Dumaresq Solar Farm

Refreshed 2023 Scoping Report supporting the request for new SEARs

Prepared by Halo Renewable Energy

August 2023

This Scoping Report has been prepared in good faith with information that Halo Renewable Energy believes to be accurate and complete as of the date of its publication.

This report is also a resubmission from the granted SEARs of 2020

That being said, areas of this report rely on searches of various databases, including Government departments & Government data sources. Halo assumes that the information obtained through those sources is accurate.

Contact point in relation to this Scoping Report:

Nicholas Assef
Halo Renewable Energy
Suite 6107, Level 61
MLC Centre
25 Martin Place
Sydney NSW 2000
Australia

Email: naa@haloenergy.net
Mobile: + 61 498 115 064

www.haloenergy.net

Table of Contents

List of Figures

Appendices

Introduction

Project Background – 2020 SEARs & Circular PS 21-005

The Dumaresq Solar Farm project was conceived in 2019 as a major renewable energy project for NSW. In early 2020 an initial Scoping Report was submitted to the Department of Planning, Industry & Environment (Department) which resulted in the Planning Secretary's Environmental Assessment Requirements (SEARs) being issued on 10th March 2020 with the project being identified as a NSW State Significant Development with Application Number SSD 10427 (2020 SEARs).

A copy of that 2020 SEARs is attached as Appendix 1 to this Scoping Report.

On 1 July 2021 the Department issued **Planning Circular PS 21-005** (Circular).

In addition to introducing certain additional requirements for proponents, the Circular also detailed a staged approach to mandatory SEARs expiry. Specifically with reference to the Dumaresq Solar Farm Project the following applied:

"The SEARs sunset dates are……..

1 July 2023 – All SEARs issued from 1 July 2019 up to 30 June 2021 will expire 1 July 2023."

At all times since the issue of the 2020 SEARs DSF has maintained an active dialogue with both the Department and other stakeholder agencies. It did appear that the EIS submission would be submitted prior to the 1 July 2023 deadline, but delays specifically in relation to Hazard Assessment stemming from the revised Battery Energy Storage System that is proposed meant that the deadline could not be met when the Department's soft sounding requirements were factored in. As such and on Department recommendation the 2020 SEARs was withdrawn

It is confirmed that all investigations, research and consultations required under the 2020 SEARs have been advanced to the point that submission of the draft EIS for Department consideration can be achieved within a short period of time. As such we have attached the documents from the 2020 SEARs to this scoping report for completeness, as the expert reports in the final EIS will comment on any developments from those versions.

It is also important to note that the Developer has made ongoing adjustment to the SEARs process in line with requirements of the Circular and best practice in relation to solar farm developments in general. This has included:

- the appointment of a registered environmental assessment practitioner (REAP) who been a great asset in the development of the Project, including being a valuable sounding board on a variety of matters – all of which contribute to ensuring that the EIS when submitted will meet quality assurance requirements; and
- an independent approach to the positive social impacts of the Project to the Northern Border Community – which in reality means documentation of the extensive conversations & communications with key stakeholder groups and individuals.

The fact that all work has been concluded has made the refresh of the original Scoping Report a novel drafting undertaking. This Scoping Report therefore combines areas of investigation that will be required under the SEARs but through a lens of the fact that the work has already been completed and as such a reasonable level of authority on various matters can be represented.

Project Overview

Summary

Dumaresq Solar Farm Pty Ltd (ABN 66 636 603 373) ("DSF") is proposing to construct and operate a utility scale photovoltaic solar ("PV") generation facility, accompanying Battery Energy Storage System ("BESS") and associated supporting infrastructure (all referred to together as the "Facility") with a capacity of up to 190 megawatt ("MW") to be located on land ("Site") between the towns of Ashford and Bonshaw, in the Inverell Shire of New South Wales (NSW) (the "Project"), shown in Figure 1. The Project address is 3500 Bonshaw Road, Bonshaw, NSW 2361.

The electricity generated from the Facility (*including that stored in the BESS)* will be transmitted by existing 330 kV transmission lines ("Lines") that intersect the Site. Those Lines have been in place since the early 2000's and are owned & operated by TransGrid and form part of the critical NSW Qld Border region electrical infrastructure. Transgrid's Dumaresq Substation is located nearby and underwent significant upgrade in 2021.

Figure 2 provides an overview of the Site, including the position of the Lines.

The Facility will operate year-round during daylight hours to generate electricity for NSW homes and businesses at this critical time in Australia's energy transition objectives.

The use of the BESS (*the optimal size of which is still being assessed – but it will be a maximum of 190MW & 4 hours of storage)* will enable electricity to be discharged into the network, including during crucial evening periods when demand for electricity traditionally is at peak. Different technologies are being assessed for the BESS which will be likely modelled on a Storage As A Transmission Asset approach. Adoption of such a strategy on the Dumaresq Solar Farm project is designed to assist in the stabilization of the energy grid at a time when the coal fired generator fleet is entering its sunset operational period.

Reapplication For SEARs

The Dumaresq Solar Farm Project has been being advanced since 2020 when the original Scoping Report was submitted to the Department and SEARs were issued (referred to in this document as the 2020 SEARs).

The work that has been conducted to date has been extensive – as has the ongoing communication by the Developer with the Department, various Agencies and the local community at large – in particular the Inverell Shire Council.

All material work outlined under the 2020 SEARs has been completed, including both the incorporation of various requirements from Agencies and the conclusion of various post approval commercial arrangements with Inverell Shire Council. Work completed includes all biodiversity studies in relation to the property on which the Facility will be constructed, and detailed studies on any potential impact on receptors in this remote part of NSW.

As such this refreshed Scoping Report provides specific comment on activities that have already been conducted and concluded successfully as a part of advancing the Dumaresq Solar Farm project. As such this Scoping Report is in a position to make comment on various aspects of the potential development that are beyond those for a developer embarking on a new project.

DSF has had extensive discussions with the leadership of Inverell Shire Council in relation to the adoption of various Community obligations. Following a full presentation to Councillors in Inverell in

March 2023 a binding Heads of Agreement has already been agreed and signed. The initiatives within that document, which will be included in the EIS, were agreed after extensive consultation with both Inverell Shire Council leadership and discussion with local Bonshaw residents. Its existence is a demonstration on the collaborative community engagement approach that has been embarked upon since the genesis of this project.

The Developer's intention is to advance the EIS submission as soon as practicable following the issuing of fresh SEARs. That EIS submission will rely on the extensive work undertaken to date at great investment of both capital and time.

Landowner Agreement & Site Overview

Landowner agreement to develop the Project is in place via an executed option to lease and attaching lease agreement. DSF engaged the leading international law firm of Herbert Smith Freehills to prepare and advise on the legal documentation that was signed with the landowner (*and substantial option fees have been paid)*.

Since the execution of the Option the landowner has been paid above market cash amounts for both the opportunity to develop the Project and also for other services, including the accommodation of EIS related consultants within a house on the landowners property and other initiatives related to the Project such as assistance in relation to community engagement activities including Newsletter drops to adjoining properties. The landowners have also arranged various meetings with local landowners (at which the Developer has attended) for which the project team is most grateful.

The Facility is anticipated to be constructed on an approximate 205-hectare ("ha") parcel of land that has traditionally been used for a combination of grazing and cropping, and which forms a smaller area of the total property Lot on which it will be based.

Figure 3 outlines the advanced Project footprint that has been now developed following detailed field studies and engagement with the Landowner. The Project footprint has been developed to both respect the feedback of landowners and to include specific observation, recommendations and comment by consultants employed to advance the EIS – including detailed matters such as the width of internal tracks and the design and implementation of Asset Protection zones.

Since the issue of the 2020 SEARs Site has now been investigated for biodiversity impact, land & water impact, traditional owner impact and all other matters that were required to be investigated. Given the long-standing use of the land for cropping and grazing purposes, the Site is all but cleared of vegetation & trees. Allowance has been made for certain trees to be retained which are located adjacent to the Bonshaw Road boundary of the Site – a direct action from investigations and recommendations of the land & water consultants during investigations to date.. It is anticipated that with the Project design that has now been adopted that the construction of the Project will be reasonably straightforward, and leverage the ease of access to the site from Bonshaw Road.

Pictures of the Site are detailed in Attachment 1. These also depict the condition of the land during the 2020 / 2021 drought when the ground conditions were such that agricultural activities (both grazing and cropping) were difficult.

Significant Video footage, including flyovers and drone footage of the Site, Bonshaw Road and the Travelling Stock Route at the dedicated Project YouTube Channel:

The designated Project Website is: www.dumaresqsolarfarm.com

Facility Components

The Facility is currently anticipated to include the following hardware and software:

- Solar PV panels (also known as “Modules”);
- Steel or alloy ground mounts for the Modules;
- Tracking systems that may be single or dual axis tracking – or a combination of both;
- Battery Energy Storage Units (BESS) and associated infrastructure;
- Dedicated & shared Water Storage Tanks located at various parts of the project site;
- Telecommunications equipment, including potential for both fiber optic and/or satellite infrastructure;
- Security lighting and monitoring cameras – likely with infra-red capability;
- Operations optimisation software monitoring sensors which will observe functions from both the solar panels and the BESS units;
- Electrical transformers;
- Electricity power inverters;
- Electrical metering and electrical switchgear;
- Electrical wiring;
- Basic site operations office & storage area which will be adjacent to Bonshaw Road;
- Car parking area including potential water storage infrastructure;
- Internal fencing areas – including a dedicated perimeter fence around the BESS area; and
- Access gates, internal access roads, cleared asset protection zones and security fencing.

The original geotechnical studies on the quality of land were conducted in the post drought period where land conditions were poor – low grass cover and hard land underfoot. Those findings indicated that ground mounted posts would likely be required to be installed via a combination of pile driven & screw driven methodologies depending on the location on site. A final decision on the approach to installation will be made with the eventual Engineering company commissioned to undertake construction of the project.

Figure 1: Dumaresq Solar Farm Project Area

Figure 2: Site area adjacent to Bonshaw Road

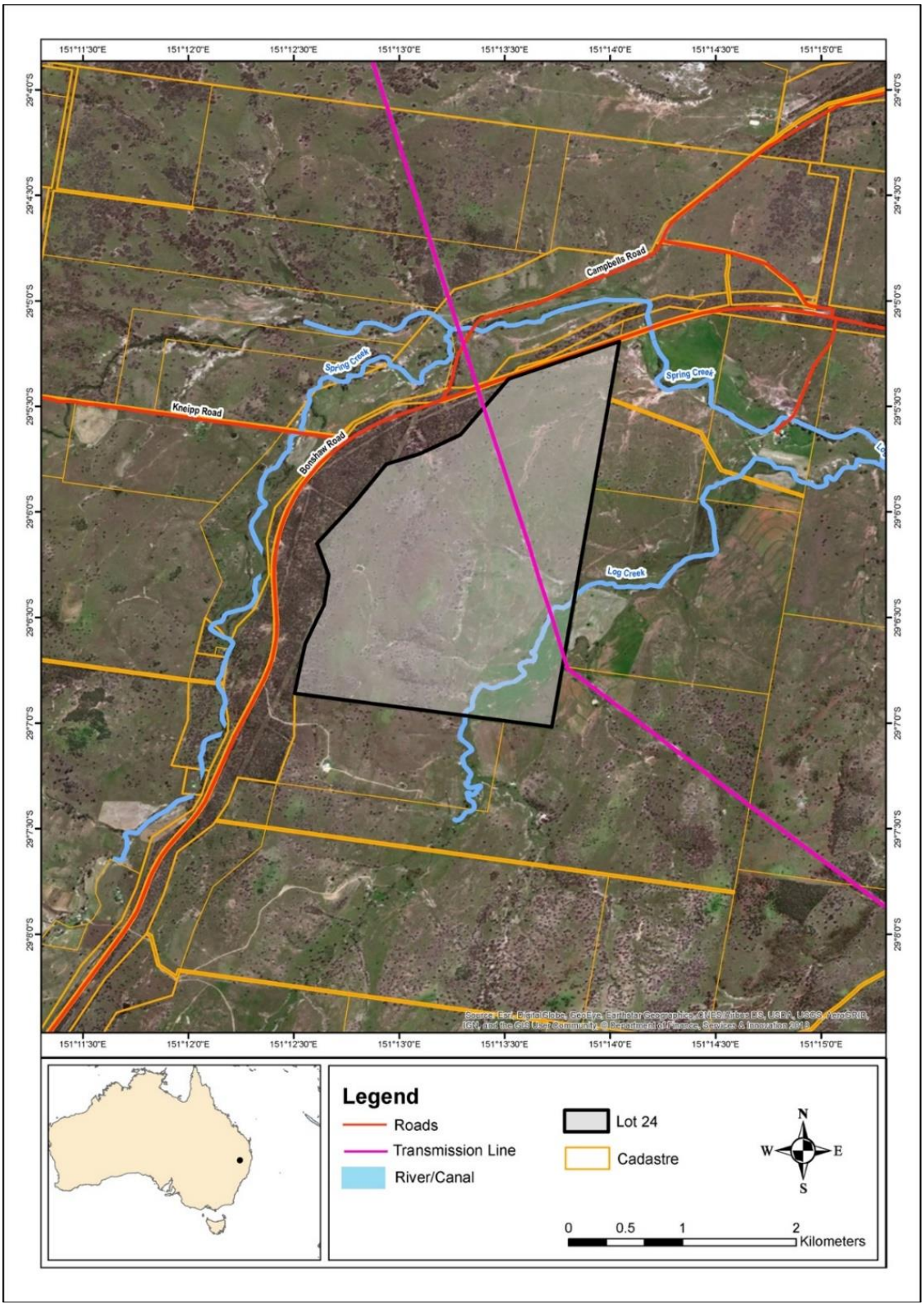
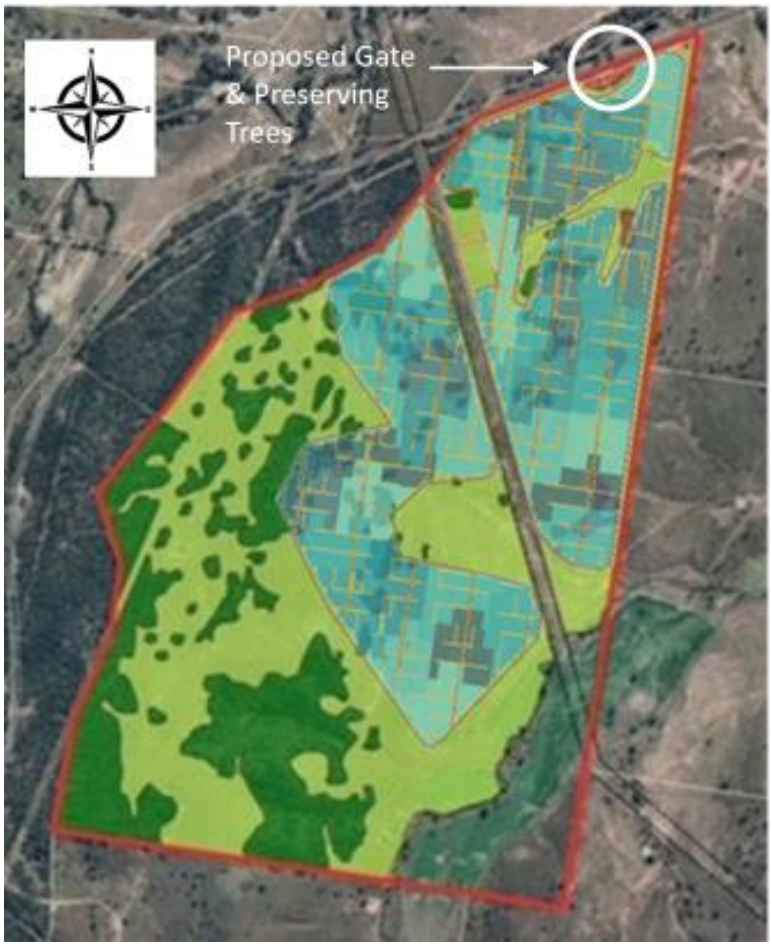


Figure 2 represents the Lot boundaries to the property at Bonshaw Road, including the presence of the Lines in Pink. The advanced project footprint in Figure 3 outlines the specific boundary for the project that will be constructed within the site area envelope.

Figure 3: Advanced Foot Print Of the Dumaresq Solar Farm Including Biodiversity Mapping



Completed biodiversity mapping with the final draft design of the solar farm overlay.

Not only has the Developer mapped the entire LOT, but feedback from all EIS consultants has been considered in advancing the Project design to mitigate any potential impacts.

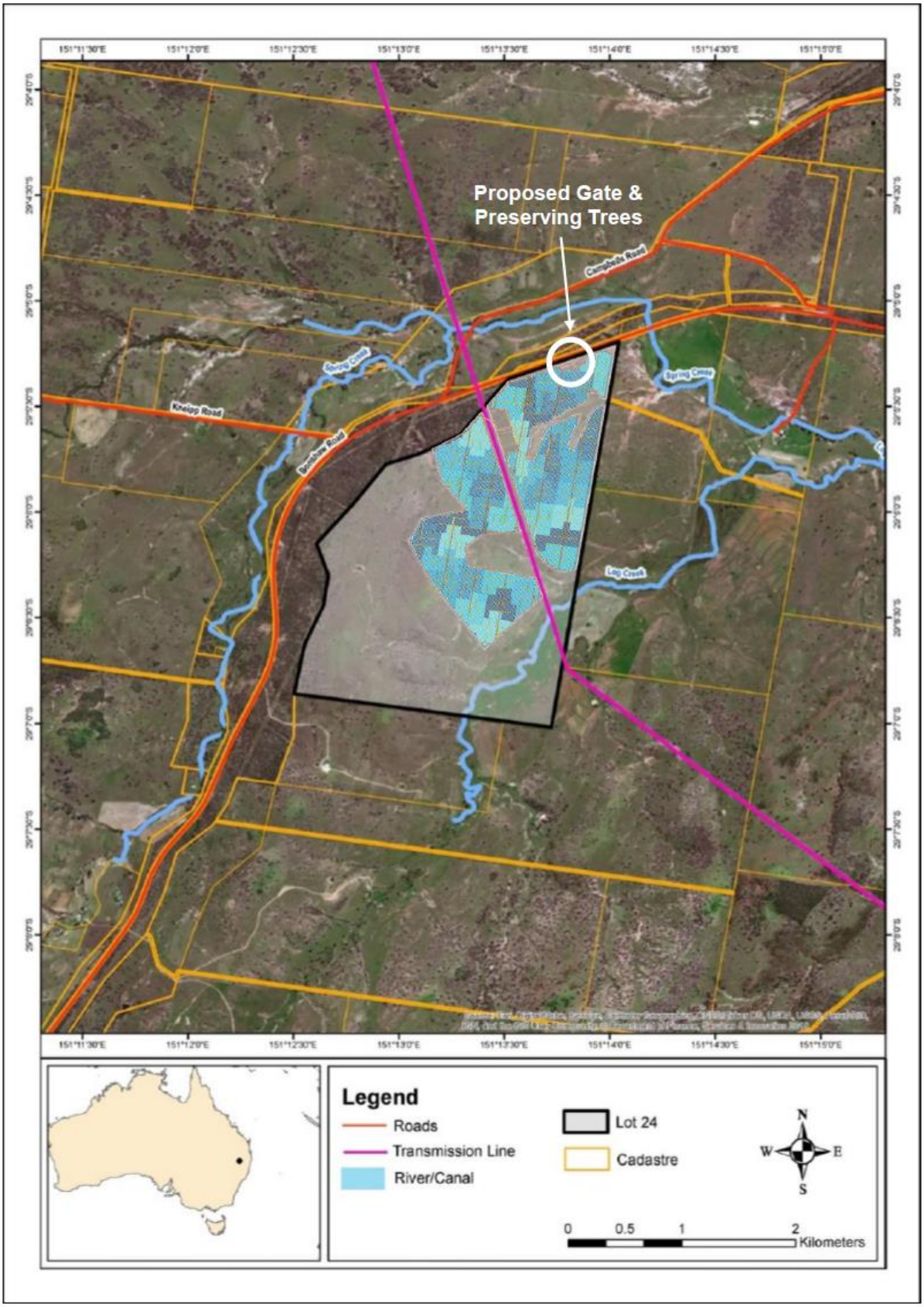
With the assistance of expert engineering firms Navitas Consulting & energySEA the design footprint of the Dumaresq Solar Farm has been advanced to include considerations & recommendations of all EIS consultants and landowner inputs that have flowed from the work conducted under the 2020 SEARs. As such the following diagrams are beyond high level concept.

