18th April 2017

Alan Coutts – Commission Chair
Joe Woodward, PSM – Commission Member
David Johnson – Commission Member
John Hann – Commission Member

NSW Planning Assessment Commission (PAC)

Email: pac@pac.nsw.gov.au

Dear Commissioners,

D458/17 – Wilpinjong Extension Project

I wish to draw your attention to my submission to the PAC re **R039/16 Wilpinjong Extension Project**, dated 5 Dec 2017. In this Submission I asked these questions that the PAC members at the time needed to consider:

1. The Paris Climate Agreement (that Australia is a signatory to), although flawed, locks in the end of coal, requiring net zero carbon emissions by the start of the second half of this century. Why is an instrument of the NSW Government (the PAC) considering allowing further coal mine development? Shouldn't governments be developing orderly plans to begin the contraction of the coal industry; not promote further coal developments? When they likely do in the near future, what are the consequences for Wilpinjong Mine's long-term viability? **Is approving the R039/16 Wilpinjong Extension Project sound?**
2. The world's largest private-sector coal company, Peabody Energy, in the US filed for bankruptcy protection in April this year. Is the owner of Wilpinjong Mine here in Australia financially viable long-term? Does Wilpinjong's owner have the financial capacity to meet its long-term environmental commitments or will the taxpayer and local communities be burdened instead? Will there be an **ongoing, profitable demand** for Wilpinjong's coal? **Will Wilpinjong Mine be a stranded asset in a few years to come, particularly beyond 2025?**

The PAC published its *Wilpinjong Extension Project SSD 6764 Review Report*, dated 20 Dec 2016, referring in its section ***6.10 Employment and Economics*** that:

> A number of submissions raised concerns over the Applicant's ability to fulfil their financial obligations under any consent, particularly with regard to rehabilitation. Although the consent authority is not required to consider the financial viability of an applicant in determining a development application, under the EP&A Act, there are processes in place to ensure financial obligations, including rehabilitation of the site, can be met. As a requirement of the *Mining Act 1992*, the Division of Resources and Energy (DRE) hold security deposits for the rehabilitation of every mine in NSW. The Applicant has lodged a security deposit for the Wilpinjong mine which addresses all operations covered by its current Mining Operations Plan (MOP). The bond for rehabilitation is assessed and determined by DRE on the lodgement of a MOP which is amended over the life of the mine. The MOP details the amount of rehabilitation completed and the outcomes of existing rehabilitation against the objectives of the project. Based on this, the bond amount is recalculated and can be increased or decreased based on the mines performance.
>
> The Commission notes that while the project would result in a net economic benefit, the increase in employment numbers would not be for the life of the mine, with numbers tapering back to approximately 550 employees once the peak operational period is complete.

> Notwithstanding, the Commission considers that the overall net benefit would outweigh the impact of reduced employment numbers once the project extension is operational.

If a number of submissions have raised concerns over the Applicant's ability to fulfil their financial obligations "*under any consent*", then how can the Commission then state with any confidence that "*the project would result in a net economic benefit*"? Is the PAC in denial over increasing and compelling evidence that global demand for coal has begun and is likely to continue a sustained decline?

The NSW Planning and Environment's *FINAL ASSESSMENT REPORT: Wilpinjong Extension Project (SSD 6764)*, was published in March 2017, and includes this statement in its Executive Summary:

> The Wilpinjong Extension Project would result in significant social and economic benefits for the local area and the State of NSW, including the continued employment of up to 625 employees. It would also create a substantial number of indirect employment opportunities in related industries and economic contributions to the State through royalty and local tax revenues.

Here again, another NSW government entity appears to be unaware or in denial of the rapid global transition occurring away from coal.

I draw your attention to the recently completed Australian Senate inquiry into the "Retirement of coal fired power stations". On Wednesday, 22 February 2017, this inquiry held a public hearing in Sydney, which I attended as an observer, where witness Tim Buckley, as Director of Energy Finance Studies for the Institute for Energy Economics and Financial Analysis (IEEFA), was called and examined. In Tim Buckley's opening statement, on the Committee Hansard transcript, page 39, he said (highlighted text my emphasis):

> As I mentioned, I work for IEEFA, a public-interest research organisation. We come at it from a financial analyst perspective, and I look at the global energy market transformation. Today I would like to bring across how that transformation is occurring in the global context and, if I could, I will reference India and China to illustrate the rate of change in two of the largest economies in the world, and to highlight the point that it is an inevitable change. The two largest economies, population groups, in the world are moving far faster than anyone in Australia understands. So I will bring in that global perspective. Secondly, I would like to talk about financial institutions because, globally, financial institutions are rapidly waking up to the issue and are changing their position dramatically to accommodate the inevitability of this change.

