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EnergyAustralia™ We're on it

14 February 2007

Mike Buckley
General Manager
Network Regulation North Branch
Australian Energy Regulator
PO Box 1199
Dickson ACT 2602

Dear Mr Buckley,

Powerlink draft revenue cap submission

I am pleased to be able to comment on the AER's draft decision for Powerlink. As EnergyAustralia is regulated, currently, as a transmission network under the ex ante regime, it is in a good position to provide practical insight.

We consider that the AER has adopted a, generally, sound approach to setting Powerlink's revenue cap and we have limited our comments to suggesting improvement, rather than noting all the areas with which we agree with the AER. In particular we suggest improvements in relation to the:

- implementation of the ex ante and contingent project regime;
- consideration of cost escalations; and
- rule of thumb cuts to replacement capex.

In addition to suggesting some improvements we seek guidance in relation to the treatment of early acquisition of easements as this is particularly relevant issue to EnergyAustralia.

Should I be able to assist you further in your consideration of this issue, please do not hesitate to call me on (02) 4951 9411 or Harry Colebourn on (02) 9269 4171.

Yours sincerely,

GEOFF LILLISS
General Manager – Network

Partner

EnergyAustralia™

Submission to the AER

Powerlink's draft revenue cap

13 FEBRUARY 2007

Powerlink's draft revenue cap

12 February 2007

Contents

1 Summary

EnergyAustralia welcomes the opportunity to comment on the AER's draft decision for Powerlink. In many areas, we believe, the AER has delivered a sound regulatory approach. However, there are some aspects of the draft decision that we view as in need of improvement and have limited our comments to these matters. Prior to discussing the areas of improvement it is worth noting that EnergyAustralia agrees with both the AER and PB Associates that acquiring sites and easements in advance is appropriate and necessary to develop infrastructure in the face of increasing pressures on land use.

1.1 Acquiring easements

Powerlink proposed that the early acquisition of easements was an efficiency gain and that it should share the gain with customers because it was induced by Powerlink's good management.

The AER, with the support of PB Associates, found that the early acquisition of easements is standard industry practice, and therefore concluded that it could not be due to a particular management efficiency or innovation.

EnergyAustralia appreciates this guidance because we have also found that the early acquisition of land is likely to result in considerable efficiencies as compared to attempting to procure land just prior to construction. However, to achieve these efficiencies there is a risk that, once the land has been purchased, the site could become unviable and the regulator will not recognise the land.

EnergyAustralia seeks further guidance as to what approach the AER would choose under such circumstances. If this land was not recognised there would not be any benefit of aiming to achieve these efficiencies in the first instance.

1.2 The "rule of thumb" to cut replacement capex

The AER has undertaken a detailed review process for Powerlink. However, it is concerning that the AER stepped away from this detailed approach when it came to Powerlink's replacement capex. It is confusing as to why it used the consultant's high level approach of "a rule of thumb" considering the increased financial incentives imposed under the ex ante framework. Imposing strengthened incentives requires a more detailed and thorough examination than the previous ex post framework to ensure that the capex targets and incentives are appropriately aligned.

In recommending the rule of thumb approach, PB Associates clearly warned the AER that the consequences of making an error in this approach should be analysed. The AER did not undertake this detailed analysis in making its draft decision.

The AER should reconsider its draft decision in this area. It should undertake the rigorous analysis of the consequences and use the detailed information provided by Powerlink to inform its decision.

1.3 The contingent project regime

The contingent project regime was designed to manage risky projects. However the AER is not using the regime for this purpose, rather it is using it as a holding cell for capex to lower the ex ante cap. It does not have sufficient justification to make these reductions permanent.

The best example of this is in the treatment of undergrounding, where the undergrounding component of 16 different capex projects have been grouped as a single contingent project. It appears that the AER has concluded that the 16 projects are needed but it has not been able to decide on which projects the undergrounding will be required.

The contingent project regime anticipates that a trigger event will have occurred prior to the majority of the expenditure on the project, which enables the AER to set an ex ante incentive for that expenditure. Here there 16 possible trigger events, which would result in 16 assessment processes and 16 ex ante incentives, giving the appearance of 16 possible contingent projects.

