Mining, Exploration and Geoscience
Department of Regional NSW

RDOC22/245144

14 December 2022

Clay Preshaw
Executive Director Energy and Resource Assessments
Department of Planning and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2124

ADVICE RESPONSE: Chain Valley Consolidation Project – SSD-17017460 – Advice on EIS and Resource & Economic Assessment

Dear Clay,

I refer to Department of Planning and Environment correspondence dated 16 November 2022 inviting the Department of Regional NSW – Mining, Exploration and Geoscience (MEG) to provide comments on the Chain Valley Consolidation Project (the Project) submitted by Great Southern Energy Pty Ltd, trading as Delta Coal (the Proponent).

MEG position

The Project has adequately addressed MEG's environmental assessment requirements submitted in April 2021.

MEG considers the Project to be an efficient use of resources and that it will provide an appropriate return to the NSW Government.

MEG is satisfied that, should the operational outcomes be achieved, the proposed mine design and mining method submissions adequately recover resources and will provide an appropriate return to the state.

Executive summary

Chain Valley Colliery (CVC) and Mannering Colliery (MC) are underground mines located on the southern shore of Lake Macquarie and fall within both the Lake Macquarie and Central Coast Local Government Areas, situated approximately 30 kilometres south of Newcastle. Underground mining at both CVC and MC commenced in the 1960s.

CVC and MC are operated by Great Southern Energy Pty Ltd, trading as Delta Coal. Delta Coal is a wholly owned subsidiary of Delta Electricity Pty Ltd. The two operations are integrated with access to the underground mining areas at both sites. The CVC and MC pit top facilities are located at Mannering Park and Doyalson North respectively.

Existing operations are undertaken in accordance with CVC's Development Consent SSD-5465 (as modified), and MC's Project Approval MP 06_0311 (as modified). Both operations are approved to carry out mining operations to 31 December 2027.

The Project is proposed to allow for the consolidation of the CVC and the MC consents and the extension of operations until 31 December 2029. Extraction of additional coal will be from within existing mining leases adjacent to approved operations at CVC and MC.

Table 1: MEG estimate of total royalties

Resource parameter	$m (2022 dollars)
Total royalties received	67
Net Present Value (NPV) royalties (7% discount rate, 2025-2029)	46
Annual estimated royalties (average)	17 (Approximate)

The Project will generate:

- on average 390 full-time equivalent (FTE) continuing jobs during operations from 2027 to 2029
- approximately 9.5 million tonnes (Mt) additional run-of-mine (ROM) coal to be extracted relative to life of mine planning for existing CVC and MC approved operations
- net economic valuation benefit of about $130 million.

Table 2: life-of-project economic contribution

Estimated economic contribution parameter	Estimate $m
Net economic valuation benefit	130
Regional benefit (payroll)	28
Annual non-labour expenditure (regional)	38
Annual regional sum spent in local economy (LGA)	66
Total annual expenditure in NSW	76

MEG considers the Project will provide an appropriate return to the NSW Government

The Chain Valley Consolidation is considered to be an efficient use of resources. If the Project does not proceed the economic and social benefits outlined above will not be realised.

Project strategic considerations

Strategic context

The Project will deliver:

- simplification of the consent requirements applicable to the CVC and MC operations, to streamline the regulatory requirements for both Delta Coal and regulators
- alignment of the extraction and production rates of CVC and MC to the requirements of the VPPS
- VPPS with a cost effective and reliable supply of coal for the life of the power station's operations

- flexibility of operations through the continued concurrent operation of both the CVC and MC Pit Tops
- emergency coal transport arrangements from MC to VPPS and transport coal from CVC to VPPS via overland conveyor system
- extension of the life of mine for a further two years to end of 2029
- a fully integrated mine closure and rehabilitation program
- continued employment opportunities within the local and regional community.

Economic benefits of the Project

The Project is expected to generate $505 million of revenue in NPV terms (7% discount rate, 2023 to 2029, 2022 dollars), $438 million in costs, resulting in $67 million in pre-tax profits.

Based on the Proponent's estimates the Project is expected to generate net benefits for NSW of approximately $130 million in NPV terms made up of the following:

- $89 million in direct benefits; $36 million in royalties, $6 million in company tax apportioned to NSW, and $47 million in net producer benefits
- $41 million in indirect benefits; $41 million in benefits to NSW workers but net benefits to NSW suppliers was not estimated
- $4 million in indirect costs, mainly groundwater impacts, which will be offset by the Proponent.

Of NSW's $130 million in estimated net benefits, around $28 million in NPV terms are expected in the Lake Macquarie and Central Coast Local Government Areas, based on 68% of the workforce being located there. Net benefits to regional suppliers were not estimated.

Royalty return to the state

The Proponent has estimated royalties of $36 million in NPV terms for 9.5 million tonnes of coal sold at around $80 a tonne in 2022 dollars.

The rate of royalty would be 7.2% for an underground mine and the Proponent intends to claim a beneficiation deduction of $3.50 a tonne for washed coal.

