



Maxwell Solar Farm

State Significant Development Assessment

SSD 9820

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Executive Summary

Maxwell Solar Pty Ltd (Maxwell Solar), a wholly owned subsidiary of Malabar Coal Ltd, proposes to develop a new 25 megawatt (MW) solar project approximately 10 kilometres (km) southeast of Muswellbrook in the Muswellbrook Local Government Area.

The project is located on a rehabilitated overburden emplacement area associated with the former Drayton coal mine, which ceased operations in December 2017 and is now known as Maxwell Infrastructure.

The former mine site is subject to continuing rehabilitation obligations under the 2012 Drayton development consent and the Mining Lease under the *Mining Act 1992*. The post-mining landscape includes voids and overburden emplacement areas, some of which have been rehabilitated and revegetated, while other areas are actively undergoing rehabilitation.

The surrounding area is dominated primarily by other open cut coal mining operations, including Mount Arthur, Bengalla and Mangoola to the west, and the Liddell and Bayswater Power Stations to the east.

There are a number of rural residences to the northeast of the site in the village of Antiene, with the closest residence located approximately 1.3 km from the site.

Engagement

The Department exhibited the Environmental Impact Statement (EIS) for the project and received advice from eight government agencies including Muswellbrook Shire Council, and two submissions from the general public, both of which were supportive of the project.

None of the agencies objected to the project, but made comments relevant to their statutory responsibilities. However, Muswellbrook Shire Council raised concerns about the location of the proposed solar project and the need to address the consistency of the project with the rehabilitation and habitat corridor obligations under the existing Drayton consent and associated management plans.

Assessment

The key assessment issues for the project relate to the compatibility of the proposed solar farm with the existing land use and the integration of the project with the rehabilitation obligations associated within the Drayton mine.

From a broad perspective, the Department considers that the site is suitable for the project as the site is already highly disturbed, well-removed from sensitive receivers, has good access to transport and the national electricity grid, and represents a beneficial re-use of a former open cut mine site.

In regard to the matters raised by Council, the Department considers that obligations associated with the rehabilitation of the former mine site should remain the sole responsibility of the mining company rather than be transferred to the owner and operator of the solar farm.

In line with this approach, Maxwell Solar has confirmed that any necessary amendments to the rehabilitation obligations (including any supplementary mine rehabilitation, alternate habitat corridor and/or any changes to the mining security deposit) would be carried out by the mine operator under the existing Drayton consent and/or the Mining Lease.

In regard to environmental and amenity impacts, the Department considers that the project has been designed to largely avoid native vegetation, watercourses, and Aboriginal heritage sites; and would not result in any significant visual and noise impacts on the local community given the distance to the nearest residences, intervening topography and vegetation, and the location of the site within a broader mining precinct.

To address the residual impacts of the project, the Department has recommended a range of conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised and managed to meet acceptable standards.

Evaluation

The Department has carefully assessed the merits of the project in accordance with the requirements of the *Environmental Planning and Assessment Act 1979*, and is satisfied that the project would not result in any significant impacts on the local community or the environment, subject to the recommended conditions of consent.

Importantly, the project would assist in transitioning the electricity sector from coal-fired power stations to low emissions sources and would also provide flow-on benefits to the local community, including up to 50 jobs during construction and a capital investment of \$39.35 million.

Overall, the Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource and minimising the potential impacts on surrounding community and the environment. It also represents an important step towards encouraging and facilitating renewable energy projects to be developed on rehabilitated mine sites in the Hunter Valley and elsewhere in NSW.

Consequently, the Department considers the project is in the public interest, and should be approved, subject to the recommended conditions of consent.

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1 Project

Maxwell Solar Pty Ltd (Maxwell Solar), a wholly owned subsidiary of Malabar Coal Ltd, proposes to develop a new State significant solar project approximately 10 kilometres (km) southeast of Muswellbrook in the Muswellbrook Local Government Area. The site is on a rehabilitated overburden emplacement area of the former Drayton Open Cut Coal Mine, which ceased mining in December 2017 and is now known as Maxwell Infrastructure (see **Figure 1** and **Figure 2**).

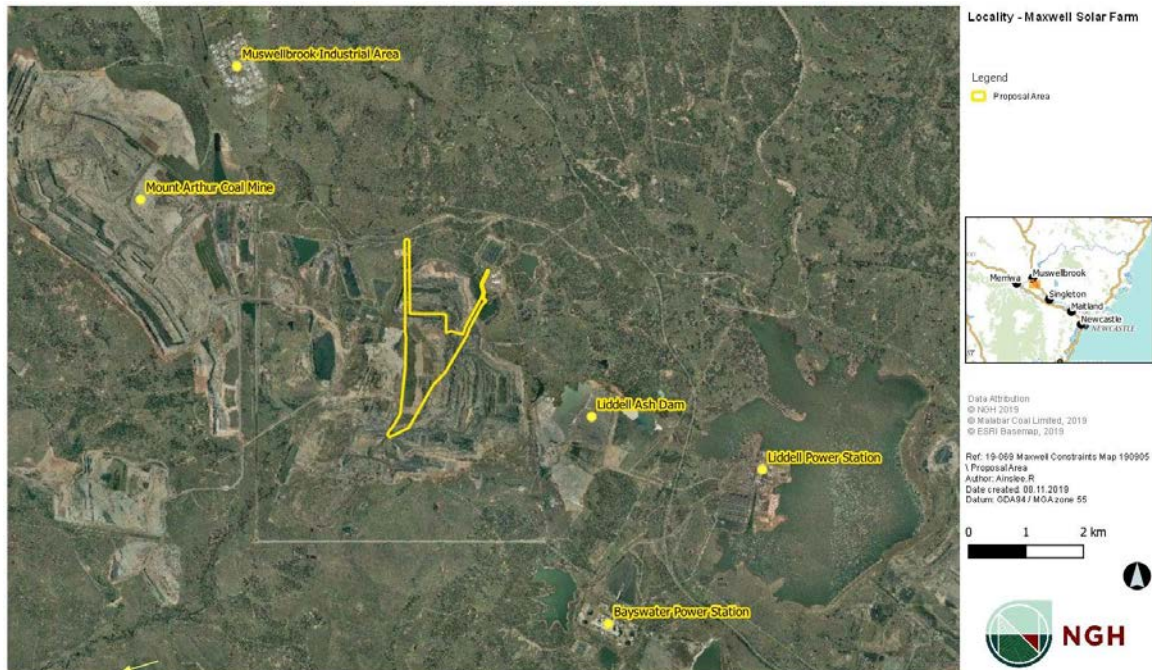


Figure 1 | Regional Context



Figure 2 | Project Site

The project involves the construction of a new solar farm with generating capacity of approximately 25 megawatts (MW) AC to supply electricity to Maxwell Infrastructure and/or the proposed Maxwell Underground Mine and/or the National Energy Market (NEM). The project includes decommissioning and rehabilitation, and also allows infrastructure and equipment to be refurbished to extend the operational duration of the solar farm. While the electrical capacity of the project may increase over time as technology improves, the footprint of the development would not increase without further approval.