Individually none of these undergrounding projects would pass the materiality threshold, which is the reason the AER has grouped these 16 projects – to creatively cross the materiality threshold. The result is Powerlink will now be subject to greater regulatory burdens and costs to have its undergrounding projects approved.

This approach is not consistent with the intent of the contingent project regime as set out in the ACCC's Statement of Regulatory Principles (SRP) or in the Rules as developed by the AEMC. It is "policy on the run", similar to the ACCC's approach to regulation.

The AER should revisit the undergrounding costs and accept Powerlink's proposed probabilistic costs in this regard, because it would:

- increase the integrity of the regulatory framework;
- prevent 16 additional intrusive regulatory assessments;
- be consistent with the Rules and intent of the SRP; and
- provide Powerlink certainty.

1.4 Input cost escalation

There is clear evidence to support arguments that the increase in input costs for the electricity supply industry has been well above CPI and will continue to be so for at least the period of the determination. As shown with the following data from the ABS.

Year ending June	Electric Cable & Wire (2852) % Change Cumulative	CPI (6401) % Change Cumulative
2004	8.4%	2.5%
2005	17.4%	5.0%
2006	31.8%	9.0%

If the rising input costs are not addressed TNSPs will overspend, as costs rise outside of their control, and this will undermine the incentives of the regulatory framework and the integrity of the AER's decision. It is concerning that it is in this climate that the ex ante framework has been implemented without the issue of input cost escalation being adequately addressed.

The adoption of an ex ante framework with no pass through for the indexation of costs to industry and producer price indexes is comparable to seeking a fixed price contract for something that has a high level of price risk.

We are also concerned about the use of the Access Economics report, which incorporates assumptions regarding the general level of inflation which are inconsistent with the AER's own assumptions embodied in its draft determination.

EnergyAustralia suggests that the AER should adopt a suite of key economic parameters (ie. economic growth, consumer prices, commodity & producer prices and exchange rates) that are internally consistent. Further, if the AER intends to continue rejecting the work done by regulated businesses on this issue, it should undertake serious analysis regarding the impact of escalating input costs on the ex ante framework.

These issues are all explained in more detail in the remainder of this submission.

2 Strategic acquisition of easements

EnergyAustralia undertakes capex in Sydney's CBD, which can be problematic for a number of reasons. One of the problems relevant to the AER's draft decision in relation to Powerlink is the strategic acquisitions of easements. We must take opportunities to acquire scarce land in an environment with increasing demand for land to build office buildings and apartments.

Powerlink have proposed that it should receive an efficiency bonus for strategically purchasing easements in advance. Powerlink purchased key land for network augmentation prior to it being required. Since that time, land values have increased and the early purchases have paid off and saved customers from paying otherwise higher prices.

Powerlink proposed that it should retain some of the efficiency that it saved customers.

Although the AER's draft decision rejected Powerlink's proposed efficiency bonus, it made some important findings on reaching its decision, which were supported by PB Associates.

> *Typically, long term planning identifies areas where either additional assets or system augmentation will be required, and land or easements are acquired once the requirement has been identified where it is believed that delaying the purchase may result in the asset not being available when required or being significantly more expensive to acquire. This often occurs as a consequence of changes in land use.* [1]

The AER considered PB Associates' findings and agrees that the early acquisition of easements is standard industry practice, and therefore cannot be attributed to a particular management efficiency or innovation.

EnergyAustralia appreciates this guidance as we are currently forecasting system capital requirements 10 years into the future. This forecasting process has shown that the early acquisition of land is likely to result in considerable efficiencies as compared to attempting to procure land just prior to construction.

To achieve these efficiencies, however, there is a considerable risk that, once the land has been purchased, the site could become unviable and the regulator will not recognise the land. EnergyAustralia seeks further guidance as to what approach the AER would choose. If this land was not recognised EnergyAustralia would not see any benefit of aiming to achieve these efficiencies in the first instance.

[1] PB Associates, *POWERLINK REVENUE RESET: Review of Capital Expenditure, Operating and Maintenance Expenditure and Service Standards*, 20 December 2006, page 169.

3 Replacement

3.1 Top-down methodology

The AER's top down approach, which was used to reduce Powerlink's replacement capex allowance is a fundamental shift in regulatory philosophy and a major concern to EnergyAustralia as it undermines the credibility of the previously promulgated regulatory framework.