On the subject of where the global seaborne thermal coal market is heading, Tim Buckley stated this (on transcript page 42, highlighted text my emphasis):

> The seaborne market is, I would guesstimate, 95 per cent 12-month contracts or spot, so 12 months or less. There are no long-term contracts of any magnitude in the seaborne market. To bring it to a close, thermal pricing for exports is determined by Chinese government policy. China has a very clear policy to move away from coal. Coal production in China dropped 9.4 per cent last year alone, and seaborne coal is a marginal high-cost source of supply, so it gets whipped around depending on China's policy. To me, the more important aspect is what is happening to the volume of seaborne thermal coal demand. In China, it dropped by 10 per cent in 2014, dropped by 30 per cent in 2015, rebounded 26 per cent when they massively curtailed their domestic production and will continue dropping, I think, to probably zero by the end of this decade.
>
> The second largest thermal coal import market in the world is India. Two years ago, Indian energy minister Goyal articulated a very clear plan to cease thermal coal imports by and large by 2020. I do not think it is any surprise that imports in December dropped 25 per cent year on year, and January 2017—the stats came out just yesterday—was down another 22 per cent. His plan to cease thermal coal imports by the end of this decade is entirely economically driven, and his economic

> rationale is supported by the solar contract I just mentioned. Solar in India is now cheaper than existing domestic coal-fired power generation. It is half the price of new imported coal-fired power generation. So the seaborne thermal coal market is in total structural decline. Australia needs to transition that industry as fast as we transition our domestic power generation.

I urge you to read Tim Buckley's testimony in full as I think it provides valuable insights into the global energy transformation occurring, that is relevant to whether the Wilpinjong Extension Project is likely to be viable into the 2020s and beyond. His perspective indicates that the world's two currently largest coal importers, China and India, are unlikely to require any more coal imports after around 2020, and if his assessment is correct (and the PAC should have the resources to check the veracity of his statements), this has dire implications for Australia's coal exports and the Australian thermal coal industry in general.

The *Wilpinjong Extension Project SSD 6764 Review Report*, in section ***7.1 Strategic Vision of Mining***, stated this:

> Based on experiences occurring elsewhere in other NSW coalfields, particularly the Central and Hunter coalfields the Commission considers it important to make reference to the need for a long term strategic plan for the western coalfields. The development of a high level strategic vision for the NSW coalfields, and in particular for the western coalfields would be of considerable benefit in the assessment of individual projects and would give mining companies, government agencies, investors and the community confidence in the long term strategic direction of mining within the State.

Dr. Alan Finkel AO, Commonwealth Chief Scientist, and Chair of the Expert Panel into the Independent Review into the Future Security of the National Electricity Market is expected to finalise and publish the findings and recommendations of the Independent Review of the NEM later this year, followed by the Australian Government considering these recommendations and responding. The NSW Government is also apparently currently drafting an *Advanced Energy Strategy* for public consultation later this year. However, without a strategic plan published and adopted by governments, neither State-based nor national, then the PAC needs to be particularly cautious about approving a project that may soon be at odds with future new policy directions.

Here below are some questions, shown in bold red text, which I think you need to ask the proponent before you make your determination.

Where is the ongoing, profitable demand for more coal in future? NSW Liddell power station is due to close in 2022 (in about 5 years) and Vales Point B could also close within about a decade as it will be past its design life in 2028 (50 years old). With domestic thermal coal demand declining in the early 2020s where is the ongoing profitable market for Wilpinjong's coal in future? With China and India unlikely to need further coal imports by around 2020 there appears to be an emerging huge glut of Australian thermal coal producers with a rapidly diminishing global market of thermal coal buyers. Who needs Australian thermal coal in the not so distant future? Apparently it seems not China. Not India. Not USA. And Japan appears to be reducing its reliance on thermal coal. These countries were the top four coal consumers in 2015, with a combined global share of 74.0%. Please see an attached rankings table that I have compiled from data derived from *BP Statistical Review of World Energy 2016*.