Figure 4: Advanced Footprint of the Battery Energy Storage System Layout

The **Figure 4** layout design includes consideration of the safe location of BESS units within the Project Site, Switch Infrastructure and the detailed layout of both solar panels and ground mounts in an optimised configuration (including allowing for access paths and Asset Protection Zones).

Figure 5: DSF Solar Farm Layout

Figure 6: New DSF Layout On Land Map Area



Purpose of This Scoping Report

The construction of the Dumaresq Solar Farm will have Capital Investment Value ("CIV") of greater than A$30 Million.

As such the Project is deemed to be a State Significant Development ("SSD") in accordance with clause 20 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development), 2011 and will be assessed under Part 4 of the Environmental Planning and Assessment Act 1979 ("EPAA").

DSF therefore is requesting the issue of the Secretary's Environmental Assessment Requirements ("SEARs") for the preparation of an Environmental Impact Statement ("EIS") to accompany the SSD application.

This Scoping Report has been prepared by DSF to accompany the renewed request for SEARs. All field, desktop and investigative work relating to the 2020 SEARs has ben completed, and will be referred to as a part of the preparation of the EIS submission.

Specifically, this renewed Scoping Report has been prepared to:

- detail the proposed key elements of the Project, including high level comment on the positive results that have been achieved in the extensive work undertaken to date;
- identify the relevant planning provisions;
- identify and assess the potential environmental impacts associated with the Project – again including now high level comment on outcomes of earlier investigations;
- provide justification for the Project compared to alternative options;
- outline the various areas of consultation that are proposed for the fresh SEARs – again including guidance and comment on what has been learned from the extensive works undertaken over the last 2.5 years; and
- to obtain the SEARs which will allow DSF to proceed with the development application process.

The DSF project is highly complementary to the ambitions of both State and Federal Governments in relation to the energy transition to renewable energy. The DSF project will introduce a major battery which is currently designed to adopt the strategy of "Storage as a Transmission Asset'. The construction and operation of this large electricity generating facility is also anticipated to be of both short term and long-term economic benefit to the Inverell Shire Council region – and this has been confirmed in the extensive positive discussions and negotiations between the Developer and the Inverell Shire Council that have taken place to date.

The Developer & Inverell Shire Council have concluded commercial negotiations in relation to the various Community Contribution initiatives that will be committed to on successful development approval of the Project. Those initiatives are a blend of Inverell Shire Council recommendations and direct initiatives for local Bonshaw regional benefit which have been identified as a result of significant and ongoing grass roots community consultation.

The Project Developer

Halo Renewable Energy ("Halo") is the developer ("Developer") of the Dumaresq Solar Farm renewable energy project, and has been working on the project since its origination as a renewable development in 2019. DSF is a special purpose vehicle incorporated specifically for this Project and all work that has been completed to date has been completed within this company.

Halo's strategic purpose is to leverage over 20 years of experience in the engineering and renewable energy sectors to:

1. pursue renewable energy projects in both Australia and abroad; and
2. develop complimentary services and technologies to support the developed projects long term. These services and technologies span simple maintenance styled activities for the sustainable operation of renewable projects through to more complex areas of activity including the recycling of battery storage systems.

Halo has been able to draw on the extensive resources of the award-winning boutique investment banking and strategic advisory firm LCC Asia Pacific ("LCC") [www.lccasiapacific.com] through a collaborative venture styled contractual arrangement to pursue both DSF and other renewable energy and complimentary specialist waste projects (including existing lithium battery recycling technology with the recycling of solar panels also now being explored for commercial feasibility).

LCC's current and historic clients include both Australian and International specialist High Voltage Electrical Engineering Firms, Civil Contractors, Generalist Electrical Contractors, Electricity Network Operators and various energy sector service and hardware players.

There is also extensive interaction with lawyers, investors and financiers that will be required to move each of Halo's solar projects from concept through approval and into construction. Numerous discussions with such parties have taken place, and continue to take place, from the time of issue of the original 2020 SEARs.

Halo Renewable Energy has directed DSF to become a signatory to the United Nations Global Compact, which reinforces the commitment to drive an agenda of corporate sustainability for a better world.

To learn more on the UNGC visit: www.unglobalcompact.org

LCC's Founder is also the Founder & Managing Director of Halo, and has been the driving force of the Project on a day to day basis.

Website & Social Media Content

The Developer has kept the website and other social media accounts (particularly YouTube) updated with various content – which forms a part of the overall community engagement process

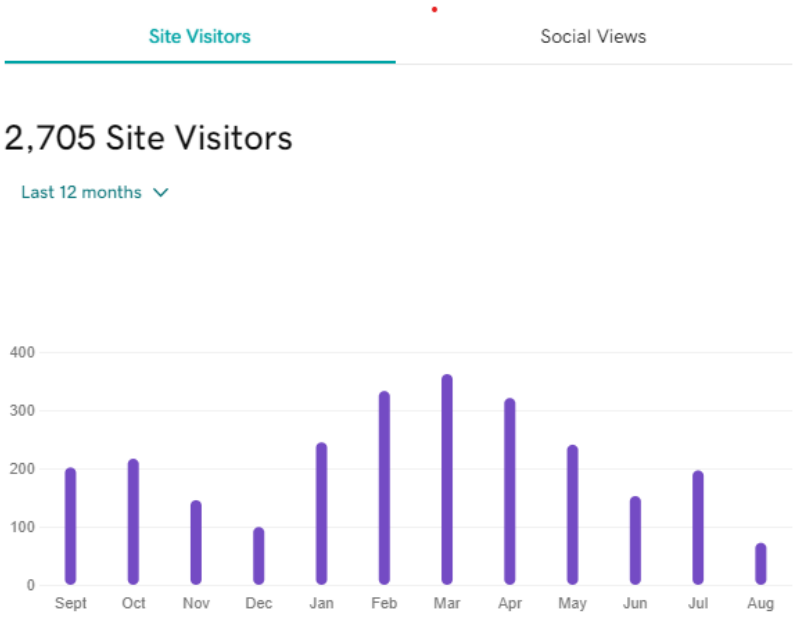
The website: www.dumaresqsolarfarm.com contains imagery of the project site and the dedicated YouTube Channel has significant vision of the site including:

- flyovers of the proposed project area;
- content from various points of Bonshaw Road;
- content from the Bruxner Highway T intersection; and
- content from the area of Bonshaw Road adjacent to the Travelling Stock Route – illustrating the thickness and magnitude of that area.

When reviewed in parallel with the reading of this refreshed Scoping Report a deeper understanding of both the benefits of the project site will be gained.

https://www.youtube.com/@dumaresqsolarfarm

Figure 7: Website Traffic Data



The project website is hosted on a GoDaddy server which allows the basic reporting of website traffic. As at 15 August 2023 for the previous 12 months the website had attracted 2,705 Site Visitors.

Strategic Context

Strategic Justification

Since the 2020 SEARs the holistic drivers to strategic justification remain constant – but the urgency has increased. Driving that increasing urgency have been a raft of events including:

- clear evidence that the energy transition in Australia has moved at a slower pace than anticipated – requiring the ongoing requirement of base load power from aged coal fired generator assets such as Eraring which were scheduled for decommissioning in the near term
- increasing problems associated with the heating of earth's environment which in the last week has been classified by the United Nations as entering an era of *boiling* and not just warming
- increasing energy prices in Australia a direct result of energy availability and consumer demand

The fundamental need for large scale renewable energy projects such as the Dumaresq Solar Farm is real and it is immediate. As important given the current crisis in the cost of energy is the inclusion of the utility scale BESS.

National

International Paris Agreement on Reducing Greenhouse Gas Emissions

Under the International Paris Agreement (Paris Agreement, 2015), Australia has committed to reducing greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030. The Australian Government's Department of Energy and Environment website notes *"Australia is taking a strong, credible and responsible commitment to the Paris climate change conference."*

To deliver on this commitment, the Australian Renewable Energy Target ("RET") was formed. The proposed project is consistent with the aims of the International Paris Agreement and will assist Australia in reaching this commitment.

Australian Renewable Energy Target

The RET is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources. It is a part of what has been defined as Australia's "Direct Action" strategy.

As a part of this Direct Action the Australian government is focused on the development of both small-scale renewable energy solutions (*for example in households and businesses)* through to the development of larger scale clean energy projects – including importantly solar PV generators.

As such the DSF project is in line with the Australian Federal Government objectives and strategic ambitions.

State

NSW Renewable Energy Action Plan

In September 2013, the NSW Government released the NSW Renewable Energy Action Plan to guide and co-ordinate NSW's renewable energy development. Since the change of Government in 2023 the Minns Labor Government continues to recognize and prioritise the shift to a clean energy future.

The core strategy was to work closely with NSW communities and the renewable energy industry to increase clean energy generation in NSW. Its aim has been to both assist in meeting growing energy demand and improve energy security for NSW in the context of the regulatory framework for the National Electricity Market.

The Completion Report for this flagship initial project was handed down in December 2018, and this demonstrated that the core strategic objectives from 2013 had on the whole been delivered. That report notes at the conclusion of the introductory remarks by the then Minister for Energy & Utilities:

"The completion of the Renewable Energy Action Plan is an important step but the beginning of many. As we move forward, renewable energy has a critical role to play as part of a diverse energy mix that will ensure affordable, reliable energy supply for NSW households & businesses."

NSW Climate Change Policy Framework

The NSW Climate Change Policy Framework *(NSW Climate Change Policy Framework, 2016)* aims to maximise the economic, social and environmental wellbeing of NSW in the context of a changing climate and current and emerging international and national policy setting and action to address climate change. The long-term objects are to achieve net-zero emission by 2050 and to ensure NSW is more resilient to a changing climate. The Dumaresq Solar Farm will generate approximately 500 GWh of renewable energy, helping NSW to achieve net-zero emissions.

Local

New England North West Regional Plan 2036

The New England North West Regional Plan 2036 provides a 20-year strategic plan for the future growth and development of the region.

The Plan identifies the Region's potential to be a leader in renewable energy, specifically solar, stating it is the second highest solar penetration region in NSW. The employment and investment benefits of large solar and wind developments are also acknowledged.

The last point of the Plan under the Inverell LGA "Narrative" notes as a priority to "*identify and promote wind, solar and other renewable energy production opportunities*".

Since the 2020 SEARs the Developer has engaged in consistent and extensive conversations with the Inverell Shire Council – which have been both positive and conclusive as to the need for renewable energy projects such as Dumaresq Solar Farm.

The DSF proposal is consistent with the Plan and in particular the overriding objective of continuing to develop "*strong infrastructure and transport networks for a connected future*." The extensive positive dialogue with Inverell Shire Council has also allowed progressive feedback, recommendations & observations to be included in the Project framework.

Energy Market

In July 2018, the Australian Energy Market Operator ("AEMO") released the Integrated System Plan (AEMO, 2018) ("ISP"), and this was complemented by the release of the 2020 Integrated System Plan ("2020 Draft Plan") on 12 December 2019 and the 2022 Integrated Systems Plan on 30 June 2022 ("2022 Draft Plan").

Despite an anticipated ongoing growth in population the National Energy Market is projected to have energy demand remain flat. This estimate reflects the expectation of continued rotation from de-centralised energy generation to decentralized generation – including the penetration of rooftop solar on houses and businesses, advancing technologies including small scale battery storage and the development of "micro grids" and other generation strategies.

The 2022 Draft Plan also highlights the growing complexity and uncertainty of managing the National Energy Market – in particular given "*technological evolution, policy choices and economic development, to name but a few*".

Both the 2018 Plan and the 2020 Draft Plan have as a backdrop the gradual reduction in Australia's coal fired power station fleet – but the commercial reality is that the rotation away from coal is taking longer than anticipated due to the delays in the approval and construction of Renewable Energy projects.

Given the environmental requirements for the rotation away from fossil fuel based energy generation, new forms of electricity generation are needed to ensure energy security for Australian households, businesses and governments.

The Dumaresq Solar Farm will benefit the network by introducing substantial clean energy to the National Energy Market.

Alternative Sites Considered

Search For A Site

The 2020 SEARs commented on the actions undertaken in the search for a suitable site for a large scale renewable project. The extensive investigations that have transpired since that time have been positive in reinforcing the suitability for the Bonshaw Road site being ideal.

The search for a suitable site to locate a large-scale solar PV and associated BESS project on was commenced in 2017. Many sites, including in the New England region, have been considered and either been found after initial investigation to be unsuitable / marginal or alternatively no agreement could be achieved with the relevant landowner(s). Other projects being considered by the Developer include the approach of acquiring land vs leasing arrangements.

This work has continued since the 2020 SEARs, with a number of potential sites examined and diligence conducted. The remote location of the DSF Project, combined with access to a major road, presence of Transmission Lines and on the whole a highly attractive land area continue to justify the prioritisation of this location for a flagship renewable energy project.

Factors Considered

In determining the original feasibility of the chosen location for the Project many factors have been considered – ranging from the attractiveness of solar resource, through to economic considerations including the feasibility of actually completing a large-scale project such as this in a timely and cost-effective fashion. Also, important factors such as anticipated community and local government support have been factored in.

- Against these "project filters" the Site was identified due to a number of factors meeting these criteria including:
- Potential for direct grid connection into the Dumaresq to Bulli Creek 330kV transmission line which intersects the Site – minimising the requirement to seek easements / concessions from adjoining landowners;
- supportive landowners and a commercially acceptable landowner agreement;
- suitable planning context, including minimal clearing of trees and sensitive flaura species due to the existing Site characteristics;
- alternate commercial benefit for the landowner from marginal agricultural land has continued to suffer from low rainfall periods;;
- specific attributes of that land including low bush fire and flooding risk, level topography for effective construction and anticipated low environmental impact *(as a result of extensive field studies conducted by Biodiversity Australia*);
- very limited direct impact on neighbours/receptors (*noise and visual*) due to the sparse population in this part of the New England region and the specific topography of the Site vs location of those receptors (*extensive studies undertaken & concluded*);
- reasonable distance from town centres (approximately 10 km south of Bonshaw and 100 km north of Inverell); and
- access to a regional road network, including direct to Bonshaw Road.

At the 2020 SEARs it was believed that the Site represents a "high opportunity, low impact" location. The extensive work that has been undertaken since the 2020 SEARs has confirmed the fantastic opportunity that the DSF location represents.

"No Project" Alternative

Failing to pursue the Project would result in the loss of numerous opportunities including the loss of:

- A renewable energy generator which both delivers clean energy and allows Australia to progress towards clean energy targets;
- large scale Battery Energy Storage System which is aligned with National and State strategies to introduce such infrastructure as a critical alternative to the existing coal fired generator fleet;
- alignment with Australia's strategic objectives in lowering the CO2 footprint from energy generation activities;
- delivering a cleaner environment for current and future Australian's; and
- considerable economic opportunities for the New England Region – including for short term employment and supply of goods and long-term commercial opportunity. The importance of those opportunities have been highlighted in the discussion and negotiations with Inverell Shire Council – and the direct feedback the Developer has received from a range of stakeholders – ranging from local community members through to Councilors directly.

As the extensive investigations since the 2020 SEARs have not identified any specific "high risk" environmental issues, the benefits of developing and operating the Dumaresq Solar Farm are considered to, far outweigh any potential low level impacts – which would be commercially identical with other solar farm projects both operating and approved but under development (by Government).

The development of the Dumaresq Solar Farm is also complimentary to an adjacent approved solar project – Bonshaw Solar Farm. From discussions with Inverell Shire Council it is clear that there is a local government ambition for suitable projects to be developed which provide opportunity for the region whilst maintaining high standards of community & environmental compliance.

Project Description

Location of the Site & Key Road Network features

The proposed Dumaresq Solar Farm is to be located in the Inverell Local Government Area ("LGA") approximately 10 km West/Southwest of Bonshaw, 35 km north of Ashford and 100 km north of Inverell. The Project is to be constructed across approximately 205 ha with elevations on the Site ranging from 334 m to 364 m Australian Height Datum ("AHD"). The advanced site design has been completed considering the specific features of Site.

Cadastre details ("Lot") involved in the Project are Lot 24 of DP 750061.

The landholder of the Site has executed the required legal documentation, and have been paid significant commercial fees, which will allow the Developer to proceed with the Project (*the Project is still subject to approvals, financing, etc.)*.

No subdivision of land is proposed on the Lot as the contractual arrangement with the landowner is to allow access to an agreed footprint within the entire Lot. Should it be required, however, such planning amendment will be addressed within the EIS and would then be the subject of further consultation with the NSW Department of Planning and Environment ("DP&E") and Inverell Shire Council. Since the advancing of activity from the 2020 SEARs the issue has not been raised by any agency.

Proposed access to the Site will be via Bonshaw Road at a point where an existing gate structure, that has been used for agricultural purposes for decades, exists.

The existing Bonshaw Road gate has been a key access point for all activity in investigation for EIS consultants under the 2020 SEARs accessing the Site, which itself has been useful in ensuring that the future expanded access point will be suitable for vehicle activity both during construction and maintenance phases of the Project. Bonshaw Road is a well trafficked regional road which extends from the town of Ashford in the south to joining the Bruxner Highway in the north.

Heavy road transport is a common vehicle movement along Bonshaw Road (including Bruxner Highway & associated Bridges in the area) given its categorisation under both Federal & NSW Government Schemes for the movement of heavy commercial products – including under the NSW Loading Livestock Scheme (NSWLLS approved roads and bridges).

Extensive Road & Traffic Studies have already been completed, including the investigation of various routes to site from either the seaports of Brisbane or Newcastle.

Investigations in relation to the actual site access / safe turn in point at Bonshaw Road has had a recommendation (from expert traffic consultants) of a slowdown lane to be constructed in the current area which exists between the Bonshaw Road surface and the access gate to the Project site (*left side of picture*)

Comment on Site

The Site is located in a sparsely populated rural region on land that has had both cultivated and herd based agricultural activities undertaken on it for decades. As with much land in the rural NSW the Site suffered during drought conditions all but ceasing agricultural production activities. The Site comprises large, fenced paddocks and as such the land has been almost completely cleared of vegetation and trees.

Importantly, the TransGrid 330 kV Interconnector splits the Site, and this key infrastructure feature has been considered in all work concluded to date (including easements, asset protection zones and project optimized footprint). The Site is also a short distance from the Dumaresq Switchyard also operated by Transgrid.

The proposed development footprint has been estimated to cover the area outlined in Figure 3. This design has advanced from the 2020 SEARs and has had the benefit of multiple streams of activity, including on site survey, extensive in field biodiversity, land & water studies and negotiation with the landowner on optimal footprint to meet project needs.

