of the rebate payments made to VENCorp under the Availability Incentive Scheme (AIS). Good performance under the AIS means an amount less than the allowance will be paid back to VENCorp in rebates (resulting in a net gain to SP AusNet), while poor AIS performance results in higher payments than the allowance (resulting in a net loss being borne by SP AusNet).

To ensure that the scheme satisfies "incentive" objectives and can be reasonably costed, the terms agreed between VENCorp and SP AusNet incorporate liability limitations and rebate payment capping. SP AusNet's total liability under the current scheme is capped at $12.0 million per annum (real 2003/04 dollars). A value of around $6 million (real 2003 / 04 dollars) is targeted and included in SP AusNet's revenue forecasts. There is also a cap per event of $1 million (real 2003 / 04 dollars).

SP AusNet has provided the AER with the relevant parts of the Network Agreement with VENCorp on a confidential basis as part of the attached material to this response.

Clause 3.3 describes the calculation of the individual rebates. Clause 3.4 sets out the calculation for the caps for individual events and the total scheme.

All calculations reference the same escalation. For example, the total payments under the scheme are capped at:

$12 million x [$CPI_t/CPI_b$]

where:

CPI_t = the CPI for the calendar quarter ending 31 December immediately preceding the commencement of that Subsequent Scheme Year; and

CPI_b = the CPI for the calendar quarter ending 31 December 2002 (which is 139.5).

The scheme requires half the cap is paid to SP AusNet in its regulated revenues making the incentives symmetrical over the long term. The AER's PTRM model requires inputs be expressed in 2007/08 dollars.

The proposals modelling was finalised before the December 2006 CPI was released, therefore a forecast was used. The proposal uses a forecast number of $6.626 million in real $2007/08 during the upcoming regulatory period.

The actual December 2006 Inflation index has come out higher than forecast, therefore, the new calculation would be as follows:

$12 million x [155.5/139.5] = $13.376344 million

This means $6.688172 million in real $2007/08 terms should be included in the revenue for the upcoming regulatory period.

1.6 Related Parties

The full details of the management services agreement between 'SPI Management Services', and SP AusNet Networks (Transmission) Ltd and SP AusNet Networks (Distribution) Ltd were made available as part of the Prospectus for the listing of SP AusNet on the Australian and Singapore Stock Exchanges.

A letter addressing related party matters outlined in the AER's Clause 6A.11.1 Request and attaching the relevant parts of the Prospectus was sent to the AER on 30 April 2007 and has been included as part of the attached material to this response.

1.7 Interaction between Capex and Opex

SP AusNet examines all options when faced with an asset management problem. Its NPV analysis ensures the least cost option is chosen regardless of whether that option involves capital or operating expenditure. This is explained in Section 3.2.4 of the proposal and is reproduced below.

"One of SP AusNet's key objectives is to provide transmission network services in the most efficient manner (consistent with other objectives) by optimising total life cycle costs. SP AusNet's Asset Management Strategy ensures that its overall expenditure and work plans minimise life cycle costs using detailed cost-benefit analyses.

SP AusNet's cost-benefit analyses use discounted cash flow analysis techniques (in accordance with the reliability limb of the regulatory test), for all major projects where costs can reasonably be estimated (estimation declines in accuracy towards the end of the forecast regulatory period). These costs include capital costs, operational risks and operating and maintenance costs. The assessment includes a quantitative estimate of the value of reliability, taking the risk of plant failure and the consequences of unserved load (namely, the cost to consumers of involuntary supply interruption), and reduced network performance into account as part of each asset management decision.

In addition to developing least-cost options for addressing specific equipment issues, careful attention is paid to ensure that overall program costs are minimised when specific solutions are consolidated into overall opex and capex plans. These plans incorporate additional work scheduling efficiencies for the entire planning period by integrating projects, where possible.

As well as co-ordinating the various SP AusNet-initiated replacement projects, the Asset Management Strategy also integrates replacement plans with the augmentation plans of VENCorp, the distributors and the generators. This approach:

- minimises project delivery costs by optimising engineering effort and resource utilisation; and
- enhances network performance by minimising the number of outages required to carry out the full work program."

The key areas where the trade off between opex and capex are most apparent are the interaction between:

- the asset replacement program;
- scheduled Maintenance; and
- asset works.

1.7.1 Replacement Capex and Scheduled Maintenance

The scheduled maintenance program is generated out of SP AusNet's Maximo system. The Maximo system contains every asset owned by the transmission company and the required maintenance intervals and costs associated with that equipment. Therefore, for any given period, the Maximo system can generate all the expected maintenance associated with the assets.

