Forest Glen Solar Farm

State Significant Development Assessment
SSD-9451258

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Executive Summary

X-Elio proposes to develop a new 90 megawatt (MW) solar farm with 25 MW / 25 MW-hour (MWh) of battery storage located approximately 10 kilometres (km) west of Dubbo in the Central West and Orana region of NSW.

The Department exhibited the Environmental Impact Statement (EIS) for the project and received 2 public submissions (both objections) and comment from Dubbo Regional Council (Council). Advice was also received from 11 government agencies.

In response to agency advice and submissions, X-Elio reduced the extent of solar panels near the western boundary of the site. This amendment would not affect the generating capacity of the project and would lead to better outcomes by reducing visual impacts at a neighbouring dwelling.

The key assessment issues for the project are energy transition, land use compatibility, visual impacts and biodiversity.

The project site is currently used for grazing. No Biophysical Strategic Agricultural Land (BSAL) would be disturbed by the project, and the site comprises Class 5 soils. The project would not significantly reduce the overall agricultural productivity of the region and the Department considers that the site can continue to be used in part of ongoing agricultural uses, and could be returned to agricultural uses in the future.

The project has been designed and refined to avoid and minimise biodiversity impacts, but would require clearing of 68.53 ha of native vegetation, including 68.06 ha of dry sclerophyll forest (of which 63.92 ha is in sufficiently poor condition that it would not generate offset credits) and 0.47 ha of grassy woodlands (endangered ecological community (EEC), *Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions*). Overall, the project would require offset for 4.61 ha of native vegetation. All impacts to vegetation and fauna habitat would be offset in accordance with the *Biodiversity Conservation Act 2016*.

Overall, the Department considers the site to be suitable for the project as it has good solar resources and available capacity on the existing electricity network and is consistent with the Department's *Large Scale Solar Energy Guideline*. The project site is located in the Central-West Orana Renewable Energy Zone, with access to existing transmission infrastructure and the local road network.

The Department has also undertaken a comprehensive assessment of the full range of other potential impacts, including noise, water, dust, heritage, hazards, decommissioning and rehabilitation, and community contributions. The Department has recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure all potential impacts are effectively minimised, managed or offset.

The project is consistent with the Commonwealth's Renewable Energy Target and NSW's Climate Change Policy Framework and the *Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 90 MW of renewable energy to the National Electricity Market and 25 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.

The project would also provide flow-on benefits to the local community, including up to 200 construction jobs and capital investment of $185.5 million. The project would result in benefits to the state of NSW and the local community and is therefore in the public interest.

Contents

1 Project

X-Elio Australia Pty Ltd (X-Elio) proposes to develop a new State significant development (SSD) solar farm in Minore, approximately 10 kilometres (km) west of Dubbo in the Dubbo local government area (LGA) (see **Figure 1**).

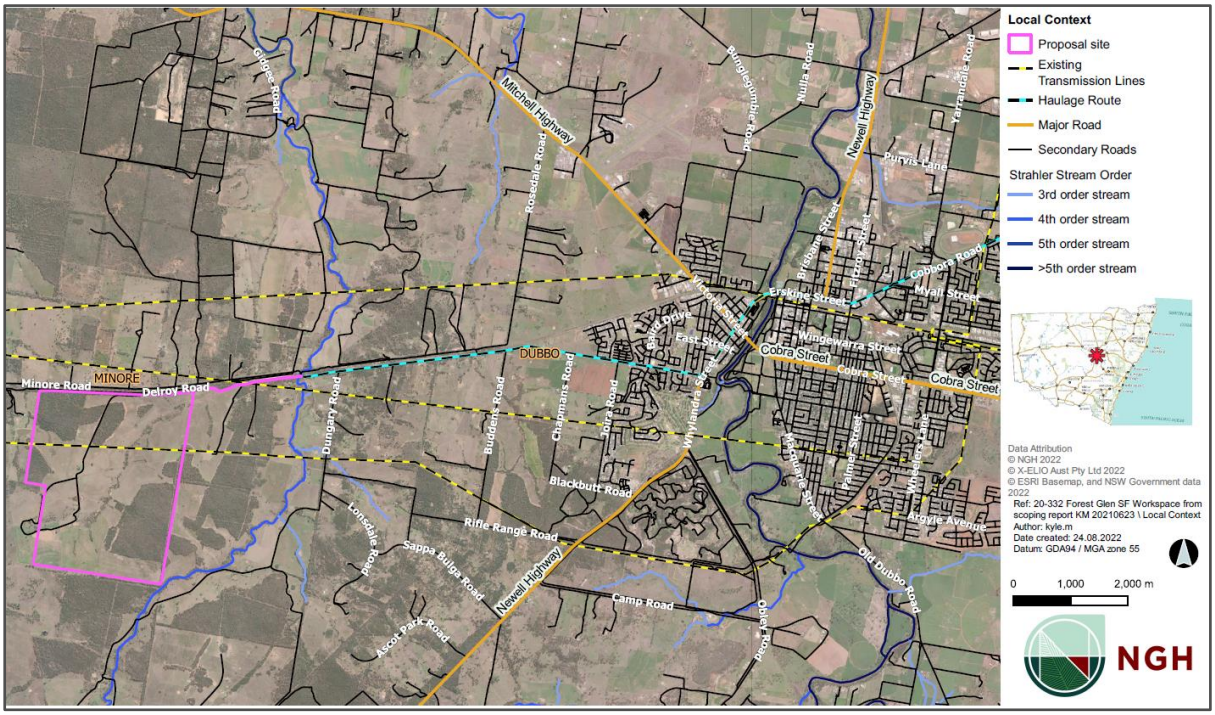


Figure 1 | Regional Context (Source: EIS)

The project involves the construction of a new solar farm with a generating capacity of 90 megawatts (MW) (AC), and 25 MW / 25 MW-hour (MWh) of battery energy storage. It also involves the upgrading and decommissioning of equipment over time. While the capacity of the project may increase over time as technology improves, the footprint of the development would not be permitted to increase without further planning approval.

The project would include an on-site substation and connection (either above ground or underground) to an existing 132 kilovolt (kV) transmission line operated by Essential Energy, which crosses east-west through the site (see **Figure 2**).

To facilitate access to the site, X-Elio proposes road widening and upgrade works on Delroy Road, including road sealing, line marking and signage at the intersection of Delroy Road and Minore Road.

The solar farm would be constructed over approximately 12-18 months, with a peak construction period of 10 months.