The solar farm would connect to the national grid by one of two options:

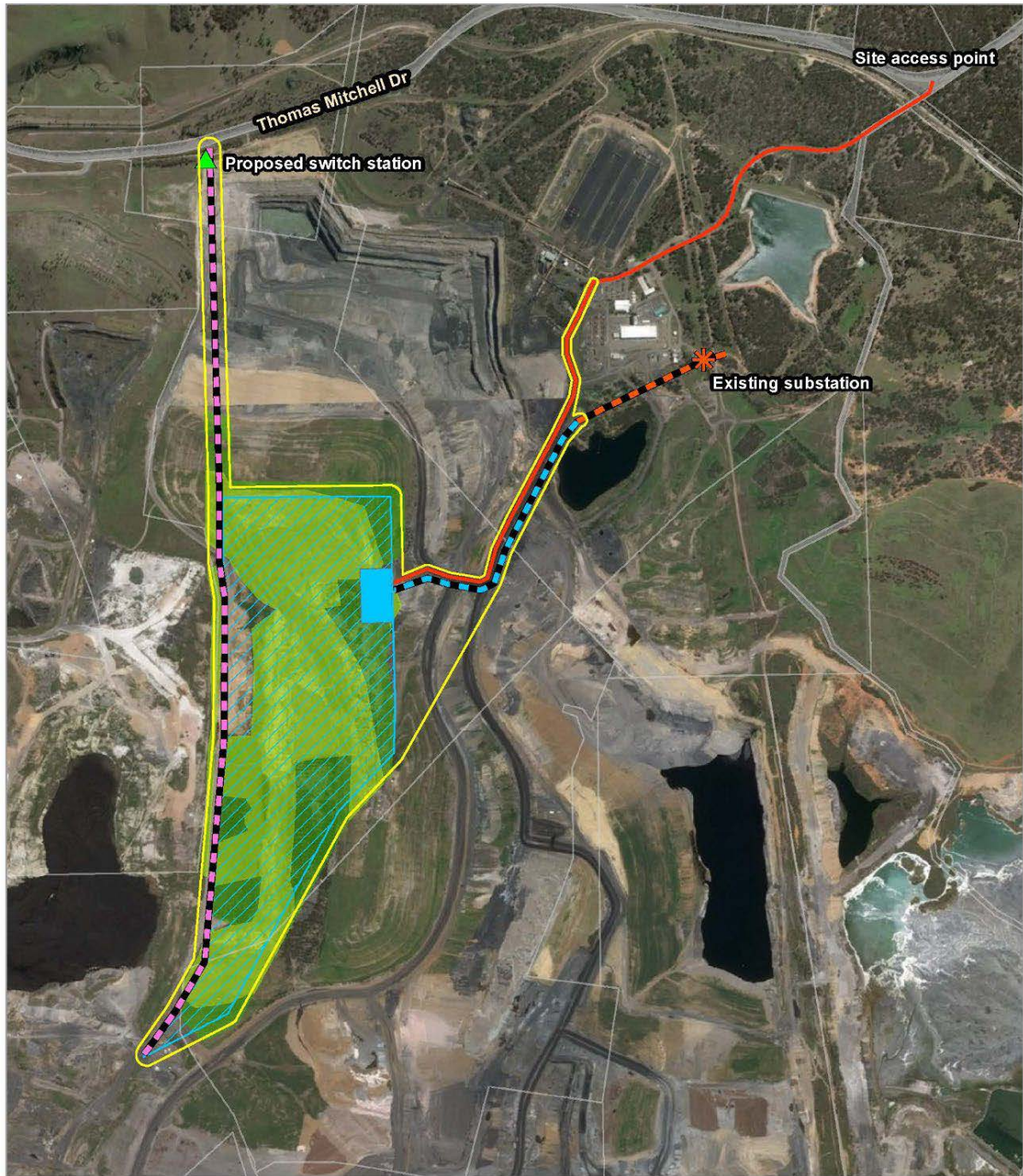
1. A new 33 kilovolt (kV) transmission line within a proposed powerline corridor to the east of the project site and connecting to the existing 33 kV transmission line and substation of Maxwell Infrastructure; or
2. A new 66 kV transmission line on the Maxwell Infrastructure site, connecting to a proposed new switch station that connects to the national grid via the Mount Arthur Feeder to the north of the project site. The Mount Arthur Feeder is currently under construction. This installation is also part of the proposed Maxwell Underground development application as the power supply to the Maxwell Underground Project.

The key components of the project are summarised in **Table 1**, shown in **Figure 3**, and described in the Environmental Impact Statement (EIS) (**Appendix B**) and Submissions Report (**Appendix D**).

Table 1 | Main Components of the Project

Aspect	Description
Project summary	<p>The project includes:</p> <ul style="list-style-type: none"> • approximately 135,000 solar photovoltaic panels mounted on single axis tracking systems and/or north-oriented fixed tilt structures (up to 4 m high); • power conversion stations, transformers, inverters; • one of two options for grid connection: <ul style="list-style-type: none"> ○ up to 1.6 km of 33 kV overhead transmission line and additional electrical transformer equipment located within the existing Maxwell Infrastructure substation, or ○ up to 3.5 km 66 kV overhead transmission line and onsite switch station containing up to two transformers and associated switchgear; • provision of an area for future Battery Storage Unit (BSU) to store energy on site, noting this would be subject to another development application; and • internal access tracks, offices, staff amenities, control and storage facilities, a car park and security fencing.
Project area	<ul style="list-style-type: none"> • 130 ha (including up to 25 ha for the larger of the two transmission line options)
Access route	<ul style="list-style-type: none"> • All vehicles would travel to the site along Thomas Mitchell Drive via the New England Highway.
Site entry and road upgrades	<ul style="list-style-type: none"> • The project would use an existing site access point for Maxwell Infrastructure, off Thomas Mitchell Drive. • No road upgrades are proposed.
Construction	<ul style="list-style-type: none"> • The construction period would up to 12 to 18 months with peak construction activity occurring over a period of 6 months.

Aspect	Description
	<ul style="list-style-type: none"> Construction hours would be Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm, except for staff access and out of hours deliveries to the site.
Operational life	<ul style="list-style-type: none"> The expected operational life of the infrastructure is approximately 30 years. The proposal includes infrastructure upgrades and refurbishment that could extend the operational life of the project.
Decommissioning and rehabilitation	<ul style="list-style-type: none"> The project also includes decommissioning at the end of the project life, which would involve removing all infrastructure and rehabilitation of the project site.
Hours of operation	<ul style="list-style-type: none"> 24 hours a day, 7 days a week.
Employment	<ul style="list-style-type: none"> Up to 50 direct construction jobs and 2 full-time operational jobs.
Capital investment value	<ul style="list-style-type: none"> \$39.35 million



Site layout

19-069 Maxwell Solar Farm

- | | |
|---|--|
| <ul style="list-style-type: none"> — Project boundary ▨ Indicative solar array ■ Indicative battery storage - - - Proposed 66kV line — Proposed 33kV line - - - Existing 33kV line — Existing access road | <p>Biodiversity constraints:</p> <ul style="list-style-type: none"> ■ Low constraint - Pasture ■ Low-medium constraint - Woodland |
|---|--|