The design has also had the benefit of specialist solar farm engineering design teams who have considered an extensive scope of issues at arriving at the refined design – including biodiversity & impact on receptors (if any)

Due to the characteristics of the Site (*including the fact 330kV Transmission Lines traverse the property)* it is anticipated that little significant vegetation will need to be removed as a part of the development process and the biodiversity impact will be minimal. It is also anticipated that the significant grasses (established in completed biodiversity field studies as being predominantly species introduced by landowners to generate seed for cattle feedstock) will continue to grow following the construction period – and will require ongoing maintenance. Discussions with consultants and desktop research from other projects also indicates the potential for land improvement given habitat can grow in the shade of the solar panel structures.

Any vegetation that is required to be removed has been identified and will be outlined in the EIS, but at time of submission it is anticipated to be minimal.

Site Locality

DSF is to be located within the Inverell Shire Council Local Government Area. The nearest townships to the Site are those of Ashford (*652 population as at 2016 Census*) and Bonshaw (*133 population as at 2016 Census*).

The nearest regional towns are those of Tenterfield (*4,066 population as at 2016 Census*) and Inverell (*11,660 population as at 2016 Census*).

The Inverell and Tenterfield greater regions have higher populations. Local community engagement since the 2020 SEARs has identified considerable concern on the long-term opportunities for rural communities, reflecting on the commercial importance of Renewable Energy Projects to inject fresh opportunity.

As a part of the Project's strategic development DSF intends to encourage local participation in the Project through both labour and product supply, and these discussions have been a feature of the dialogue between the Project Developer and Inverell Shire Council.

DSF has already commenced the process of engagement with local communities and business associations to better understand local capabilities and how those can be leveraged as a part of the Project – and those discussions and research will continue as a part of overall business planning to compliment the Site Locality.

An example of this is the collaborative approach to potential regional community initiatives such as the engineering of specialist small scale fire response units. This has been identified via community consultation as a specific need for landowners.

Project Design

The Project will involve the construction, operation and maintenance of a solar PV generation facility, BESS and associated infrastructure with a capacity of not more than 190 MW and an accompanying Battery Energy Storage System. The actual footprint of the development is approximately 205 ha and has been refined following extensive field & design work, feedback from biodiversity, visual impact and land consultants and interaction with the landowner.

Additional refinement of design will continue as the Project moves into its construction phase.

The Project will likely include (as with other typical solar farm developments):

- A network of PV modules likely to be mounted on a combination of single and dual axis trackers. Given the investigations in relation to the Site to date it is anticipated that areas of the property may be more suited to one technology rather than the other;
- a separated (*on Site)* BESS with a maximum anticipated capacity of 190 MW & 4 hours of storage. This has been now designed to be a part of the project site that is near to Bonshaw Road which will both provide a high point in relation to topography on site and additionally mean that hardware is moved a minimum distance from the proposed Bonshaw Road entry gate;
- a site office, parking, laydown and storage areas which will be adjacent to Bonshaw Road;
- various internal access tracks spanning out from Bonshaw Road. These have been considered and designed allowing for both best practice in terms of width of access roads and also in places to allow for Asset Protection Zone extension;
- underground or overhead cabling for connection between arrays, inverters and transformers. Again it is now likely that there will be a combination of engineering methodologies adopted;;
- a number of discrete perimeter security fencing structures – including the separate fencing of the BESS and Switch infrastructure;
- telecommunications infrastructure, supporting technology & connections;
- various sensors and cameras for both monitoring of the day to day performance of the facility and data collection; and
- two grid connection options to the 330 kV TransGrid Transmission Lines that cross the site.

DSF has commenced the grid connection enquiry process with TransGrid to connect to the 330kv Dumaresq to Bulli Creek Transmission Line. This is a key piece of Infrastructure with a $236 million upgrade completed in June 2022 which included upgrading the Dumaresq switch as an overall part of the strategy to ensure quality and reliability of electricity supply

The location within the Site of the Modules, cabling, BESS, substation and switchyard infrastructure has been advanced by the DSF engineering consulting team and will form a part of the next phase of detailed consultation with TransGrid during the finalisation of the EIS.

It is anticipated that the BESS will be installed on the Site to provide a large scale energy resource that will be modelled on the Storage As A Transmission Asset strategy. This will ensure a longer electricity discharge rate which results in greater certainty of useful energy contribution for the community over a longer period of time.

The specific technology, MW rated capacity and MWh of storage for the proposed BESS will be determined during the detailed design stage of the Project. Discussions with various OEMs have commenced – but the Developer is also aware of rapidly changing technology which impacts the timing of any decision and additionally the timetable for supply of equipment (which is still recovering from long delays in the post COVID world combined with heavy European demand for equipment).

For purposes of this Scoping Report, it is detailed as being a maximum of 190 MW & 4 hours of storage, but the final size will be determined by both commercial and financial considerations in conjunction with government policy given the current focus on ensuring reliability of renewable energy & grid stability.

The BESS will be located in a secure compound on the Site which will include its own security monitoring technology, cameras and sensors. That compound area has also been considered with detailed Hazard Risk Assessment consultants – Mendham Consultants

Core Project Technology

As a part of the development of the Project a number of critical decisions need to be made in relation to technology of hardware and software that will be adopted. Since the 2020 SEARs extensive investigation on technology that will both optimise the performance of the generator and also allow efficiency in monitoring has taken place. The adoption of additional technology may not only result in a high performing renewable energy project but also will ensure a highly efficient operating state is maintained.

Although significant progress has been made since the 2020 SEARs, investigations and considerations continue in relation to:

1. Solar Modules, the size and characteristics (*including potential for bifacial*);
2. Mounting Technology;
3. Hazard Mitigation Technology;
4. Battery Energy Storage, size, technology (*including potential for hydrogen or various chemical engineering based solutions); and*
5. Optimisation Software *(including for short term solar forecasting)*.

A challenge for all developments is the time at which a final decision on components needs to be made against rapidly changing technology. The COVID period has shown, however, that supply chain dislocation indeed can disrupt the availability of hardware which when combined with the lower Australian Dollar over the last 2 years results in potential cost increases for the capital coast of the project. For this reason DSF is also considering partnering with various OEMs in a number of alternate approaches to achieve the most effecting capital cost for project construction.

DSF is undertaking research into the rapid developments in technology, and these will be considered with detailed engineering for engagement with TransGrid in addition to the development of the EIS.

Anticipated Capital Investment

Based on the Project's initial design and costs associated with comparable large-scale solar photovoltaics and associated BESS the estimated gross capital expenditure cost of the proposal will be approximately A$250m to $270m. In the current business conditions it is a difficult exercise to establish a specific cost at any time – with key factors contributing to uncertainty including equipment cost, timing of availability (including paying a premium in cost for equipment to be available earlier) and the high volatility of the Australian dollar against major global currencies – including the Yen, USD and Euro.

This is an initial estimate only and will be subject to a number of factors including the ability to acquire both PV Modules and BESS on acceptable terms, in combination with the engagement of an experienced EPC contractor to execute the construction of the Project on acceptable contractual terms. As such the current estimated range may increase or decrease – dependent on final design and technical configuration of the Project.

A more advanced budget will be formulated as a part of the EIS, and will be independently reviewed by a suitably qualified professional in line with the requirements of the 2020 SEARs that we anticipate will be replicated in any fresh SEARs.

Project Lifecycle & Timeframe

As with all projects DSF will have four key phases being Planning, Construction, Operation & Decommissioning. Key elements of those phases include:

- Detailed engineering design and technical investigations with TransGrid, in order to deliver a robust & sustainable electricity generator;
- site preparation involving planning & grading of access road, construction of security fencing technology, various earthworks, location of office buildings & storage equipment;
- location and construction of a laydown area for the BESS and associated infrastructure;
- construction of supporting structures, cables, PV modules, substations and switchyard;
- connection to the grid and monitoring system setup;
- commissioning operation, including phase by phase energising of the Project;
- a systematic maintenance programme to ensure highest levels of electricity productivity are maintained across the operational life; and
- decommissioning at the end of the operational life, involving the removal of all above ground infrastructure and returning the site to its existing land capability.

Construction Phase

The Site preparation and Project construction is expected to take approximately 9-12 months once it is commenced. The actual Site design will be advanced as a part of the EIS, and will include considering issues such as:

- Optimal location of the Inverters, Transformers and BESS with reference to the Lines;
- design and layout of the Modules in order to maximise unit collection efficiency across a 365 day cycle; and
- any optimal tracker system that would enhance the energy collection abilities of the Modules.

Construction & installation activities will include the use of light vehicles, water trucks, trenching equipment and potentially pile drivers *(which will be determined following geotechnical work*). It is anticipated that up to 150 individuals will be employed to build the Facility, and DSF will be encouraging local participation of individuals and businesses in order to keep capital in the regional community.

The agreement with the landowner is that the DSF will operate for an initial lease term of 20 years, with options to extend that initial term out to a maximum term of 40 years (*multiple additional options which cumulatively add another 20 years*) and significant fees have paid for this contractual right – in addition to other payments made. Having experienced significant project delays during the COVID period (due to a range of reasons) the ambitions of getting the Project to construction phase is 'as soon as practicable'. The extensive work done since the issue of the 2020 SEARs has been extremely useful in terms of the understanding of Site and the execution of the project as a whole. The Developer hopes that this depth of study will translate into an efficient project development timetable.

Grid Connection Studies & Intending Participant Registration

As the Project is intended to connect to the Dumaresq – Bulli Creek 330kV Transmission Lines, detailed technical studies need to be undertaken in collaboration with TransGrid and the Australian Energy Market Operator.

DSF obtained a Preliminary Technical Advice from TransGrid on 22 January 2020, and has also received a response to the Connection Enquiry from TransGrid.

Since the 2020 SEARs the Project has also been registered with the Australian Energy Market Operator as an 'Intending Participant' as at 1 October 2021 with the Registration Application ID : INT0005219

Operational Phase

Once the commissioning of the Facility has taken place, the Project will move into an Operational Phase.

Noise from the Site across the Operational Phase is anticipated to be minimal and consistent with background noise in this remote rural setting combined with the traffic noise from land transport vehicles regularly using Bonshaw Road and the noise produced from the existing Transmission Lines. It is interesting to note that the existing High Voltage Transmission Lines are reported by the landowner as being themselves 'noisy' from time to time – in particular during thunderstorm activity.

The Modules at the Site are designed to operate during daylight hours, 7 days a week and 365 days per year, and electricity generated will be both transmitted to the Lines and stored in the onsite BESS for subsequent discharge.

The Facility will be remote monitored and as such no permanent employees will be located at Site, although the Site is being designed with various storage units to accommodate the inventory of key spare units (solar panels, etc.). It is anticipated that between 3 and 7 individuals will be employed off site for various routine maintenance functions as well as for emergency situations should they arise. That exact number of employees will be influenced by technology advances and investigations that will be undertaken ahead of the Operational Phase complimented by certain Maintenance functions (such as vegetation clearing / care) which cannot be replaced by technology.

Operational activities generally range from low level maintenance to more technical requirements, including:

- Washing / cleaning the solar modules regularly to maintain high levels of electricity output;
- vegetation management including mowing of grasses around the solar modules;
- maintenance of security fencing and associated monitoring equipment; and
- repair or replacement of a range of items from fencing to technical infrastructure as required.

Maintenance activities will potentially contribute to local noise levels, but these again should be minimal and in line with other rural operational activities that are undertaken in area (*light vehicle movements, low level maintenance activities*). The regular traffic of B Double Rated Truck Transport on Bonshaw Road is another source of significant local noise that will remain.

The permanent operational infrastructure on Site will be minimal, with likely a small demountable central building, no on-site amenities and a number of shipping containers that will be used as storage units for maintenance equipment and spare parts. Importantly some maintenance functions, in particular the cleaning of Solar Panels, needs to be conducted in early morning or early evening hours

to avoid the introduction of cold water (example) onto hot panels during peak heat periods – such an approach will result in damaged / cracked panels.

Lighting required on the Facility will likely be sensor activated and calibrated to not react to small animals but rather to alert to non authorised entry during nighttime hours. The indicative position of these items will be identified on the EIS, but it is also likely that practically the final location will be a matter of some trial and error in understanding the behaviors of local species.

The Site will be surrounded by a chain mesh security fence which will be approximately 2.5 metres in height and with a secure entrance gate adjacent to Bonshaw Road. Complimenting this internally will be Asset Protection Zones at various locations, and in particular on the Travelling Stock Route boundary on the Bonshaw Road side of the property.

Other maintenance gates will likely be designed and included to allow convenient access to the outer perimeter of the Facility at various points. These matters have been considered as a part of the detailed investigation to date and will be finalised in the EIS submission.

Predator Proof Fencing

The 2020 Sears considered the inclusion of a form of Predator Proof area for the management & protection of various endangered species. Significant research and discussion with experts and universities has been carried out over the last 2 years – which has uncovered mixed opinion on the cultural and social impact of such contained habitats. One argument is that it is a strategy for wildlife preservation. The other is that it is a form of prison restricting the natural existence of the species in question.

Whilst the Developer's approach to maximising positive social impact continues there is a question on whether the final design will incorporate the previously suggested strategy. This is mentioned for completeness only given its reference in the 2020 SEARs.

Decommissioning

The Site will generate electricity for a period of up to 40 years. At the end of this period the infrastructure will be either updated to allow continued operation or alternatively the Site will have all infrastructure removed and the location returned as close as possible to its original condition.

As a part of the advancing of the 2020 SEARs decommissioning strategies have been considered as an extension of the waste management strategies. This has included understanding the approaches to recycling and repurposing of various components of the Project and in particular both solar panels and battery units.

The Developer also has the advantage of now observing and learning from internationally located early solar energy projects – and how they are approaching the task of recycling.

We are confident that a cost effective strategy will be developed and executed in relation to the decommissioning requirements.

Statutory Context

The key relevant statutory requirements for the project having regard to the EP&A Act, other NSW and Commonwealth legislation, and environmental planning instruments are summarised in this chapter. This chapter has been set out in accordance with the Scoping Report Guidelines and State Significant development – preparing an environmental impact statement Appendix B to the state significant development guidelines (DPIE 2021d) (EIS Guidelines), to cover the following:

- power to grant approval (i.e. approval pathway)
- permissibility
- consistent approvals
- Commonwealth approvals
- approvals not required (pursuant to Section 4.41 of the EP&A Act)
- mandatory matters for consideration.

Detailed consideration of relevant statutory requirements will be provided in the EIS.

Approval	Requirement
Power to grant approval	
EP&A Act	The Environmental Planning and Assessment Act, 1979 ("EP&A Act") and its associated regulations provide the framework for assessing environmental planning & impacts for developments and activities in NSW. The need or otherwise for development consent is set out in in a variety of environmental planning instruments – State Environmental Planning Policies ("SEPPs"), Regional Environmental Plans ("REPs") or Local Environmental Plans ("LEPs").
Planning Systems SEPP	A State Significant Development to which Division 4.7 of the EP&A Act applies is identified in the State and Regional Development SEPP and in declarations made by the Minister for Planning. Dumaresq Solar Farm is considered to be 'State Significant Development' as it is of a project of the type listed in Schedule 1, Item 20 of the State and Regional Development SEPP as it is "electricity generating works" and has a capital investment value of more than A$30 million, as detailed in clause (a) of Item 20. The NSW Minister for Planning is the consent authority for the proposal and a development application is required to be lodged with the NSW Department of Planning and Environment, accompanied by an EIS. Before proceeding to prepare the EIS, all applicants must request SEARs. The request for SEARs is accompanied by a Scoping Report (*this document*) which outlines the location, nature and scale of the proposed project, as well as outlining the preliminary assessment of environmental issues so as

	to identify key issues that require detailed investigation and reporting as a part of the EIS. Once that application for SEARs has been submitted the Department of Planning and Environment consults with relevant public authorities & other stakeholders to obtain input prior to the issuing of SEARs. This process was undertaken by the Developer in the submission of an earlier Scoping Report to obtain the 2020 SEARs. The Department then issues SEARs. An EIS is then prepared to address the SEARs and the form and content requirements set out in Schedule 2 of the Environmental Assessment & Planning Regulation, 2000. The completed EIS (*including supporting specialist & technical reports)* is then submitted to the Department for review before it is publicly exhibited for at least 30 days. During the exhibition period, both the public and various agencies are invited to make submissions and comments. After the exhibition period closes, the Department may request that the proponent respond to issues & concerns raised in the submissions – or to clarify matters that requires additional information.
Permissibility	
State Environmental Planning Policy (Transport and Infrastructure) 2021	Section 2.36(1)(b) of State Environmental Planning Policy (Transport and Infrastructure) 2021 states that RU1 Primary Production is a prescribed non-residential zone. Therefore, development for the purpose of a solar energy system may be carried out within the project area with development consent.
Other approvals	
Overview	Under Section 4.42 of the EP&A Act, the following authorisations cannot be refused if they are necessary for the carrying out of a State Significant Development that is authorised by development consent, and are to be substantially consistent with the consent: • *Fisheries Management Act 1994* – aquaculture permit under Section 144 • Mine Subsidence Compensation Act 1961 – approval under Section 15 • *Mining Act 1992* – a mining lease under this act • *Petroleum (Onshore) Act 1991* – a production lease under Division 5 of Part 3 • Protection of the Environment Operations Act 1997 – an EPL under Chapter 3 of the Act • *Roads Act 1993* – a permit under Section 138 to impact on public roads • *Pipelines Act 1967* – a licence under Section 11 to construct and/or operate a pipeline.

	Not all of these acts have been relevant to the Dumaresq Solar Farm development, and all have been investigated as a part of the 2020 SEARs. For completeness and best practice all searches that formed a body of the 2020 SEARs have been updated to form part of this refreshed Scoping Report. As a part of the EIS process, and for completeness, the relevance of these matters will be also commented on – with all field activities flowing from the 2020 SEARs completed.
Local Environmental Plan	The Project Area is zoned as RU1 Primary Production under the Inverell LEP. Subdivision provisions under the Inverell LEP are not considered relevant to the Project as the entire land area of the Lot on which the Site is to be constructed is subject to an option to lease.
An approval under Section 138 of the NSW Roads Act 1993	The Roads Act, 1993 is administered by the NSW Roads and Maritime Services, local councils or the Department of Industry - Land. Roads and Maritime Services has jurisdiction for classified roads, local councils for non-classified roads and the Department of Industry - Land for road reserves or Crown roads. Under Section 138 of the *Roads Act 1993*, a person must not impact or carry out work on the "road reserve" otherwise than with the consent of the appropriate Roads authority. All work in relation to traffic investigation has been completed, including discussions with Inverell Shire Council and other agencies. Consultants have also concluded investigation and recommendations relating to various access routes to Site from east coast major ports of Brisbane and Newcastle. The only Site specific project works that have been recommended are a widening of Bonshaw Road to allow for vehicle turning into the proposed project site. This recommendation will be confirmed as a part of the final EIS report. General traffic on Bonshaw Road today features extensive heavy vehicle movement. Investigation of the suitability of the proposed entry area has included investigation of the vegetated shoulder region of Bonshaw Road for both Traditional Owner and Biodiversity issues.
Protection of the Environment Operations Act 1997	The Protection of the Environment Operations Act, 1997 ("POEO Act") establishes, amongst other things, the procedures for issuing of licences for environmental protection on aspects such as waste, air, water and noise pollution control. The owner or occupier of premises engaged in scheduled activities is required to hold an environment protection licence ("EPL") and to comply at all times with the conditions of that licence. Schedule 1 of the POEO Act outlines the activities which are considered to be scheduled activities to which an EPL is required to be obtained. Electricity generating works (Clause 17 of Schedule 1) with the capacity to

	generate over 30 Megawatts are identified in Schedule 1 as requiring an EPL. In sub clause 17(1) of Schedule, however, wind and solar power are specifically excluded from the definition of "general electricity works". As Dumaresq Solar Farm will only be generating electricity from solar energy (and associated Battery Energy Storage), it is not anticipated that an EPL will be required to pursue the Project.
Commonwealth approvals	
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The *Environment Protection and Biodiversity Conservation Act, 1999* ("EPBC Act") is administered by the Commonwealth Department of the Environment and Energy ("DoEE"). Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a Matter of National Environmental Significance ("MNES") or Commonwealth land, then the action may not be undertaken without prior approval of the Minster. The EPBC Act specifically identifies the following eight MNES: • World Heritage properties; • National heritage places; • Ramsar wetlands of international significance; • threatened species and ecological communities; • migratory species; • Commonwealth marine areas; • the Great Barrier Reef Marine Park; • nuclear actions (including uranium mining) and • a water resource, in relation to coal seam gas development and large coal mining development. When a party proposes to take an action, which may be a 'controlled action' under the EPBC Act, they must refer the proposal to the DoEE for a determination on that action. A search of the *Commonwealth Protected Matters Search Tool* indicates that there are no World Heritage or National Heritage places that are located on the Site – which is consistent with the property's extensive use for agricultural purposes and the ongoing presence of the 330kV Transmission Lines. Search results listed three Wetlands of International Importance that are either known to occur or have potential to occur in the area, however these are located more than 1,000 kilometres from the Site and are therefore not considered to be impacted by the Project.