The key components of the project are summarised in **Table 1**, shown in **Figure 2**, and described in detail in the Environmental Impact Statement (EIS) (see **Appendix B**), Submissions Report (see **Appendix D**), Amendment Report (**Appendix E**) and additional information provided during the Department's assessment of the project (see **Appendix F**).

Table 1 | Main Components of the Project

Aspect	Description
Project summary	The project includes: • a generating capacity of approximately 90 MW (AC); • approximately 150,000-200,000 single-axis tracking solar panels (up to 2.1 m height); • up to 25 power conversion units, each comprising 4 inverters, transformer and associated control equipment; • underground cabling between solar panels and power conversion units; • on-site substation, and transmission line connection (either above or underground); • 25 MW/25 MWh BESS; • operations and maintenance buildings up to 5 m high; • site entry via Delroy Road (see below); • internal access and perimeter tracks; and • security lighting and fencing
Project area	Site: 789 hectares (ha) Development footprint: 384.39 ha
Access route	All vehicles would access the site via Newell Highway, Minore Road, and Delroy Road
Site entry and road upgrades	Site access would be via Delroy Road. Road upgrades proposed for Delroy Road comprise: • formalising/line marking/signage for intersection of Minore Road and Delroy Road, and sealing initial section of Delroy Road west of intersection; and • widening of sections of Delroy Road to ensure minimum 6.5m road width
Construction	Indicative 12-18 month construction period Construction hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm
Operation	The expected operational life of the project is approximately 35 years
Decommissioning and rehabilitation	The project also includes decommissioning at the end of the project life, which would involve removing all infrastructure with the possible exception of the substation and deep underground cabling and rehabilitating the site to the current land capability
Hours of Operation	Operations and maintenance work would be conducted during standard working hours of 7 am to 6 pm Monday to Friday, and 8 am to 1 pm Saturday
Subdivision	Three lot subdivision, comprising substation lot, solar farm lot and balance-of-site lot
Employment	Up to 200 construction jobs and 10 full-time equivalent operational jobs
Capital Investment Value	Approximately $185.5 million

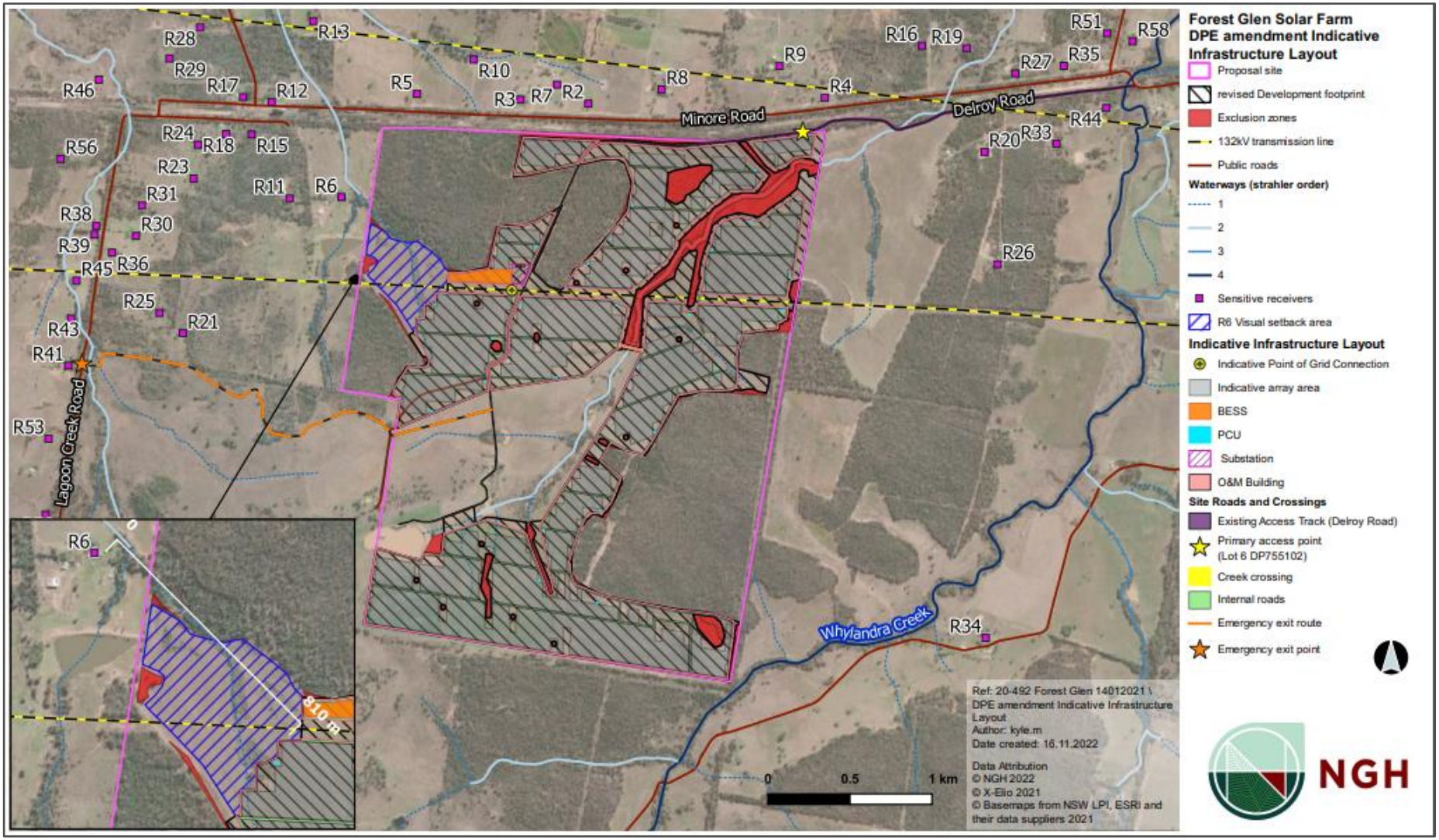


Figure 2 | Site (Source: Provided by applicant)

2 Strategic Context

2.1 Local context

The project is located on a 789 ha site within the Central West and Orana region of NSW. The solar farm site is zoned RU1 Primary Production, and part of the access road is zoned RU2 Rural Landscape, under the Dubbo Local Environmental Plan 2011. The site is currently used for grazing sheep, with intermittent oat cropping.

Land immediately surrounding the site is zoned RU1 and RU2 and is used primarily for agricultural purposes (grazing). A large lot rural subdivision (R5) is located approximately 300 m west of the site.