In 2005 the ACCC set EnergyAustralia's transmission revenue cap and it also engaged PB Associates to provide expert advice. In the case of EnergyAustralia, the ACCC decided to cut EnergyAustralia's proposed replacement capex because it disagreed with EnergyAustralia's proposal that certain assets needed to be replaced. The ACCC based its decision on asset's condition and stated, on page 50 of its decision for EnergyAustralia, that:

> *… the replacement of assets where the condition report shows that they do not require replacement until at least the next regulatory period is not reason enough to replace the assets this regulatory period.*

EnergyAustralia has since documented one consequence of the ACCC's decision to reduce its replace capex allowance in the current determination[2].

In the case of Powerlink, the AER used a top-down approach to determine appropriate level of replacement expenditure and did not make the decision based on similar condition assessments. Page 69 of the draft decision stated:

> *Although PB considered that Powerlink's proposed replacement expenditures were overstated it was not able to form a view based on the information available on the amount by which replacement expenditures should be reduced. PB therefore considered it reasonable to use a top-down approach to determine an appropriate level of replacement expenditure.*

This top-down approach is a major concern because it removes the link between asset condition and the replacement decision when setting the 5 year capital allowance. In effect, the top-down approach provides for condition information to be used to prioritise tasks within a budget that is set on a theoretical basis, and which has no link to the reality of network needs.

PB said in its report that a number of their detailed reviews of replacement capex projects indicated that the project scope was greater than that justified by condition assessment. On this basis, it determined that the replacement capex was too high and concluded that the proposal represented the upper bound. In response, PB used a rule of thumb to cut the level of replacement capex. It is very disturbing that the AER accepted this approach considering it lacked any detail or rigour, especially considering the impact this will have on Powerlink under the new ex ante framework

PB stated that their recommendation was significantly different from Powerlink's proposal and therefore that the consequences of its recommendation being wrong and subsequently adopted should be considered. The AER does not appear to have made these considerations.

The lack of analysis of the consequences of cutting Powerlink's replacement program, either in terms of higher risk, higher maintenance costs in the short term, or higher real costs in the long term is very disappointing. It appears that the AER is more interested in adopting the recommendation to cut capex without doing the hard work of analysing the consequences as suggested by PB.

EnergyAustralia recommends that the AER review its adoption of the top down approach or do the analysis needed to support it. In either case the AER should do a more detailed review as required by the ex ante framework.

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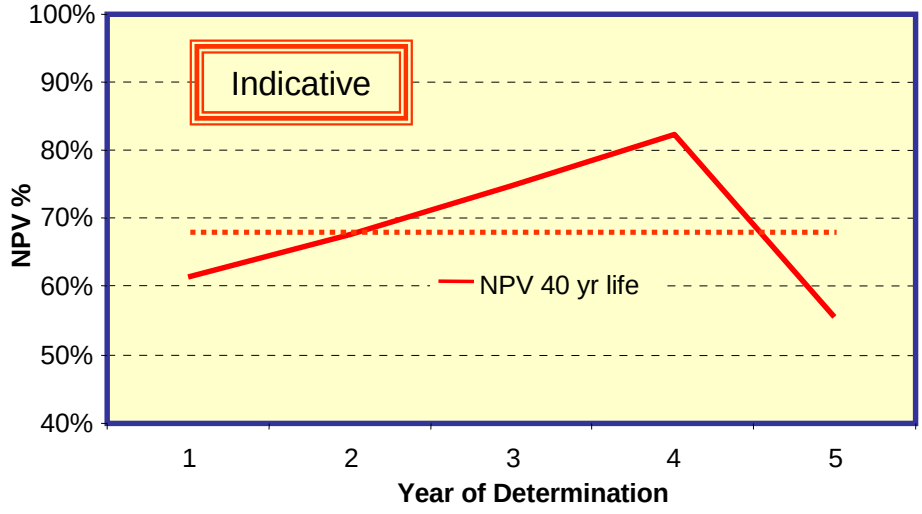
[2] Letter from Mr George Maltabarow (Managing Director, EnergyAustralia) to Mr Steve Edwell (Chairman, AER), *Economic Regulation of Transmission Services: Treatment of Forecast Expenditure*, 10 November 2006.

