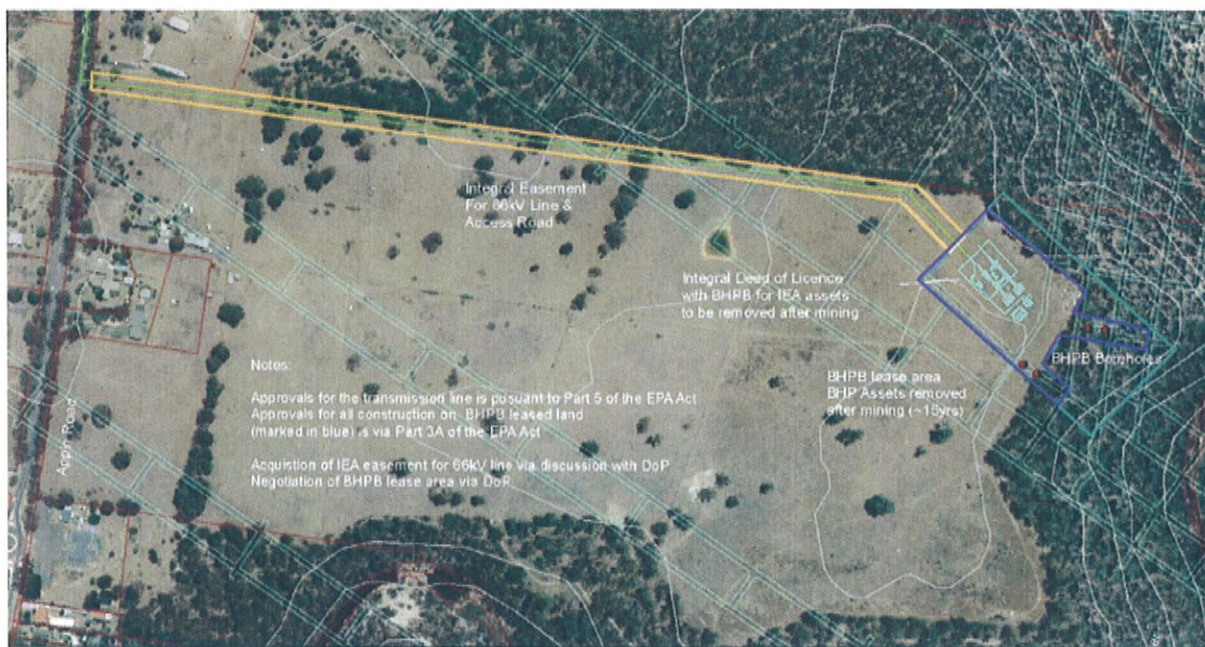




NSW GOVERNMENT
Department of Planning

MAJOR PROJECT ASSESSMENT: East Appin 66kV Switching Station – West Cliff Coal Mine



Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

July 2006

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1. EXECUTIVE SUMMARY

BHP Billiton Illawarra Coal Holdings Pty Limited (BHP Billiton) proposes to construct and operate an electricity supply switching station at East Appin, approximately 2km north of the town of Appin within Wollondilly local government area (Figure 1). The switching station would enable the supply of increased power to the West Cliff coal mine.