Despite the Site currently having sparse vegetation and tree coverage, initial desk top research suggests a potential referral may be required if certain threatened vegetations and species are in fact found within the Site area.

The presence of endangered flora & fauna has now been studied in detail as a part of extensive field work that has been completed as a part of the EIS. The Developer believes that a positive submission in the EIS on the matter of biodiversity.

Picture. Completed mapping of flaura species across entire LOT (not just smaller Project footprint) of Dumaresq Solar Farm

Source: Biodiversity Australia

The Developer believes that a positive submission in the EIS on the matter of biodiversity with field works confirming low levels of disturbance of flaura and no presence of endangered species.

Certain factors have been taken into account when the final design has been progressed including the adjustment of Project boundaries, the avoidance of certain areas and the preservation of a series of mature trees

Native Title Act 1993

Native title is the recognition by Australian law that Indigenous people had a system of law and ownership of their lands before European settlement. Where that traditional connection to land and waters has been maintained and where government acts have not removed those rights of connection, the potential for a granting of native title exists.

Importantly the registration of freehold land entitlements prima facie extinguishes any rights to a Native Title Claim being raised.

Searches that have been conducted as a part of the preparation of this Scoping Report are as follows:

- Native Title Register (Inverell Shire Council) (Attachment 2)
- Native Title Register (Tenterfield Shire Council) (**No Results**)
- Aboriginal Places & NSW State Heritage Register (Attachment 5)
- Register of Native Title Claims (**Attachment** 2)

The landowner's property may in fact fall just inside the boundary of the Gomeroi People Claim, but in discussion with the landowner no contact has ever been made on the issue. The property on which DSF is proposed to be constructed is held Freehold.

Since the 2020 SEARs all activities in relation to Traditional Owner and Cultural Heritage matters have been completed. This has included detailed

	on site activities including walks on country with Traditional Owner representatives – and subsequent communication with various Traditional Owner nations and individuals. The Developer is appreciating of the time taken by Traditional Owner representatives in assisting with the assessment of the Site. On the project website various images of artefacts are displayed (with Traditional Owner consent) and images of the archaeological field studies also displayed. All Traditional Owner studies have been completed and the specialist consultants continue to keep Traditional Owner stakeholders informed of Project progress.
Approvals not required	
Overview	Section 4.41 of the EP&A Act specifies certain authorisations which are not required for State Significant Development that has been authorised under a development consent. Many of these are not relevant given the physical location of the Site in regional, inland, New South Wales.
NSW Coastal Protection Act 1979	Not relevant due to Site location
NSW Fisheries Management Act 1994	Permit for work or structures within a waterway
NSW Heritage Act 1977	Approval to disturb an item or an excavation permit
NSW National Parks and Wildlife Act 1974	A bushfire safety authority under Section 100B of the Rural Fires Act 1997 will not be required pursuant to Section 4.41 of the EP&A Act. A bushfire assessment in accordance with NSW Rural Fire Service Planning for Bushfire Protection 2019 will be carried out to inform the EIS.
Water Management Act 2000	A water use approval under Section 89, a water management work approval under Section 90 or an activity approval (other than an aquifer interference approval) under Section 91 of the Water Management Act 2000 will not be required pursuant to Section 4.41 of the EP&A Act.
NSW National Parks and Wildlife Act 1974	An Aboriginal heritage impact permit under Section 90
Pre-conditions to exercising the power to grant consent	
No pre-conditions to exercising the power to grant approval have been identified for the project. An EIS will be prepared in accordance with relevant legislative requirements and guidelines.	
Mandatory matters for consideration	
Section 1.3 of the EP&A Act	Objectives of the EP&A Act relevant to the Project are:

	(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources, *(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,* *(c) to promote the orderly and economic use and development of land,* *(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,* *(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),* *(g) to promote good design and amenity of the built environment,* *(j) to provide increased opportunity for community participation in environmental planning and assessment*. These objectives would be considered in the EIS.
Section 4.15 of the EP&A Act	Pursuant to Section 4.15 of the EP&A Act the consent authority must consider the following relevant matters for consideration: • relevant environmental planning instruments for the project including: - State Environmental Planning Policy (Biodiversity and Conservation) 2021 - State Environmental Planning Policy (Resilience and Hazards) 2021 - State Environmental Planning Policy (Transport and Infrastructure) 2021 - Lithgow Local Environmental Plan 2014 (Lithgow LEP) • relevant development control plans • the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality • the suitability of the site for the development • the public interest. The above will all be considered in the EIS.
Biodiversity Conservation Act 2016	The New South Wales Biodiversity Conservation Act, 2016 ("BC Act") came into effect on 25 August 2017 and repealed the Threatened Species Conservation Act 1995 ("TSC Act"). The BC Act established the Biodiversity Offsets Scheme ("BOS"), which provides a number of tools to assist developers and landowners to avoid,

minimise and offset potential impacts on biodiversity which might result from commercial activity (including agricultural).
An area threshold or assessment of significance is used to determine when the BOS will apply to local developments. If the area threshold is met or a significant impact is likely, the BOS is applied and impacts, and offsets must be assessed in accordance with the Biodiversity Assessment Method ("BAM").

The potential impact to threatened species, populations and ecological communities as detailed in the 2020 SEARs (and commented on below) has been extensively investigated and now concluded. Those positive findings will be detailed within the EIS, and have been considered by the REAP on the Project as a part of their independent deliberations.

Crown Lands Act 1989

A Crown Lands approval would potentially be required for any works located on Crown Land, but as the Site is located on a private landholding this Act should not apply.

The only thing that was deemed relevant in the 2020 SEARs was the existence on the Bonshaw Road Boundary of a Travelling Stock Route(TSR) https://www.lls.nsw.gov.au/help-and-advice/growing,-grazing-and-land/travelling-stock-reserves .

This is an independent area of vegetation that is fenced off and was used historically as a resting area for livestock being moved from location to location. Today they also have high value in being discrete areas of vegetation and potential protection of cultural heritage matters (Traditional Owner and/or European).

The TSR today is heavily overgrown with vegetation and provides and extensive screen for the proposed project area from much of Bonshaw Road, including in combination with the topography providing comprehensive screening from Site.

Kneipps Road Bonshaw Road Intersection – TSR blocks project Site

Further to the 2020 SEARs activities have been conducted on the TSR area even though it is not directly within the Project footprint. Those activities have included the consideration of any impact on the TSR by the Project's development.

It is not believed that there will be any impact, and these matters will be detailed within the EIS.

Stakeholder Engagement

Consultation & Notification Activity Undertaken To Date

Extensive community & stakeholder consultation has been completed since the issue of the 2020 SEARs. This has included numerous in region face to face meetings have been undertaken with the following as part of the development of the Project:

- The landowners of Lot 24, DP 750061 who have been consulted with extensively on a variety of matters relating to Project feasibility;
- Various senior members of Inverell Shire Council leadership and planning divisions;
- Senior professionals within the NSW Government Department of Planning & Environment;
- Senior professionals within TransGrid as a part of the Preliminary Technical Advice that was received on 22 January 2020; and
- Specialist electrical engineering firms with knowledge of the transmission lines & infrastructure around the Bonshaw and Dumaresq areas.

These activities have been invaluable in both shaping aspects of this Scoping Report and planning for overall Project advancement.

Other activities that have taken place at the investigative stages of the Project include:

- Establishment of the core project website: www.dumaresqsolarfarm.com in October 2019 and a dedicated community email contact point: community@dumaresqsolarfarm.com
- Connection of a dedicated mobile phone number for this and other Halo energy projects being: 0498 115 054
- Various social media accounts to allow the timely distribution of information and also sharing of images and other news as the Project develops
    - Twitter: www.twitter.com/dumaresqsolar
    - Instagram: www.instagram.com/dumaresqsolar
- The distribution of multiple Project Newsletters to landowners within a (*estimated*) 10 km radius of the Project.
- Extensive media advertising in both Tenterfield and Inverell newspapers.

Ongoing Consultation Activities

A Community Consultation & Engagement Plan ("CCEP") was prepared following the issue of the 2020 SEARs – and actioned. The aim of the CCEP was to ensure an effective ongoing liaison with relevant stakeholders and to those provide stakeholders with opportunities to voice their concern and feedback in relation to the Project.

The CCEP has been an evolving strategic document used to steer the process of communication to ensure that community members are fully aware of the development timetable, the scope of the Project and also importantly opportunities for commercial and social engagement with DSF.

The key stakeholders identified for the Project include those detailed below:

- Government agency stakeholders ranging from the Inverell Shire Council through to NSW Government departments;
- The network owner & operator - TransGrid;
- Local landowners, including those that are closest to the Site;

- Local business groups, including the Inverell Chamber of Commerce; and
- Interest and community groups including importantly the local Aboriginal Land Council and Traditional Owners.

The process has combined best practice approaches to consultation combined with bespoke adjustments to the process where specific issues or concerns require consideration and adaptation.

An important element in the overall consultation process will be a definitive "town hall" style meeting to allow local community to engage face to face with the Developer and understand specific questions that they might have. This will take place prior to the submission of the EIS. Town Hall meetings planned over the 2020 and 2021 period could not be undertaken due to COVID travel restrictions.

Appointment of a REAP

It is also confirmed that the Developer has appointed a REAP in 2022 who has been closely working with the Project team to deliver the EIS.

That REAP is Mr Michael Crammer of Accent Environmental

Detailed Consultation With Community & Publication

As detailed previously in this report the engagement with community has been important since day one. This has included:

- Discussion of the project and presentation of various design options and project strategies with a cross section of stakeholders from landowners through to Government agencies.
- Support of on ground community initiatives such as the Fierce Female Farmers.
- Distribution of Newsletters and Email Updates.
- Extensive discussion and negotiation with Inverell Shire Council on strategies and operational mechanisms to support community initiatives including an executed VPA, which will be administered by Inverell Shire Council, and which includes a series of identified projects and initiatives that are a direct result of consultation.
- Extensive newspaper advertising in various regional publications.
- Maintaining an ongoing update opportunities and news on the Project website.

Clarification of Methods & Results of Local Community Engagement

Local community has been engaged in a cross section of methodologies:

Neighbouring Landowner Briefings – in person by Developer	As the Project is near submission of EIS the consultation process has not been of a pre-cursor requirement that is the requirement of SSD Guidelines. It has been in fact to keep landowners abreast of progress – in no small part as a number of landowners want to explore commercial opportunities as a part of the Construction Phase of the Project. Meetings have been (kindly) hosted at the Landowner's Residence in an informal format that has included the presentation of design concepts as they have evolved and discussion of elements of the Project – ranging from operational questions (glint / glare / noise / commercial opportunity) to the importance of the project as a part of the NSW energy transition. *No specific concerns or issues have been raised by any landowner at the date of issue of this refreshed Scoping Report, nor have any specific*

	questions or concerns been submitted via the Website or Phone Support line. It has also been a useful exercise (which is ongoing) to understand the wider backdrop issues – including landowner dealings & frustrations with various agencies. It is hoped that as the Project advances non Project related issues can be championed for progress given the commercial importance of the Project to the region. An example of those non project related issues that the Developer is exploring is the sealing of the road surface of a part of Campbell Road. The community is well used to the process given the existence of other renewable projects (including Bonshaw Solar Farm) and the meetings have been effective, to the point and encouraging.
Specific Community Engagement Discussions With Neighbouring Landowners – in person by Developer	Independently there have been one on one / group discussions with neighbouring landowners on ways in which the Project can engage and support community on a local basis. These are not high-level exploratory conversations as a precursor to a Scoping Report, but rather have been granular in nature and have resulted in 2 specific Bonshaw local community projects being recommended, which as Developer have both adopted and built into the Heads of Agreement with Inverell Shire Council. Those are: • The sponsorship of the Bonshaw Camp Draft which is a major community initiative with wide ranging positive impact for the Bonshaw region; and • The support of Rural Fire Services activities including the potential construction of small mobile pump/tank units to allow rapid response to bush/grass fire incidents. In the company of local landowners planning sessions have included visits to the Bonshaw Showground (in person by Developer) to discuss the operational requirements to improve facilities in order to reestablish and deliver a successful Camp Draft. Various projects have not been engaged on, specifically where those projects are likely to result in individual (landowner) benefit rather than community wide. Those have included specific requests for the payment of education courses and consultants which primarily relate to land improvement potential given the challenges of ground conditions in the Bonshaw region in general.
Specific Community Engagement – Commercial Opportunity – in person & by email by Developer	Neighbouring landowners and regional landowners have also inquired on commercial opportunity which has also been discussed at length. A neighbouring property, for example, provided construction aggregate for a local tip development, and there is potential for that same landowner to be a supplier to the Project. Similarly, a landowner based in Ashford historically provided sand to the Pindara Dam development that is located east of the town of Ashford. Face to face, phone & email methodologies

	have been implemented to advance an understanding of that landowner's potential to engage commercially. These are 2 examples of the extensive number of commercial discussions that have taken place with neighbouring and local landowners to date.
Newsletters To Neighbouring Properties & Region	The Landowner has been paid a commercial rate to physically deliver newsletters to the immediate neighbours and near neighbours on multiple occasions. Those newsletters are available on the Project website – www.dumaresqsolarfarm.com Those newsletters were dated: • 9th December 2019 • 2nd April 2020 • 3rd May 2021 Following issue of the refreshed SEARs a further detailed newsletter will be produced and circulated to all landowners.

It is also important to note that the near located Bonshaw Solar Farm (SSD 9438) has had a positive determination in relation to it's development. As a part of its definitive EIS submission at Table 5-2 (page 50 of EIS report) the extensive consultation with the local Bonshaw community is outlined which is a relevant consideration under Section 3.5 Community Engagement in the *State Significant Development Guidelines*.

The Developer has also reviewed the *Undertaking Engagement Guidelines for State Significant Projects* as a part of this refreshed Scoping Report and specifically the requirements of *Appendix A, Table 1 Engagement at each phase in the environmental assessment* process. The 2020 SEARs approach to community engagement has been consistent with the guidance under the section "*SEARs are issued and EIS is being prepared*".

Given the delays to this project that have resulted from having to resubmit a new Scoping Report, additional community engagement as a capstone will take place before the submission of the final EIS.

This will include:

- Additional newsletters in a letter box drop to local community and adjoining landowners
- Further face to face meetings with local landowners out of courtesy given delays
- Updates to the project website
- Emails to news subscribers on the website
- A town hall style meeting at likely Bonshaw Public School (ISC suggestion) to present the final project and discuss community matters prior to the submission of the definitive EIS.

Consultation with Inverell Shire Council

Detailed consultation has taken place with Community and Inverell Shire Council on various strategies that might be pursued as a part of community support expected from all renewable energy developers.

It is pleasing to report that a Heads of Agreement has been negotiated and signed with Inverell Shire Council which identifies specific financial commitments that the Project will make following approval of the development.

Those commitments are a combination of recommendations of the Inverell Shire Council (including one priority Legacy Project) and direct input from Project neighbouring landowners as discussed in the last section.

The details of that signed Heads of Agreement, *which is a commitment for a 10 year period*, will be outlined in the EIS.

Additionally, conversation is ongoing with ISC on other opportunities and initiatives that can be adopted to maximise commercial opportunity for small businesses and individuals within the Inverell Shire. This includes specifically the town of Ashford. The activities of the Developer go well beyond precursor to a Scoping Report and ISC issued a Letter of Support which has been provided to the Department dated: 11 May 2023.

Preliminary Assessment of Impacts

Rationale For Approach

As a part of the original overall Project Feasibility, and subsequent advance of the Project against the 2020 SEARs, a combination of activities have been undertaken including desktop searches of various databases, discussions and research in community (*including with the key landowner*), extensive meetings with various relevant authorities and all field studies as prescribed by the 2020 SEARs.

As a part of community engagement and awareness extensive advertising of the Project has also appeared in both The Inverell Times and the Tenterfield Star. Following issue of the new SEARs additional advertisements will be placed in each of these newspapers, and on the recommendation of ISC, also within the Macintyre Gazette (local regional newspaper).

All works have been highly useful in progressing the potential for the Project, and the Developer's position is that the Dumaresq Solar Farm location is a superior area for the development of a large-scale renewable energy development.

Preliminary Key Issue Investigations

As a part of the preparation of the 2020 Scoping Report DSF undertook extensive desktop analysis, searches of relevant databases and preliminary discussions with key stakeholder organisations & individuals.

The extensive work since that time has reinforced the attractiveness of this specific location for a large-scale solar PV generator, Battery Energy Storage and associated infrastructure.

Socio-Economic Impact

DSF has undertaken extensive discussion and research in area to ensure an efficient and productive engagement framework with community has been designed and advanced. These discussions have included an initial face to face meeting with leadership of the Inverell Shire Council on many occasions, and various follow ups (*phone and email*) with other Council professionals.

All discussions were consistent with the 2020 SEARs and the feedback received from agencies.

The Developer's objective has been at all times to balance the commercial requirements of ultimately delivering a cost-effective project with the promotion of opportunities for local businesses and individuals. To this end all opportunities for commercial engagement have been be highlighted within the local community, in addition to Project and open tender websites. The Developer has also sought to engage with regional consultants as a part of the advancing of the project as a part of the 2020 SEARs.

Once constructed the solar farm will continue to deliver opportunities for regional commercial involvement at a number of levels. The Developer has already commenced strategic planning and discussion with Inverell Shire Council, local landowners and other potential stakeholders on assistance with crucial services for the solar farm including vegetation management and solar panel cleaning.

As such it is believed that the development of this large-scale solar farm will bring both short-term and long-term benefits to the Inverell community.

Biodiversity

Biodiversity Searches Undertaken

As a part of the preparation of the 2020 Scoping Report the following desktop studies and searches were undertaken – and they have been refreshed for this 2023 Scoping Report:

- EBPC Protected Matters Search (**Attachment 3**)
- NSW Wildlife Atlas Online Database Search (**Attachment** 4)
- Darling Endangered Ecological Community – Fisheries Management Act 1994

Desktop Findings

These searches detail that there are a number of endangered flora and fauna species that occur within the LGA search area, and additionally there are wetlands identified and the Dumaresq River noted *(which is over 5km in a straight line from the Site)*.