Access to the site is via Delroy Road. An existing 132 kV transmission line operated by Essential Energy crosses east-west through the site. The site is generally flat, sloping gently to a central valley. A second order stream (unnamed) runs south-west to north-east, with up to 6 minor tributaries. Remnant native vegetation is located in the north-west and eastern parts of the site.

There is one mineral exploration licence over the site, but no activities authorised under the licence have taken place on the site. Minerals, Exploration and Geoscience (MEG) have reviewed the project and raised no issues with the proposal.

There are 58 non-associated residences located within 2 km of the site and 17 residences located within 1 km, however the vast majority of these are shielded from the site due to the topography and intervening terrain. The closest residence is located 153 m from the project boundary.

2.2 Other Energy Projects

There are seven State significant renewable energy projects within 50 km of the project site, with the nearest solar farm located north of the site and the remaining projects all to the south-east.

Table 2 | Nearby renewable energy projects

Project	Capacity (MW)	Status	Approximate distance
Gilgandra Solar	40 MW	Approved	40 km north
Maryvale Solar	125 MW	Approved	45 km south-east
Suntop Stage 1 Solar	170 MW	Under construction	45 km south-east
Suntop Stage 2 Solar	190 MW	Proposed	45 km south-east
Wellington North Solar	300 MW	Approved	50 km south-east
Wellington Solar	180 MW	Approved	50 km south-east
Wellington South BESS	500 MW / 1000 MWh	Proposed	50 km south-east
Orana BESS	400 MW / 1600 MWh	Proposed	50 km south-east

The potential cumulative impacts are discussed further in **Section 5.5**.

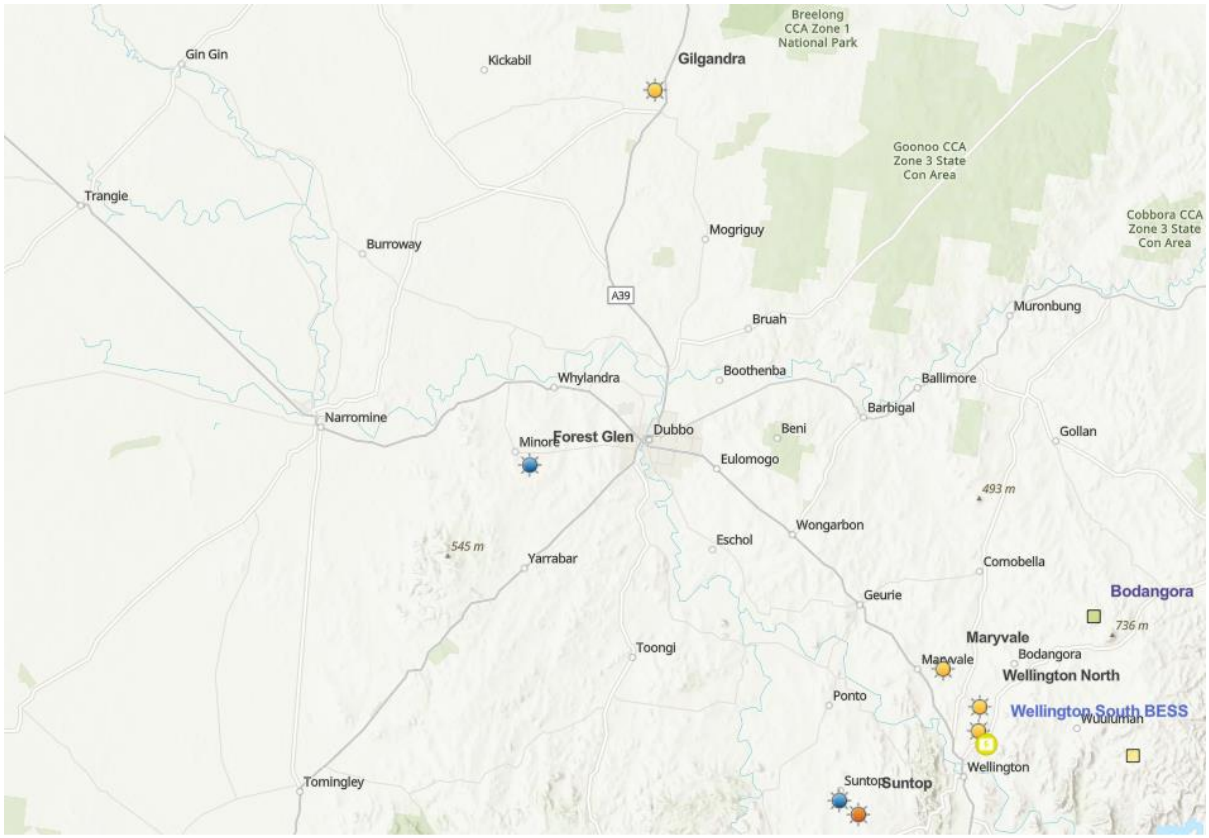


Figure 3 | Nearby renewable energy projects

2.3 Energy Context

The Commonwealth and State energy context is described in **Table 3**.

Table 3 | Energy Context

Policy / Year	Summary
Australia's Long Term Emissions Reduction Plan (2021)	Sets a pathway to net zero emissions by 2050 and affirms Australia's commitment to meeting its revised 2030 target (43% below 2005 levels).
Australian Energy Market Operator's (AEMO) 2022 Integrated System Plan (ISP)	Notes that: - without coal, investment is needed to meet significantly increased electricity demand requiring a nine-fold increase in large-scale variable renewable energy generation (wind and solar) - a mix of solar and wind is needed and they offer complemetnary daily and seasonal profiles.
NSW: ***Climate Change Policy Framework (2016), Transmission Infrastructure***	Relevant aspects of these policy documents include: - aims to achieve net zero emissions in NSW by 2050 and reduce emissions by 70% below 2005 levels by 2030

Policy / Year	Summary
Strategy (2018), Electricity Strategy (2019), Electricity Infrastructure Roadmap (2020), Net Zero Plan Stage 1: 2020 – 2030 (2020) and Implementation update (2022) ***- Central West and Orana Regional Plan 2036 and 2041*** ***- Local Strategic Planning Statement***	- notes that all coal fired power plants in NSW are scheduled for closure within the next twenty years - identifies Renewable Energy Zones (REZ) across NSW aimed at encouraging investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW - Regional goals to support the State's transition to lower emissions and Council goals to promote renewable energy production; and - Central-West Orana REZ was declared in November 2021 and is the first step in formalising the REZ under the EII Act.