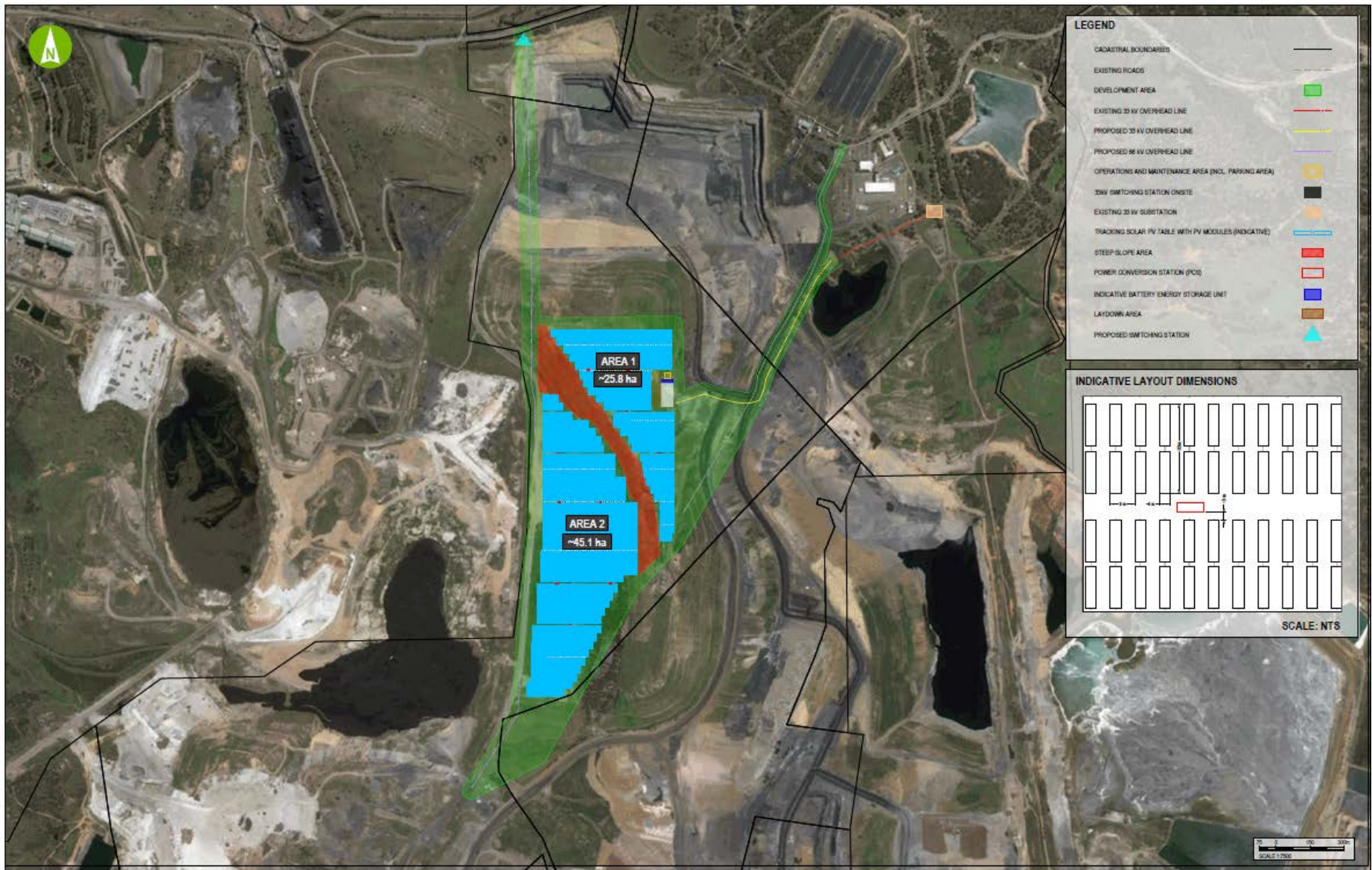
0 200 400 600 Meters

A4 @ 1:20000
 Ref: 19-069
 Author: L.B 14.5.19



NGH

Figure 3 | Local Context



 www.aurecongroup.com	CLIENT	REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY	PROJECT	MAXWELL SOLAR PV
		A		ISSUED FOR REVIEW		NOT TO SCALE	A3	NOT FOR CONSTRUCTION	TITLE	MAXWELL SOLAR PV
						DRAWN		APPROVED	DATE	INDICATIVE LAYOUT
						M.MODISANE				
						DESIGNED				
						M.MODISANE				
						REVIEWED				
						M. GRIFFITH				
									DRAWING No.	500654 - 0000 - DRG - ELE - 0001 - C

Figure 4 | Site Layout

2 Strategic context

2.1 Site and Surrounds

The project site is located on approximately 130 ha of land within the larger 1,470 ha site of the former Drayton Open Cut Coal Mine in the Muswellbrook Shire of the Hunter Region of NSW. The land is zoned RU1- Primary Production under the *Muswellbrook Local Environmental Plan 2009* (Muswellbrook LEP).

The former mine site has extensively modified landforms and the site for the solar farm is located on a partly rehabilitated overburden emplacement area. The former mine site is subject to continuing rehabilitation obligations under the *Mining Act 1992*. The post-mining landscape includes voids and overburden emplacement areas, some of which have been rehabilitated and revegetated, while other areas are actively undergoing rehabilitation. Soils on the site are highly modified, requiring ongoing management of issues such as erosion, salinity and fertility.

There are existing internal mine roads providing access within the former mine site, and existing 33 kV powerlines and a substation, all of which are privately owned and maintained by Maxwell Infrastructure.

The land immediately surrounding the project includes agricultural, mining, power generation and rural residential uses (including a rural residential subdivision). Approximately 22 residences are located within 3 km of the project site (including its transmission line options) all of which are to the northeast in Antiene. The closest private residences are approximately 1.3 km from the project site.

The town of Muswellbrook is located approximately 5 km to the northwest, and the Hunter River is located approximately 8 km northwest and south of the site. The surrounding area is dominated primarily by other open cut coal mining operations, including Mount Arthur, Bengalla and Mangoola to the west, and the Liddell and Bayswater Power Stations to the east.

2.2 Existing Approvals

The former mine site, including the Maxwell Solar project site is subject to a number of existing approvals, including:

- the Drayton Coal Mine project approval (06_0202) granted in 2012 under the *Environmental Planning and Assessment Act 1979*;
- a Mine Operation Plan (MOP) and Coal Lease CL 229 under the *Mining Act 1992*; and
- an Environmental Protection Licence No. 1323 under the *Protection of the Environment Operations Act 1997*.

Despite cessation of mining in December 2017, these approvals continue to have effect and require ongoing rehabilitation of the former mine site, including within the site for the solar farm.

In addition, a separate State significant development application has been lodged for the Maxwell Underground Coal Mine. The proposed Maxwell Underground is located to the south, east and northeast of the Maxwell Solar project site. The development application for the Maxwell Underground is not dependent on the Maxwell Solar project, although they would have common use of existing and new infrastructure such as roads and transmission lines.

The interaction of these approvals with the Maxwell Solar project is addressed in **Section 5.1**.

2.3 Energy Context

In 2019, NSW derived approximately 18.7 % of its energy from renewable sources. The rest was derived from fossil fuels, including 76.7 % from coal and 4.1 % from gas. There are currently no plans for the development of new coal power stations in NSW, and the development of renewable energy sources, like wind and solar farms, is experiencing rapid growth.

This is highlighted in the 2017 *Independent Review into the Future Security of the National Electricity Market* (The Finkel Review), which outlines a strategic approach to ensuring an orderly transition from traditional coal and gas fired power generation to generation with lower emissions. It notes that Australia is heading towards zero emissions in the second half of the century.

The *United Nations Framework Convention on Climate Change* has adopted the Paris Agreement, which aims to limit global warming to well below 2°C with an aspirational goal of 1.5°C. Australia's contribution toward this target is a commitment to reduce greenhouse gas emissions by 26 to 28 % below 2005 levels by 2030.