The EBPC Protected Matters Search provides an overview of species that range from "vulnerable" through to "critically endangered". In that later high-risk category of "critically endangered" are listed:

1. 3 ecological communities; and
2. 3 species of bird life; and
3. 1 species of frog; and
4. 2 species of plant; and
5. 1 species of reptile.

In terms of birdlife the general Inverell region is detailed in the EPBC Protected Matters Search to be home to critically endangered species of:

- Regent Honeyeater (Anthochaera Phrygia)
- Curlew Sandpiper (Calidris Ferruginea)
- Swift Parrot (Lathamus Discolor)

Activities Pursuant to the 2020 SEARs

All investigations relating to flora and fauna have now been concluded – including activities that are both seasonally sensitive and other night based investigations. No critically endangered species has been identified by the extensive field activities undertaken by Biodiversity Australia. As the department is aware the Developer was significantly delayed by the original Biodiversity consultant being unable to complete their contractual engagement during the COVID 19 Pandemic period – and in that period going out of business.

Recommendations and modifications from the activities in relation to Biodiversity have been limited, but have still been considered and key elements incorporated at arriving at the final design. Those investigations included the potential relevance of dead trees housing species, the position and relevance of Log Creek and other matters.

All matters from the extensive field studies will be incorporated within the final EIS submission.

Groundwater, Erosion & Air Quality

The Site has now had extensive investigation for matters identified in the 2020 SEARs, including water, soil & erosion matters.

The Land & Soil Capability Assessment Scheme (LSCAS) has also been considered at a threshold level, and as per the photos that accompany this Scoping Report and the video footage that is available of the Site it is anticipated that no land will be categorized within Categories 1, 2 & 3 of that Scheme. The Site features a varied topography – the majority of which is not suitable for cultivation and has limited value for grazing purposes (rocky outcrops in areas, high slope, etc.). It is anticipated that against the LSC class definition scale land within the Lot will likely be classified in the 5,6 & 7 categories.

All work required to be completed as a part of the EIS will address the LSCAS in detail.

The below picture details the erosion zone which has been carved out from the Project footprint and will be (in conjunction with the landowner) targeted for soil improvement activities.

One area of concern that has been raised by the landowner, and evidenced by infield studies, is the extensive erosion that has resulted from the concrete anchor points of the Transmission Line Towers that traverse the site.

Additionally, there are numerous trees that the landowner reports were felled during the erection of the Lines that remain on Site and have never been addressed by Transgrid.

These matters will need to be discussed with Transgrid moving forward to find resolution.

The input & recommendations of specialist water / land consultants (Australian Wetlands Consulting) have been incorporated in the draft EIS that has now been prepared. Those recommendations have ranged from project site design, through to the use of various strategies to assist in the improvement and recovery of land which has extensive pre-existing erosion on it.

The Site on which the Project will be constructed is approximately 205 ha, and whilst of reasonably flat topography the potential for run-off water has been considered and incorporated in refined designs. This has included an extensive set back from Log Creek which both mitigates any impact from the development and meets landowner needs – which is detailed in the advanced design included in this Scoping Report

The potential for increase in dust during the construction phase will be dealt with in line with traditional watering techniques. It is anticipated, however, that the introduced species of grasses will potentially flourish in the shads of the solar panels (as has been the case in many other projects globally) there by actually leading to an improvement in the quality of the ground cover.

Further Investigation

These matters have been extensively considered and assessed as a part of the 2020 SEARs EIS preparation – including the best practice of both construction phase and operational management plans as required.

Figure 8: Erosion zones on Site

Erosion zones at base of Transgrid towers within easement

Heritage

The following searches were conducted prior to the 2020 SEARs as a part of the preparation of the initial Scoping Report in order to understand the potential of Heritage issues impacting the Site and the Project. Those searches have been refreshed even though the work under the 2020 SEARs has been completed by expert consultants:

- Australian Heritage Database (**Attachment 2**)
- Inverell Shire Council LEP 2012, Environmental Heritage

No Heritage issues have been identified through desktop studies and searches, and the position of the subsequent extensive investigations on the subject will be confirmed as a part of the EIS preparation.

Visual Impact

Regional Site Location, Existing Electricity Infrastructure & Receptors

The Site is located within a rural area which has traditionally seen various grazing & cropping agricultural operations over many decades. Significant electrical transmission infrastructure has been on the Site since its commissioning in 2001, being TransGrid's 330kv AC Dumaresq to Bulli Creek Interconnector ("Line"). This is an important aspect to consider when an EIS is considered – including the existing aesthetic impact from both primary and secondary transmission lines that exist on the Site and within the immediate region.

The metal towers from this large-scale transmission infrastructure extend approximately 60m skywards and traverse the Site – including at one point where the cables cross Bonshaw Road. This infrastructure's appearance is evident from many kilometres distance from their physical presence.

As such the general region of the proposed Site, including regional landowners and regular users of Bonshaw Road, have been used to the appearance of electrical infrastructure for over 21 years.

Figure 9: Visual Impact of Transgrid Towers

Transgrid Towers visible from many kms from the Project Site

The closest neighbouring residence to the Site is "Eloura" which is estimated to be over 2km in distance from the Site, and not in direct line of sight to the land on which the Project will be constructed. The Campbell property which is located on Campbell Road has no line of sight access due to the combination of topography and vegetation – as is the same from Kneipps Road from which no aspect of the project is visible, although the Lines are.

As such no homestead, including that of the landowners themselves, will have a direct line of site view of the solar PV modules and associated infrastructure.

Extensive field works have been conducted as a part of the consideration of visual impact – and project design considered in line with recent guideline changes.

Figure 10: Topography and Vegetation Natural Screen

Kneipps Road – Topography & Vegetation Provide Natural Screen

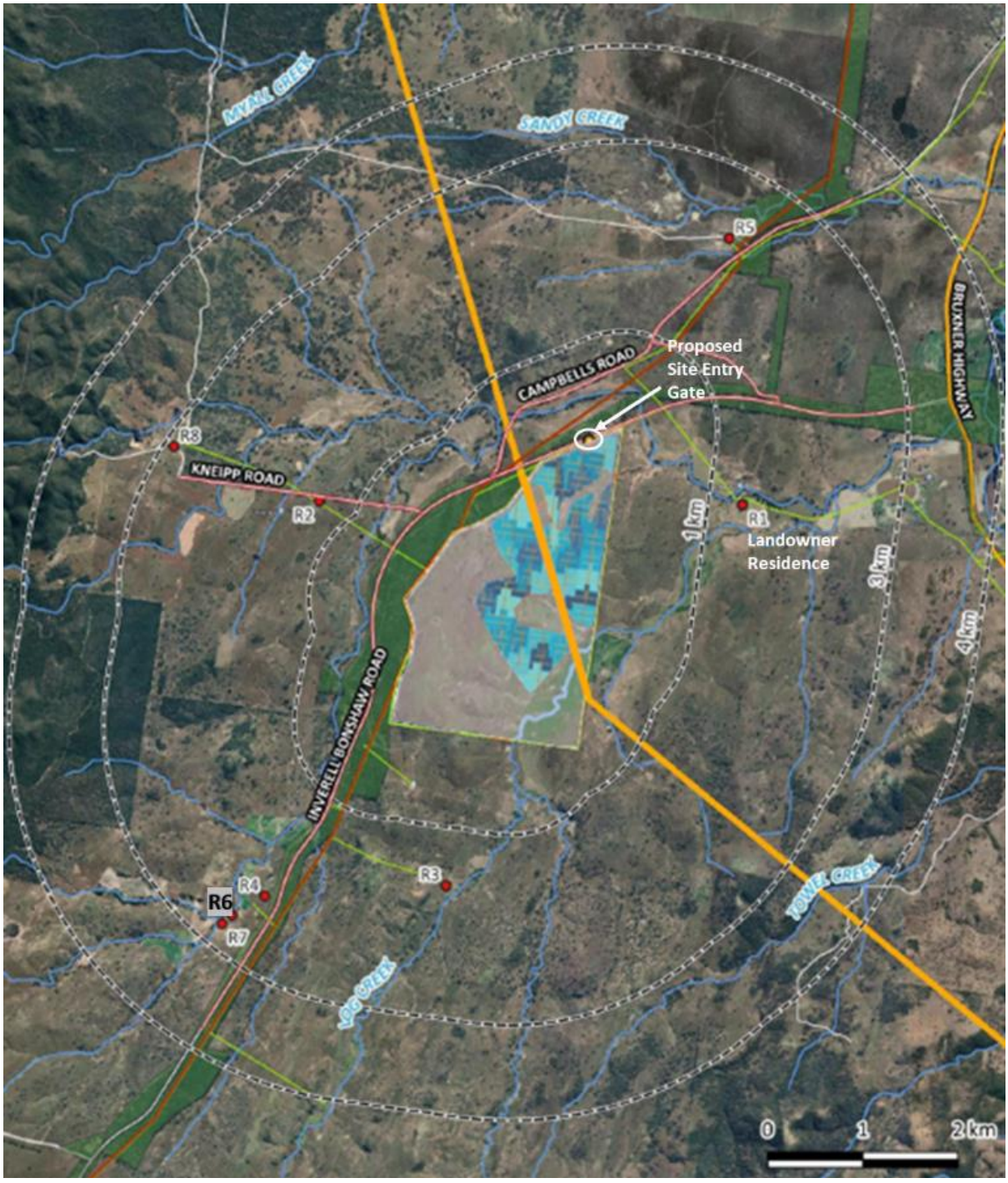
Campbell Road Terrain – Topography & Vegetation Provide Natural Screen

Preliminary assessment and various desktop studies initially undertaken prior to the issue of the 2020 SEARs highlighted the following:

- The Site does not interfere or is adjacent to any airport or aircraft landing strip, reducing the relevance of glare impact upon any such vital transport corridors;
- the Site is not in direct visibility of neighbouring residences, again reducing the relevance of direct glare impact from solar panels during daylight hours;
- the topograohy of the Site is such that the potential impact on vistas/views over the underlying property is of low relevance. There are currently no vantage points or near high ground which provide vistas over the Site; and
- large scale electrical infrastructure has been established on the Site for in excess of 21 years

The impact of the Project on vehicle travelling on Bonshaw Road has been extensively considered and modelled by expert consultants. The combination of the TSR and the natural topography / hills in this specific part of the Bonshaw region in fact means that the Project site will be cloaked in general – with only direct movement along the straight of Bonshaw Road providing visibility.

Figure 11: Receptors to the Site



Specific preliminary information in relation to receptors detailed on the above picture is as follows:

R1	Landowner Residence. Hills & vegetation exist between R1 and Site
R5	Campbell Road. Hills & vegetation exist between R5 & Site
R2,R8	Kneipp Road. Hills & vegetation between Receptors & Site
R4,R6,R7	South Bonshaw Road. Hills, road & vegetation between Receptors & Site
R3	South West Site. Site design modifications to minimize impact & take advantage of large hills between Receptor & Site. Solar Arrays point away from this Receptor

Landscaping and the preservation of certain trees within the Project envelope has also been considered and advanced to provide a level of softening of the layout of the Solar Farm from Bonshaw Road in particular.

Visual sensitivity also includes the impact night-time lighting required to provide security and visibility on Site (*although this will be likely sensor based thereby minimising its impact*) and this has now been considered as a part of advancing design.

Visual Impact During Construction

In addition to visual impact during the ongoing operational period, there is also potential for short term visual impact during the construction phase. This will include from:

1. Movement of large vehicles onto and from Site;
2. construction infrastructure on site, including portable building structures, laydown yards, heavy equipment, vehicle carparks and similar; and
3. the performance of various civil works, including the construction of internal access roads, preparation of areas and the erection of the ground mounts / fitting of the solar panels to bring the project to reality.

The EIS will consider these issues and specifically strategies that can be applied to minimise both visual impact and the generation of dust (*dust suppression strategies*).

Noise

Regional Site Location & Existing Noise From Electrical Infrastructure

Current noise levels for the general area would reasonably be regarded as low and typical of a regional rural setting in NSW comprising of wildlife noises, intermittent farm machinery and traffic driving on Bonshaw Road. This set of facts has been confirmed in the investigations flowing from the 2020 SEARs.

Within the Site itself there are additional noise levels that stem from the Lines. The landowner does report intermittent “humming” and “woosh” styled noises from the Line which likely coincide with power oscillation through transmission infrastructure. Other times of noise are reported to coincide with thunderstorms in the area – including from lightning strikes.

As such the Site has had low level transmission infrastructure related noise for over 17 years.

Noise Levels Across Solar Farm Lifecycle

The assessment of noise in relation to the Site will be undertaken in considering three separate phases of the solar farm’s lifecycle. Those separate phases are:

1. the pre-construction planning phase
2. the construction phase
3. the operational phase

Pre-Construction Phase

The 2020 SEARs considered that “during the pre-construction phase there may be low level noise associated with test geotechnical drilling on site, field work for completion of various studies of the EIS and associated movement of light vehicles. Such noise will be transitory in nature and is not anticipated to be of any significance.”

Extensive field activities have been completed and it is fair to say that there has been no noise impact whatsoever that would be considered either unusual or above the existing background noise.

Construction Phase

The most significant of these three phases will be the construction phase, with the most likely contributor to noise levels being the movement of contractor vehicles to and from Site and the operation of various mobile plant & equipment which is likely to include:

- Movement of equipment to and from site by way of road transport;
- piledrivers;
- trenching machinery and equipment;
- stand-alone diesel-powered generators; and
- mobile cranes and specialist equipment associated with the installation of Battery energy storage system.

If the decision is made to construct the solar farm by piledriving then any noise will be restricted to approved daylight construction hours.

With the potential for other solar farm developments in the region, any draft noise management plan may need to consider the cumulative noise impacts of developments taking place in parallel. That being said the nearest project is Bonshaw Solar Farm which is approximately 10 kms away with the land between the DSF Site and the Bonshaw project hilly – minimizing the potential for soundwaves to carry.

Operational Phase

Noise levels may also be relevant during the operational phase of the Facility from sounds:

1. being omitted from various pieces of electrical infrastructure and battery energy storage system technology; or
2. from the gradual movement of a tracking technology that is selected for the Project.

Even with a tracking technology the movements are slow and quiet in nature. Such technology has been used both in Australia and internationally for decades. One of the benefits of PV facility technology is that it operates quietly and autonomously for long periods of time.

Noise Conclusion & Next Steps

Although the Site presents many positive attributes for a solar farm development, a detailed understanding of noise, and potential strategies to ensure mitigation of any noise levels, will be included in the EIS report. Again, all field work required to be completed has been at the time of resubmission of this Scoping Report.

Traffic

All work in relation to Traffic as outlined in the 2020 SEARs has been completed, and the recommendations and observations of the expert consultants incorporated into the design process for the Project that has been advanced.

Existing Infrastructure

The Site is located adjacent to Bonshaw Road, a significant sealed roadway for the Inverell regional area. The Site itself will be accessed via an unsealed internal private access route which is located at an existing gate point along Bonshaw Road.

No other public road is available to access the Site.

Impact of Development

The development of solar farm infrastructure requires the shipment of a large numbers of components to Site from various regional & coastal locations. At this stage the final route for transportation has not been determined, but it will likely be from either the ports of Newcastle or Brisbane. Road studies advanced since the 2020 SEARs have considered both routes.

The final EIS will also consider in detail both internal access road construction and onsite arrangements for both construction phase and subsequent operational phase onsite parking and servicing, against a series of factors including the potential for soil erosion as a result of any potential change to run off resultant from the construction of unsealed access roads.

We have also considered the requirements of agencies such as Fire & Rescue NSW as a part of the expert hazard consultants engagement.

Detailed Traffic Management & Safety Planning

Other areas in relation to traffic management that have now been considered as a part of the completion of work stemming from the 2020 SEARs completed by Arc Traffic & Transport includes:

- A comprehensive map of primary haulage routes to the Site, highlighting and discussing any locations that present specific issues that will need to be considered in isolation. We have considered a variety of routes to site.
- Understanding any potential impact of glare from the solar farm, and whether that will create issues for vehicles travelling on Bonshaw Road at any specific times of day throughout the year. If impact from glare is possible then the approach to potential vegetation screening would need to be considered, including volume of plantings, growth rates of plantings and any specific requirements for ongoing vegetation management as a result.
- The safety of those proposed haulage routes, including where available crash / safety data for routes and sight distance measurements at key intersections.
- Understanding the impact on potentially increased traffic movements resulting from both oversized vehicles and construction worker transportation moving to and from site from the period of preparation/mobilisation until the completion of construction
- A logistics/project management framework demonstrating a traffic minimisation strategy to reduce where possible general traffic movements to & from Site from to be determined accommodation areas.

In order to conduct this type of analysis and assessment close collaboration with Inverell Council, landowners and relevant Road authorities has taken place. In parallel with this activity a Rules of Engagement Framework will need to be developed which will additionally consider site specific operational matters including:

1. Any standardized induction process for vehicle operators and other relevant staff covering traffic movements;
2. regular toolbox meetings to brief vehicle operators on developments with the Project and how those impact any alternations to the Rules of Engagement;
3. approaches to handling complaints and complaint resolution. Rules of Engagement will require accurate documentation and reporting of any incident, for example;
4. relevance of community consultation on issues including traffic movements, and requirement to engage constructively with community members; and
5. disciplinary processes for workers failing to adhere to the Rules of Engagement.

It is noted, however, that the Project does not involve any construction work or activities directly impacting the physical structure of any public road. Furthermore the investigations to date have not identified any major alterations being required – other than a slowdown lane on Bonshaw Road at the proposed turning in gate site. Internal road construction, including width, has been a subject of investigation and best practice in relation to internal track widths, turning circles and the overlap with Asset Protection Zones have all been considered – including incorporating discussion topics with Fire & Rescue NSW and local units of the Rural Fire Service Bonshaw Branch.

Finally, no airport is located within a 50km radius of the Project and so the likely requirement for extensive consultation with the Civil Aviation Authority is low.

Truck travelling on Bonshaw Road adjacent to the proposed Project site.

Bonshaw Road is heavily used by existing large scale ground transport as a key alternate inland route to the Pacific Highway and the New England Highway.

Picture. Nicholas Assef

Aboriginal Heritage & Native Title

As a part of the preparation of the 2020 SEARs Scoping Report the following desktop searches were undertaken and have been refreshed as a part of the preparation of this refreshed Scoping Report:

- AHIMS Basic and Extensive Search (**Attachment 5**)
- National Parks & Wildlife Act 1974 No. 80 – Schedule 15, Lands of cultural significance to Aboriginal persons Search

One of the benefits of this Site is that the Dumaresq to Bulli Creek Transmission Lines were planned for in the period around 1999. Attached are two reports from that then National Parks and Wildlife Service which conducted a heritage site inspection as a part of the feasibility of the construction of that Interconnector.

(*National Parks Standard Site Recording Form 0034*) notes the finding of a small stone artefact which was stated as having "*low scientific significance*".

(*National Parks Standard Site Recording Form 0043*) notes the finding of a small stone artefact which was also stated as having "*low scientific significance*".

Both of these artefacts are also described in those reports as being "isolated" examples. **During the walk on country supervised and led by Apex Archaeology forming part of the work under the 2020 SEARs the historic items identified in the National Parks investigation could not be located.**

The Site has been used for extensive cropping and grazing activities for decades, and as such the potential for new finds was believed to be low due to the high level of disturbance of the land. All work in relation to the investigation of Site for Traditional Owner artefacts has been completed since

the issue of the 2020 SEARs. Additional isolated finds were uncovered and those will be reported upon in the EIS.