In 2021, NSW derived approximately 26.9% of its energy from renewable sources. The rest was derived from fossil fuels, including 69.7% from coal and 2.8% from gas. NSW is one of the nation's leaders in large-scale solar, with 22 major operational projects and 8 under construction or planned to be under construction.

The project's alignment with existing Commonwealth and State policies and strategies are considered in **section 5.1**.

2.4 NSW Solar Guideline

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

The Guideline was revised in August 2022 following extensive consultation, to ensure the assessment of large-scale solar energy projects continues to be transparent, consistent and supported by the best available information. While the revised guideline does not strictly apply to this project as it was lodged prior to their release, the project is broadly consistent with the principles in the revised guideline.

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

3 Statutory Context

3.1 State Significant Development

The project is classified as State significant development under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in clause 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP), as it is development for the purpose of electricity generating works with a capital investment value of more than $30 million.

Consequently, the Minister for Planning is the consent authority for the development. However, under the Minister's delegation of 9 March 2022, the Director, Energy Assessments, may determine the development application as Council did not object, there were less than 15 unique submissions from the general public and a political donations disclosure statement has not been made.

3.2 Amended Application

In accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), a development application can be amended at any time before the application is determined. X-Elio has sought to amend its application, the details of which are summarised in **Section 4.2** of this report. Under the delegation from the consent authority (i.e. the Minister for this development), of 9 March 2022, the Director, Energy Assessments can agree to amendments to an application.

The Department has accepted the amended application for the following reasons:

- the project amendments have reduced the impacts of the project as a whole;
- the amended application directly responds to the key issues raised in submissions received by the Department during the exhibition of the original application;
- X-Elio assessed the impacts of the amended project (see **Appendices E** and **F**); and
- the Department made the additional information available online and sent it to the relevant agencies for comment.

3.3 Permissibility

The majority of the site is located on land zoned RU1 – Primary Production, with part of the access road to the site located on land zoned RU2 – Rural Landscape, under the *Dubbo Local Environmental Plan 2011* (LEP).

The project is permissible because electricity generating works are permissible with consent on any land in a prescribed rural, industrial or special use zone, including RU1 and RU2 zones, under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP).

The Department must consider the application in accordance with clause 2.42 of the Transport and Infrastructure SEPP, which applies to the determination of a State significant development application for solar or wind electricity generation on certain land. Clause 2.42 states that the determination of solar

or wind electricity generation SSD projects in a regional city must consider any conflict with existing or approved residential or commercial uses of land surrounding the development and whether it is unlikely to have a significant impact on the regional city's capacity for growth or scenic quality and landscape character. The site is located on the periphery of the regional city of Dubbo, and while the majority of the proposal site (including all solar panels and transmission line infrastructure) is located outside of the land covered by the Transport and Infrastructure SEPP, the proposed road upgrades on Delroy Road are on subject land under that provision.

Therefore, the Department has considered the requirements of clause 2.42 for the overall proposal in **Section 5.2** and **5.3**.

3.4 Integrated and Other approvals

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

Under Section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).

The Department has consulted with the relevant government agencies responsible for the integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix H**).

3.5 Renewable Energy Zone

The *Electricity Infrastructure Investment Act 2020* (EII Act) coordinates investment in transmission, generation, storage and firming infrastructure in NSW and gives effect to the Electricity Infrastructure Roadmap. Under section 19 of the EII Act, the Minister for Energy may declare a renewable energy zone comprising a specified geographical area of the State, and specified generation, storage or network infrastructure.

This project is located in the geographical area specified in the Central-West Orana REZ declaration, which would comprise all planned, new and existing network infrastructure, with an intended network capacity of 3 gigawatts.

3.6 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. The Department has considered all of these matters in its assessment of the project, as well as X-Elio's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix G**.

4 Engagement

4.1 Department's engagement

The Department publicly exhibited the EIS from 2 December 2021 until 20 January 2022, advertised the exhibition in the press, and notified adjoining landowners adjacent to the project boundary including in-person discussions with one landowner.

The Department consulted with Council and the relevant government agencies throughout the assessment, and inspected the site on 20 May 2022. The Department notified and sought comment from Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP, as discussed further in **sections 4.5** and **5.5**. The Department also consulted with the Department's Biodiversity, Conservation and Science Directorate (BCS) regarding a revision to the Biodiversity Development Assessment Report (BDAR) following a request for further information.

4.2 Submissions and Submissions Report

During the exhibition period of the EIS, the Department received 2 public submissions, both objecting to the project.

Advice was also received from 11 government agencies and a submission received from Dubbo Regional Council.

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

X-Elio provided a response to matters raised in submissions on the project (see **Appendix D**) and has also provided additional information during the Department's assessment (see **Appendix F**).

4.3 Amended Application

Following consideration of submissions on the project, X-Elio amended its application in April 2022, as detailed in the Amendment Report (see **Appendix E**). The amended application includes:

- removal of solar panels to avoid visual impacts to Receiver R6; and
- commitment to a right of way carriageway for the site access.

Despite the proposed changes, the generating capacity of the project would remain unchanged at 90 MW.

The Department provided the Amendment Report to relevant government agencies for review and comment and made it available on the Department's website. As the project amendments refer to a reconfiguration and reduction in the site footprint within the previously provided project site, the Department did not exhibit the Amendment Report.

4.4 Summary of submissions

Both public submissions were received from neighbouring residents, and each objected to the project.

The objections raised the following concerns:

- visual impacts and the adequacy of the visual assessment;
- glint and glare impacts from the proposed solar panels;
- impacts on property values and land use;
- adequacy of consultation;
- flooding;
- construction dust; and
- local road network capacity, road safety and extent of proposed upgrades, and road noise.

4.5 Summary of advice received from Government agencies

Council and the government agencies provided comments on key aspects and recommended conditions of consent. No agency objected to the proposal. A summary of the key matters raised in the government agency submissions and subsequent advice is provided in **Table 4Table 4**.