As assets are replaced the Maximo database is updated removing the old piece of equipment and the maintenance associated with it and including the new piece of equipment and its updated maintenance schedule. In so much as the new piece of equipment is lower maintenance, the total scheduled maintenance will fall (note that not all new pieces of equipment are lower maintenance than the old equipment they replaced).

However, the remaining assets continue to age and deteriorate in condition. Where more regular or higher cost maintenance is required for an asset due to deterioration in its condition this change is also reflected in the Maximo database.

Overall, whether scheduled maintenance hours are rising and falling on the existing asset base (excluding growth in the number of assets) depends on the balance of these two effects. It should be noted that despite the expenditure on replacing assets over the 2003 to 2007/08 regulatory control period the average age of the network continued to increase.

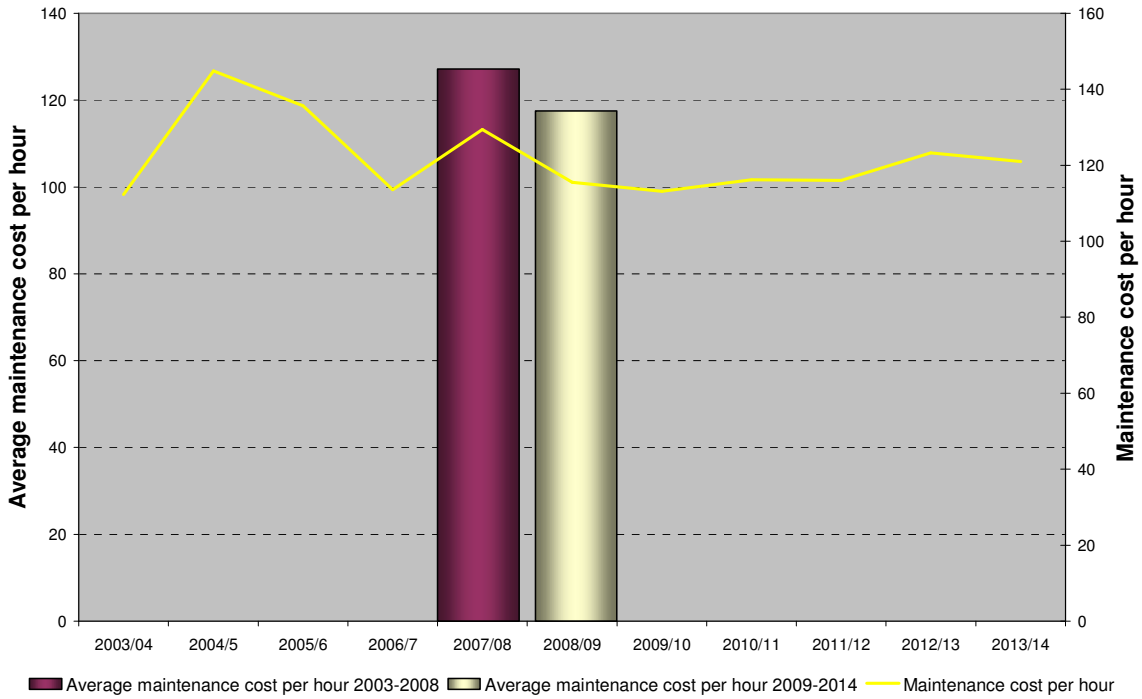
Therefore, the base year for the routine maintenance forecasts fully incorporates the effects of the replacement capex program to that point in time (end of 2006/07).

The routine maintenance forecasts for the 2008/09 to 2013/14 regulatory control period do not rely on bottom up outputs from the Maximo systems as the opex model simply escalates using a factor from the base year. Nonetheless, the forecasts incorporate considerable productivity improvements measured in dollars per maintenance hour between the current and forthcoming periods.

While the forward replacement capex program is not expected to impact on the forward scheduled maintenance by more than 1-2 percent, we have modelled the impact of a 10 percent cut in the scheduled maintenance on productivity improvements generated from the high level opex model measured in dollars per maintenance hour between the current and forthcoming periods.

This analysis shows that even under the extreme assumption that the forward replacement capex program cuts the forward scheduled maintenance by 10 percent the proposal incorporates a productivity improvement of 8 percent between the current and forthcoming regulatory control periods. This is shown in Figure 1.7.1 below.

Figure 1.7.1 Index of Dollars per Routine Maintenance Hours – 2003/04 to 2013/14



Source: SP AusNet

1.7.2 Replacement Capex and Asset works

The opex/capex trade off is also very apparent in the asset works programs that address asset failure risk.

