



OUT14/18983

Mr David Kitto
Director Mining and Industry Projects
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Kitto

Thank you for the opportunity for NSW Trade & Investment – Division of Resources & Energy (DRE) to provide advice on the significance of the resource associated with the Stratford Extension Project (the Project) to assist in your Department's assessment of the proposal.

DRE has concluded that the significance of the Project's coal resource (see attached) lies mainly in its ability to maintain coal production from the existing Stratford mining complex (which has been in operation for 20 years) and to add significantly to the total value of NSW exports (around \$1.25 billion in current dollars over the life of the Project).

In addition, it is important to note the requirement to blend coal from the Project and the neighbouring Duralie mine (also owned by Yancoal Australia Ltd) to enable a higher valued export product to continue to be produced.

DRE note that in its review report on the Project published in April 2014, the Planning Assessment Commission (PAC) has made strong comments as to the validity of the calculation of both the royalty benefit to the State and the indirect employment generation from the Project. The PAC also made comments about the net production benefit derived from the Project to Australia.

The following comments are provided by DRE relating to both the royalty benefit to the State and indirect employment generated from the Project. No comment is provided by DRE as to the quantum of the monetary value of the net production benefit to Australia.

Royalty benefit to the State from the Project

The Project is a proposed open cut mine - as such a royalty rate of 8.2% of net disposal value is applicable. Net disposal value is the price received per tonne minus any allowable deductions. The main allowable deduction is for coal beneficiation, which is either:

- \$3.50 per tonne for coal subjected to a full washing cycle,
- \$2.00 per tonne for coal subjected to a simple washing process, or

- \$0.50 per tonne for coal that is washed and screened.

As all coal from the Project will be subjected to a full washing cycle, a deduction of \$3.50 per tonne from the value of coal produced applies. A deduction for levies also applies which would amount to no more than \$1.00 per tonne. Hence, total allowable deductions would amount to \$4.50 per tonne.

One of the most important assumptions in the calculation of future royalties for a coal proposal is the estimate of a future coal price over the life of a project. Coal from the Project is to be sold into either the thermal or metallurgical export markets. At the present time, NSW export coal prices are at the bottom of the price cycle - thermal coal has been trading at just below \$A90 per tonne for the last 6 quarters (Coal Services Pty Ltd data to end of March 2014), with around \$115 per tonne being paid for semi-soft coking coal. In comparison to this, the period prior to the last 6 quarters saw the NSW export thermal coal price in the range of \$A115 to \$A96 per tonne.

This demonstrates that coal price forecasting is inherently difficult for projects of over 10 years duration - as there will no doubt be peaks and troughs of the coal price cycle within this timeframe. For its royalty calculation, DRE has taken a conservative approach and has used a long term export thermal price of \$A90 per tonne and \$A115 per tonne for semi-soft coking coal. Coal Services data for 2012-13 indicates that Stratford produced a product mix of around one third metallurgical coal and two thirds thermal coal resulting in an average coal price estimate of \$A98 per tonne.

Another important aspect of future royalty calculation for a proposed coal project is estimation of future annual production. The Proponent has proposed that between 1.1 – 1.4 million tonnes per annum of coal product will be extracted from the Project over an 11 year period. This is higher than the 10 year average production rate for the Stratford mining complex, but given the project could operate within 3 mining areas this could be achievable.

Using the above parameters, DRE has calculated that in a typical full production year the State will receive approximately \$10 million per annum, and in dollars of the day total Royalties payable for the Project would be nearly \$100 million. Using a 7% real discount rate, the net present value of this Royalty stream would be around \$58 million. DRE note that the PAC is of the opinion that Royalties payable would be "no more than \$47 million". DRE have calculated a 23% higher Royalty payment of \$58 million (using a 7% real discount rate).

Indirect employment generation from the Project

The Proponent has estimated that around 500 flow-on jobs would result from the 250 direct jobs generated by the Project. The PAC disputes this and states in its Review Report on the Project that "jobs generated outside the mine site are likely to be few".