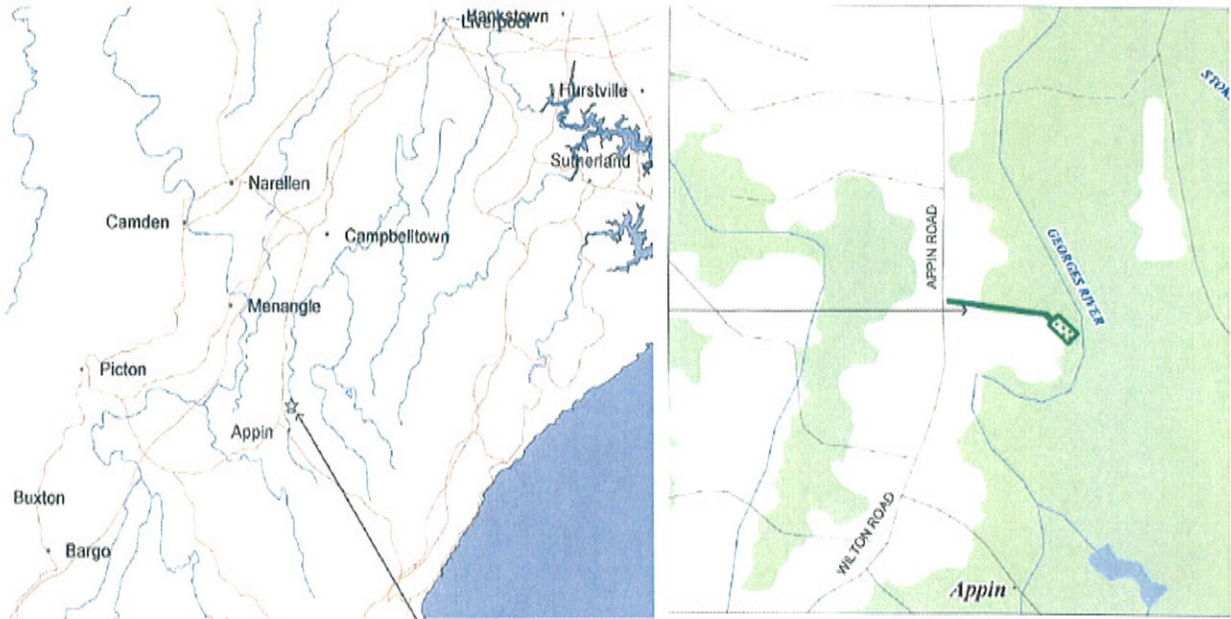


Figure 1: Maps showing the location of Appin and the proposed switching station.

The proposal is classified as a major project under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and consequently the Minister for Planning is the approval authority for the project.

The Department exhibited the environmental assessment of the project between 3 March 2006 and 4 April 2006.

The main issue raised during the public exhibition period was flora and fauna. The project requires the removal of a small amount (about 100 square metres) of good quality vegetation which contains minor elements of (though does not constitute) the endangered ecological community *Shale Sandstone Transitional Forest*. Following its assessment, the Department is satisfied that the project would not have a significant impact on the endangered ecological community, or on any other threatened species. The Department has recommended a condition requiring BHP Billiton to prepare a Vegetation Clearing Protocol prior to undertaking any works, which includes provisions to protect the *Shale Sandstone Transitional Forest* in the vicinity of the site.

The Department is satisfied that other environmental impacts of the proposal are relatively minor, and can be mitigated and/or managed to ensure an acceptable level of environmental performance.

The Department believes the project would generate socio-economic benefits by attracting capital investment of \$3 million to the region, and employing 3 people; but more importantly, it would facilitate ongoing mining operations at the West Cliff coal mine, which is a major employer in the Illawarra region.

On balance, the Department believes the benefits of the proposal outweigh its potential costs, and subsequently believes it is in the public interest and should be approved.

2. PROPOSED PROJECT

BHP Billiton proposes to construct and operate an electricity supply switching station at East Appin. This switching station will transform power from 66 kV to 11 kV before delivering it underground to West Cliff coal mine via purpose driven bore holes. The major components of the project are (see Figure 2):

- two 66/11 kV transformers, electricity supply distribution switching station components;
- two demountable single level control buildings; and
- an access road, security fencing, switchyard lighting and four boreholes.