Is the owner of Wilpinjong mine financially viable long-term? Again, I highlight Tim Buckley's testimony, as referred above, in response to a question regarding the implication for existing assets and whether there will be **a re-evaluation of assets or financing issues with coal companies if these legacy issues become more prominent**, and he responded with:

> Absolutely. I would draw reference to the fact that the biggest private coal company in the world went bankrupt last year—Peabody. They were at US$18 billion at the start of this decade market capitalisation, and they went to zero along with four of the other biggest US coal companies. They went to zero. I think the whole reason China actually instigated the 276 rule at the middle of last year was that they did not want their own coal industry going bankrupt at the same time as the American coal industry was going bankrupt. China announced they were retrenching 1.2 million coalmining workers. They are a third of the way through that program. What they did not want was six million coalmining workers to be unemployed. They already had massive structural problems in five of their biggest coal provinces last year. I think they actually pushed the coal price up deliberately to stabilise those domestic coal companies. Companies like China Coal Energy were borderline bankrupt until the price of coal went back up. So I think it is part of their long-term strategic plan. We are a free market—although energy markets are never free. In China they actually have a planned economy and they are trying to manage their way through a massive, multidecade transformation. They are being far more successful at it than we are.

And from an article on the internet-based *E&E News*, headlined "**ENERGY TRANSITIONS: Coal plants keep closing on Trump's watch**" by Benjamin Storrow, dated 21 Feb 2017, part of a continuing series examining the ups and downs of the US coal industry and whether President Trump can save it, stated that:

> In the next four years, utilities have plans to close 40 coal units, federal figures show. Six closures have been announced since Trump's victory in November.

And this article also reported:

> "Unless those fundamentals change in some deep and fundamental way, I don't see how you get anything other than rapid elimination of coal plants and certainly not any new ones," said William Hogan, a professor of energy policy at Harvard University.

Australia and NSW currently both have energy and resources policy failures that are not effectively dealing in a timely manner with a rapid, extensive global transition currently occurring away from coal. The PAC should avoid compounding the problem by **recommending not approving the Wilpinjong Extension Project.**

Please choose wisely. Don't make a mess of it.

Yours Sincerely,

Geoff Miell

Geoff Miell

[redacted]

BP Statistical Review of World Energy 2016 (65th Edition)

Coal Proved Reserves & Reserves-to-Production (R/P) at end of year 2015; and Production & Consumption in 2015: Calender Year 2015 Rankings Table: World and Countries #1 to #8

Coal for year 2015	World	Rank #1 Country	Rank #2 Country	Rank #3 Country	Rank #4 Country	Rank #5 Country	Rank #6 Country	Rank #7 Country	Rank #8 Country
Reserves (Mtonnes)	891 531	USA 237 295	Russian Fed. 157 010	China 114 500	Australia 76 400	India 60 600	Germany 40 548	Ukraine 33 873	Kazakhstan 33 600
(% share)	100	26.6	17.6	12.8	8.6	6.8	4.5	3.8	3.8
R/P (years)	114	292	422	31	158	89	220	>500	316
Production (Mtoe)	3 830.1	China 1 827.0	USA 455.2	India 283.9	Australia 275.0	Indonesia 241.1	Russian Fed. 184.5	South Africa 142.9	Colombia 55.6
(% share)	100	47.7	11.9	7.4	7.2	6.3	4.5	3.7	1.5
Consumption (Mtoe)	3 839.9	China 1 920.4	India 407.2	USA 396.3	Japan 119.4	Russian Fed. 88.7	South Africa 85.0	South Korea 84.5	Indonesia 80.3
(% share)	100	50.0	10.6	10.3	3.1	2.3	2.2	2.2	2.1

Calender Year 2015 Rankings Table: Countries #9 to #16

Coal for year 2015	Rank #9 Country	Rank #10 Country	Rank #11 Country	Rank #12 Country	Rank #13 Country	Rank #14 Country	Rank #15 Country	Rank #16 Country
Reserves (Mtonnes)	South Africa 30 156	Indonesia 28 017	Serbia 13 411	Turkey 8 702	Colombia 6 746	Brazil 6 630	Canada 6 582	Poland 5 465
(% share)	3.4	3.1	1.5	1.0	0.8	0.7	0.7	0.6
R/P (years)	120	71	352	192	79	>500	108	40
Production (Mtoe)	Poland 53.7	Kazakhstan 45.8	Germany 42.9	Canada 32.1	Vietnam 23.3	Ukraine 16.4	Czech Republic 16.4	Mongolia 14.9
(% share)	1.4	1.2	1.1	0.8	0.6	0.4	0.4	0.4
Consumption (Mtoe)	Germany 78.3	Poland 49.8	Australia 46.6	Taiwan 37.8	Turkey 34.4	Kazakhstan 32.6	Ukraine 29.2	United Kingdom 23.4
(% share)	2.0	1.3	1.2	1.0	0.9	0.8	0.8	0.6

Billion = 1 000 000 000 = 10^9 = giga = G; million = 1 000 000 = 10^6 = mega = M;
Mtoe = million tonnes oil equivalent; 1 tonne of oil equivalent approximately = 42 gigajoules = 1.5 tonnes hard coal = 3 tonnes lignite