Table 4 | Summary of Agency Advice

Agency	Key issues	Position	Section in report
Dubbo Regional Council	Road upgrades, biodiversity, waste management, subdivision, easements and consideration of the draft consolidated LEP.	Comment	5.4 and 5.5
Department's Biodiversity, Conservation and Science Directorate (BCS)	Initial feedback on EIS requested clarification about the Category 1-exempt land designation, justification for the identification of Plant Community Types on the site, and further survey or assessment of Eastern pygmy-possum, *Pterostylis cobarensis* and Leafless Indigo. Further feedback was provided on the revised BDAR, querying whether all scattered trees across the site had been identified and accounted for in BAM C calculations.	Comment	5.4
Transport for NSW (TfNSW)	Requested further information about traffic assessment, request for strategic designs be provided for any required access treatments and road upgrades	Comment	5.5
Rural Fire Service (RFS)	Recommended requirements for comprehensive Fire Safety Study and Emergency Response Plan	Comment	5.5
Heritage NSW	Recommended requirements for an unexpected finds protocol, to be implemented during construction and operation	Comment	5.5
DPI Agriculture	Recommended options to verify soil health and capability would improve as a result of the project, including baseline measurements, ongoing monitoring process, in conjunction with groundcover management	Comment	5.2
Crown Lands	Noted that there are Crown roads adjoining the site	Comment	Noted

Agency	Key issues	Position	Section in report
Department's Water Group and the Natural Resource Access Regulator (NRAR)	Requested confirmation of water availability for construction and operation uses	Comment	5.5
Minerals, Exploration and Geoscience (MEG)	Confirmed that the applicant had consulted with owner of exploration licence across land and had no further issues.	Comment	5.2
Fisheries Group (DPI Fisheries), Environment Protection Authority, WaterNSW, and Civil Aviation Safety Authority (CASA) did not raise any issues.			

5 Assessment

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key issues, namely land use compatibility (**Section 5.2**), visual impacts (**Section 5.3**) and biodiversity (**Section 5.4**) .

The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions in **Section 5.5**. A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Energy Transition

The project aligns with a range of national and state policies, which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability.

With a generating capacity of 90 MW, the solar farm would generate enough electricity to power about 33,600 homes. This is consistent with the *NSW Climate Change Policy Framework* of achieving net zero emissions by 2050. The inclusion of a battery would enable the project to store solar energy for dispatch to the grid outside of daylight hours and/or during peak demand, increasing grid stability and energy security.

Further, the project would be located within the Central-West Orana REZ. As such, the project would play an important role in:

- increasing renewable energy generation and capacity of the NEM;
- firming the grid by including 25 MW / 25 MWh energy storage; and
- contributing to the transition to a cleaner energy system as coal fired generators retire.

The project is in an area with direct access to the transmission network with available capacity and abundant solar resources in the Central-West Orana REZ, on land where solar development is permissible with consent under the Transport and Infrastructure SEPP.

5.2 Compatibility of proposed land use

Provisions of the LEP

The site is located on land within the RU1 – Primary Production and RU2 – Rural Landscape zones under the LEP. While a solar farm is permitted in these zones because of the Transport and Instructure SEPP, the Department notes a solar farm would otherwise be a prohibited land use in these zones under a strict reading of the LEP. However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar farm on the project site.

Firstly, the LEP expressly references the Transport and Infrastructure SEPP and acknowledges that electricity generating works are regulated by the Transport and Infrastructure SEPP, rather than the LEP. As described above, a solar farm is permitted with consent on land zoned RU1 under the Transport and Infrastructure SEPP.

Secondly, the proposal is consistent with the objectives of the zones under the LEP, particularly by:

- providing diversity in primary industry enterprises and systems appropriate for the area.
- minimising conflict between land uses within this zone and land uses within adjoining zones.
- providing for a range of compatible land uses in the locality.

The locality supports a range of rural land uses including agricultural, large lot residential and recreational uses, and the proposal would add a new infrastructure development with minimal off-site environmental impacts, encouraging renewable energy development in the area.

In addition, Council's strategic planning documents specifically encourage the provision of renewable energy across the LGA. The Dubbo Regional Council *Community Strategic Plan* notes that the LGA 'has one of the highest take-up rates for solar energy provision in Australia' and 'recognises that our community, business and industry understand the financial and environmental benefits of renewable energies and the role it can play in our sustainable future.' The Community Strategic Plan includes a strategic outcome that investment in renewable energy opportunities are encouraged and supported.

Further, the development is consistent with key Government strategic planning guidance, including the *Central West and Orana Regional Plan 2041*, which includes a direction to support the State's transition to lower emissions and renewable energy generation, and identifies growth in solar energy as an opportunity to promote local jobs and development opportunities for associated industries, emphasises the strategic need for increased renewable energy development in the region, and to leverage the Central–West Orana Renewable Energy Zone to provide economic benefit to communities.

Whilst the Department considers that the project is compatible with the LEP, and broader strategic planning objectives for the site, the project's impacts on other land uses are further discussed below.

Provisions of the Transport and Infrastructure SEPP

In accordance with the Transport and Infrastructure SEPP, the Department must consider whether the project is located to avoid conflict with existing or approved residential or commercial uses of land surrounding the development and whether it is unlikely to have a significant impact on the regional city's capacity for growth or scenic quality and landscape character.

The site is located on rural lands with a large lot residential subdivision (R5) approximately 300 m west of the site and approximately 2.5 km to the east of the site (see **Section 5.5**). There would be negligible potential for noise or air quality impacts on large lot residential land uses due to the distance from these areas and large stands of remnant woodland that would be retained on the proposal site. The access route to the site along Delroy Road is not shared with through-traffic travelling to and from residential land west of the site, and the Department considers that potential traffic impacts to the east on Minore Road would be minimal and readily capable of effective management in accordance with the proposed limits on heavy vehicle movements and implementation of a Traffic Management Plan (see **Section 5.5**). The Department considers that the site has been located to avoid significant conflict with existing or approved residential or commercial uses of land surrounding the development.

The Department notes that the site and its immediate locality have not been identified for future growth by Council or the Department in strategic planning documents, and as such the proposal would not impact on Dubbo's capacity for growth.

The Department has also considered the landscape and visual impacts of the proposal in detail in **Section 5.3**. For the reasons stated in that section, the Department considers the proposal is unlikely to have a significant adverse impact on Dubbo's scenic quality and landscape character.

Overall, the Department is satisfied the location of the site meets the requirements of clause 2.42 of the Transport and Infrastructure SEPP.

Potential Impacts on Other Land Uses

Siting of the project has avoided important agricultural land. Land across the site is mapped as Class 5 under the Land and Soil Capability Mapping for NSW (OEH 2017), indicating agricultural uses are largely restricted to low-moderate impact uses such as grazing and some horticulture.

To reduce the potential for impact on agricultural land, X-Elio has committed to continuing agricultural uses on the site, and development of a groundcover management plan and weed and pest management measures.

The Department considers that the impacts are acceptable subject to X-Elio's commitments, which also include a post-approval soil survey, and ongoing monitoring of soil health and capability as recommended by DPI Agriculture.