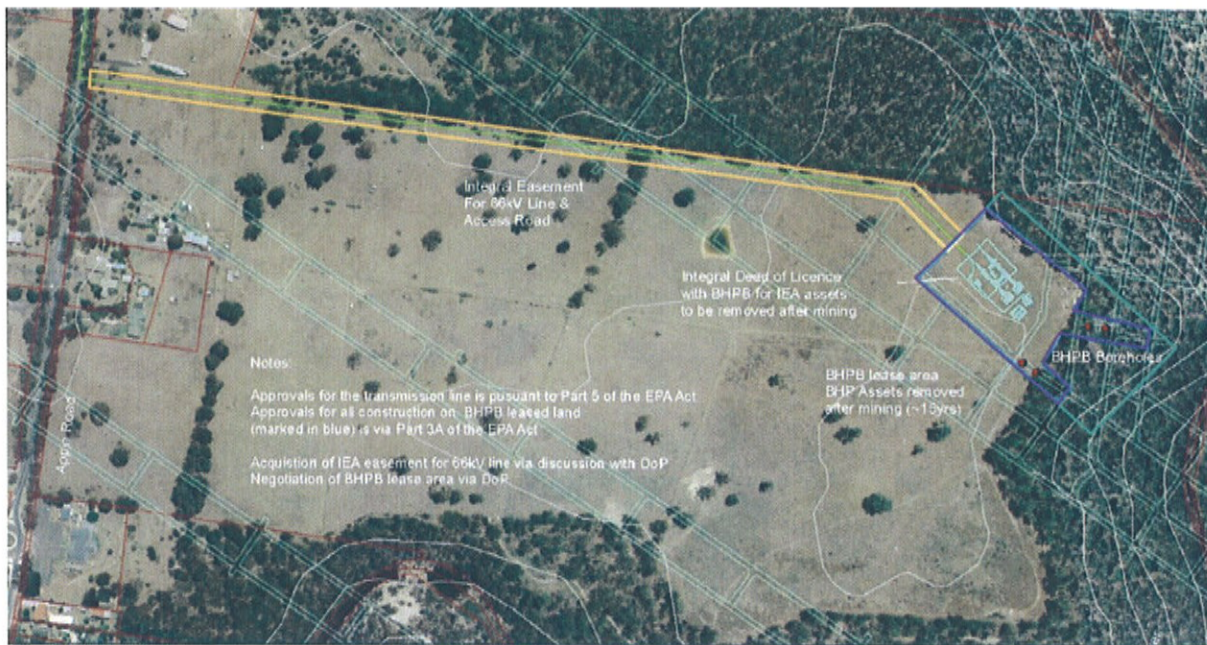


Figure 2: Project Layout

An upgrade of the mine's 11kV capacity and 11kV distribution network is required to support current operations, and allow continued extraction of coal reserves. The objective of the project is to increase the existing underground supply at the mine from the current 10 megavolt amperes (MVA) capacity to 25MVA.

The location of the proposed switching station is approximately 200 metres west of the Georges River, and 800 metres from the nearest residences. Alternate project locations were considered, however BHP Billiton considers this location to be the preferred option as it provides energy efficiencies, being located closer to the point of consumption than other viable project locations.

The project is estimated to cost \$3 million, and would generate 20 construction and 3 operational jobs.

BHP Billiton lodged an environmental assessment of the project with the Department in February 2006.

3. STATUTORY CONTEXT

3.1 Major Project

Under the *State Environmental Planning Policy (Major Projects) 2005*, the proposal is classified as a major project as it involves development for the purposes of coal mining. As such, the project is to be assessed under Part 3A of the EP&A Act, and the Minister for Planning is the approval authority for the project.

3.2 Permissibility

The project is located on land zoned Rural A1 under the *Wollondilly Local Environment Plan 1991*, and is permissible with consent in this zone.

3.3 Exhibition

The Department exhibited the environmental assessment of the project from 3 March 2006 until 4 April 2006 in accordance with the requirements in section 75H of the EP&A Act.

3.4 Environmental Planning Instruments

Under section 75I(2) of the EP&A Act, the Director-General's report is required to include a copy of, or reference to, the provisions of any State Environmental Planning Policies (SEPPs) that substantially govern the carrying out of the project.

The Department is generally satisfied that there are no SEPPs that substantially govern the carrying out of the project, but has assessed the proposal against the relevant provisions of the following environmental planning instruments (see Appendix D):

- SEPP No. 11 – *Traffic Generating Developments*;
- SEPP No. 44 – *Koala Habitat Protection*;
- *Greater Metropolitan Regional Environmental Plan No 2, Georges River Catchment*; and
- *Wollondilly Local Environment Plan 1991*.