Many of these non-routine maintenance programs have specifically been selected as the lowest cost solution relative to replacement capex options when particular assets have been identified as placing an unacceptable risk of failure on the network. This assessment is briefly described in Table 1.7.1 below.

Table 1.7.1 (a) Asset Works Program - 2007/08 to 2013/14

Asset Works Program	Capex Options Considered
Tower Foundation Corrosion	Tower replacement considered, much higher NPV cost
Tower Ground Level Corrosion	Tower replacement considered, much higher NPV cost
Tower Painting	Tower replacement considered, much higher NPV cost
Tower Bolt Replacement	No
Replacement of Tower Steelwork	No
Replacement of Transmission Line Hardware	No
SF6 Circuit Breaker Refurbishments	CB replacement was considered, higher NPV cost
Gas Insulated Switchgear Refurbishment	CB replacement was considered, much higher NPV cost
Power Cable Repairs	Replacement of entire cable not considered as only joints have problems
Power and Instrument Transformer Repairs	Replacement considered
Facilities Maintenance	Replacement considered
Condition Monitoring Development	Not applicable
Miscellaneous Works	Not applicable
Asbestos Removal	Included in capex program where possible
Switchyard Resurfacing	No capex option is available
Lead contamination	Tower replacement considered, much higher NPV cost
Transformer Leaks Repairs and Oil Treatment	Replacement of transformers will be considered (as appropriate)

Source: SP AusNet

1.8 Performance Incentive Scheme Parameters

SP AusNet has attached a completed spreadsheet provided by the AER that addresses Section (1) and (2) of the additional information required on the performance incentive scheme parameters. SP AusNet has also updated its paper on the methodologies used for the calculation of service standards, addressing Section (3) of the additional information required. Both documents are included as part of the attached material to this response.

1.9 Demand Forecasts

SP AusNet's proposal addresses only capital expenditure on the existing network (replacement, compliance, non system), as it is not responsible for augmentation in response to demand growth. VENCorp is the appropriate Victorian TNSP to provide Victorian demand forecasts to the AER underpinning the shared network. The Victorian Distribution Companies are the appropriate bodies to provide demand forecasts to the AER for specific connection points.

1.10 Self Insured Risks and Deductibles

SP AusNet has attached a Board Resolution to self insure as per Section 4.3.21 of the Submission Guidelines.

1.11 Capital Financing and Taxation

SP AusNet has advised the AER of its intended averaging period in a confidential letter sent on 3 April 2007 as per Clause 6A.62 of the NER and Section 4.3.10 of the Submission Guidelines. The AER approved the averaging period on 13 April 2007. The AER accepted SP AusNet's request for the commencement date of the averaging period to be kept confidential until after the expiration of the period as per Clause 6A.6.2(c)(2)(iii) of the NER.

1.12 Cost Allocation

The AER requested the following information:

- What costs were allocated on a direct causal basis?
- How shared costs were allocated between SP AusNet's networks?
- For shared costs, whether these allocations will change over time?; and
- How this information is to be recorded?

What costs were allocated on a direct causal basis?

All costs were allocated on a direct causal basis where such a basis could be identified. Examples of direct allocations are project-based work, particularly capital expenditure and maintenance activities, each of these allocators also determine whether the cost is direct or indirect.

Where a direct causal basis could not be identified for shared costs then specific cost centre drivers are used to allocate costs. These drivers maybe the based on direct and indirect time allocations or annual Activity Based Costing Surveys.

How shared costs were allocated between SP AusNet's networks?

Shared costs were allocated on the basis of assessment of effort. Examples are the allocation of office accommodation costs that follow the assessment of effort of the people occupying the accommodation, that is, if an office is the work place of a group working exclusively on transmission activities, the accommodation cost will be allocated to transmission activities, in a case where the office is used by people who are assessed as working 30% on transmission and 70% other matters, 30% of the accommodation cost will be allocated to transmission.