The estimation of indirect employment from direct mine employment is not an exact science and a variety of methodologies can be used. The Proponent has used Input:Output Modelling (IOM) to estimate flow-on jobs from the 250 direct jobs to be generated by the Project. The PAC has criticised the use of IOM in calculating indirect job creation in its review report.

DRE prefers to utilise more empirical evidence and uses the latest (2012/13) NSW Minerals Council survey of NSW mining (the Survey) to obtain an employment

multiplier. In this Survey the NSW Minerals Council has received results from 26 NSW exploration and mining companies to identify the economic contribution of the industry throughout NSW in 2012/13. The Survey collected data on both direct and indirect (incl. induced employees) in the NSW mining industry. Direct employment from the Survey was approximately 23,500 and indirect employment was approximately 132,000 - the resultant multiplier being around 5.5. DRE has taken a more conservative approach and uses a multiplier of 4 to estimate indirect employment from direct employment.

As a result, DRE considers the estimate by the proponent of 500 flow-on jobs being generated by the project as a conservative and fair estimation. These indirect jobs will be in mine and non-mine related industries in both regional and metropolitan areas of NSW.

In summary, DRE is supportive of the Project as a responsible utilisation of the State's coal resources that will generate employment opportunities and bring economic benefits to the local region and to the State as a whole.

Thank you for bringing this matter to my attention.

Yours sincerely

K Hargreaves
26.8.14

Kylie Hargreaves
Deputy Secretary
Resources & Energy

Enc.

Tab A**Stratford Extension Project****Assessment of the Significance of the Resource:**

In considering the significance of the resource in comparison with other resources across the State, DRE has made the following assessments.

Size, quality and availability of the resource

The Stratford Extension Project (the Project) is owned by Stratford Coal Pty Ltd (SCPL), SCPL is a wholly owned subsidiary of Yancoal Australia Limited (Yancoal). SCPL is seeking approval for the continuation and extension of open cut coal mining and processing facilities at the Stratford Mining Complex on land located in the Gloucester coalfield approximately 100 km north of Newcastle.

NSW Trade and Investment – Division of Resources & Energy (DRE) supports the reported Project reserve estimate of approximately 21.5 million tonnes (Mt) of run-of-mine (ROM) coal, the coal is suitable to produce high-grade export quality coking and thermal products.

Given the relatively complex geological structure of the Gloucester Basin generally, and the Stratford deposit specifically, DRE is unable to provide an accurate assessment of the potential in situ coal resource in the Project area. However, given the size of the proposed Project area, DRE estimates a mineable reserve in the range of 15 Mt to 25 Mt. This compares closely with the 21.5 Mt stated in the Environmental Impact Statement (EIS) and the estimated mine life of 11 years, producing up to 2.6 Mt of ROM coal per annum. DRE considers these estimates are reasonable.

The ash of the coal in the Project area is comparable with the operating Stratford mine. The coal will be processed in accordance with current operational procedures prior to transport to the Port of Newcastle for export. DRE considers that the reported maximum output of 1.4 Mt of product coal per annum, from the combined Stratford Extension and the Western Co-Disposal area, as feasible.

The Gloucester coalfield is a small, isolated coal basin that currently has two operating mines, both of which are open cut, namely the Stratford mining complex and the Duralie mine. In 2012-13 the Stratford mining complex produced 0.85 Mt of saleable coal and is on track to produce a similar quantity for 2013-14. On average Stratford has produced around 0.75 million tonnes per annum (Mtpa) of saleable coal over the last 10 years. In its EIS the Proponent states that the Project will have a ROM coal production rate of up to 2.6 Mtpa. This ROM rate of production is more than double the average from Stratford (1.15 Mt) over the last 10 years. To achieve this maximum ROM rate either additional mining equipment would need to be purchased, or additional mining contractors would need to be engaged. As mining at Stratford has traditionally used contractors who utilise their own equipment it is probable that this option will be used for the Project.

The closest coalfield to Gloucester is the Newcastle coalfield and therefore comparisons have been made with operating mines in the Newcastle coalfield.