3.2 The ex-ante framework

Under the ex-ante framework, the regulator bases its revenue cap on a program of proposed capital projects. However, a business is able to reprioritise its capital expenditure during the period. What it cannot do, without having negative financial consequences, is spend more than the capital allowance.

The NPV loss associated with over expenditure of the capex allowance under the ex ante framework is illustrated below. It may be seen the loss depends upon the year the expenditure is made and is greatest in the final year of the determination, where there would be a six year delay in recognition of the investment and a consequent six year loss of both return on and return of capital. This powerful incentive has the effect of almost halving the regulatory rate of return on capital for investments which exceed the regulatory allowance.



Given these financial consequences with the ex ante framework, it is incumbent upon the regulator to review capex forecasts in greater detail than as under the ex post framework. The regulator's decision needs to be more soundly based so that any foreseen error in the forecast is minimised. Any under or overspend may then be more representative of the network's actions.

Despite this, the AER has adopted PB's high level rule of thumb approach to cut Powerlink's replacement capex. Given recent growth rates and the cost rises seen since 2004, the probability of Powerlink overspending its allowance to maintain its licence and other obligations is believed to be to be greater than under spending. This is particularly true as the regulator has a history of escalating costs by only CPI despite clear evidence that costs in the electricity sector are rising more rapidly. This is of concern because the cost to the economy of underinvestment in electricity infrastructure is far greater than the cost of over investment.

3.3 Rule of thumb

After concluding that Powerlink's proposal needed to be cut, PB used a rule of thumb estimate to make that cut. The method uses the age profile of Powerlink's RAB. PB noted that 65 percent of Powerlink's RAB will be older than 15 years at the end of current period.

> *Based on the assumption of a 35 year capital weighted average life for Powerlink's RAB, PB considered that Powerlink should be replacing its asset base to ensure that the $3510million portion* (portion over 15 years old) *is renewed over 35 years.*[3]

This method may be a good proxy for a replacement capex forecast provided that all the following assumptions hold true, namely that:

- assets can be replaced incrementally;

[3] AER, *Draft Decision Powerlink Queensland transmission network revenue cap 2007-08 to 2011-12,* Dec 2006, p69. Bracketed text added.

- depreciation was consistent with the correct replacement costs;
- 35 years is an appropriate capital weighted average life for Powerlink's assets;
- the asset base will age over the 35 years in a consistent (linear) manner;
- Powerlink's average asset age (and condition) is at a level where it need only be maintained (not reduced);
- the assets are being replaced with like for like equipment; and
- the replacement cost is equal to the existing asset value in the RAB.

These assumptions are all questionable.

The failure of these assumptions is exacerbated in the case where businesses have large numbers of older assets[4]. In such cases, applying a long term average expenditure to replacement will not stop the ageing of the asset population in the short to medium term because the RAB will age faster than assets can be replaced. In such cases, a business must be able to seek more than the long term average replacement expenditure to mitigate the risk of wide spread asset failure in the short to medium term. It is only when an asset age profile is at a sustainable level, that rules of thumb can be applied as a high level proxy for average replacement expenditure over the longer term. To do so in other circumstances does not represent good asset management.

In reality, replacement of large assets occurs in blocks (often involving equipment of contemporary manufacture) and there is unlikely to be an alignment in the short term between specific replacement needs and the long term average replacement spend. It is therefore important that the regulator recognises specific asset replacement in its analysis to ensure that the assets that are the worst performing (which are often over standard age) can be replaced when they need to be, rather than kept in service beyond the point where it is economic to do so.

Using different approaches to determine replacement capex over different regulatory periods has the potential to seriously impact on the condition and age profiles of networks. For example in an initial regulatory period the replacement capex might be cut because the regulator considers that the condition does not warrant replacement of the asset until the next regulatory period Then in a second regulatory period the condition of those assets warrants immediate replacement, however the regulator cuts the replacement expenditure on the basis of a top down approach. Over the life of the assets, the results will be a progressive deterioration in performance and rapidly increasing costs due to failures and outages.

