

Coalpac: Invincible and Cullen Valley modifications

Submission
September 2014

Rod Campbell

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Level 5, City Walk Centre
131 City Walk
Canberra City, ACT 2601
Tel +61 2 6130 0530
Email: mail@tai.org.au
Website: www.tai.org.au

Key points:

- **EIS assumes Energy Australia will pass savings to consumers by expanding electricity supply if modifications are approved.**
- **Energy Australia says electricity market is already “grossly oversupplied” and is reducing supply.**
- **Economic modelling for Energy Australia is based on electricity price forecasts three times higher than current forecasts.**
- **Any savings from the project will be kept as profits, accruing to Energy Australia’s foreign owners, giving no benefit to NSW.**
- **Discounted coal to Energy Australia means less royalties are paid – a loss to NSW.**
- **Energy Australia already has approval for access to competitive coal supplies.**

Introduction

The NSW Planning and Assessment Commission (PAC) is considering an application to re-open and expand the operations of the Invincible Colliery and Cullen Valley Coal Mine, near Lithgow. If approved, the mines will provide coal at below-market prices to the nearby Mount Piper and Wallerawang power stations, owned by Hong Kong company, Energy Australia.

A previous application to expand these mines, the Coalpac Consolidation Project, was rejected by the NSW Planning and Assessment Commission as its environmental costs were likely to be far greater than any economic benefits to NSW.

The Australia Institute has made several submissions on these projects. Our opinion is that the economic benefits to NSW of the modifications are minimal and that they should also be rejected. The economic assessment in the Environmental Impact Statement (EIS) is seriously flawed and is contradicted by public statements by Energy Australia. The Department of Planning and Environment’s Secretary’s report (the Department’s report) relies heavily on this flawed analysis. The key flaws are:

- Assumption of savings to energy consumers
- Royalty estimates
- Concept of competitive supply

Savings to NSW energy customers

Savings to Energy Australia

According to the EIS and the Department’s report, the key benefit of the proposed modifications is cheaper electricity for NSW consumers. Both the EIS and the Department use an estimate of \$155 million dollars for this claimed benefit.

This estimate is based on Energy Australia receiving coal for \$50 per tonne which has a market value of \$70 per tonne, giving a saving of \$20 per tonne. The mine would provide the power station with 2.2 million tonnes per year, a saving of \$44 million per year. The \$155 million figure is in 'present value' terms, ie is discounted over the four year period at a 7 per cent discount rate.¹

EIS assumes savings passed to consumers

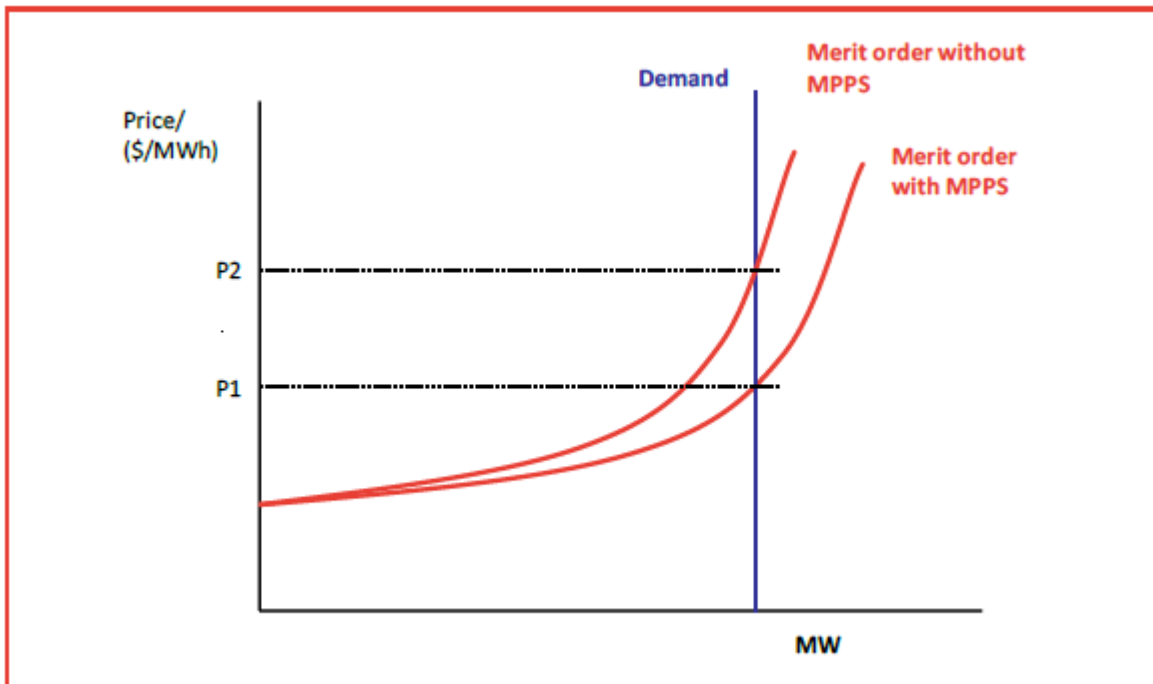
If Energy Australia receives subsidised coal, they will either pass their savings on to their customers, keep the saving as profit, or a combination of the two. **The EIS and the Department's report assume they will pass 100 per cent of this saving to consumers:**