The NSW *Climate Change Policy Framework*, released in November 2016, sets an aspirational objective for NSW to achieve net zero emissions by 2050. The NSW Government also has a *Net Zero Plan Stage 1: 2020 – 2030*, which promotes the development of renewable energy in NSW.

The Department released the *Large-Scale Solar Energy Guideline* in December 2018 to provide the community, industry and regulators with guidance on the planning framework for the assessment of large-scale solar projects and identify the key planning considerations relevant to solar energy development in NSW.

The guideline aims to support the growth of the solar industry, whilst ensuring that impacts are adequately assessed, effective stakeholder engagement is undertaken, and that attracting investment is balanced with considering the interests of the community. Maxwell Solar submitted its EIS in December 2019 and its assessment is consistent with the principles of the guideline.

The guideline also acknowledges that large scale solar projects could help reduce reliance on fossil fuels, thereby contributing to reductions in air pollution and greenhouse gas emissions, whilst also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.

NSW is one of the nation's leaders in large-scale solar, with 13 major operational projects and an additional 8 under construction.

In March 2018, the NSW Government identified 10 potential Energy Zones across three broad regional areas, including the New England, Central West and South West regions of NSW. These energy zones are aimed at encouraging “investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW, subject to appropriate site selection, detailed assessment and community consultation”.

Whilst the project would not be located in a nominated Energy Zone, it is located 5 km from the Liddell Power Station. As this power station is scheduled for closure by April 2023, the project would have access to the electrical grid at a location with available network capacity. With a capacity of 25 MW, the project would generate enough electricity to power (or to reserve grid power where the power is

consumed by Maxwell Infrastructure) the equivalent of 9,354 homes. It would save up to 52,980 tonnes of greenhouse emissions per year and is therefore consistent the *Net Zero Plan Stage 1: 2020 – 2030*.

3 Statutory Context

3.1 State significance

The project is classified as State significant development under Section 4.36 of the *Environmental Planning & Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million.

Consequently, the Minister for Planning and Public Spaces is the consent authority for the development. Under the Minister's delegation of 9 March 2020, the Executive Director, Energy, Resources and Compliance, may determine the development application as Council did not object, there were fewer than 50 objections from the general public and a political donations disclosure statement has not been made.

3.2 Permissibility

The project site is located wholly within land zoned RU1 Primary Production under the Muswellbrook LEP, which is discussed further in **Section 5.1**. The RU1 zone includes various land uses that are both permitted with and without consent. As electricity generating works are not expressly listed as permitted with or without consent, a solar farm is considered a prohibited land use under a strict reading of the LEP. However, the LEP references the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) and acknowledges that electricity generating works are regulated by the Infrastructure SEPP, rather than the LEP.

Under the Infrastructure SEPP, electricity generating works are permissible on any land in a prescribed rural, industrial or special use zone. Land zoned RU1 Primary Production is a prescribed rural zone pursuant to the Infrastructure SEPP. Consequently, the project is permissible with development consent.

3.3 Integrated and other approvals

Under Section 4.41 of the EP&A Act, a number of other approvals are integrated into the State significant development approval process, and therefore are not required to be separately obtained for the proposal.

Under Section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal.

In this case, the project does not require any integrated or other approvals.

3.4 Application of Biodiversity Conversation Act 2016

Under Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), an application for development consent under Part 4 of the EP&A Act for State Significant Development “*is to be accompanied by a biodiversity development assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values*”.

Maxwell Solar sought approval to waive the requirement for a biodiversity development assessment report (BDAR) for the project as the proposed site:

- is predominantly cleared of native vegetation;
- has no habitat available for threatened ecological communities; and
- is comprised of highly modified and disturbed vegetation, and soils with low natural resilience due to previous and current disturbance by mining.

A BDAR waiver for the Project was granted on 5 June 2019 and therefore a BDAR was not required to be submitted with the development application.

3.5 Commonwealth approvals

Noting that a BDAR waiver was granted by the Department, no impacts on matters protected under the *Environmental Protection and Biodiversity Conservation Act 1999* have been identified. Consequently, Maxwell Solar concluded that it would be highly unlikely for the project to have an adverse impact for any Commonwealth MNES and did not make a referral to the Commonwealth under the EPBC Act.

3.6 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters are summarised as:

- the provisions of environmental planning instruments (including draft instruments), development control plans, planning agreements and the EP&A Regulations;
- the environmental, social and economic impacts of the development;
- the suitability of the site;
- public submissions and advice from government agencies; and
- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

The Department has considered these matters in its assessment of the project, as summarised in **Section 5** of this report. Detailed consideration of the relevant provisions of the environmental planning instruments is provided in **Appendix E** and the Department concluded the project is consistent with the relevant provisions.

4 Engagement

4.1 Department's engagement

The Department publicly exhibited the EIS from 13 December 2019 to 3 February 2020, advertised the exhibition in the *Hunter Valley News* and the *Muswellbrook Chronicle* and notified landowners adjoining the project boundary.

The Department consulted with Council and the relevant government agencies throughout the assessment. The Department notified and sought comment from TransGrid and Transport for NSW (TfNSW) in accordance with the Infrastructure SEPP, as discussed further in **Sections 4.4** and **4.6** below.

4.2 Maxwell Solar's engagement

Maxwell Solar engaged with the surrounding community as detailed in the EIS, including newspaper advertisements, community meetings and information sessions, individual meetings with adjacent landowners and making information about the project available via a project newsletter and its website.

Maxwell Solar also consulted directly with the nearest cluster of residents in the rural residential neighbourhood of Antiene to the north of the project site, the owners of nearby mining operations, Muswellbrook Shire Council and relevant government agencies.

4.3 Submissions

The Department received advice from 11 government agencies, including Muswellbrook Shire Council, a letter of advice from TransGrid, the operator of the State's high voltage transmission network, and submissions from two members of the general public in support of the project.

Full copies of the advice and public submissions are attached in **Appendix C**.

Maxwell Solar provided a response to all matters raised in submissions on the project (**Appendix D**)

Following the exhibition of the project, Maxwell Solar made a number of changes to the proposed mitigation measures proposed for the project. Those changes are detailed the Submissions Report (**Appendix D**) and involve commitments to:

- remove above and below ground infrastructure as part of the rehabilitation and decommissioning of the project;
- ensure solar panel wash water meets water quality guidelines outlined in the *Australian and New Zealand guidelines for fresh and marine water quality (Section 4.2 Water quality for irrigation and general water use)*; and
- rehabilitate the site to pasture capable of supporting low density livestock grazing.

Maxwell Solar also committed to implement the rehabilitation obligations and liabilities under the mining lease as part of the solar project. However, the Department considers that it is not appropriate to capture the obligations as part of the development of the solar project, as discussed further in **Section 5.1** below.

No other changes were made to the project as it was presented in the EIS.

4.4 Key issues – Government agencies

Muswellbrook Shire Council (Council) raised a number of issues including:

- a request for developer contributions to the value of 1 % of the capital investment value of the project, as well as other contributions, preferably captured in a voluntary planning agreement;
- concerns about how the project site would be rehabilitated and the need for a rehabilitation security deposit, given it is on a rehabilitated overburden emplacement area that is currently required to be rehabilitated as a wildlife habitat corridor under the Drayton mine consent;
- concerns about who would be responsible for the rehabilitation (i.e. the mining company or the solar company);
- use of clean water for solar panel washing to prevent accumulation of salt and heavy metals; and
- soil, weed and erosion control over the life of the project.