This assessment concludes that the project can be conducted in a manner that is consistent with the relevant requirements of these planning instruments.

4. ISSUES RAISED IN SUBMISSIONS

The Department received 4 submissions on the project, all from public authorities (Department of Environment and Conservation, Wollondilly Shire Council, Roads and Traffic Authority, and the Mine Subsidence Board – see Appendix C). None of these submissions objected to the project.

Both the DEC and WSC were primarily concerned with issues relating to flora and fauna. These concerns included the species and amount of vegetation to be cleared, weed control measures for the site, and minimising the impact to adjacent vegetation listed as an endangered ecological community.

The RTA made a number of recommendations regarding additional traffic impact assessment for the project.

The MSB recommended that the Department require BHP Billiton to certify that structures have been designed to accommodate potential subsidence, as the site is within a mine subsidence district.

BHP Billiton provided a response to all of these issues (see Appendix B), and the Department has considered these issues and BHP Billiton's response to these issues in more detail in Section 5 of this report.

5. ASSESSMENT

5.1 Flora and Fauna

The site is largely cleared but contains some areas of good quality native vegetation (see Figure 2). Some vegetated areas of the site are mapped by the National Parks and Wildlife Service (NPWS) as *Shale Sandstone Transition Forest*, which is listed as an Endangered Ecological Community (EEC) under the *Threatened Species Conservation Act 1995* (TSC) and the *Environment Protection and Biodiversity Act 1999* (EPBC). This vegetation is potential habitat for a number of threatened fauna species listed under the TSC and EPBC Acts.

A flora and fauna assessment was commissioned by BHP Billiton, finding that previous vegetation mapping of the area by the NPWS is incorrect, with the project site containing minimal *Shale Sandstone Transition Forest*. Accordingly, the proposed works would not involve the removal of any areas of EEC, with the exception of scattered trees in cleared paddocks and possible lopping of branches bordering the project area.

However, the vegetation immediately adjacent to the site does contain *Shale Sandstone Transition Forest*, and the DEC has asked for the impacts on this community to be minimised during construction works. The Department agrees and has recommended a condition requiring BHP Billiton to prepare and implement a Vegetation Clearing Protocol for the works, including measures to protect the *Shale Sandstone Transition Forest* (such as protective fencing and weed management measures).

BHP Billiton's assessment concluded that while the proposed works will modify 1.3 hectares of potential habitat for 10 threatened fauna species, given the mobility of these species and the extent of similar habitat in the immediate vicinity of the site, it is unlikely that the project will have a significant impact upon them.

BHP Billiton has agreed to replace the vegetation removed by the project (about 100 square metres in total) with vegetation consistent with the adjoining forest area, on the subject property. To further reduce the impact upon fauna habitats, trees with hollows would be retained wherever possible.

The Department is satisfied with BHP Billiton's assessment of flora and fauna and, with the mitigating strategies outlined above, is satisfied that the Project would not result in any significant impact on flora and fauna.

5.2 Other Issues

Other environmental aspects associated with the project have been considered and are summarised in Table 1 below.

Following its assessment the Department is satisfied that the impacts associated with these aspects are relatively minor, and can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to conditions.