According to Coal Services Pty Ltd 2013-14 data (10 months up to end April 2014) there was only one operating open cut coal mine in the Newcastle coalfield which was the Bloomfield mine. Compared to the Bloomfield mine and current open cut operations in the Gloucester Basin, at the maximum ROM production rate of 2.6 Mtpa the Project would be the largest open cut mine in both the Newcastle and Gloucester coalfields. In comparison to all mines in the Newcastle coalfield, the Project would be the third largest producing mine in terms of ROM tonnage.

If approved the Project would be ranked 30 of the 56 producing NSW coal mines in 2013-14. The Project producing at a ROM rate of 2.6 Mt would be considered small when compared to other operating open cut coal mines in NSW, i.e. the average size of currently operating open cut coal mines in NSW in 2013-14 was around 7 Mtpa. However, at a regional level it is very significant.

Over the life of the Project assuming one third of production is sold on the export metallurgical market and two thirds on the export thermal market, the value of the coal produced would be worth around \$1.25 billion in current dollars. The net present value of this revenue stream has been estimated by DRE at approximately \$740 million.

The resource is available to be mined, in that the Proponent intends to extract the resource once all the relevant Government approvals have been granted. The Proponent has sound financial backing for the Project and is fully committed to the commencement of production.

Proximity to existing infrastructure

In its Environmental Impact Statement, the Proponent has indicated the existing capacity of the coal preparation plant and coal handling fixed infrastructure would be adequate to meet the Project processing rates. Saleable coal produced from the Project will continue to be loaded onto trains for transport on the North Coast rail line for export through the Port of Newcastle. Therefore the Project will utilise the extensive existing Newcastle coalfield rail network. The Project would also add to the Port of Newcastle throughput.

Relationship of the resource to any existing mine, petroleum production facility or extractive industry

The Project is an extension of the existing Stratford mining complex and as such will utilise all of the existing mine facilities. Approval of the Project will result in continuing employment of the existing Stratford mining complex workforce and continuing use of existing mining equipment and infrastructure. The Duralie mine located 20 km to the south of Stratford uses the Stratford mining complex's Coal Preparation Plant to process ROM coal mined from Duralie.

ROM coal from the Duralie and Stratford mines is blended at Stratford to produce two products, Gloucester Semi Hard Coking and Gloucester Thermal, which are established brands in the export market.

This blending is essential as the coal from the Duralie mine has an inherently high sulphur content which would reduce its marketability and price if it were sold on its own. In addition, coal from Stratford is required to ensure the overall sulphur content

of the brands produced from the ROM coals produced from the two operations, is of a quality to meet the company's requirements for sale to both the coking and thermal coal export market. It may be possible to blend coals from other Hunter Valley mines to lower the overall sulphur content of the products produced, however it would be difficult to produce the Gloucester Semi Hard brand as other Hunter Valley coals do not having the same Crucible Swell Number and fluidity as the Project coal possesses. The lower sulphur content of the Project coal lowers the sulphur content of the Gloucester Thermal brand producing a higher valued product. DRE are of the opinion that without Stratford coal the economics of the Duralie operation is compromised.

The main relationships that the Project has with other existing mines in the region is common use of the existing rail network and the requirement to blend coal from the Duralie mine to produce higher valued export products.

Dependency of other industries on the resource project

Many local industries rely on the two existing coal mines in the area and hence would be able to expand further or at least maintain their existing relationships, if the Project is approved. These industries include; mine equipment maintenance firms, mining equipment supply firms, coal preparation and handling plant maintenance and supply firms. These firms are mainly local industries which employ locally and would rely on the Project for either their continued existence or expansion.

Based on other mine projects, DRE believes the indirect employment within the region and in NSW as a whole from the Project could be around 1000 positions.

Other Factors

DRE also notes from the Environmental Impact Statement that the Project will bring the following economic benefits to the regional economy over the life of the Project:

- \$215 million in annual direct and indirect output;
- \$89 million in annual direct and indirect value added;
- \$24 million in annual direct and indirect household income; and
- 250 direct jobs.

If the project gains approval, DRE estimates the total additional royalty to the State will be nearly \$100 million in direct revenue in dollars of the day over the life of the Project. The net present value of this royalty stream has been estimated by DRE at approximately \$58 million.