These matters are addressed in **Section 5** of this assessment report.

The **Environment Protection Authority** (EPA) stated that the project would not require an Environment Protection Licence, and made no comments on the project.

The **Division of Mining, Exploration and Geoscience** (formerly Resources and Geoscience) stated that it has no concerns with the EIS for the project.

The **Resource Regulator** stated that the mining title holder is currently responsible for the rehabilitation of the project site. It noted that the proposed rehabilitation plan for the solar project is different to the approved rehabilitation in the Mining Operations Plan for the site. It suggested that the mining title holder could relinquish its lease in respect of the project site, but only if the rehabilitation obligations for the project site, including any legal liabilities associated with the former mining operations, were transferred to the solar project by way of consent condition on the solar project.

However, the Department does not consider it is appropriate to transfer mine site rehabilitation obligations to the owner and operator of a solar farm, as discussed in more detail in **Section 5.1** below.

The **Department of Primary Industries - Agriculture** (DPI Agriculture) requested that the Rehabilitation and Decommissioning Management Plan for the project include the removal of all above and below ground infrastructure. The Department has reflected this requirement in the recommended conditions of consent.

The **Biodiversity Conservation Division** of the Department (BCD) noted that a waiver for a Biodiversity Development Assessment Report (BDAR) was granted to the project on 5 June 2019. It also raised a number of other issues including the need for an unexpected finds protocol for Aboriginal Cultural Heritage, consideration of potential flood impacts and consideration of geotechnical stability and erosion and sediment controls.

These matters are addressed in **Section 5.3** of this report.

Hunter New England Local Health District stated that any water collected on the site or transported to it for potable purposes must meet the *Australian Drinking Water Guidelines 2011* and be the subject of a Quality Assurance Program. Maxwell Solar has made a commitment to this outcome.

Crown Lands and the **Natural Resources Access Regulator** raised no concerns.

Fire and Rescue NSW stated that large-scale photovoltaic installations and associated battery energy storage solutions present unique hazards to its personnel when fulfilling their emergency duties. It recommended an emergency response plan for the project and a Fire Safety Study be prepared for the battery installation. The Department notes that the battery installation is not proposed under the current application and would be the subject of a future development application. These matters are addressed in **Section 5.3** of this report.

Transport for NSW (formerly Roads and Maritime Services) noted that the project would be accessed by Thomas Mitchell Drive, which is a Council controlled road, and raised no issues with the project.

TransGrid is the operator of the State's High Voltage Transmission Network. TransGrid stated that Maxwell Solar would be required to lodge a Connection Enquiry and follow the connection process to development and finalise a connection agreement.

4.5 Community submissions

The Department received two letters of support from the general public; one from a resident of Singleton and another from a resident of Stockton. One letter stated that clean energy is positive measure to address the climate emergency. Both submitters reside in the Hunter Valley, although neither live in close proximity to the solar project.

5 Assessment

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the two key issues, namely the interaction with the rehabilitation of the site under the mining lease (see **Section 5.1**) and the compatibility of the project with the land use objectives in the locality (see **Section 5.2**).

The Department has also considered the full range of potential impacts associated with the project and has included a summary of this assessment in **Section 5.3**.

A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Interactions with Mining Rehabilitation

The project is located on a rehabilitated overburden emplacement area at the former Drayton mine site. While mining at Drayton ceased in December 2017, the project approval (06_0202), its Coal Lease (CL229), Mining Operations Plan (MOP) and Environmental Protection Licence (EPL 1323) continue to operate. These approvals specify ongoing requirements for safety, stability and rehabilitation on the former mine site including for the area of land now proposed for the solar project.

Muswellbrook Shire Council raised a number of specific issues about the mining approval obligations in its submission (see **Appendix C**).

In particular, Council considered that the mine rehabilitation and wildlife corridor that was planned for the solar project site should be completed on other land within the former mine site to achieve the goal of enhancing habitat connectivity, and that conditions of consent are required for the solar project to

make it clear which project (i.e. the former mine or the solar project) would be responsible for the existing rehabilitation obligations.

However, the Department considers that these issues (including any supplementary mine rehabilitation, alternate habitat corridor and any changes to the mining security deposit) should remain the sole responsibility of the mining company under the existing Mining Lease and associated obligations under the *Mining Act 1992*.

In line with this regulatory approach, Maxwell Solar has confirmed that any necessary amendments to these obligations under the existing Drayton consent and/or the Mining Lease would be carried out by Maxwell Infrastructure as the mine operator.

The Department notes that multiple development consents can legally exist over the same land, and it would be the responsibility of the holder of these consents to comply with the applicable conditions, or seek to modify these conditions to align any inconsistent obligations.

Alternatively, these obligations could be incorporated in the regulatory requirements of any planning approval for the Maxwell Underground Coal Project which would also require the existing Drayton consent to be surrendered.

Consequently, both the Department and the Resources Regulator are satisfied that these separate regulatory processes will deliver appropriate outcomes, and there is no need to duplicate or transfer these obligations to the solar farm.

5.2 Compatibility of proposed land use

Provisions of the Muswellbrook LEP

The site is located wholly within the RU1 Primary Production zone under the LEP. As discussed in **Section 3.2**, a solar farm is a prohibited land use under a strict reading of the LEP. However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar project on the former mine site.

The LEP expressly references the Infrastructure SEPP and acknowledges that electricity generating works are regulated by the Infrastructure SEPP, rather than the LEP. As discussed in **Section 3.2**, a solar farm is permitted with consent on land zoned RU1 under the Infrastructure SEPP. Secondly, the project is not inconsistent with the objectives of the RU1 zone, particularly in relation to:

- encouraging diversity in primary industry enterprises and systems appropriate for the area; and
- minimising fragmentation and alienation of resource lands.

While the Muswellbrook Shire has traditionally relied upon mining and agriculture, the introduction of solar energy generation would contribute to a more diverse local economy, which is consistent with the *Hunter Regional Plan 2036*.

The Department considers that the proposed solar farm represents an effective and compatible use of the land within the region, especially when balanced against:

- the broader strategic goals of the NSW government for the development of renewable energy into the future;

- the environmental benefits of solar energy, particularly in relation to reducing greenhouse gas emissions; and
- the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity infrastructure.

Potential impacts on mining and exploration

The project would not further sterilise any underlying mineral or petroleum resources as it is situated on an overburden emplacement area of a former mining operation. The Department notes that the Maxwell Underground Coal Project, which is currently under assessment, is separate to and not affected by the solar project even though it shares some common infrastructure.

The Department considers renewable energy projects are a suitable use of former mine sites, such as rehabilitated overburden emplacement areas, and they are readily accessible via existing transport routes that can accommodate heavy vehicle traffic.

5.3 Other issues

The Department’s consideration of other issues is summarised in **Table 2**.