For shared costs, whether these allocations will change over time?; and

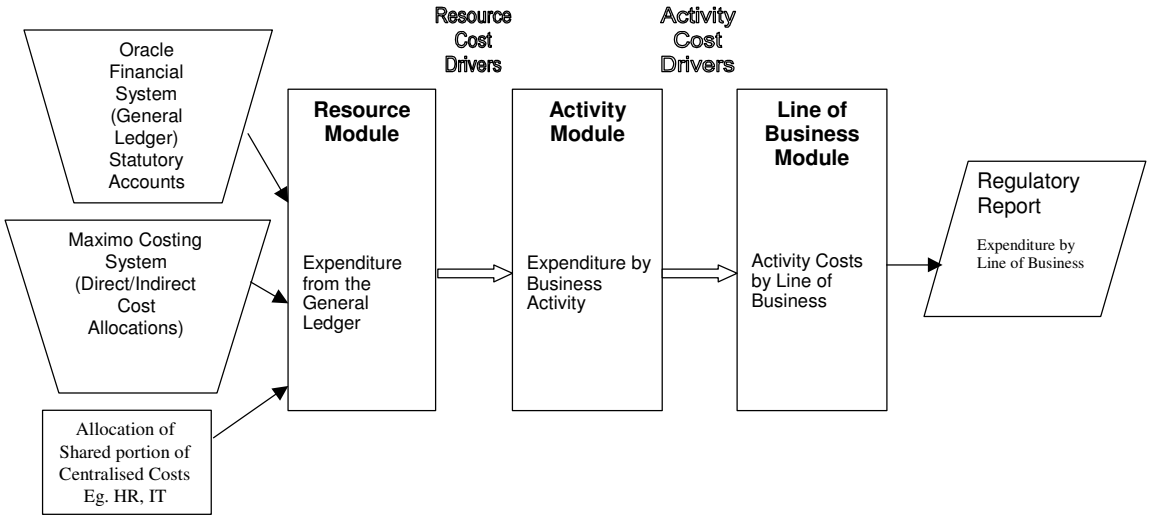
Yes, the allocations will change over time in many instances. In the example used above, if the employees using an office are working on activities that change from one Network to another then the allocation will change. Where there is no change to the work being done in a location the allocation would not be changed.

How this information is to be recorded?

The information is recorded in the cost allocation model and additional details on cost recording and allocation have been provided with SPI PowerNet's 2005/06 Regulatory Accounts (the transmission licence holding entity). The diagram below is an outline of the cost allocation data flow model.

SP AusNet can provide further elaboration on the cost allocation methodology and outcomes to the AER to examine when it suits the AER.

Figure 1.12.1 Cost allocation data flow model



Source: SP AusNet

1.13 Proposed Pricing Methodology

As you are aware, SP AusNet submitted its revenue proposal to the AER on 28 February 2007. In accordance with the requirements of the Rules, SP AusNet also submitted its proposed pricing methodology.

In conducting its initial review of SP AusNet's proposed pricing methodology, SP AusNet understands that the AER's view is that the proposed pricing methodology does not comply with the requirements of the Rules, and therefore the AER has requested further information.

The purpose of this section is two fold. Firstly, SP AusNet would like to take this opportunity to explain why the company believes that its proposed pricing methodology complies with the Rules. Secondly, if the AER is not persuaded the proposed pricing methodology does comply with the Rules, then SP AusNet seeks further clarification from the AER regarding its further information requirements.

Rules and agreed interim requirements

For the purposes of the pricing methodology applying for this forthcoming regulatory period, SP AusNet is subject to agreed interim requirements in accordance with clause 11.8.4 of the Rules. The AER issued agreed interim requirements in February 2007. The relevant provisions of these interim requirements are reproduced below (emphasis added):

> (a) Subject to the proposed pricing methodology being consistent with the pricing principles in rule 6A.23 of the National Electricity Rules, the proposed pricing methodology must be:
>
> (1) to the extent applicable, consistent with clause 9.8.4F of the National Electricity Rules; and
>
> (2) consistent with Part C of Chapter 6 of the old National Electricity Rules.
>
> (b) In accordance with paragraph (a), the proposed pricing methodology must demonstrate:

(1) the allocation of the aggregate annual revenue requirement and the delineation of assets to classes of transmission services is consistent with rule 6.3 of the old National Electricity Rules;

(2) the allocation of the aggregate annual revenue requirement among all assets used in the provision of transmission services in order to allocate the costs involved in the provision of transmission services is consistent with rule 6.4 of the old National Electricity Rules; and

(3) the conversion of the allocated costs in rule 6.4 of the old National Electricity Rules into prices and charges is consistent with rule 6.5 of the old National Electricity Rules.

The agreed interim requirements clearly state that SP AusNet is required to follow the old National Electricity Rules, subject to the proposed pricing methodology being consistent with the pricing principles in rule 6A.23 of the National Electricity Rules. In preparing its proposed pricing methodology, SP AusNet examined carefully the provisions in rule 6A.23 as these pricing principles must be satisfied in accordance with paragraph (a) of the agreed interim requirements. This examination led SP AusNet to conclude that the requirement to satisfy the principles in rule 6A.23 is incompatible with applying the old National Electricity Rules. The following table explains this point in more detail.