Issue	Department's Consideration	Impact
Construction Noise	The project would take about 4 months to construct. BHP Billiton commissioned a construction noise assessment which found that construction noise levels would comply with relevant construction noise criteria. The nearest sensitive residential receivers are about 800 metres from the site.	Low
Operational Noise	Given the low noise emissions associated with the switching station and the distance to receivers, the Department is satisfied that the project would not result in any significant operational noise impacts.	Low
Soil and Water	The main potential impacts to soil and water are associated with general disturbance during construction works. These impacts would be minimised through standard construction erosion and sediment control measures. The Department is satisfied that the project can be managed such that it would not result in any significant soil or water impacts.	Low
Transport and Access	Access to the site would be via a two-lane earthen track from the Appin Campbelltown Road. Due to low predicted traffic numbers during construction and operation (12 vehicles per day during construction, 1 vehicle per week during operations), impact is expected to be low. Provision of car parking consistent with operational access (approximately 1 vehicle per week) would be provided. Given the very low traffic movements associated with the proposal, the Department does not believe that the RTA's request for additional traffic impact assessment is warranted.	Low
Visual Impact	An assessment commissioned by BHP Billiton concludes that it is unlikely that the proposed switching station would be noticeable or offensive to the public, given it would be located 900 metres from Appin Road and existing trees would effectively screen it from the road and nearest residences.	Low
Air Quality	The main potential air quality impact is dust emission during	Low

Issue	Department's Consideration	Impact
	construction. Given the nearest residence is 800 metres away, the Department is satisfied that impact to air quality would be low.	
Electromagnetic Field Effects	Emissions from the switching station would be within the guidelines for the exposure of humans to Electric and Magnetic Fields set by the National Health and Medical Research Council. The Department is satisfied the impact of electromagnetic fields would be minimal.	Low
Heritage	There are no known Aboriginal or European Heritage items within the area of the project.	Low
Bushfire protection	The project would be constructed in accordance with Integral Energy requirements that include bushfire protection and management.	Low

Table 1: Other environmental impacts of the project.

6. RECOMMENDED CONDITIONS OF APPROVAL

The Department has prepared recommended conditions of approval for the project (see Appendix A). These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- ensure regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

BHP Billiton does not object to the recommended conditions of approval.

7. CONCLUSION

The Department has assessed the project in accordance with the requirements in clause 8B of the *Environmental Planning & Assessment Regulation 2000*, and is satisfied that the impacts of the project can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to conditions.

The project requires the removal of a small amount (about 100 square metres) of good quality vegetation which contains minor elements of (though does not constitute) the endangered ecological community *Shale Sandstone Transitional Forest*. The Department is satisfied that the project would not have a significant impact on the endangered ecological community or on other threatened species, but believes BHP Billiton should be required to prepare a Vegetation Clearing Protocol for the works, which includes provisions to protect *Shale Sandstone Transitional Forest*.

The Department is satisfied that the site is suitable for the project given the site's distance from residential receivers (800 metres), the minimal and/or manageable environmental impacts associated with the project, and the need to locate the facility close to the point of consumption (to maximise energy efficiency).

The Department is also satisfied that the project is in the public interest, given that it:

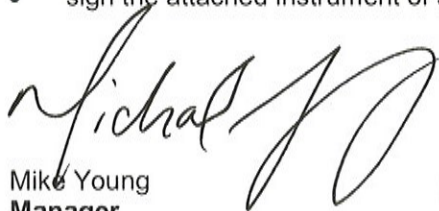
- provides important infrastructure support to the West Cliff Coal Mine, which generates significant regional socio-economic benefits;
- would generate local socio-economic benefits, including a capital investment of about \$3 million, and 3 full time jobs; and
- can be conducted with minimal environmental impact.

On balance, the Department believes the benefits of the project outweigh its potential costs, and consequently believes it is in the public interest and should be approved.

8. RECOMMENDATION

It is RECOMMENDED that the Minister:

- consider the findings and recommendations of this report;
- approve the project application, subject to conditions; and
- sign the attached instrument of approval (Appendix A).



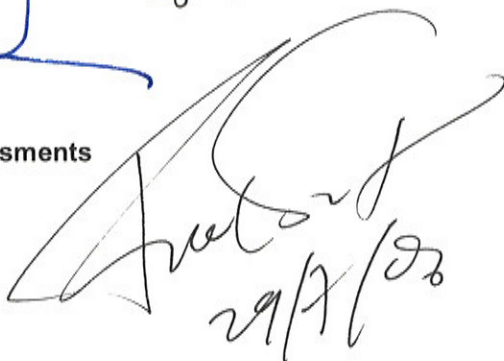
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