[Benefits accrue to] the operator of the [Mount Piper Power Station] in the form of lower cost coal (and ultimately electricity consumers in NSW in the form of lower electricity prices)(\$155M)²

The EIS economic assessment shows on p20 that they assume all this benefit will accrue at either a local or a state level, this is not questioned in the Department's report (see p12).

The EIS and the Department's report assume this saving will be passed on to the energy market as the cheaper coal will allow Energy Australia to expand their supply of electricity, forcing down prices. Analysis commissioned by Energy Australia and provided to the Department, shows this mechanism and is reproduced in Figure 1 below:

Figure 1: Electricity supply with and without Mt Piper



Source: Research commissioned by Energy Australia, (Frontier Economics, 2013), figure 10, p21

¹ Actually this results in a present value of \$149 million. It is unclear how the \$155 million figure was obtained.

² (Gillespie Economics, 2014) p19

In Figure 1, we see that the red supply curve shifts to the right as Mount Piper supplies more electricity into the market, reducing price from P2 to P1. The vertical blue demand curve assumes that people will buy the same amount of electricity regardless of its price, an assumption which is not realistic and not supported by data from the Australian Energy Market Operator.

Supply from Energy Australia will not expand but will reduce

However, it is very unlikely that Energy Australia will expand supply from their Mount Piper or Wallerawang stations. They have recently made submissions to the Federal Government's review of the Renewable Energy Target, stating that they feel there is already too much generation capacity in the market and that prices are already too low:

*Since 2010 it has become apparent that the **wholesale energy market is grossly oversupplied** and that there is insufficient demand to absorb even existing generation capacity adequately.³*

In a market which it considers "grossly oversupplied", Energy Australia will not expand supply and work to keep prices lower, but will withdraw it and try to raise them. This logical course of action is spelled out in Energy Australia's parent company's most recent interim report:

*During the first half of 2014, market conditions in Australia remain challenging due to ongoing weak demand and intense competition. In the face of these challenges, I am pleased that EnergyAustralia's own operational performance and cost structure showed improvement. We have also **taken steps to respond to the oversupply situation on the generation side by rationalising our generation portfolio**. As we expect the external market to remain difficult in the years ahead, we will continue to optimise our business, strategy and structure in response to changing market conditions.⁴*

It is clear that 'rationalising' their generation portfolio means reducing supply, not increasing it, as is clear in CLP's Quarterly Statement:

In response to these market conditions, EnergyAustralia took one unit of the Wallerawang Power Station out of service in early 2014, and it has now been permanently closed. The second unit was removed from service at the start of April 2014 and placed on a three-month recall.

Wallerawang has not been recalled to our knowledge and it seems very unlikely that Energy Australia would do so given its statements to the market and the government.

ACIL Allen Economic model

Central to Energy Australia and the Department's argument is economic modelling commissioned by Energy Australia. The Department says:

[Energy Australia] also provided independent modelling that indicated this could increase retail electricity prices in NSW by between 4 and 12 per cent.

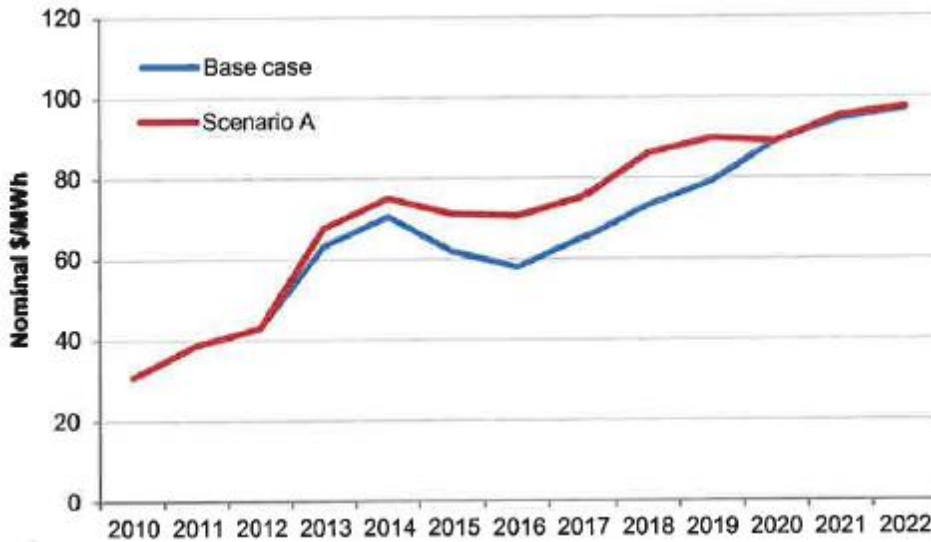
This **modelling was not independent, but was commissioned by Energy Australia** and conducted by ACIL Allen. A central assumption of ACIL Allen's modelling for Energy