Notification & Consultation

DSF has completed and is keeping current the process of community engagement specifically with regional aboriginal leadership and Traditional Owner Councils. This work is being undertaken by Apex Archaeology who have been the expert consultants for this aspect of the Project.

The landowner has close personal relationships with a number of local aboriginal leaders. As a part of the overall engagement strategy DSF has undertaken dialogue and consultation with the local aboriginal community in addition to commissioning an Aboriginal Heritage Assessment by a suitably qualified professional in accordance with the Guide to Investigating Assessing and Reporting on Aboriginal Cultural Heritage in NSW (*DECCW 2010 Published*).

Waterways & Wetlands

One of the positive features of the Site is a minimal engagement with significant ground water resources.

There are no natural waterways within or immediately adjacent to the Site. There is a small creek, titled "Log Creek", located at the lower boundary of the proposed solar farm site. That creek is reported by the landowner as not having to have flowed for many years.

There are no current man-made or natural dams present, nor irrigation canals or large-scale irrigation piping networks on the Site.

Additionally:

- The nearest waterway is the Dumaresq River which is located approximately 5 kms to the north.
- A search of the Department of Primary Industries (Office of Water) water monitoring network found no groundwater bores near the Proposed Site (*Border Rivers Basin. Basin Number 416 Map. NSW Government. March 2011 Publication).* Included as **Attachment 6**.

Water Planning & Log Creek Investigation

Extensive investigation of the Log Creek area has been undertaken and significant dialogue conducted with the Department of Environment on the potential for Log Creek to flood (even though it is not in a flood zone). The proposed design of the Project sees a significant set back from the Log Creek area – minimizing the potential impact from any construction or operational period activities.

The EIS will also need to consider the potential for any soil erosion or sediment movement as a direct impact from the solar farm development.

Bushfires & Floods

The Site is largely cleared of all vegetation, with a few paddock trees (*including many dead*) occurring in isolation at intervals. The NSW RFS Bushfire Prone Land Search is included as **Attachment 7**.

The Site is not included as a Flood Plan risk. The Inverell Shire Council Flood Plain Search is included as **Attachment 8.**

Undertaken Consultation Activities

The NSW Rural Fire Service and other relevant stakeholders have been consulted since the issue of the 2020 SEARs to determine if there are any matters that need to be specifically considered as a part of the design, construction and ongoing operation of the Dumaresq Solar Farm.

The Developer has also engaged the services of one of Australia's foremost hazard and fire consulting firms. In the period since the issue of the 2020 SEARs the Developer reconsidered the Battery Energy Storage system size and amended that. Following feedback from the Department this resulted in additional consideration of the BESS area within the Project boundary – including the size of Asset Protection Zones and the potential need for formwork foundations to be laid on which the BESS would be constructed.

The Developer has adopted a best practice approach to the topic of Hazard mitigation which will be outlined in the EIS.

Mining Operations

No current or prospective mining leases, exploration licenses or operations appear to cover the Site. A search from the NSW Department of Resources & Geosciences is included as **Attachment 9**. The landowner has also reported no inquiry in relation to prospective mining operations.

At this stage no additional work is considered necessary in relation to this issue.

Contaminated Lands

A Register of Contaminated Lands Search for NSW has been conducted and is included as **Attachment 10**. The Site does not appear on this register, and that would appear consistent with the land's use for agricultural purposes.

It is not envisaged at this stage that any additional work in relation to potential contaminated land will be required.

Scoping Report Conclusion

The Dumaresq Solar Farm is a large-scale solar PV project to be located in the Inverell Shire Local Government Area in northern NSW.

The Project is a 190 MW solar farm with accompanying maximum 190 MW of BESS with 4 hours storage. The Facility is intended to connect to the national electricity grid via 330kV Transmission Lines that are owned & operated by TransGrid and have been located on the Site for over 21 years.

DSF's capital investment is likely to be in the order of A$250 million to A$270 million (*dependent in large part due to final BESS configuration*), and it is therefore classified as a "State Significant Development" under Part 4 of the EP & A Act. A detailed Environmental Impact Statement therefore needs to be prepared and submitted to the Department of Environment & Planning for approval.

That EIS has to be prepared in accordance with the refreshed SEARs that is to be issued by the DEP. It is confirmed that all investigative work required under the 2020 SEARs has been completed. The necessity for a fresh SEARs a result of a Department timing deadline that could not be met (despite an EIS being weeks from submission).

The Project is still subject to technical and engineering development which has been extensively progressed.

This Scoping Report has investigated & commented on numerous areas of relevance for the development of such a large-scale Project, and it is the Developer's belief that the property on which the Project is to be based presents a number of positive characteristics.

The Developer believes that it is also a unique Scoping Report given the extensive work that has been completed and the investment that has been made, in advancing the Project based on the 2020 SEARs.

Preliminary Scope of the EIS

On the receipt of SEARs the EIS will be prepared and then publicly exhibited, in accordance with the requirements of Part 4.1 of the EPAA.

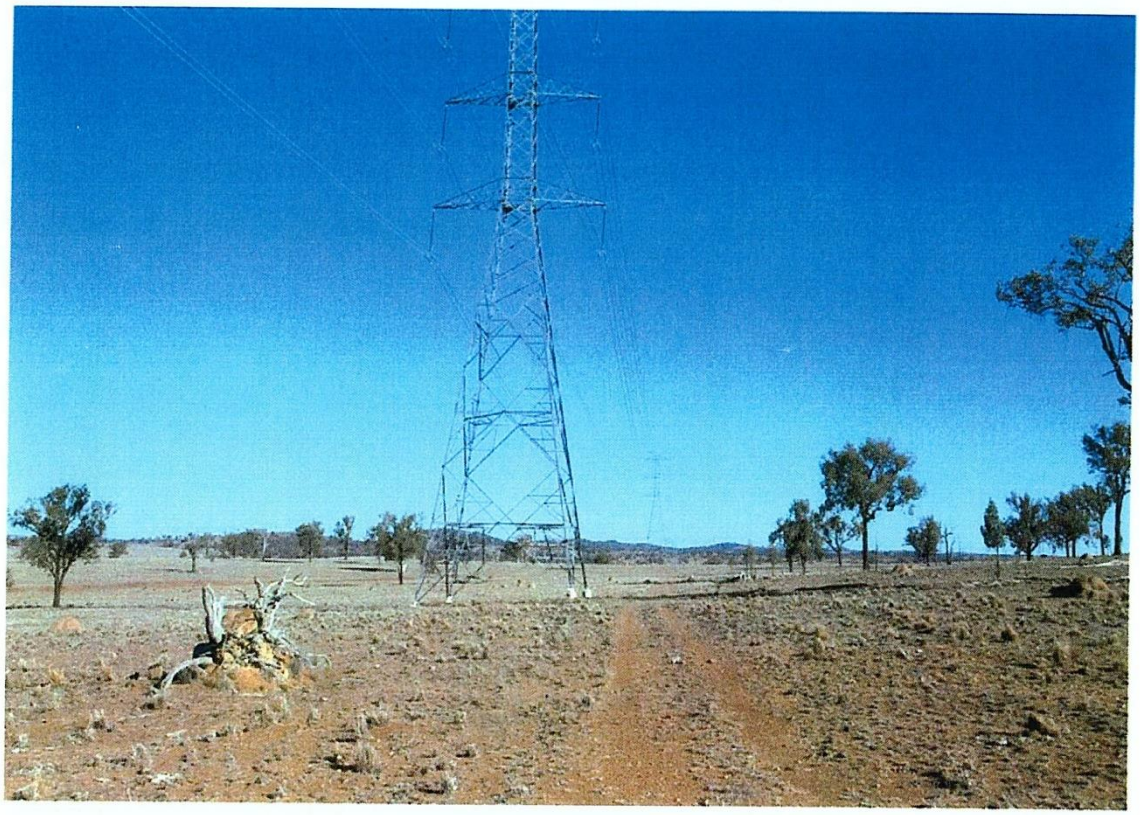
It is anticipated that this EIS will contain details on the overall Project including:

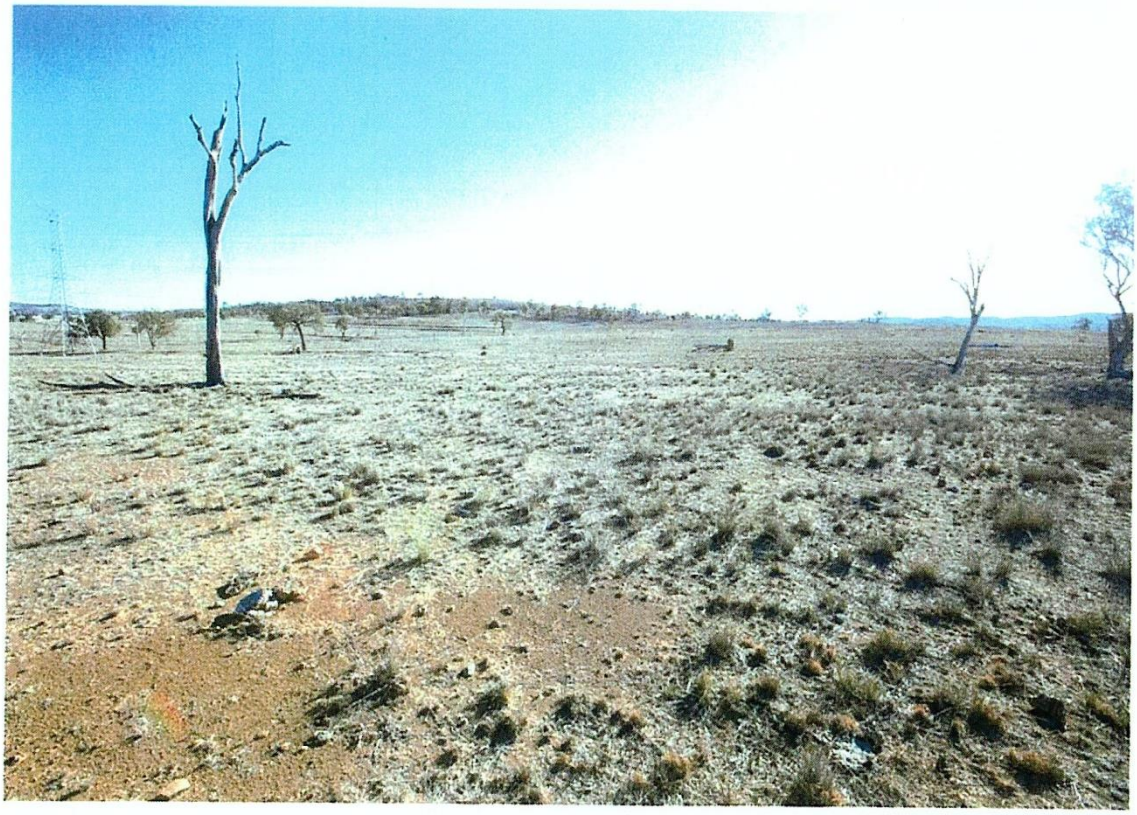
- A detailed description of the Project, including technical overview of design and components (*including BESS*);
- a confirmation of the strategic importance of the Project, including a clear statement on objectives that are sought to be achieved;
- an overview of the strategic importance of the Project in contributing to both Australian Commonwealth and State goals on renewable energy and emissions targets;
- an overview of the analysis that was undertaken in arriving at the decision relating to the suitability of the Site to house the Project;
- an overview of the key issues that will need to be addressed in the EIS;
- a statement on the outcomes that the Developer anticipated delivering against each of those key issues; and
- an assessment of the cumulative impact that the development of the Project might have when other similar renewable energy projects in region are considered.

The final scope of the EIS will be dictated by the scope and requirement of the SEARs.

Supporting Attachments to Scoping Report

Attachment 1: Photos of Site and Land





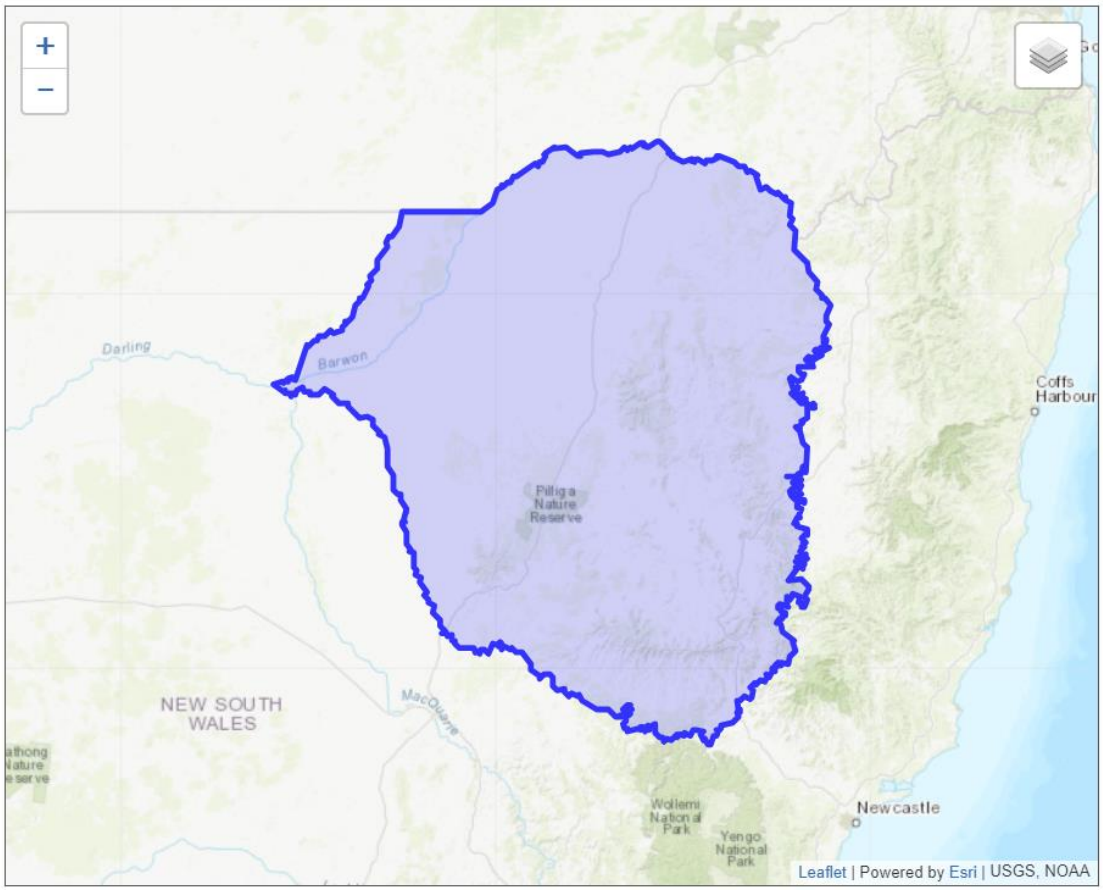
Attachment 2: Native Title Register (Inverell Shire Council)

Register of Native Title Claims Details

Back to search results >

NC2011/006 - Gomeroi People

Tribunal file no.	NC2011/006
Federal Court file no.	NSD37/2019
Application name	Gomeroi People
State or Territory	New South Wales;
Representative A/TSI body area(s)	New South Wales
Local government area(s)	Armidale Regional Council,Coonamble Shire Council,Gilgandra Shire Council,Glen Innes Severn Shire Council,Gunnedah Shire Council,Gwydir Shire Council,Inverell Shire Council,Liverpool Plains Shire Council,Mid-Western Regional Council,Moree Plains Shire Council,Muswellbrook Shire Council,Narrabri Shire Council,Tamworth Regional Council,Upper Hunter Shire Council,Uralla Shire Council,Walcha Council,Walgett Shire Council,Warrumbungle Shire Council
Date filed	20/12/2011
Date claim entered on Register	20/01/2012



Extract from the Register of Native Title Claims

External Boundary Descriptions

Attachment 3: EPBC Protected Matters Search

View full report here

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	1
Wetlands of International Importance (Ramsar	4
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	8
Listed Threatened Species:	75
Listed Migratory Species:	13

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

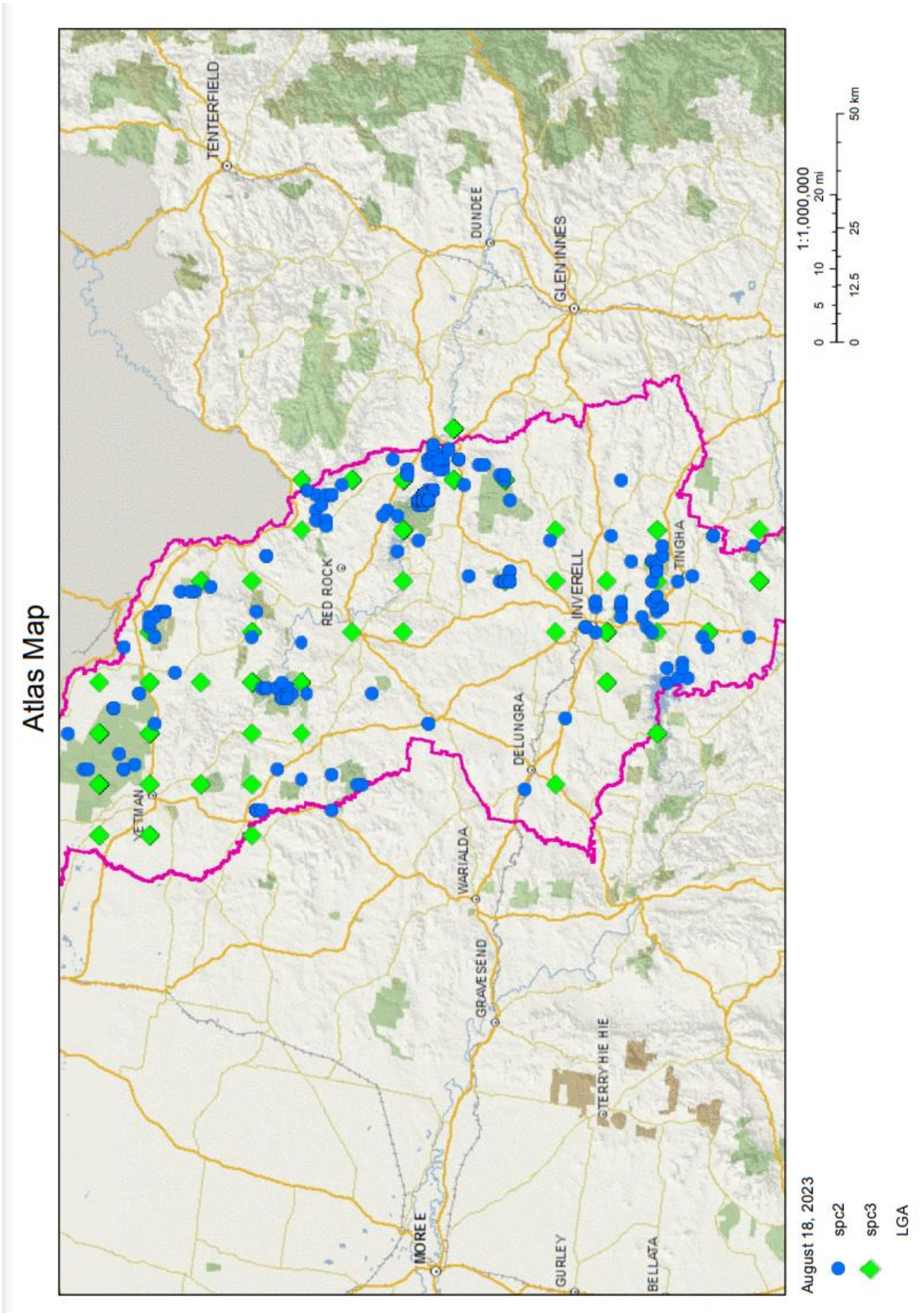
Commonwealth Lands:	21
Commonwealth Heritage Places:	1
Listed Marine Species:	21
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	21
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	21
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	2
Geological and Bioregional Assessments:	None