3.4 20% premiums

PB noted that in the case of Powerlink

> *…there is an augmentation element in many of Powerlink's replacement projects. Furthermore, there is an additional cost involved in replacement assets because of the need to maintain supply and work around existing live infrastructure. This indicates that a replacement premium is likely to be around 20% ..... [PB] think a 20% augmentation premium would also be reasonable.*[5]

There is no explanation contained in PB's report or the AER's draft decision as to why a 20% premium for augmentation and 20% premium for replacement is appropriate.

It is essential that the replacement costs used to calculate the RAB reflect the true cost of new assets (i.e. the cost to replace the old assets with new). PB referred to the NSW Treasury Guidelines for ODRC, which contain unit rates that were out of date in 2002, and which would clearly bear little relevance to today's costs. EnergyAustralia believes that a premium significantly higher than 20% would be required to bring the Guideline unit rates in line with today's costs, particularly given the recent labour and commodity price hikes experienced by the industry and escalation in land values.

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4 13 percent of EnergyAustralia's assets (by asset value) are older than their standard technical lives.

5 *ibid,* p 112.

Furthermore, the cost of replacing equipment on a brownfield site is significantly higher than the equivalent installation at a greenfield site. EnergyAustralia's experience suggests a premium of 50-100% would be more indicative of the actual costs incurred by businesses today.

The AER must disclose the basis for PB's recommended and apparently arbitrary 20% premium. Further it should provide its reasons for adopting this recommendation and why the premiums are not significantly higher to cater for higher costs associated with brownfield work and to correct for out of date unit rates, particularly given recent supply and labour cost pressures.

4 Contingent projects

EnergyAustralia and TransGrid were the first TNSPs to have the contingent project scheme applied. It was developed as a way of catering for project uncertainty within an ex ante cap. At the time, the uncertainty was defined as being in terms of whether the project would go ahead or not, and/or uncertainty about the project's scope and therefore cost when it did proceed.

EnergyAustralia has one contingent project under development at present[6] and has found the contingent project framework to be critical for the practical application of the ex ante cap given the difference in forecast costs at the time of the submission compared to current cost forecasts.

Despite the very real need and benefits of the contingent project regime, EnergyAustralia is concerned that it is being used by the AER to artificially reduce capex programs under the ex ante cap and avoid the need to address the true underlying capital needs of the network. In Powerlink's case, the AER seems to be moving a greater proportion of capex into this category because it reduces Powerlink's revenue cap, but it has insufficient justification to make these reductions permanently. It has manipulated the contingent project regime to be a holding cell for capex.

We note the AER's use of discretion in deciding many Powerlink projects to be contingent projects even where they did not meet the (extraordinarily high) threshold included in the SRP. In some cases, it could be argued that the AER accepted projects as contingent projects in order to remove them from the main allowance. This effectively is a "yes but not now" approval strategy by the regulator that can remove legitimate projects from the capital expenditure profile and thereby mitigate upward (yet legitimate) pressure on transmission prices. The increasing size of the contingent project basket means that TNSPs will have to go through an intensive process during the regulatory period to have contingent capex approved. As the number of contingent projects increase, this will prove to be a large (and inefficient) burden for TNSPs and the AER that will ultimately increase the very prices that regulation is supposed to protect.

EnergyAustralia is also specifically concerned by the AER's decision to make undergrounding transmission assets a contingent project. We do not understand how the contingent project regime will work in a case where the project is approved, but the cost of undergrounding is not. Does this mean that a TNSP will effectively seek approval twice for a single project? If this is the case, this does not appear to be an efficient outcome of the regulatory process.

The AER's treatment of undergrounding in the Powerlink decision has grouped the undergrounding component of 16 different capex projects as a single contingent project. It appears that the AER has concluded that the 16 projects are needed but it has not been able to deicide whether the undergrounding will be required.

The contingent project regime anticipates that a trigger event, whilst it may have several parts, will have occurred prior to the majority of the expenditure on the project. This timing enables the AER to set an ex ante incentive for that expenditure. However in this case the AER has 16 possible trigger events, which would result in 16 assessment processes and 16 ex ante incentives. Therefore it appears there are 16 projects.

EnergyAustralia suggests that none of these undergrounding projects would pass the materiality threshold on its own and that this would be the reason the AER has grouped these projects – to creatively cross the materiality threshold.