The Proponent's forecast of $80 a tonne was made prior to the significant increase in prices and observed energy market disruptions, generally attributed to the current Ukraine and Russian military conflict. The November 2022 Consensus Price forecasts for thermal coal sold on contract indicate that traded prices will decline from around $210 a tonne in 2026 to around $115 in 2029. However, the Project will likely receive lower prices as all coal will be sold domestically to a related entity power station.

MEG estimates that royalties would be $46 million in NPV terms (i.e., within 25 per cent of the proponent's estimate) based on an average price of $100 a tonne.

Resource Assessment

Background

The Project seeks to maximise the use of Delta Coal assets under a single development consent and continue supply of high-quality thermal coal for the VPPS, noting that VPPS electricity supplies up to around 11% of NSW electricity.

Product coal is conveyed (via the VPPS overland Conveyor) to the VPPS which is adjacent to the CVC and MC pit top facilities. CVC and MC have supplied coal to VPPS since the early 1960's. CVC is also approved to transfer up to 660,000 tonnes per annum (Tpa) of product coal to the Newcastle Coal Terminal by road for export and up to 180,000Tpa to other domestic sources, by road. MC has historically only supplied coal to VPPS.

There are no proposed changes to hours of operation, access, rehabilitation, workforce, current exploration, water supply or discharge.

Consolidation of the existing Delta Coal consents to streamline regulatory requirements would improve alignment of the current approvals within the mining leases held by or subleased to Delta Coal.

CVC is approved to produce up to 2.1 million tonnes per annum (Mtpa) of ROM coal. All of this is approved to be transferred to the surface at the MC pit top facilities via an underground linkage, however the CVC Pit Top itself is limited to only 1.5 Mtpa of ROM coal handling. At present, all coal mined at CVC is brought to the surface via the MC Pit Top.

Under the MC Project Approval, up to 1.1 Mtpa ROM coal is currently approved to be extracted from the Fassifern Seam using bord and pillar (first workings only) mining method. There is currently no extraction of coal occurring from within the approved MC mining area however coal extracted from the CVC mining area is transferred to the surface at the MC Pit Top via an underground roadway which connects the two operations.

Size and quality of the resource

The Project lies within the Newcastle Coalfield which has around 200 years of ongoing mining within the high-quality Permian Coals from this area. The southern part of Lake Macquarie includes the Vales Point, Wallarah, Great Northern and or Fassifern coal seams.

To date mining has occurred at CVC in the Wallarah, Great Northern and Fassifern Seams with mining at MC limited to only the latter two deeper coal seams. The target coal seams to be extracted at both MC and CVC are the Fassifern and Great Northern seams which are a high-quality thermal coal.

Coal quality parameters for ash and specific energy for the Fassifern and Great Northern coal seams are similar with ash contents around 24% and specific energy levels of around 5900 k/cal/kg. This coal is suitable as a high-value local source of thermal coal for VPPS.

Total annual ROM production from the Project would be capped at 2.8 Mtpa. This represents a reduction from the currently approved combined ROM production cap of 3.2 Mtpa across the CVC and MC operations.

Resource recovery

Many factors constrain the mine complex, mine planning, extraction methodology and resource recovery. These include (but are not limited to) geological features, environmental constraints, commercial viability, social licence and community support.

A fault structure within the current CVC mining area currently imposes operational constraints on accessing coal resources in the western areas of the approved CVC and MC mining areas. The current restrictions on approved mining at MC and CVC to 2027 and the limited volume of coal able to be

extracted from the western area during this period do not justify the costs associated with development works needed to access these areas without the flexibility provided by the Project.

Currently, mining at both CVC and MC is only within the Fassifern Seam. Extraction is via combination of Miniwall and bord and pillar mining techniques. Miniwall mining and other secondary extraction mining methods are only permitted in certain areas under Lake Macquarie.

The Project also includes the ability to undertake secondary extraction in the approved MC mining areas below Lake Macquarie, to maintain consistency with the existing CVC consent, increasing potential resource recovery in this area.

The Project is considered to be an efficient use of coal resources using existing infrastructure which takes advantage of the existing synergies between the CVC and MC mines. The continuation of mining and development of coal resources provides an appropriate return to the State, within existing mining leases, giving due consideration to the constraints of the location.

JORC code considerations

The Proponent has completed resource and reserve estimations for the Project in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC code) produced by the Australasian Joint Ore Reserves Committee. The JORC Code is an industry-standard professional code of practice that sets minimum standards for public reporting of mineral exploration results, mineral resources and ore reserves. Reserves are the economically mineable portion of a resource. A JORC compliant reserves report assists in independently assessing the commercial viability of the Project and the proposed mining method.

In view of the opportunities and constraints outlined in the Proponent's Project and based on the information currently available, MEG considers that the Project is consistent with the objects of the *Mining Act 1992*. Furthermore, in relation to clause 2.21 of the State Environmental Planning Policy (Resources and Energy) 2021, the Project represents an efficient development and utilisation of minerals resources which will foster significant social and economic benefits.