Attachment 4: NSW Wildlife Atlas Online Database Search



Attachment 5: AHIMS Extensive Search

View AHIMS Extensive Search results here

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : DSF_Basic
Client Service ID : 811188

Nicholas Assef

Date: 18 August 2023

Suite 3, Level 39, 88 Phillip Street, Aurora Place
Sydney New South Wales 2000

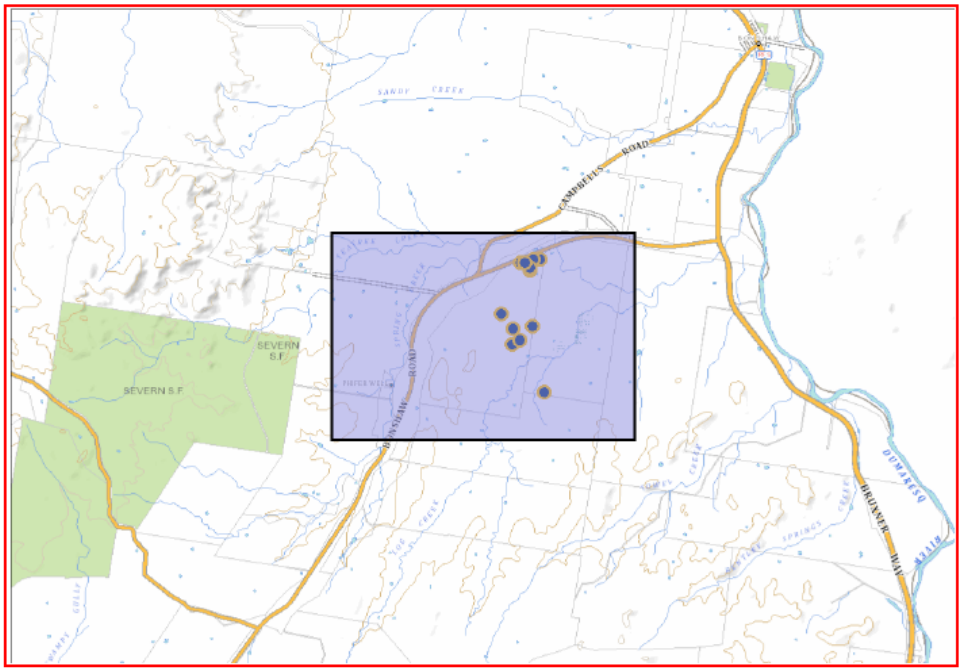
Attention: Nicholas Assef

Email: naa@lccapac.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -29.1207, 151.1903 - Lat, Long To : -29.0832, 151.2522, conducted by Nicholas Assef on 18 August 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

12	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : DSF_Extensive

Client Service ID : 811191

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
11-3-0125	DSF AS 02	GDA	56	328011	6780973	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0123	DSF AS 03	GDA	56	327815	6780744	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0124	DSF IF 03	GDA	56	327890	6779619	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0121	DSF AS 01	GDA	56	327886	6780960	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0120	DSF IF 02	GDA	56	327486	6779247	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0042	S18	AGD	56	328037	6778111	Open site	Valid	Artefact : -	Open Camp Site	
Contact		Recorders	Robert Paton					Permits		
11-3-0118	DSF IF 06	GDA	56	327264	6779866	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0119	DSF IF 01	GDA	56	327629	6780899	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0122	DSF IF 04	GDA	56	327817	6780796	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0117	DSF IF 05	GDA	56	327714	6780890	Open site	Valid	Artefact : -		
Contact		Recorders	Apex Archaeology,Ms.Jenni Bate					Permits		
11-3-0043	S17	AGD	56	327540	6779141	Open site	Valid	Artefact : -	Isolated Find	
Contact		Recorders	Robert Paton					Permits		
11-3-0034	S16	AGD	56	327400	6779370	Open site	Valid	Artefact : -	Isolated Find	
Contact		Recorders	Robert Paton					Permits		

**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

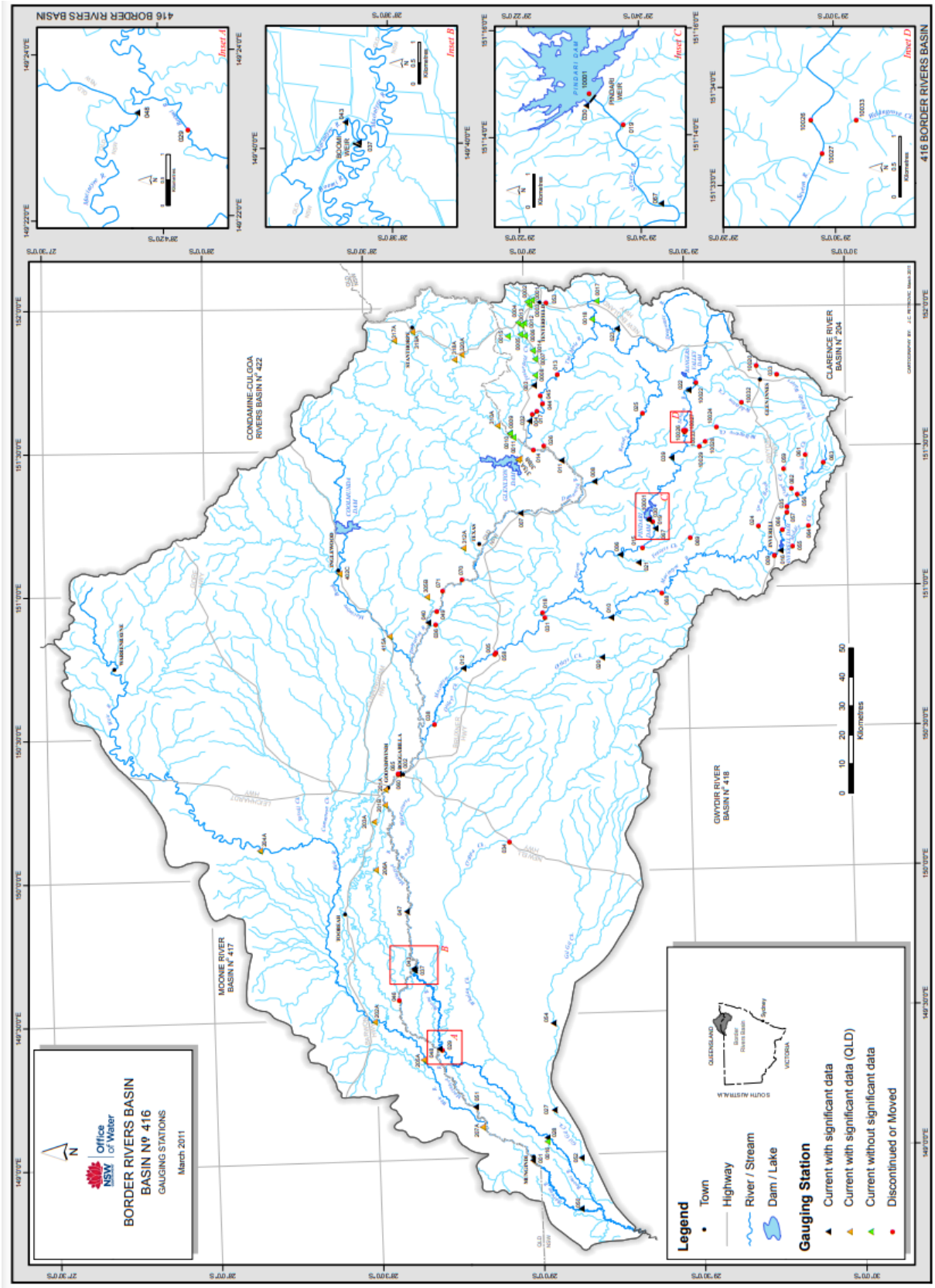
Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 18/08/2023 for Nicholas Assef for the following area at Lat, Long From : -29.1207, 151.1903 - Lat, Long To : -29.0832, 151.2522. Number of Aboriginal sites and Aboriginal objects found is 12

Attachment 6: NSW Government Map – Border Rivers Basin No. 416 - Gauging Stations

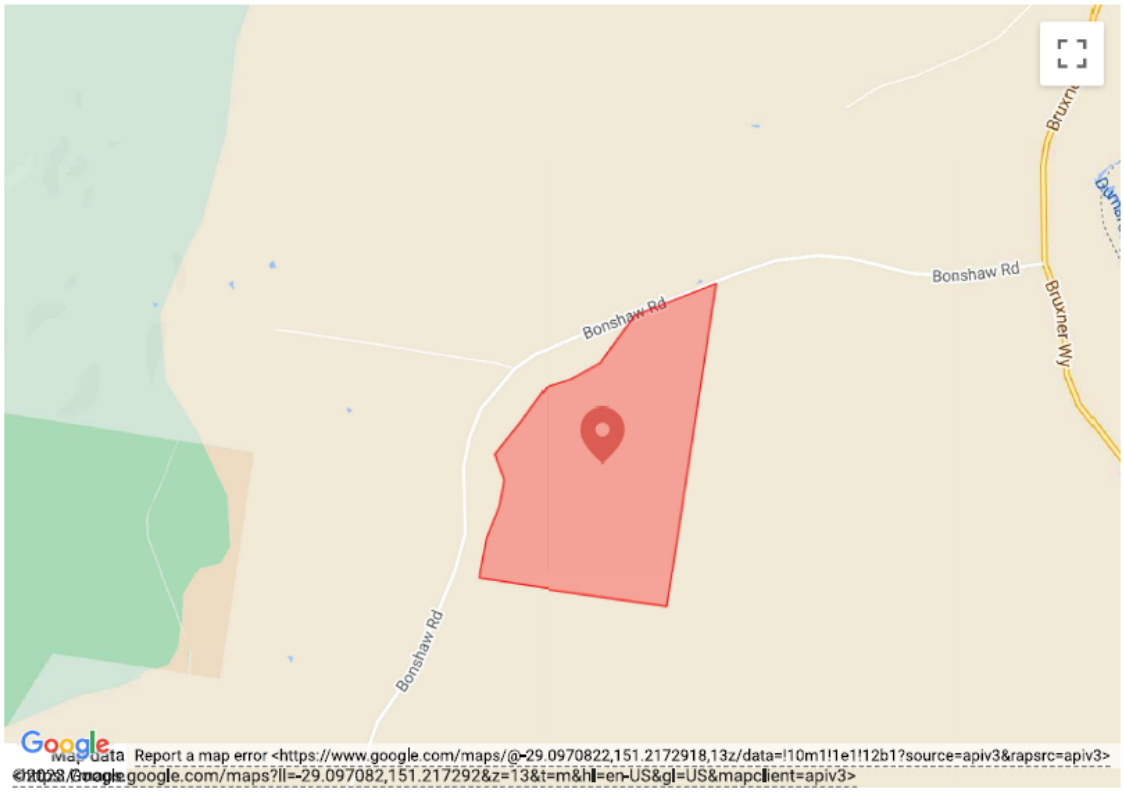


Attachment 7: NSW RFS Bushfire Prone Land Search

NSW RURAL FIRE SERVICE

Check if you're in bush fire prone land

Your Property



Your search result

You have conducted a search of the online bush fire prone land tool for the land in the map above. This search result is valid for the date the search was conducted. If you have any questions about the Bush Fire Prone Land Tool please contact bushfireprone.mapping@rfs.nsw.gov.au

The parcel of land you have selected is within a designated bush fire prone area.

Make sure you have completed the four simple steps to prepare for bush fires

In a bush or grass fire, minutes can matter. You need to take action now. Getting ready for a bush fire is easier than you think. By taking 20 minutes with your family to discuss what you'll do during a fire, you could save their lives, as well as your home.

There are four simple steps to get ready for a bush fire:

Attachment 8: Inverell Shire Council Flood Plain Search

View Inverell Development Control Plan 2013 – Chapter 6: *Flood Prone Land*

FLOOD STUDY

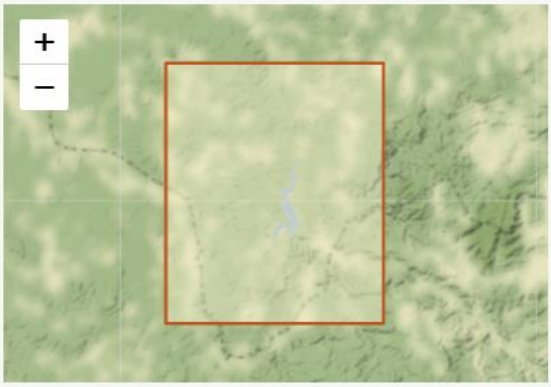
Glenlyon Dam - Design Flood Studies

This document includes an investigation into the hydrology of the Glenlyon Dam as part of the Glenlyon Dam Design Flood Studies. The following recommendations are made as a result of this investigation. This report was prepared by the Water Resources Commission for the Borders River Commission in August 1986.

Datasets

This Flood Project has no datasets yet.

Barelli catchment | Border Rivers Commi... | Glenlyon Dam

Field	Value
Title	Glenlyon Dam - Design Flood Studies
Publication Date	1 August 1986
Themes	Land and Resource Management
Spatial Extent	 Map data © OpenStreetMap contributors Tiles by Stamen Design (CC BY 3.0)
Council/LGA	Inverell Shire Council
Author/ Prepared by	Department of Water Resources

Attachment 9: Conveyancing Search: NSW Resources & Geosciences

Form CS1

Mining Act (1992) and Petroleum (Onshore) Act (1991)

NSW GOVERNMENT

Applicant details

Applicant Details			
Applicant reference		Date	20/12/2019
Applicant name	Nicholas Assef		
Postal address	PO Box 441 Rose Bay 2029		
Phone	0424 222 444	Email	naa@lccapac.com
Preferred return method	☒ Email ☐ DX ☐ Post		
Preferred Service option	☒ Express – 2 days* ($72.50 incl. GST) ☐ Standard – 10 days* ($55.00 incl. GST)		

Fee payment

There are two fee options depending on the urgency of your request.

- **Express processing fee** (returned within 2 business days) – $72.50 (incl. GST)
- **Standard processing fee** (returned within 10 business days) – $55.00 (incl. GST)

Note: While every effort is made to complete all work within a timely manner, the department bears no liability for any delay under any circumstance. In the event that we are unable to complete all work within the stated timeframe the department may, in its absolute discretion, refund the difference in cost between the express and standard service delivery option upon the request of the applicant.

Select payment method

Payment Method	
☒	**Direct deposit** Account name: Department of Regional NSW BSB: 032001 Account: 183837 Reference: CSA [your company name or last name] (e.g: CSA Company) Direct deposits will require a copy of the deposit receipt issued by the banking authority as evidence to accompany the application form. Failure to provide a payment reference may result in lost payment and an invalid application.

Attachment 10: Register of Contaminated Land Search

Search results

Your search for: LGA: INVERELL SHIRE COUNCIL

Search Again Refine Search

did not find any records in our database.

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... more search tips

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the planning process.

More information about particular sites may be available from:

- The POEO public register
- The appropriate planning authority: for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act.

See What's in the record and What's not in the record.

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.
This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating contamination at the site through a licence under the Protection of the Environment Operations Act 1997. You may wish to search the POEO public register

18 August 2023

Appendix 1: 2020 SEARs – SSD 10427

View full SEARs Report here

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD 10427
Project Name	Dumaresq Solar Farm which includes: · the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of up to 190 MW; and · associated infrastructure, including a grid connection and battery storage.
Location	Approximately 10 km southwest of Bonshaw and 75 km north of Inverell in the Inverell Shire Local Government Area
Applicant	Halo Renewable Energy
Date of Issue	10/03/2020
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. In particular, the EIS must include: · a stand-alone executive summary; · a full description of the development, including: - details of construction, operation and decommissioning; - a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); - a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development; · a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved solar farms, rural residential development and subdivision potential); · an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development; - an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments in the region (including the approved White Rock and Sapphire Solar Farms and the proposed Sundown and Bonshaw Solar Farms), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice; - a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development; · a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and · the reasons why the development should be approved having regard to: - relevant matters for consideration under the *Environmental Planning and*

	Assessment Act 1979, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. · a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department's guidance on the matter; and · a detailed evaluation of the merits of the project as a whole. The EIS must also be accompanied by a report from a suitably qualified person providing: - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; and - certification that the information provided is accurate at the date of preparation. The development application must be accompanied by the consent in writing of the owner/s of the land (as required in clause 49(1)(b) of the Regulation).
Key issues	The EIS must address the following specific issues: · **Biodiversity** – including: - an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016* (NSW), the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR), unless BCD and DPIE determine that the proposed development is not likely to have any significant impacts on biodiversity values; and - the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM; · **Heritage** – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including consultation with the local Aboriginal community in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents*; · **Land** – including: - an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: o a consideration of agricultural land, flood prone land, Crown lands (including Travelling Stock Route 63952), mining, quarries, mineral or petroleum rights; o a soil survey to determine the soil characteristics and consider the potential for erosion to occur; o a cumulative impact assessment of nearby developments; - an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including: o consideration of the zoning provisions applying to the land, including subdivision, and; o completion of a Land Use Conflict Risk Assessment in accordance with

	the Department of Industry's *Land Use Conflict Risk Assessment Guide*; and · **Visual** – including an assessment of the likely visual impacts of the development (including any glare, reflectivity and night lighting) on surrounding residences, scenic or significant vistas, air traffic and road corridors in the public domain, including a draft landscaping plan for on-site perimeter planting, with evidence it has been developed in consultation with affected landowners; · **Noise** – including an assessment of the construction noise impacts of the development in accordance with the *Interim Construction Noise Guideline* (ICNG), operational noise impacts in accordance with the *NSW Noise Policy for Industry* (2017), cumulative noise impacts (considering other developments in the area), and a draft noise management plan if the assessment shows construction noise is likely to exceed applicable criteria; · **Transport** – including: - an assessment of the peak and average traffic generation, including over-dimensional vehicles and construction worker transportation; - an assessment of the likely transport impacts to the site access route (including, but not limited to Bonshaw Road, Bruxner Highway, New England Highway and Gwydir Highway), site access point, any Crown land, particularly in relation to the capacity and condition of the roads; - a cumulative impact assessment of traffic from nearby developments (including cumulative impacts from White Road and Sapphire Solar Farms and the proposed Sundown and Bonshaw Solar Farms); - a description of any proposed road upgrades developed in consultation with the relevant road and rail authorities (if required); and - a description of the measures that would be implemented to mitigate any transport impacts during construction; · **Water** – including: - an assessment of the likely impacts of the development (including flooding) on surface water and groundwater resources (including Log Creek traversing the site and surrounding water courses), drainage channels, wetlands, riparian land, farm dams, groundwater dependent ecosystems and acid sulfate soils), related infrastructure, adjacent licensed water users and basic landholder rights, and measures proposed to monitor, reduce and mitigate these impacts; - details of water requirements and supply arrangements for construction and operation; and - a description of the erosion and sediment control measures that would be implemented to mitigate any impacts in accordance with *Managing Urban Stormwater: Soils & Construction* (Landcom 2004); · **Hazards and Risks** – including: - Battery Storage – include a Preliminary Hazard Analysis (PHA) prepared in accordance with *Hazard Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011; and - an assessment of potential hazards and risks including but not limited to bushfires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) *Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields*. · **Socio-Economic** – including an assessment of the likely impacts on the local community, demands on Council infrastructure and a consideration of the construction workforce accommodation; and · **Waste** – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste, taking

	into consideration capacity and availability of local landfills.
Plans and Documents	A list of some of the legislation, policies and guidelines that may be relevant to the assessment of the project can be found at: - https://www.planningportal.nsw.gov.au/major-projects/assessments/policies-and-guidelines; and - http://www.environment.gov.au/epbc/publications#assessments
Consultation	During the preparation of the EIS, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landowners and any exploration licence and/or mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the development and Inverell Shire Council. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