The AER's implementation in this case is not consistent with the intent of the contingent project regime and seems to be "policy on the run", similar to the ACCC's approach to regulation. It is not consistent with either the new Rules developed by the AEMC or the SRP as initially developed by the ACCC. In both cases a specific project with a single trigger event and single assessment process was anticipated.

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6 EnergyAustralia has not formally submitted its application for this contingent project to the AER as yet but plans to do so in the first half of 2007.

As a general principle, EnergyAustralia believes the contingent project regime needs to be greatly simplified to avoid involving the regulator in continuous monitoring of the day to day activities of the network. Such intrusion is the antithesis of light handed regulation, which is the stated goal of best practice regulators.

Powerlink's probabilistic approach to undergrounding is a better way to pool the risks and it does not attack the integrity of the contingent project regime. The AER should revisit the undergrounding costs and accept Powerlink's proposed probabilistic costs in this regard, because it would:

- increase the integrity of the regulatory framework;
- remove the need for 16 intrusive regulatory assessments;
- be consistent with the Rules and intent of the SRP; and
- provide Powerlink with certainty.

5 Productivity & cost escalation

Escalating input costs need to be addressed, otherwise networks will overspend due to factors outside their control, which will completely undermine the incentive based regulatory framework. Imposing an incentive on a network would only be meaningful if it could take action to make the most of that incentive. Unless the input costs are adequately considered by the AER, Powerlink may have a meaningless and punitive incentive applied in the face of these rises.

5.1 Productivity

EnergyAustralia notes the report produced by Access Economics on wage growth in the utilities sector. The report focuses on real wage growth and the trends for productivity in the next 5 to 10 years.

Chart 3 in the Access report shows the clear increase in productivity seen during the late 1990s and it attributes this to falling employment levels following the industry's deregulation. However, the report does not recognise that with falling employment levels came falling rates of replacement expenditure during the 1990s, a trend that is now steadily being reversed. As a result of increasing levels of asset replacement, productivity is slowing, not because workers are being less productive, but simply because productivity measures often use network capacity in the comparative measures. Asset replacement typically only adds marginally to network capacity. Although older assets may be replaced with higher capacity modern assets, the additional capacity that results is marginal for the level of expenditure, compared to primarily growth driven investments.

EnergyAustralia believes that while growth related capital expenditure will continue to occur, expenditure on asset replacement will constitute a growing proportion of the total capital spend, thus resulting in a slowing in the rate of increase in network capacity per worker and therefore, indicate that productivity is also slowing or is likely to be negative for some time as reflected in the current Productivity Commission estimates for the electricity, gas & water sector.

5.2 Labour cost escalation

There is growing evidence that CPI does not sufficiently capture cost escalations faced by the electrical industry. EnergyAustralia welcomes the consideration of embedded escalation factors for labour, materials and property. EnergyAustralia plans a similar approach in our submission for the 2009-2014 period.

EnergyAustralia believes that the labour costs forecasts put forward by Powerlink reflect market conditions and the increased competition for workers with electrical skills. EnergyAustralia is less supportive of Access Economics' assessment of the labour market, as there is little reason to suggest there will be a change in market conditions in the short term. Any change in global costs in the medium term will take time to trickle through to materials prices and even longer to trickle through to lower project costs.

It should also be noted that the AER should fully understand and explain the basis upon which its consultants make their advice. In the case of Access Economics, EnergyAustralia is not sure that the inflation assumption used by Access Economics is consistent with that in the AER's PTRM. When the same parameters have different values in different but interdependent models it must be questioned as to which is the better estimate.

This shows a clear lack of understanding of the basic drivers of input costs.

5.2.1 Actual labour cost increases

The ABS publishes a Labour Price Index[7] for the Electricity, Gas & Water Sector. This index indicates the following increases in labour prices for Private & Public enterprises.

ABS Labour Price Index (Electricity, Gas & Water Public & Private)	
Jun-2001	4.1%
Jun-2002	4.0%
Jun-2003	4.6%
Jun-2004	4.7%
Jun-2005	3.8%
Jun-2006	6.9%

These figures are generally consistent with EnergyAustralia's experience in terms of electrical labour cost increases however, wage increases in the electricity sector have generally been higher than those in the gas and water industries.. The reasons for wage pressures are discussed below.