The site is covered by an active mineral exploration licence (EL8961) held by Sunrise Energy Metals Ltd. X-Elio consulted with Sunrise Energy Metals Ltd, who confirmed that proposal would not sterilise potential mineral resources in the area. MEG also reviewed the documentation and confirmed they had no issues with it proceeding.

Land adjoining the southern and eastern site boundaries are Crown Roads and therefore would not be impacted by the project.

The Department considers that the proposal represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the development.

5.3 Visual

Public submissions objecting to the project raised concerns about visual impacts including potential impacts on the visual landscape and glare to surrounding properties.

The site is located on gently undulating land, within a rural landscape. Expansive views across the area are generally limited by the undulating topography and patches of native and planted vegetation, including large stands of remnant woodland on the proposal site, and significant trees along Delroy and Minore Roads and the Main Western Rail Line.

In regard to visual impacts on public vantage points, X-Elio's assessment concluded that the only high visual impacts would be at the neighbouring Dubbo Model Aero Club grounds, which is associated with the proposal, and for users of Delroy Road, which terminates at the site access and is used at this location only for access to the proposal site and the Aero Club. On this basis, the Department considered the visual impact from public vantage points to be transient, and would overall be minimal.

X-Elio assessed the visual impacts of the proposal from 7 representative viewpoints, and 58 non-associated residential receivers within 2 km of the proposal site. The visual assessment concluded that, of the 58 residential receivers, the site would only be visible from 2 receivers, R4 (163 m north of the

project boundary) and R6 (180 m west of the project boundary). The Department accepts that views from other receivers (include R2 and R3 which are closest to the site) are screened by topography and vegetation including remnant vegetation that would be retained on site.

The visual impact at R4 is low, given there would be potential for filtered views of the main access point and solar panel infrastructure to the north east of the site, through existing vegetation along Minore Road and the Main Western Rail Line. X-Elio advised that it consulted directly with the landowners prior to lodgement of the EIS, and, while the landowner did not express any concerns about the potential impacts, X-Elio has committed to ongoing consultation with the landowner throughout the operation of the project to address any residual concerns.

At receiver R6, the visual assessment concluded that the visual impacts would be negligible, however there would possibly be filtered views of solar panels from the dwelling. This landowner objected to the project, expressing concerns about the potential visual impacts, prompting the Department to request additional consideration of the impacts.

X-Elio amended its site layout to significantly increase the distance between the closest panels and receiver R6 (refer to Figure 1). With the amended site layout, the distance from the residence to panels is around 810 m. The Department considers the visual impact at this residence with the amended layout would be low.

The Department acknowledges concerns raised by receiver R6 that the proposal may also generate glare impacts, given that glint and glare can be caused by metallic components of the solar panel modules, but considers that impacts would be negligible at all residences given intervening topography, vegetation and the proposed increased setback from R6.

The Department considers that the applicant has adequately reduced the potential visual impacts of the proposal to an acceptable level, while maintaining the proposed solar power generating capacity. X-Elio has advised that the creation of the setback area would not reduce the generation capacity of the proposal, which can still be achieved within the remaining solar panel footprint.

5.4 Biodiversity

The proposal has the potential to impact biodiversity through the clearing of native vegetation.

The site is comprised predominantly of paddocks, with large areas of woodland to the north west and east of the site, and a riparian corridor bisecting the site from north-east to west.

As the majority of the site has been historically cleared for grazing use, much of the site (approximately 400 ha) is considered "Category 1 – exempt land" in accordance with the *Local Land Services Act 2013*. Clearing on Category 1 land does not require full biodiversity assessment. As part of the assessment, X-Elio provided further information to verify the categorisation of the land, which was accepted by BCS .

NGH prepared a revised BDAR for the site in November 2022 to respond to a request for further information to ensure the BDAR covered the full project area. The revised BDAR was reviewed and accepted by BCS.

Avoidance and mitigation

X-Elio has generally focused on avoidance of impact through the preliminary design process for the project. The project would avoid the two large woodland areas (each approximately 250 ha in area) located to the north-west and east of the site, and generally avoid impacts to riparian woodland in the centre of the site, except for the establishment of internal access roads.

One endangered ecological community (EEC), Fuzzy Box Woodland was identified on site, and it would be largely avoided, as no panels are proposed to be constructed in that area. The EEC within the project mostly constitutes the exclusion zones (see **Figure 1**). There are however 0.47 ha that would be impacted of this EEC for crossings required between panel arrays.

Native vegetation

The site contains grassy woodlands, comprising one endangered ecological community Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion (Fuzzy Box Woodland), and dry sclerophyll forests, Mugga Ironbark - Buloke - Pillga Box - White Cypress Pine shrubby woodland on sandstone in the Dubbo region, south-western Brigalow Belt South Bioregion (Mugga Ironbark Woodland).

Within the 384.39 ha clearing area, the project would clear 68.53 ha of native vegetation, including 0.47 ha of Fuzzy Box Woodland and 68.06 ha of Mugga Ironbark Woodland, and the remainder of the footprint was Category 1 land. However, of the 68.06 ha of Mugga Ironbark Woodland that would be cleared, the majority (93% or 63.92 ha) is in poor condition and would not need to be offset under the *Biodiversity Conservation Act 2016* and 2.58 ha (4%) is of low quality and the remainder is moderate quality.

Table 5 provides a summary of the impacts of the project, and the relevant ecosystem credit liability under the NSW Biodiversity Offset Scheme.

Table 5 | Ecosystem credit requirements

PCT	Condition	Impact area (ha)	Ecosystem credits required
PCT 201: Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion	Moderate	0.47	12
PCT 255: Mugga Ironbark - Buloke - Pillga Box - White Cypress Pine shrubby woodland on sandstone in the Dubbo region, south-western Brigalow Belt South Bioregion	Low	2.58	43
	Moderate	1.56	39
	Scattered Trees	1 tree	1

Five species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* were assessed: Regent Honeyeater, Swift Parrot, Spot-tailed Quoll, Corben's Long-eared Bat, and Grey-headed Flying Fox. As a result of that assessment, suitable foraging habitat areas for the Regent Honeyeater were excluded from the development footprint. None of the fauna species associated with the vegetation on site generated credits based on the absence of suitable habitat or through targeted surveys.

The Department has recommended X-Elio retire the ecosystem credits outlined in **Table 5** in accordance with the NSW Biodiversity Offsets Scheme prior to the commencement of construction of the project. X-Elio has advised they intend to pay the offset obligation rather than establish a Stewardship site to generate credits, prior to the commencement of construction.