Table 2 | Summary of other issues

Findings	Recommended conditions
<p>Traffic and Transport</p> <ul style="list-style-type: none"> • Access to the site is from the existing Maxwell Infrastructure site entry off Thomas Mitchell Drive. This entry was formerly used for the Drayton Open Cut Coal Mine. • Major project components would be shipped to the Port of Newcastle or Port Botany and road-hauled to the site in heavy vehicles, including B-Double trucks. • All haul routes are rated for B-Double trucks. • Peak construction traffic is estimated to be 120 vehicle movements per day, including up to 16 heavy vehicles and 4 over size/overmass cranes. • Operational traffic is 10 light vehicle movements per day. • A road transport study prepared for the Maxwell Underground Coal Project concluded that for the Maxwell Underground Coal Project: <ul style="list-style-type: none"> ○ there would be minor or no impact on the midblock levels of service experienced by drivers on Thomas Mitchell Drive; ○ key intersections are expected to operate at good levels of service with short delays and spare capacity without needing upgrade; and ○ cumulative impact of projects on the midblock levels of service experienced by drivers on Thomas Mitchell Drive would be minor. • Traffic generation for the Maxwell Solar project is only 16 % of the expected daily construction traffic for the Maxwell Underground Coal Project. • Muswellbrook Shire Council and Transport for NSW did not raise any concerns about the traffic impacts of the project and Maxwell Solar has committed to a Traffic Management Plan that would address any scheduling conflicts with the Maxwell Underground Coal Project (should it be approved), as well as traffic monitoring and management. • The Department is satisfied, subject to the preparation of the management plan, that there would be no further deterioration in road performance or safety. 	<ul style="list-style-type: none"> • Prepare and implement a detailed Traffic Management Plan for the project, in consultation with Council.

Findings

Recommended conditions

Biodiversity

- The site is located on rehabilitated overburden emplacement area, largely within a cleared landscape. The project site does not presently connect with native vegetation remnants. The nearest of these remnants to the main part of the project site are approximately 1 km northeast and 2 km southeast.
- A waiver for the preparation of a BDAR for the project site was granted by BCD under the *Biodiversity Conservation Act 2016*.
- The Department is satisfied that impacts to the limited biodiversity values of the project site are negligible.

- Consent condition to restrict any clearing outside the approved site for the project.

Aboriginal Cultural Heritage

- The site is a highly modified landscape with no original landforms or sensitive subsurface archaeological conditions.
- The closest previously recorded Aboriginal site to the project site is an open artefact and PAD site 'Ramrod R10' (AHIMS ID#37-2-2347) located 110 m from the existing road access.
- A total of four transects were completed over the project site covering approximately 55 ha, representing around 57 % of the topsoil area.
- No Aboriginal objects were identified during the survey and the Registered Aboriginal Parties (RAPs) that were present suggested that land within the project is of low sensitivity due to disturbance associated with mining.
- The RAPs did not describe any Aboriginal cultural values specifically associated with the project site.
- BCD recommended the consent conditions include a protocol for unexpected finds. These have been incorporated into the recommended conditions of consent.
- With these measures in place, both the Department and BCD are satisfied that the project would not result in any material impacts on Aboriginal objects or heritage values.

- Prepare and implement an unexpected finds protocol for Aboriginal heritage items.

Visual

- The solar panels would be up to 4 m high and the associated infrastructure including substations, transformers, transmission lines, and access roads would be similar in scale to the infrastructure that already exists on the Maxwell Infrastructure site and at nearby mines.
- The project site is located on disturbed and partly rehabilitated landforms within an established mining precinct. The project is setback from the overburden emplacement area, and screening is provided by topography, vegetation and neighbouring mine facilities.
- Immediate viewpoints only occur within Maxwell Infrastructure's former mine site. The closest residences are at least 1.3 km away and would not have a significantly visual impact from the project.
- Visual impacts of the project have been assessed as low for all assessed public viewpoints because they:
 - occur only at middle ground and background distances;
 - provide only occasional glimpses of the project;
 - do not significantly impact on residences; and
 - occur in the context of a mining landscape.
- Potential for glint and glare impacts from photovoltaic solar panels is relatively limited because they are designed to absorb sunlight. The panels would not create noticeable impacts compared with an existing roof or building surfaces.
- The 66 kV transmission line and switch station option would connect to the Mount Arthur Mine feeder at Thomas Mitchell Drive. The new line would be visually compatible with the feeder, which is currently under construction.
- The Department is satisfied that visual impacts would be low and that no mitigation is necessary.

- No consent conditions are necessary.

Findings

Recommended conditions

Noise and Vibration

- Construction noise would occur over 12-18 months, during standard daytime construction hours only, as specified in the *Interim Noise Construction Guideline (ICNG)*.
- The ICNG construction noise management level for the project is 50 dB LA90 (15min). This is calculated from a Rating Background Level in the Noise Management Plan for Maxwell Infrastructure, and the level is indicative of the existing noise environment associated with nearby mines.
- Operational noise would result from tracking motors and DC inverters. These noises would only occur during the day when the solar farm is tracking the sun and producing power.
- The *Industrial Noise Policy (INP)* day operational noise management level for the project is 40dB Aeq (15 min), which is the minimum under the INP.
- There is no operational noise modelling for the project, but Maxwell Solar indicates that noise modelling for a larger solar farm project using similar technology in a rural area indicates no exceedances for residences over 50 m from the project infrastructure.
- Road traffic noise from the project is most relevant in Thomas Mitchell Drive, which has residences within 150 m to 200 m.
- This road is classified as a regional road providing access from the south to Maxwell Infrastructure, Mount Arthur Coal and the Muswellbrook Industrial Estate.
- The additional construction and operational traffic for the solar project is unlikely to significantly impact existing road noise impacts for local residents.
- Vibration impacts attenuate with distance, and sensitive receivers are well beyond the relevant safe buffer distances.
- The Department is satisfied that all noise and vibration impacts from the project would be negligible due to the distance to the nearest residences, the existing noise environment with existing mining operations nearby, and the implementation of ICNG construction noise mitigation measures.

- Comply with the standard day time construction hours of Monday to Friday 7am to 6pm and Saturday 8am to 1pm, unless inaudible at non-associated receivers.

Soils and Erosion

- Topsoils and subsoils of the project site include non-dispersive fines that are susceptible to erosion, and sodic soils.
- There is no evidence of contamination and this risk is considered low.
- There are areas of the project site (such as access tracks and the transmission line corridor) with unstabilised slopes with erosion present.
- The project would largely be constructed in areas with limited topographic relief and minimal existing erosion. The solar arrays would be located on flat areas with slopes up to 10 %, while powerlines would be located on slopes up to 30 %.
- Pile driving/screwing of steel posts supporting the solar arrays and fencing uses light equipment within a small and discrete footprint and is unlikely to result in significant soil disturbance.
- Soil compaction would occur as hardstands and internal access roads are created, reducing soil permeability, although these impacts would occur in small, discrete parts of the site and are not significant.
- Erosion and sediment control would be managed in accordance with *Landcom Soils and Construction: Managing Urban Stormwater (2004)*, while groundcover would be retained as far as practicable during construction and maintained during operation.
- Council expressed concern about weed management for the project and the Department's recommended consent conditions address this matter.
- While BCD requested further details on the suitability of soil and water management strategies, the Department's recommended consent conditions specify accepted performance requirements for soil and erosion management instead of prescribing specific techniques.
- The Department is satisfied that the risk of erosion is generally low because runoff is readily manageable within the site and unlikely to lead to sediment transport.

- Implement construction erosion and sediment control and progressive revegetation of disturbed areas.

Findings

Recommended conditions

- With the recommended conditions, the Department is satisfied that there would be no significant soil and erosion issues.