³ (Energy Australia, 2014) p3-4, emphasis added

⁴ (CLP Holdings, 2014) p3, emphasis added

Australia is wholesale electricity prices. They assume that wholesale electricity prices will rise to nearly \$100 per megawatt hour in NSW, as shown in Figure 2 below:

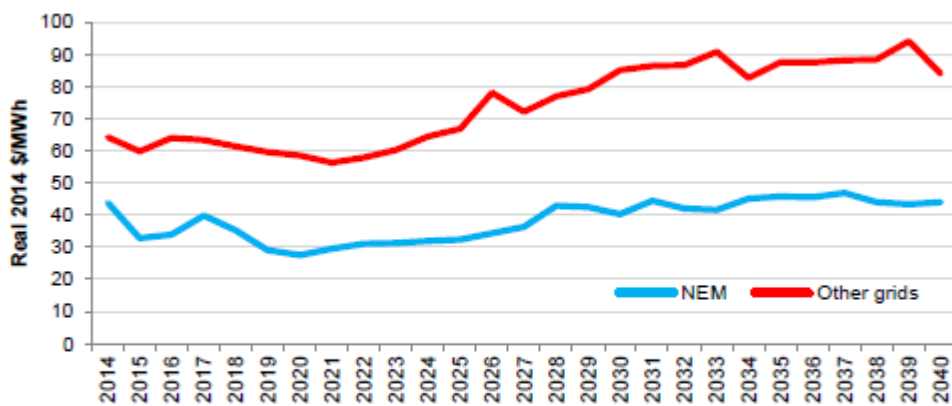
Figure 2: NSW wholesale electricity price assumptions in ACIL modelling for Energy Australia



Source: ACIL Allen modelling in Energy Australia submission on Coalpac consolidation project, see link in bibliography as for (Frontier Economics, 2013)

It is surprising, therefore, to see that **just one year later, ACIL Allen’s wholesale price forecasts are much lower.** In their modelling of the Renewable Energy Target for the Federal Government’s review, ACIL see prices tending between \$30 and \$40 per megawatt hour for most of the coming decades, as shown in Figure 3 below:

Figure 3: National Electricity Market wholesale electricity price assumptions in ACIL modelling for RET Review



Note: Prices presented on an equivalent basis to time-weighted annual averages. Weighted average prices for grids (NEM = NSW, QLD, SA, TAS and VIC; Other grids = SWIS, NWIS, DKIS and Mt Isa).

Source: (ACIL Allen, 2014) p9

The relevant line in Figure 3 is the lower blue line representing the National Electricity Market (NEM), which includes NSW. While Figure 2 is listed in nominal dollars with no adjustment for inflation, and Figure 3 shows NEM prices not only NSW, this cannot account for the

differences between the two forecasts. **The claims of a 4 to 12 per cent reduction in retail prices, are based on wholesale forecasts up to three times higher than ACIL's more recent forecasts.** Under the more recent forecasts of declining prices, these savings will not eventuate.

Benefits will be passed to shareholders

Rather than passing savings on to consumers, in a market with abundant supply, Energy Australia will take the savings provided by these modifications and pass them on to their shareholders. This is precisely what they have already done with the closure of Wallerawang and reducing costs at Mount Piper:

*Our Australia business **recorded earnings of [AUD\$83] million** as compared to a loss of [AUD\$6] million in the first half of 2013. The improved performance was mainly attributable to lower depreciation and amortisation on reduced asset bases after the 2013 impairment, **lower finance costs and operating expenses (mainly costs for operating Mount Piper and Wallerawang and lower marketing expense)**, partially offset by reduced gross margin due to lower customer accounts and usage.⁵*

As CLP Group and Energy Australia are entirely foreign owned, **these savings will be expatriated rather than flowing to NSW.**