5.5 Other issues

The Department's consideration of other issues is summarised in **Table 6**.

Table 6 | Summary of other issues raised

Findings	Recommendations
Traffic and Transport	
• The project has the potential to impact local and State roads primarily during construction. • Council raised concerns with the adequacy of the proposed site access route via Delroy Road, an unsealed local road. • The primary heavy vehicle route during construction is from Port Botany, via the Golden Highway (with some movements expected on the Mitchell Highway from Bathurst and south). • Within Dubbo LGA, vehicles would access the site via the Newell Highway, and the local road network via Minore Road and Delroy Road. • The Traffic Impact Assessment states that up to 68 heavy vehicles, and a total 167 vehicles, would access the site each day during peak construction. Operational traffic would be infrequent and generally minimal. • Overall, the proposed transport route has sufficient capacity for the predicted traffic generation. • However, while Delroy Road is currently used by only approximately 10 vehicles a day, it is unsealed with sections of poor drainage, and its condition is likely to degrade with heavy vehicle use for the project. • Although X-Elio proposed to upgrade the intersection of Minore Road and Delroy Road, to provide a short sealed approach, minor linemarking and signage, Council requested X-Elio also seal the entire length of Delroy Road from Minore Road to the site access point, with the potential to reduce the sealed road width where required to avoid clearing of native vegetation. • The Department considered that sealing Delroy Road would provide a safe heavy vehicle access to the site and required X-Elio to consult further with Council to develop a schedule of road upgrades to be undertaken prior to the commencement of construction to the satisfaction of Council. • With the implementation of intersection upgrades, the sealing of Delroy Road, and implementation of a comprehensive Traffic Management Plan, the project would not result in significant impacts to the road network capacity, efficiency or safety.	• Complete the upgrade of the Minore Road / Delroy Road intersection, and sealing of Delroy Road to the site access point. • Restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified. • Prepare and implement a Traffic Management Plan, including provisions for dilapidation surveys, and incorporating details of measures that would be implemented to address road safety.

Findings	Recommendations
Heritage	
Aboriginal Cultural Heritage • A survey of the site undertaken in consultation with Registered Aboriginal Parties (RAPs) identified no Aboriginal objects, Aboriginal sites or potential archaeological deposits (PADs). • The Aboriginal Heritage report concludes that potential impacts are very low, subject to a Chance Finds Protocol being implemented. • Heritage NSW advised that it is satisfied with the Aboriginal Cultural Heritage assessment undertaken. • Heritage NSW recommended that if Aboriginal artefacts or skeletal remains are identified during construction of the project, all work on the site should cease and X-Elio committed to implementing this in the response to submissions. • With these measures, the Department and Heritage NSW consider that the project would not significantly impact the Aboriginal heritage values of the locality. Historic Heritage • No heritage items listed on Commonwealth, National or State registers are located within or surrounding the site. • Site inspections did not identify any new heritage sites or items occurring within or near the development site. • Neither Heritage Council of NSW nor Council raised concerns in relation to historic heritage, noting that there are no heritage items within or surrounding the site. • The Department considers that the project would not have any adverse impacts on local or State heritage items in the local area.	• Prepare and implement a Chance Finds Protocol, in consultation with RAPs and to satisfaction of Heritage NSW.
Hazard and Risks	
• The site is classified as bushfire prone land on Council's bushfire prone land map. • X-Elio would be required to comply with the RFS's *Planning for Bushfire Protection 201*9, and prepared a bushfire risk assessment. • The Department considers that the bushfire risks can be suitably controlled through the implementation of standard fire management procedures and recommendations made by FRNSW and RFS, including: – measures including asset protection zones in accordance with Planning for Bushfire Protection 2019:	• The BESS associated with the development must not exceed a total capacity of 25 MW across the project site and must be installed in an arrangement consistent with the EIS. • Ensure that the development complies with the relevant requirements in the RFS's *Planning for Bushfire Protection 2019* and Standards for Asset Protection Zones.

Findings	Recommendations
– preparation of a Fire Safety Study in consultation with FRNSW; – development and implementation of a comprehensive Emergency Response Plan; • X-Elio committed to preparing both a Fire Safety Study and a comprehensive Emergency Response Plan in their response to submissions. • X-Elio completed a preliminary risk screening for the project and found that the quantity of dangerous goods would be below the SEPP 33 threshold. • The project would comply with the *International Commission on Non-Ionizing Radiation Protection* (ICNIRP) guidelines for electric, magnetic and electromagnetic fields. • Subject to the recommended conditions, the Department, FRNSW and RFS are satisfied that risks associated with the project would be minimal.	• Ensure the defendable space and solar arrays are managed as an APZ and the development is suitably equipped to respond to fires including water supply tank and appropriate connectors. • Prepare a Fire Safety Study and an Emergency Plan for the development. • Store and handle all liquid chemicals, fuels and oils used on-site in accordance with all relevant Australian Standards and the EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Handbook.*
Water	
Surface Water and Flooding • The proposal area includes a number of minor watercourses, including seven first order streams, and one second order stream. There are also a number of existing farm dams across the site. All watercourses would be described as ephemeral and only contain water during and shortly after rainfall events. • The project has been designed to avoid the second order stream entirely except for a single internal access road crossing, and includes a vegetation buffer along the length of the stream, consistent with the *Guidelines for Controlled Activities on Waterfront Land*. • The flood modelling indicates that parts of the proposed site are affected by flooding for the 5% annual exceedance probability (AEP) event and 1% AEP events. • The flood hazard vulnerability over the site is largely classified as low in the 1% AEP event, except within the second order watercourse and dams onsite. • The project has been designed to have all infrastructure a minimum of 500 mm above the modelled 1% AEP flood level, and avoid areas high risk areas. • The flood modelling shows that there is not predicted to be a significant impact on flood behaviour within the floodplain as a result of the proposed works. • One public submission raised concerns regarding an existing dam in the north of the project site and the flood impacts on the proposal site when the dam overflows. The dam is located away from any project infrastructure as a result of the proposed visual setback from R6, and so is unlikely to have any impact on the project in a flooding event.	• Minimise any soil erosion in accordance with the Managing Urban Stormwater: Soils and Construction (Landcom, 2004) manual and ensure the solar project is constructed and maintained to avoid causing erosion on site. • Unless DPIE Water agrees otherwise, ensure all works are undertaken in accordance with Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018).