Hydrology and Flooding

- No natural watercourses or prescribed streams run through the project site because it is a constructed overburden emplacement area. There are three final mining voids nearby, which are used as water storages.
- Existing surface water drainage patterns may be slightly altered by construction. These would be managed by ensuring flow is directed to existing ephemeral drainage lines and rock lined drainage lines.
- Detention ponds, if required for surface water management, would be detailed in the design phase, specific to the solar array layout.
- Groundwater impacts are unlikely because there is no extraction, and pollution risk from the solar array is low.
- Parts of the north and northeast of the project site may be vulnerable to temporary overland flows during high rainfall events.
- In respect of flooding, Maxwell Solar has committed to ensure:
 - buildings, equipment foundations and footings would consider flooding potential and no components would be flood-mobile;
 - all potential pollutants stored on-site during construction would be stored in accordance with HAZMAT requirements and banded; and
 - a flood response plan would be developed to manage the safety of workers and equipment in the event of flooding.
- In addition, the solar array itself is unlikely to be flood prone because of its elevation on the overburden emplacement area.
- The Department, in consultation with BCD, has recommended conditions that require Maxwell Solar to ensure the solar panels and infrastructure are designed, constructed and maintained to reduce impacts on surface water and flooding.
- The Department is satisfied the hydrology and flooding impacts are satisfactory because the site is already has highly modified and managed hydrology, and the residual risks are manageable with the recommended conditions and Maxwell's commitments.

- Prepare and implement an Emergency Response Plan for the project.

Water Supply

- Maxwell Solar estimates water usage as follows:
 - construction stage potable water usage – 0.15 ML;
 - construction stage non-potable water usage – 15 ML;
 - operational stage potable water usage – 15 kL/year; and
 - operational stage non-potable usage – 10 ML/year.
- Potable water would be supplied from a commercial supplier, while non-potable water would be drawn from dams on the Maxwell Infrastructure site or an off-site standpipe.
- Council stated that solar panel wash-water should be low in salt and heavy metals to limit accumulation in soils. Maxwell Solar has committed to use water that meets *Australian and New Zealand guidelines for fresh and marine water quality - Water quality for irrigation and general water use*
- Hunter New England Local Health stated that potable water must meet the *Australian Drinking Water Guidelines 2011*.
- Maxwell Solar has committed to comply with these recommendations, and the Department has recommended that Maxwell Solar ensure that the project does not result in any water pollution.

- Ensure that there is sufficient water for all stages of the development, and adjust the scale of the development to match the available water supply.
- Ensure that the development does not cause any water pollution, as defined under Section 120 of the *Protection of the Environment Operations Act 1997*.

Hazards and Risk

- The project includes a designated space for a battery storage unit although its installation would be subject of a future development application and hazard assessment.
- Dangerous goods transported to and stored on the site include inert fire suppression gas, fuel and pesticides. These would not exceed SEPP 33 thresholds and the project does not require a Preliminary Hazard Analysis.
- The site is identified as high bushfire risk in the *Muswellbrook Bush Fire Risk Management Plan* although, native vegetation on the site is from prior

- Implement asset protection requirements in accordance with the RFS's *Planning for Bushfire Protection 2019*,
- Store and handle all liquid chemicals, fuels and oils on-site

Findings

Recommended conditions

- mine rehabilitation and the site for the solar array is generally flat with elevation decreasing along the two proposed transmission line routes.
- Asset Protection Zones (APZ) of at least 10 m would be provided around buildings, the switching station and the outside perimeter of the solar array. The APZs would be managed as an Inner Protection Area.
 - APZs around the power conversion stations and switching station (for the 66 kV option) would include a gravel surface to minimise fire risks.
 - Access for firefighting appliances would be constructed and maintained and the perimeter APZ would also include a 4 m gravel access track.
 - Fire-fighting water storage would be installed adjoining the main access road with fire-fighting connectivity and a minimum of 20,000 litre fire-fighting reserve. Rainwater tanks installed beside buildings for staff amenities would also be fitted with fire-fighting connectivity.
 - Suitable fire extinguishers and PPE would be maintained in these buildings.
 - Fire and Rescue NSW recommends an emergency response plan for the project and Maxwell Solar has committed to do this.
 - There is low potential for EMF impacts during the construction and decommissioning of the project. Exposure to EMFs during the construction of the switch station and its connection would be short term and the effects are likely to be negligible.
 - During operation, EMF sources include overhead transmission lines and the solar array incorporating inverters. The maximum magnetic field of the proposed transmission line is well under the 200 μ T and 1000 μ T limits recommended for public and occupational exposure.
 - The construction site would be fenced to protect the public from construction health and safety risks. Public access would also be restricted by Maxwell Infrastructure site fencing during the operational phase.
 - EMFs from the solar project are likely to be indistinguishable from background levels and it would comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for electric, magnetic and electromagnetic fields.
 - The Department is satisfied that the key hazards and risks of the project have been addressed and are low, particularly given the location of the site within a former mine site.

in accordance with all relevant Australian Standards and the EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Handbook*.

Decommissioning and Rehabilitation

- The Department has developed standard conditions for solar farms to cover rehabilitation and decommissioning, including clear triggers for action and objectives such as removing all above and below ground infrastructure and restoring land capability to its pre-existing use.
- The standard conditions also allow for the upgrade of solar panels on site provided the upgrades remain within the approved development footprint.
- Council raised concerns about the responsibility for rehabilitating the site, the relocation of wildlife habitat corridors, the incorporation of micro-relief, and rehabilitation security deposits for the post-mining landforms.
- As discussed in Section 5.1 above, the Department considers these matters are, and would remain, the sole responsibility of mine operator and the existing Drayton development consent and the Mining Lease for the Drayton mine.
- Notwithstanding, the Department has recommended standard conditions, that require the solar farm to be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and rehabilitate the site to pasture/grassland suitable for grazing, unless otherwise agreed with the Secretary.

- Comply with rehabilitation objectives requiring the site to be decommissioned and rehabilitated within 18 months of cessation of operations.

Social and Economic

- The project would generate approximately 50 direct jobs during construction, and one to two full time staff during operation and maintenance.
- The project site is close to Muswellbrook and Singleton and on-site workforce accommodation or services are neither necessary.

- No consent conditions necessary.

Findings

Recommended conditions

- Demand for accommodation and services in the locality created by the construction workforce would be unlikely to add significantly to the already high demand from the mining contractor workforce.
- The Department is satisfied that the increased demand would be sufficiently accommodated in the local area.
- In addition to the job creation specified above, the project would involve benefits such as:
 - employment and contracts including landscaping, catering, trenching, maintenance, piling and electrical;
 - a capital investment value of \$39.35 million;
 - an estimated \$390,000 in wage spending; and
 - a boost to the local and regional economies through demand for accommodation, goods and services.
- Potential socio-economic impacts may result from:
 - increased traffic on local roads and hazards associated with construction traffic;
 - small changes in the landscape character and visual amenity of the area; and
 - construction workers demand for local accommodation, health and broader services.
- These amenity impacts have been considered in the assessment and the Department considers that the project would not have a significant impact on the amenity of the local community.
- The Department considers on balance that the project would provide socio-economic benefits for the local community.