Skills shortages

EnergyAustralia has faced very strong wage pressure in recent years and expects pressure for wage increases to continue as the number of capital and maintenance tasks required continues to rise. Like Powerlink, EnergyAustralia predicts a large increase in replacement expenditure over the next 10 years which we believe will continue to drive demand for skilled workers in the electricity industry. Combined with pressure from other sectors such a mining, EnergyAustralia does not expect labour shortages in the industry (and therefore wage pressures) to taper off within the next five years.

EnergyAustralia is facing critical skill shortages in areas of line workers, cable jointers, electrical engineers, design staff and general electrical workers. EnergyAustralia has taken up the responsibility of providing many of these workers by increasing our apprenticeship programs and sponsorship of engineering faculties at university to encourage a growth in the number of workers and professionals with electrical skills. Despite our efforts, EnergyAustralia does not expect to see these skilled workers available to the market for at least four years due to the training time required for both apprenticeships and degree qualifications.

An alternative strategy such as hiring skilled workers from overseas is also constrained due to an international shortage of skills, particularly in cable jointing. EnergyAustralia is now being forced to apply less skilled workers to tasks much earlier in their training than has been the case in past years. There is some evidence that the lower skill level is resulting in additional costs due to greater time taken to complete tasks, and in some cases lower quality workmanship that has resulted in additional costs to the business.

Aging workforce

A further pressure on EnergyAustralia's workforce is the average age of our staff. Large numbers of EnergyAustralia's most skilled workers are reaching retirement age and there will be a significant number of new recruits required to meet new vacancies simply as a result of the trickle down effect of promotions. This impact is not linked to asset growth but will compound the impact of the general shortfall in skilled labour within the industry.

EnergyAustralia does not expect real wage pressures to fall or labour productivity to increase significantly to offset this pressure within the next 5-10 years.

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7 6345.0 - Labour Price Index, Australia

5.3 Materials escalation

EnergyAustralia's key materials comprise predominantly electrical equipment and electrical cables. ABS Producer Price Data[8] by Manufacturing Industry Classification indicates the following price increases for Electrical Cables & Wire and Electrical Equipment Manufacturing. The ABS data clearly shows a lack of correlation with the CPI.

Year ending June	Electric Cable & Wire (2852)	% Change	% Change Cumulative	Electrical Equip Mfg. (2859)[9]	% Change	% Change Cumulative
2003	96.9			133.1		
2004	105.0	8.4%	8.4%	132.3	-0.6%	-0.6%
2005	113.8	8.4%	17.4%	137.0	3.6%	2.9%
2006	127.7	12.2%	31.8%	142.1	3.7%	6.8%
2007*	134.1	5.0%	38.4%	149.2	5.0%	12.1%
2008*	140.8	5.0%	45.3%	156.7	5.0%	17.7%
2009*	147.8	5.0%	52.6%	164.5	5.0%	23.6%

* Projections

5.3.1 Civil Construction

ABS constructs an index for non-residential construction[10] (shown below since June 2002). The increase in this cost index is generally consistent with the Department of Commerce Building Construction Index.

Year ending June	Non-Res Construction	% Change	% Change Cumulative
2003	112.7		
2004	127.0	12.7%	12.7%
2005	135.2	6.5%	20.0%
2006*	140.6	4.0%	24.8%
2007*	147.6	5.0%	31.0%
2008*	155.0	5.0%	37.6%
2009*	162.8	5.0%	44.4%

* Projections

5.3.2 Contracted Works

EnergyAustralia has seen a strong increase in the costs of contracted services, particularly those with high labour content such as vegetation management and pole inspection. Contracts for these services are negotiated on a 3-4 year cycle. The contracts are currently being renewed and price increases of 30-40% are expected for both vegetation management and pole inspection as a result of higher labour costs seen over past 3-4 years and a wider scope of works made necessary by regulatory and safety obligations.

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8 Producer Price Indexes, Australia, (Cat. No. 6427.0), Tables 10 and 11. Articles Produced by Manufacturing Industries

9 This Class consists of units mainly engaged in manufacturing electric motors, generators, electricity transmission or distribution equipment, switchgear, transformers or other electrical machinery, equipment, supplies or components.

10 6427.0 Producer Price Indexes, Australia, Tables 15 and 16. Output of the General Construction Industry; Non-residential building construction (4113) New South Wales