Table 1.13.1 Analysis of differences between Rule 6A.23 and the old National Electricity Rules

Clause	Details of clause requirements	Implications for applying old National Electricity Rules
6A.23.2(a)	Specifies the method for allocating the *aggregate annual revenue requirement* to the to each *category of prescribed transmission services* in accordance with the *attributable cost share* for each such category of services	It is not possible to address the requirement of 6A.23.2(a) and apply the old Rules because: *Aggregate annual revenue requirement* definition which applies in Clause 6A.23.2 (also see 6A.22.1) is different to the a*ggregate annual revenue requirement* definition in the old Rules. The term *attributable cost share* appears in Clause 6A.23.2(a), but does not exist in the old Rules.
6A.23.2(b)	This allocation results in the *annual service revenue requirement* (*ASRR*) for that category of services.	There is no such term as the *ASRR* in the old Rules – and therefore it is not possible to adopt the old Rules whilst also demonstrating that 6A.23.2(b) has been satisfied.
6A.23.3(a)	The whole of the *ASRR* for *prescribed entry services* is to be allocated to *transmission network connection points* in accordance with the *attributable connection point cost share* for *prescribed entry services* that are provided by the *Transmission Network Service Provider* at that *connection point*.	It is not possible to address the requirement of 6A.23.3(a) and apply the old Rules because: The term *ASRR* appears in clause 6A.23.3(a), but does not exist in the old Rules; and The term *attributable connection point cost share* for *prescribed entry services* appears in clause 6A.23.3(a), but does not exist in the old Rules.
6A.23.3(b); (c); (d); (e) and (f)	These provisions all use the concept of the ASRR.	As above – it is not possible to adopt the ASRR concept and apply the old Rules, which do not use this term.

Source: SP AusNet

In light of the above table, it is clear that there is very little scope to apply the old National Electricity Rules subject to satisfying the pricing principles in Rule 6A.23. Given this difficulty, SP AusNet's proposed pricing methodology explained that in order to comply explicitly with the pricing principles in Part J of the NER and the AER's interim arrangements, SP AusNet's previous pricing methodology has been redrafted to reflect the terminology and drafting

employed in Part J of the NER. In relation to matters that do not relate to the pricing principles in Part J of the NER, SP AusNet's proposed pricing methodology refers to Part C of the old Chapter 6 in accordance with the interim arrangements.

SP AusNet's view is that its proposed pricing methodology complies with the requirements of the Rules and the agreed interim requirements.

SP AusNet has attached a detailed clause-by-clause explanation of its approach to pricing against the new and old pricing rules as part of the attached material to this response.

Further information

As noted earlier, if the AER is not persuaded that the proposed pricing methodology complies with the Rules, then SP AusNet invites the AER to specify precisely its further information requirements. One possible approach would be for SP AusNet to run a workshop for AER staff to explain SP AusNet's pricing model.

In this regard, SP AusNet notes that it has not previously been required formally to demonstrate compliance with the old pricing Rules. SP AusNet's previous pricing methodology has been available to stakeholders for a number of years, and is not considered controversial. In light of this observation, SP AusNet would be concerned if the AER sought to impose new formal obligations on SP AusNet to demonstrate compliance with the old Rules.

2 Attached Material

Attached Documents	Type	Confidential
Historic Capex		
Comparison between Original Business Case Cost and Actual Expenditure	Excel Spreadsheet	N
Reconciliation between Summary Documents and Templates	Excel Spreadsheet	N
Capital Governance and Approval Process Documents	Powerpoint, PDF	N
Capitalisation Policy Documents	PDF	N
Forecast Capex		
Reconciliation between Summary Documents and Templates	Excel Spreadsheet	N
Opex		
Opex Model	Excel Spreadsheet	N
Merger Effects on Business	Powerpoint	N
Easement Valuation	Excel Spreadsheet	N
Availability Incentive Scheme		
Network Agreement (Availability Incentive Scheme)	PDF	Y
Related Parties		
Letter	PDF	N
Performance Incentive Scheme Parameters		
AER Supplied Information Spreadsheets	Excel Spreadsheet	N
Service Standards Paper	PDF	N
Self Insured Risk and Deductables		
Board Circular	PDF	N
Proposed Pricing Methodology		
Clause by Clause analysis of Pricing Rules	PDF	N