Developer Contributions

- Council requested a developer contribution under section 7.12 of the EP&A Act (preferably within a Voluntary Planning Agreement) for:
 - contributions to the value of 1 % of the project's capital investment value (\$393,500) to be put toward road maintenance and community infrastructure;
 - \$10,000 funding toward a Council Officer to monitor the project; and
 - a target for employing one local youth per year as an apprentice on the project.
- Council has a Development Contributions Plan. While the plan is a relevant matter for consideration by the consent authority, it is not binding on State significant developments.
- The Department considered the need for developer contributions in its assessment of this project and whether it would create any additional demand on public services and infrastructure.
- Given the relatively low level of operational employment, the project is unlikely to result in significant ongoing demand on community services and infrastructure during the operational stage of the project.
- Under the recommended conditions, Maxwell Solar would also be required to pay for the repairs of any project-related impacts on the local road network. No road upgrades or ongoing road maintenance is necessary.
- In addition, as the Department would enforce compliance with the approval, there would be no need of Council officer to monitor the project.
- Despite significant capital investment, the Department is satisfied that the project can adequately address short term construction related demands and would not create ongoing operational demand for community infrastructure and road maintenance.
- Consequently, the Department does not consider that a Voluntary Planning Agreement or a section 7.12 levy is necessary or warranted in this case.

- Repair any damaged local roads that result from the construction of the project.

6 Recommended Conditions

The Department has prepared recommended conditions of consent for the project (see **Appendix F**). The Department consulted with Maxwell Solar and the relevant agencies on the conditions for the project, particularly Council and the Resource Regulator in regard to the interaction of the Maxwell Solar project with the existing approvals for the former mine site.

These conditions are required to:

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

The recommended conditions use a risk-based approach that focuses on performance-based outcomes. This reflects current government policy and the fact that solar farms require relatively limited ongoing environmental management once the project has commenced operations.

In line with this approach, the Department has recommended operating conditions to minimise impacts, and required the following management plans be prepared and implemented:

- Traffic Management Plan; and
- Emergency Response Plan.

The recommended conditions also require Maxwell Solar to provide detailed final layout plans to the Department prior to construction.

Other key recommended conditions include:

- *rehabilitation and decommissioning* – to ensure that the land is restored for future land uses (including land capability to pasture/grassland), including the removal of all underground cabling and infrastructure;
- *bushfire risks* – to ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019*;
- *construction hours* – to ensure construction, upgrading or decommissioning activities occur during standard construction hours, unless these activities are inaudible at non-associated receivers; and
- *heritage* – to ensure unexpected items of Aboriginal heritage are properly addressed.

7 Evaluation

The Department has assessed the development application, EIS, and Submissions Report provided by Maxwell Solar, as well as public submissions and advice from the relevant government agencies. The Department has also considered the objectives and relevant considerations under section 4.15 of the EP&A Act.

The project is located on rehabilitated overburden from the former Drayton Open Cut mine, with the nearest non-associated residence located about the 1.3 km northeast. The Department considers the site to be appropriate for a solar farm as it has good solar resources and either on-site demand for the electricity or likely available capacity on the existing electricity network.

None of the government agencies or Council have objected to the project, and the Department has sought to address any issues raised through the recommended conditions of consent. There were also no submissions objecting to the project and the community submissions received indicated their support for the project.

Overall, the Department considers a solar farm is a suitable land use for the site, and that the existing mining rehabilitation obligations for the site can still be achieved (or suitable alternatives implemented) under the Drayton mine consent and the Mining Lease, rather than transferring these obligations to the solar farm.

The Department considers that the project has been designed to largely avoid key constraints, including native vegetation, watercourses, and Aboriginal heritage sites. The Department also considers that the project would not result in any significant visual, noise or traffic impacts on the local community given the distance to the nearest residences, intervening topography and vegetation, and the location of the site within a broader mining precinct.

The Department has recommended a range of strict conditions, developed in conjunction with relevant government agencies and Council, to effectively minimise and manage any residual impacts.

Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources. The project is located close to the Liddell Power Station that is scheduled for closure by April 2023 and would have access to the electrical grid. It would generate enough electricity to power the equivalent of 9,354 homes. It would save up to 52,980 tonnes of greenhouse emissions per year and is therefore consistent with the *Net Zero Plan Stage 1: 2020 – 2030*.

The Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. The project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community, through job creation and capital investment.

On balance, the Department considers that the project is in the public interest and should be approved, subject to the recommended conditions of consent (see **Appendix F**).

8 Recommendation

It is recommended that the **Executive Director, Energy, Resources and Compliance**, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of SSD 9820, subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Appendix F**)

Recommended by:



David Mooney 17/8/20
Specialist Planning Officer
Energy Assessments

Recommended by:



Nicole Brewer 17/8/20
Director
Energy Assessments

9 Determination

The recommendation is **Adopted / Not adopted** by:



19/08/20

Mike Young
Executive Director
Energy, Resources and Compliance

Appendices

Appendix A – List of referenced documents

Maxwell Solar Farm Environmental Impact Statement, ngh consulting, December 2019

Maxwell Solar Farm Submissions Report, ngh consulting, March 2020

Appendix B – Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/9626>

Appendix C – Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/9626>

Appendix D – Submissions Report

<https://www.planningportal.nsw.gov.au/major-projects/project/9626>

Appendix E – Statutory Considerations

In line with the requirements of Section 4.15 of the EP&A Act, the Department’s assessment of the project has given detailed consideration to a number of statutory requirements. These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all of these matters in its assessment of the project and has provided a summary of this assessment below.

Aspect	Summary
Objects of the EP&A Act	<p>The objects of most relevance to the Minister’s decision on whether or not to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act.</p> <p>The Department is satisfied that the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project:</p> <ul style="list-style-type: none"> • is a permissible land use on the subject land; • is located in a logical location for efficient solar energy development; • is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; • would contribute to a more diverse local industry, thereby supporting the local economy and community; • would not fragment or alienate resource lands in the LGA; and • is consistent with the goals of the the <i>Net Zero Plan Stage 1: 2020 – 2030</i> and would assist in meeting Australia’s renewable energy targets whilst reducing greenhouse gas emissions. <p>The Department has considered the encouragement of ESD (Object 1.3(b)) in its assessment of the project. This assessment integrates all significant socioeconomic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk weighted consequences.</p> <p>In addition, the Department considers that appropriately designed SSD solar development, in itself, is consistent with many of the principles of ESD. Maxwell Solar has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD.</p> <p>Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in Section 5 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality.</p>
State significant development	<p>Under Section 4.36 of the EP&A Act the project is considered a State significant development. The Minister for Planning and Public Spaces is the consent authority for the development. Under the Minister’s delegation of 9 March 2020, the Executive Director, Energy, Resources and Compliance, may determine the project.</p>

Aspect	Summary
Environmental Planning Instruments	<p>The Muswellbrook Local Environment Plan 2009 applies and is discussed in Section 3 of this report, particularly regarding permissibility, land use zoning, bushfire and contributions.</p> <p>The project is permissible under the Infrastructure SEPP. In accordance with the Infrastructure SEPP, the Department has given written notice of the project to TransGrid and Transport for NSW.</p> <p>Maxwell Solar completed a preliminary risk screening in accordance with SEPP No. 33 – Hazardous and Offensive Development. The Department’s consideration of this analysis is discussed in Section 5.</p> <p>The Department has considered the provisions of the SEPP (Primary Production and Rural Development) 2019. Of relevance to the project, the SEPP aims to facilitate the orderly economic use and development of lands for primary production, to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land. The project site is a former overburden emplacement area and does not comprises productive agricultural land.</p> <p>The Department has considered the provisions of SEPP No. 55 – Remediation of Land. A preliminary assessment of the land found no contaminated land within the project site, and the Department is satisfied the site is suitable for the development.</p> <p>Muswellbrook Shire Council is listed under SEPP (Koala Habitat Protection) 2019. Maxwell Solar’s assessment concluded that the vegetation within the site is not considered potential Koala habitat.</p>

Appendix F – Recommended Instrument of Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/9626>