MEG is of the view that, should the operational outcomes be achieved, the proposed mine design and mining method submissions adequately recover resources and will provide an appropriate return to the state.

Application of section 380AA of the *Mining Act 1992* – restrictions on planning applications for coal mining and titles required to undertake mining

Coal is a prescribed mineral under the Act and the Proponent is required to hold appropriate mining titles from MEG to undertake mining.

Section 380AA states:

1. *An application for development consent, or for the Modification of a development consent, to mine for coal cannot be made or determined unless (at the time it is made or determined) the applicant is the holder of an authority that is in force in respect of coal and the land where mining for coal is proposed to be carried out, or the applicant has the written consent of the holder of such an authority to make the application.*
2. *For that purpose, an authority in respect of coal need not be in force in respect of the whole of the land to which the application for development consent relates but must be in force for the land where mining for coal is proposed.*

Based on current title information MEG advises that the Proponent holds the appropriate titles as required for planning applications for coal as relating to the Project and satisfies the requirements of section 380AA.

The requirement for a mining authority and royalty liability

The requirement for a mining lease

As coal is a prescribed mineral under the Act, the Proponent is required to hold appropriate mining title(s) allowing for mineral extraction, such as a mining lease, to undertake mining.

Based on current authority information MEG advises that the Proponent holds the appropriate authorities as required for mining operations as relating to the Project.

Royalty Liability

The holder of a mining lease is also liable to pay a royalty for both publicly and privately-owned minerals (refer to section 282-285 of the Act).

Biodiversity offset assessment

MEG requests that the Proponent consider potential resource sterilisation should any future biodiversity offset areas be considered. The Proponent must consult with MEG and any holders of existing mining or exploration authorities that could be potentially affected by the proposed creation of any such biodiversity offsets, prior to creation occurring. This will ensure there is no consequent reduction in access to prospective land for mineral exploration or potential for the sterilisation of mineral and extractive resources.

Summary of review

MEG considers that should the Project be approved; efficient and optimised resource outcomes can be achieved.

MEG requests that it be provided with an opportunity to review the draft conditions of approval before finalisation and any granting of development consent.

For enquiries and further information on this matter, please contact the Industry Advisory and Mining Concierge on 02 4063 6860 or mining.concierge@regional.nsw.gov.au.

Yours sincerely,

Tony Linnane
Executive Director Strategy, Performance and Industry Development
Mining, Exploration and Geoscience
Department of Regional NSW

Encl.
Attachment A – Resources Regulator advice

Attachment 1

Resources Regulator
Department of Regional NSW

Tuesday 13th December 2022

James McDonough
Department of Planning and Environment
James.mcdonough@planning.nsw.gov.au

Via: Major Projects Portal

Dear James,

I refer to the Chain Valley Consolidation Project EIS submitted to the Resources Regulator on 17th November 2022 (SSD 17017460).

Based on the review of the Environmental Impact Statement (September 2022) the Resources Regulator advises that it has no specific comments regarding mine rehabilitation matters in relation to the proposal. The consolidation project will not alter approved rehabilitation outcomes, including the approved subsidence performance measures. Furthermore, the proposed consolidation project as described in the EIS does not introduce additional subsidence risks beyond the approved SSD-5465 for Chain Valley Colliery.

The Resources Regulator requests an opportunity to review any amended or additional documentation lodged by the proponent that affects rehabilitation outcomes.

LIMITATIONS
It should be noted that the Resources Regulator does not provide any endorsement of the proposed rehabilitation methodologies presented in the plans provided. Under the conditions of a mining authorisation granted under the *Mining Act 1992*, the Resources Regulator requires the holder to adopt a risk-based approach to achieving the required rehabilitation outcomes.

The applicability of the controls to achieve effective and sustainable rehabilitation is to be determined based on site-specific risk assessments conducted by the authorisation holder. An authorisation holder may also be directed by the Resources Regulator to implement further risk control measures required to achieve effective rehabilitation outcomes during the life of the mine.

REGULATORY REQUIREMENTS IF APPROVED
The proponent will be required to comply with rehabilitation requirements under the mining authorisations prior to the commencement of the works associated with the proposal.

The Resources Regulator may undertake assessments of the mine operators' proposed mining activities under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and Regulation as well as other WHS regulatory obligations.

BACKGROUND
The Mining Act Inspectorate within the Resources Regulator undertake risk-based compliance and enforcement activities in relation to obligations under the *Mining Act 1992*. This includes undertaking assessment and compliance activities in relation to mine rehabilitation activities and determination of security deposits. To ensure consistency, the Regulator requests the opportunity to review a copy of the draft development consent prior to any approval of the project.

The Mine Safety Inspectorate within the Resources Regulator is responsible for ensuring the mine operators' compliance with the Work Health and Safety (WHS) legislation, in particular the effective management of risks associated with the principal hazards as specified in the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

CONTACT
Should you require any further information or clarification, please contact the Regulator on 1300 814 609 (Press Option 2 Press Option 5) or email nswresourcesregulator@service-now.com.

Yours sincerely,

Garvin Burns

Chief Inspector of Mines

Resources Regulator