Impact of distribution and retail not considered in EIS

Even if Energy Australia do pass some savings into the wholesale market, it is by no means certain that these will ever reach retail customers. This is ignored in the EIS economic assessment and by the Department. The response to submissions fails to address this criticism, suggesting only that moves towards deregulation will assist consumers:

The extent to which lower cost coal is passed on to electricity consumers will depend not only on competition between electricity generators but also on competition in distribution and retailing. The deregulation of electricity providers (wholesalers and retailers) in NSW aims to promote competition, customer choice and encourage cheaper electricity. To the extent this deregulation is and will be successful, then the provision of cheaper coal to MPPS by Coalpac will be passed on to electricity consumers.⁶

This response fails to address what portion of any savings would be taken by distributors and retailers and places surprising faith in the creation of a perfect market for electricity in NSW. Prominent economists are sceptical of this position.⁷

A key justification for this proposal is to reduce retail electricity prices. Yet surprisingly, the proponents cannot estimate or explain how or if benefits will be passed on to consumers. These claims should be dismissed as they are entirely without supporting analysis.

Loss of royalties

Both the EIS economic assessment and the Department's report refer to royalties paid to the state government as a benefit of the project. The EIS estimate is that present value \$29

⁵ (CLP Holdings, 2014) p11

⁶ (Gillespie Economics, 2014)

⁷ See for example (Quiggin, 2014)

million in royalties will be paid, assuming an 8.2 per cent royalty rate, a \$50 price paid for coal and a 7 per cent discount rate.

While this may be the value of royalties the project would pay to the government for the coal, this is far less than the royalties that would be paid on this coal if it were sold at the market price. The EIS economic assessment says that if the project had to purchase coal from alternative suppliers it would be forced to pay \$70 per tonne. **By allowing the project below-market priced coal, royalties are not paid on the full value of the coal, representing a loss to NSW.**

Assuming a price reduction of \$20 per tonne of coal, an 8.2 per cent royalty rate and a 7 per cent discount rate, this represents **a loss to NSW of royalties of \$12.2 million.**

The necessary assumption here is that the domestic use of coal does not displace coal exports, ie that another NSW producer would expand its output to supply this reduction in output. This replacement may not be complete, which could reduce the size of this loss.

Competitive supply

The Departments report states that:

The primary need for the modifications is to ensure the short-term supply of competitively priced coal to the nearby Energy Australia power stations while longer-term strategies for coal supply can be explored.⁸

Given that Energy Australia is a privately owned company and the electricity market is currently “grossly oversupplied”, it is unclear why there is any need for assisting it with its supply of coal. There is abundant coal that could be supplied to the project. In fact its longer term strategies for **access to competitively priced coal have already been explored**, as is made clear on Energy Australia’s website:

*EnergyAustralia developed the idea for the Western Rail Coal Unloader project in order to continue the coal supply needed to operate the Mt Piper and Wallerawang Power Stations. The Minister for Planning and Infrastructure **granted approval in 2009** for EnergyAustralia to construct a rail coal unloader at Pipers Flat. This will ensure ongoing operational needs are met and both power stations have **access to competitively priced coal.**⁹*

For five years Energy Australia and the former operators of the Wallerawang and Mount Piper power stations have had approval to build the infrastructure that would allow them to access the competitively priced coal of the NSW coal industry. In fact, the current modifications are about access to un-competitively priced coal – coal which Energy Australia would not have to compete to buy, but would be given at cheap prices causing a loss to NSW.

⁸ P12

⁹ <http://www.energyaustralia.com.au/about-us/what-we-do/projects/mt-piper-and-wallerawang>
emphasis added

Conclusion

The Coalpac modification proposal represents an almost certain loss to the NSW community. It is highly unlikely that an energy company which is currently lobbying to reduce the amount of electricity supplied to wholesale markets will pass on savings in fuel costs to buyers. Instead, it will 'rationalise' its supply and keep the savings as profits which will be repatriated to its foreign owners, leaving no benefit to NSW.

Economic modelling suggesting that the project will provide savings to retail consumers is based on wholesale price assumptions which are no longer valid. It is surprising that such different price estimates were produced by the same consultancy only one year apart.

While NSW consumers are unlikely to benefit from reduced prices, giving the project access to cheaper coal reduces royalty values by around \$12 million.

Energy Australia already has approval for infrastructure that would provide access to a competitive coal market. This proposal is not aimed to provide competitive supply, but to reduce competition in the coal and electricity markets. The proposals will act as a producer subsidy, with most benefits flowing to overseas shareholders and a likely reduction in royalties. They should be rejected on this basis.

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