Appendix 2: Scoping Summary Table

View Scoping Summary Table here

Severity	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
Matter 1: Access					
Detailed	Access to property	No	Specific	• Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2013).	Traffic
Detailed	Traffic and parking	No	General		Traffic
Standard	Road and rail facilities	No	General		Traffic
Matter 2: Air					
Minor	Atmospheric emissions	No	General	See Scoping Report	Groundwater, Erosion & Air Quality
Matter 3: Amenity					
Detailed	Noise	No	Specific	• NSW Interim Construction Noise Guideline (DECC 2009) • NSW Noise Policy for Industry (EPA 2017) • NSW Road Noise Policy (DECCW 2011) • Assessing Vibration: A Technical Guideline (DECC 2006) • Large-Scale Solar Energy Guideline (DPE 2022) • Guidelines for Landscape and Visual Impact Assessment (United Kingdom Landscape Institute of Environmental Management and Assessment 2013) • Wind Energy: Visual Assessment Bulletin AB 01 For State Significant Wind Energy Development (DPE 2016) • Guidance Note for Landscape and Visual Assessment (Australian Institute of Landscape Architects 2018)	Noise
Detailed	Visual	No	General		Visual Impact
Matter 4: Biodiversity					
Detailed	Conservation areas	No	General	• Biodiversity Assessment Method (DPIE 2020) • Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance (Commonwealth of Australia, 2013) • Commonwealth EPBC 1.2 Significant Impact Guidelines – Actions on, or Impacting upon Commonwealth Land and Actions by Commonwealth Agencies (Commonwealth of Australia, 2013) • Commonwealth Department of the Environment – Survey Guidelines for Nationally Threatened Species (various)	Biodiversity
Detailed	Terrestrial flora and fauna	No	General		Biodiversity
Detailed	Aquatic flora and fauna	No	General		Biodiversity
Matter 5: Economic					
Standard	Natural resource use	No	Specific	• Social Impact Assessment Guideline for State Significant Projects 2021 (DPIE 2021).	Socio-Economic Impact
Detailed	Livelihood	Yes	Specific		Socio-Economic Impact
Standard	Opportunity cost	Yes	Specific		Socio-Economic Impact
Matter 6: Hazards and Risks					
Minor	Biosecurity	No	General	• Hazardous Industry Planning Advisory Paper No. 6 – Guideline for Hazard Analysis (DoP, 2011a). • Multi-Level Risk Assessment (DoP, 2011b). • Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP 2011).	Biodiversity
Detailed	Bushfire	No	General		Bushfires & Floods
Detailed	Environmental hazards	No	General		Bushfires & Floods
Minor	Flooding	No	General		Bushfires & Floods
Standard	Groundwater contamination	No	General		Groundwater, Erosion & Air Quality
Minor	Land contamination	No	General		Contaminated Lands
Minor	Land movement	No	General		Groundwater, Erosion & Air Quality
Matter 7: Heritage					
Detailed	Aboriginal	No	Specific	• Guide to investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011). • Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). • Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).	Aboriginal Heritage & Native Title
Detailed	Historic	Yes	Specific		Heritage
Detailed	Natural	No	Specific		Heritage
Matter 8: Land					
Minor	Stability	No	Specific	• Large-Scale Solar Energy Guideline (DPE 2022). • Land Use Conflict Risk Assessment Guideline (DPI 2011). • Managing Land Contamination: Planning Guidelines State Environmental Planning Policy No 55 Remediation of land (Department of Urban Affairs and Planning and Environment Protection Authority, 1998).	Groundwater, Erosion & Air Quality
Detailed	Land capability	Yes	Specific		Mining Operations
Minor	Topography	No	Specific		Project Site Location
Matter 9: Social					
Detailed	Community services & facilities	No	Specific	See Scoping Report	Socio-Economic Impact
Standard	Housing availability	No	Specific		Socio-Economic Impact
Matter 10: Water					
Minor	Hydrology	No	General	• Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004). • Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008). • Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000). • Guidelines for instream works on waterfront land (NOW 2012). • Guidelines for riparian corridors on waterfront land (NOW 2012). • Guidelines for watercourse crossings on waterfront land (NOW 2012).	Waterways & Wetlands
Minor	Water quality	No	General		Waterways & Wetlands
Detailed	Water availability	No	Specific		Waterways & Wetlands

Appendix 3: Consultants Engaged Under 2020 SEARs

Consultants Engaged Under 2020 SEARs & Corporate Directory

REAP	Accent Environmental	www.accentenvironmental.com.au
Transport	Arc Traffic & Transport	www.arctt.com.au
BAR / BAL Design	Stantec Australia	www.stantec.com
Land Assessment	Australian Wetlands Consulting	www.awconsult.com.au
Water Assessment	Australian Wetlands Consulting	www.awconsult.com.au
Biodiversity	Biodiversity Australia	www.biodiversityaust.com.au
Visual Impact	Accent Environmental	www.accentenvironmental.com.au
Noise Impact	Accent Environmental	www.accentenvironmental.com.au
Fire & Hazard	Mendham Consultants	www.mendhamconsult.com
TO Heritage	Apex Archaeology	www.apexarchaeology.com.au
Cultural Heritage	Apex Archaeology	www.apexarchaeology.com.au
Project Engineering	energySEA	www.energysea.com.au
Site Design	Navitas Consulting	www.navitas-consulting.com.au
OEM Hardware Selection Consulting	energySEA	www.energysea.com.au
Socio Economic Impact	LCC Asia Pacific	www.lccasiapacific.com
Waste Management	Halo Renewable Energy	www.haloenergy.net
Agencies Engagement	Halo Renewable Energy	www.haloenergy.net
Inverell Shire Council Liaison	Halo Renewable Energy	www.haloenergy.net
Community Engagement	Halo Renewable Energy / Accent Environmental (Capstone)	www.haloenergy.net www.accentenvironmental.com.au
Legal Counsel	Herbert Smith Freehills Hamilton Locke	www.herbertsmithfreehoills.com www.hamiltonlocke.com.au
Financial Advisors	LCC Asia Pacific	www.lccasiapacific.com
Accountants	RSM Global	www.rsm.global/australia
Commercial Bankers	Westpac Banking Corporation	www.westpac.com.au

Appendix 4: Social Impact Assessment

Dumaresq Solar Farm

Prepared by Halo Renewable Energy

August 2023

Introduction

Large-scale developments possess the capability of generating opportunities as well as creating unfavourable effects for the local community. While the creation of employment and increased local trade are among the opportunities that such developments can provide, they may also strain existing infrastructures, such as accommodation facilities and public transport. Thus, a socio-economic assessment is crucial for a comprehensive examination of crucial demographic, economic, and infrastructure aspects of the surrounding area to determine potential impacts associated with the Project. This Social Impact Assessment report delves into the socio-economic profile of the region to grasp and evaluate the potential impacts of the Project on the local community.

Existing Environment

Demographic Profile

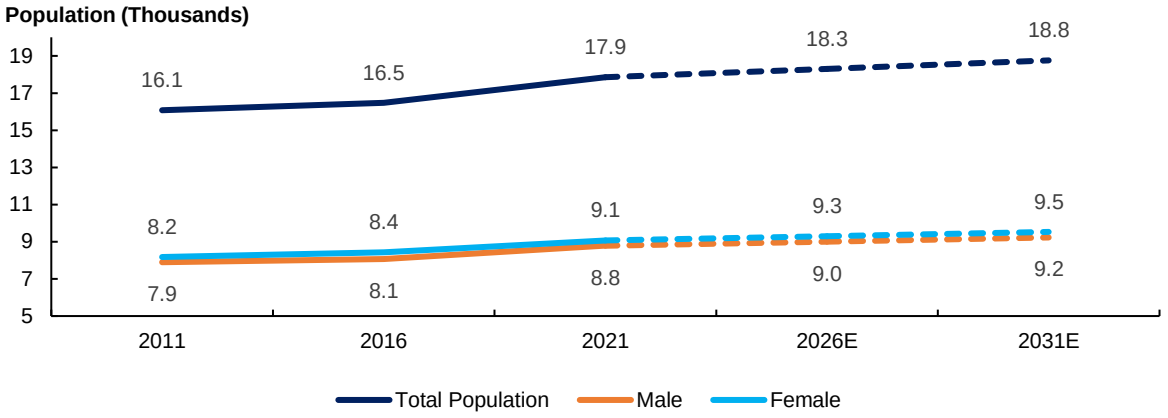
Inverell Shire is a local government area in the North West Slopes region of New South Wales, Australia adjacent to the Macintyre River and the Gwydir Highway. The Inverell Shire Local Government Area (LGA) covers an area of 8,623 km^2 and has a population of 17,853. As of the 2021 census the total number of residence participating in the labour force was 7,534 and the unemployment rate was 6.2%. The town of Inverell has the highest population density in the LGA, housing 68% of local residence while the remaining 32% are dispersed in smaller towns and villages including Ashford, Bonshaw and Yetman.

Demographic	*Inverell*	*Ashford*	*Bonshaw*	*Yetman*
Population	12,057	659	133	187
Median Age	41	54	51	48
Unemployment Rate (%)	6.3%	10.5%	0.0%	11.5%
Unemployment Number	323	26	0	9
Labour Force	**5,114**	**247**	**62**	**78**
Median Household Weekly Income ($)	1,187	855	1,042	1,069
Unoccupied Private Dwellings (%)	8.1%	13.7%	20.0%	27.3%
Unoccupied Private Dwellings (#)	408	43	12	24
Median Rent ($)	270	185	200	150

Population Trends

In the 2021 ABS Census, there were 17,853 people in the Inverell LGA. Of these 49.2% were male and 50.8% were female (ABS, 2021). The population of the Inverell Shire is predicted to grow by 2.5% per annum. The chart below shows the population trends, indicated by blue. The blue and orange lines representing males and females respectively depict the population split between genders within the Inverell LGA.

Population over time



Between 2011 and 2021, the population grew by 11.1%. This growth was relatively in line with the broader Rural NSW, which grew by 12.6% between 2011 and 2021.

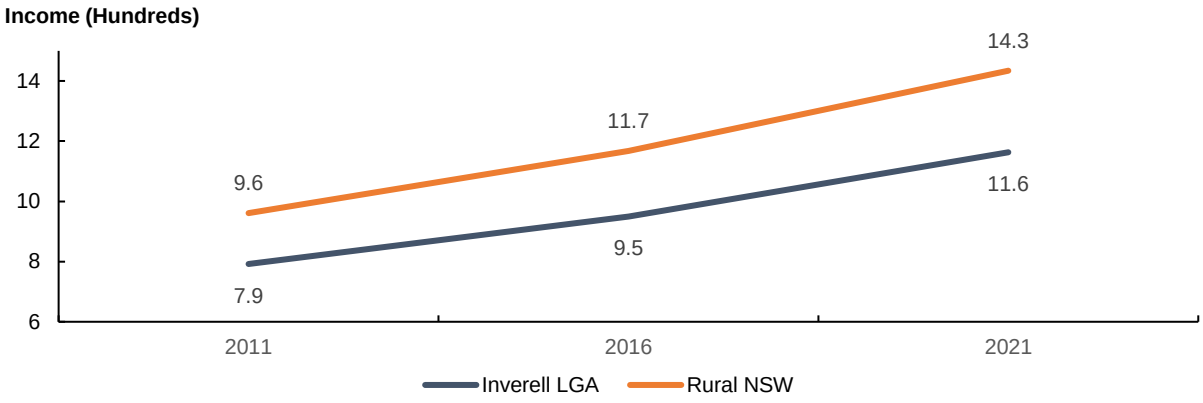
Employment and Income

Inverell currently has a labour force of 7,534 workers. The largest employer in Inverell Shire is Bindaree Beef, with other prominent employers including BOSS Engineering, McLean Memorial Retirement Village and Inverell Shire Council. (Inverell Shire Council & Remplan, 2021).

Occupations	*No.*	*%*
Labourers	1,183	16.7%
Managers	1,144	16.2%
Professionals	989	14.0%
Community & Personal Services	985	13.9%
Technicians and Trades	877	12.4%
Sales Workers	688	9.7%
Clerical and Administrative	657	9.3%
Machinery Operators and Drivers	397	5.6%

The median incomes in the Inverell LGA are slightly below the Rural NSW level from 2011-2021, which reflects limited economic and employment opportunities. Although incomes are increasing, as shown below, the median income gap is widening.

Median Weekly Income for Inverell LGA and Rural NSW



Local Economy

The Gross Regional Product for the Inverell Shire region was estimated to be $1.12 billion in 2022. Inverell represents 0.16% of NSW Gross Domestic Product of $697.36. The main industry sectors in which residence are employed are Health Care and Social Assistance (16%), Agriculture (13%), and Manufacturing (12%).

The Inverell region is a major revenue generator for the Northern Inland economy with an output of approximately $2.42 billion 2022. The largest gross revenue generating industries by value are:

- Manufacturing ($605.2 million, 25%)
- Agriculture, Forestry & Fishing ($336.5 million, 14%)
- Construction ($267.1 million, 11%)

The total value added in 2022, calculated as revenue output net total expenditure for Inverell was $1.03 billion. Largest industries contributing to additional economic value are:

- Rental, Hiring & Real Estate Services ($162.7 million, 16%)
- Agriculture, Forestry & Fishing ($126.4 million, 12%)
- Health Care & Social Assistance ($124.3 million, 12%)

These sectors are considered to be the key drivers of economic growth based on the regions competitive advantages.

Assessment of Impact

General

The development of renewable energy sources and the shift towards a low-carbon future have immense socioeconomic and environmental benefits that can enhance the quality of life for entire communities. The adoption of renewable energy sources is crucial in Australia's transition from traditional, carbon-intensive energy production, which contributes to atmospheric pollution and carbon emissions that exacerbate climate change. By reducing carbon emissions, the effects of climate change can be reversed or slowed, ultimately benefiting both present and future generations.

By producing electricity from the site, the Dumaresq Solar Farm (DSF) provides a clean and cost-effective power source to local and regional consumers. In addition, with the installation of battery-based storage (of around 720 MWh), the Solar Farm can dispatch scheduled and reliable renewable energy to the National Electricity Market (NEM).

Construction Phase

Dumaresq Solar Farm will have a positive impact on the Inverell economy during the 9 – 12 month construction period. It is anticipated that up to 150 individuals are to be employed to construct the Generator. The largest economic benefits for businesses and individuals are anticipated to occur during the construction and decommissioning stages of the Proposed Development. This is attributed to the hiring of a significant temporary workforce. The employment opportunities during construction would include concreting, earthworks, steelworks, and electrical cabling, while demolition and removal activities would dominate during decommissioning. Whenever feasible, the Proponent would procure resources from local supply companies. In addition, indirect employment opportunities would arise from food industries, fuel, accommodation, and other services that contractors would require while working in the area.

Community wellbeing will be positively influenced by the Proposed Development during the construction phase in several ways, including:

- A temporary increase in population during construction due to the incoming workforce, stimulating the local economy; and
- An increase in the number of jobs available in the area during the construction of the Proposed Development.

Local employment opportunities will be generated, while the influx of additional workers from outside the region would create a demand for accommodation, hospitality, and retail services, thereby stimulating the local economy. However, the temporary influx of staff may lead to a slight increase in pressure on local services, including accommodation.

The Study Area has a labour force of 2,457 resident worker occupied in construction-related activities. Therefore, the Project should not present a constraint to labour supply in the local economy with the projects labour requirement representing just over 6.1% of the local construction workforce.

The Project will positively impact the Study Area by providing opportunities for local workers to upskill and develop renewable energy skills which will help grow the renewable energy workforce. Additionally, the Project offers the potential for some unemployed job seekers (469 persons) to find temporary work.

Operation Phase

DSF would have an overall positive effect on the regional economy through the employment of up to 7 individuals. Community wellbeing may be positively influenced by the Proposed Development by a small increase in full-time employment during operation for a select skilled workforce. No negative socioeconomic impacts are expected as a result of the introduction of the Proposed Development during the operational period.

Operational activities conducted by employees would generally range from low level maintenance to more technical requirements, including:

- Washing / cleaning the solar modules regularly to maintain high levels of electricity output;
- vegetation management including mowing of grasses around the solar modules;
- maintenance of security fencing and associated monitoring equipment; and
- repair or replacement of technical infrastructure as required.

Maintenance activities will also contribute to local noise levels, but these again should be minimal and in line with other rural operational activities that are undertaken in area. It is not expected that DSF would have any adverse effects on tourism, as its visibility is limited, and Australians generally have a favourable view of renewable energy developments.

Decommissioning Phase

The Site will generate renewable electricity for a period of up to 40 years. At the end of this period the infrastructure will either be update to allow for continued operation or alternatively the infrastructure will be removed and the location will be returned to its original condition. Similar economic benefits identified for the construction of the project would arise as well as further economic opportunities such as remediation services and local recycling of infrastructure.

Agricultural Impacts

The development of DSF is anticipated to increase the economic security of the local community by providing an opportunity for the diversify rural incomes. DSF is not expected to cause significant land disturbances and the size of the Proposed Development would not considerably affect the availability of land for agricultural production purposes in the Inverell Shire LGA.

Ongoing Economic Stimulus

Socio-economic Impact to Date

The developer has undertaken all activities so as to be able to clearly identify benefits that have been injected into the regional community today. This has included specifically:

- Significant fees paid to the current landowner for both the right to pursue the development and for day-to-day activities
- Hiring specialist consultants for the environmental impact statement that are based in rural/regional areas.
- Support of various community interest groups by cash and in-kind contributions.
- Costs incurred as a part of a regional development process including travel, accommodation, and day-to-day expenditures.

Local Wage Stimulus

Inverell Shire Council is ambitious in leveraging regional renewable energy projects to inject much-needed economic support into regional towns. Collaboration with Inverell Shire Council is seen as a logical strategy to ensure all community-based initiatives are optimised for effect. The largest ongoing economic benefit to the local community is the ongoing wages provided through the Project.

Community Funding Measures

Significant discussion with community groups and in parole Shire Council place over the last 12 to 18 months. The Company has in principal proposed a $100,000 funding mechanism for a maximum 10 year period based on current and future project plans.

Inverell Shire Council is undertaking a major project in upgrading the community swimming all. 75% of the to be committed funding will be attributable to that project for a 10 year period. Reporting & governance requirements for annual contributions will also he agreed as a part of that commitment.

Conclusion

The construction and operation of the project will have a net positive impact on the level of economic activity in the Inverell Shire area. DSF will work with all stakeholders to maximise the economic benefits of the project and minimise any negative impacts.

DUMARESQ
SOLAR FARM

Halo Renewable Energy

Email: naa@haloenergy.net
Mobile: + 61 498 115 064
www.haloenergy.net