Findings	Recommendations
• The submission also noted that the access to the site via Minore Road is prone to flooding, and this would prevent vehicles from leaving the site. • The applicant will be required to identify specific emergency exit routes to be used in the case of flood in their Emergency Plan. • Any erosion and sedimentation risks associated with the project can be effectively managed by following the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004). The Department has included these requirements in the recommended conditions and to prepare a Soil and Water Management Plan. <u>Groundwater</u> • The project is not expected to adversely affect groundwater resources. • During construction the maximum depth of infrastructure would be mounting structures up to a depth of 2- 3 m, and impacts to groundwater are considered unlikely to occur. <u>Water Supply</u> • The project would require up to 42 ML of water across the entire 18 month construction period, largely for dust suppression on unsealed tracks and for the construction of new roads. • There are a number of dams which will be retained in the development footprint and it is proposed that the some of water used on site would be sourced from existing on-site farm dams. It is estimated that the harvestable right for the development footprint is approximately 26.6ML, or 71% of the total water required. • The remaining water would be sourced from the Macquarie River above Burrendong, subject to commercial agreement. This source has adequate supply for the project. • Subject to the recommended conditions, the Department considers that the project would not result in significant impacts on water resources. •	
Noise	
• There is potential for noise impacts during construction activities, operation and from road traffic. Two public submissions expressed concern about potential noise impacts. • Noise generated by the proposed construction, upgrading and decommissioning activities would be well below the 'highly noise affected' criterion of 75 dB(a) in the EPA's *Interim Construction Noise Guideline* (the ICNG) at all surrounding residences, and construction would be limited to daytime hours.	• Minimise noise generated by the construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG. • Comply with the noise management levels as derived from the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence

Findings	Recommendations
• Construction noise is predicted to exceed the noise management level of 45 dB(A) for 10 non-associated residences R2 – R10 during site establishment, piling for panel supports and assembly of frames and panels. • The noise levels predicted for these residences range between 46 – 59 dB(A), but would be only for a short duration during construction (two to three days out of the 18 month construction program). • There are also two receivers (R61 & R44) that would experience minor exceedances of 2 and 3 dB(A) during the upgrade works along Delroy Road and at the Minore Road intersection. These works would take place over an approximately one-week period. • X-Elio has committed to a suite of noise mitigation measures including using less noisy plant and equipment, regular inspection and maintenance of equipment, strategic placement of machinery within site to reduce noise impacts on residences, and a noise complaints procedure to handle complaints from the community. • Construction traffic noise would comply with the criteria in the EPA's *Road Noise Policy*. • Vibration impacts from construction works would not impact any surrounding non-associated receivers and there are no operation ground vibration sources which were identified. • Noise generated during the normal operation of the proposed facility would not exceed the noise trigger levels in the EPA's *Noise Policy for Industry* (NPI). • Noting the short nature of the exceedances and the proposed mitigation, the Department is satisfied that construction and operational noise impacts would be limited and has recommended conditions requiring X-Elio to minimise noise during construction, upgrading and decommissioning as well as limiting operational noise.	• Restrict construction hours to Monday to Friday, 7 am -6pm and Saturday, 8 am - 1 pm.
Subdivision	

• Council raised concerns about 'rights of carriageway' for the proposed lots subdivision.
• X-Elio proposes to subdivide Lot 6 DP 755102 into:
  – Lot A (1 ha) for the substation, battery energy storage and ancillary facilities;
  – Lot B (441 ha) for the project site; and
  – Lot C (346 ha) continue to be used by the existing landowner.
• X-Elio clarified that the project would create right of carriageway to link the Lot C land parcels to enable landowner access during the project construction and operation. Further, following Council consultation, X-Elio obtained landowner consent to establish a right of carriageway.
	• Subdivide the proposed land in accordance with requirements of the EP&A Act, EP&A Regulation and the Conveyancing Act 1919 (NSW).

Findings	Recommendations
• The proposed subdivision of the lots would be below the minimum lot size of 800 ha and prohibited under a strict reading of the LEP. Notwithstanding, under Section 4.38(3) of the EP&A Act, development consent for the project as a whole can be granted despite the subdivision component of the application being prohibited by the LEP. • The Department considers that the subdivision should be approved as it: – is necessary for the operation of the substation; – would not result in any additional dwelling entitlements on the subdivided lots; and • is consistent with the key objectives of the RU1 zone as it would encourage diversity and primary industry enterprises and minimise conflict between land uses.	
Cumulative Impacts	
• Given the distance of the Forest Glen Solar Farm from all other proposed or approved major energy projects in the region (see **section 2.2**), and the lack of common haulage routes west of Dubbo, there would be no material cumulative traffic, visual or noise impacts. • X-Elio identified projects with potential overlapping construction periods (NSW RDS training academy, Wellington North Solar Farm, Suntop Solar Farm, Uungula Wind Farm, Marivale Solar Farm, Dunedoo Solar Farm, Gilgandra Solar Farm, Dubbo Quarry Continuation Project, Mumbil Solar Farm and Burrendong Wind Farm), • While it is unlikely that the entire construction period of these projects would overlap, to manage the potential cumulative impacts associated with multiple projects in the region and to encourage locally sourced workers, X-Elio would be required to develop an Accommodation and Employment Strategy in consultation with Council. The Strategy would require X-Elio to: – propose measures to ensure there is sufficient accommodation for the workforce associated with the project; – consider cumulative impacts with other projects in the area; – prioritise employment of local workers; and – monitor and review the effectiveness of the strategy, including regular monitoring during construction. • To address any potential cumulative impacts associated with multiple projects being built simultaneously in the region, an Accommodating and Employment Strategy has been recommended.	• Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration to prioritising the employment of local workers.

Findings	Recommendations
Community benefit	
• The Department considers that, in addition to its contribution to energy transition, the project would generate direct and indirect benefits to the local community, including: – up to 200 construction workers would be required during the 10 month peak construction period; – expenditure on accommodation and business in the local economy by workers who would reside in the area; and – the procurement of goods and services by X-Elio and associated contractors. • Further, X-Elio has reached an in-principle agreement with Council to enter into a VPA, for a total of payment of $500,000 throughout the life of the project.	• X-Elio implement its offer to enter into a planning agreement with Council.
Decommissioning and rehabilitation	
• The Department has developed standard conditions for solar farms to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objectives such as restoring land capability to its pre-existing agricultural use. • With the implementation of the standard conditions and monitoring requirements, the Department considers that the solar farm would be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and that the site be appropriately rehabilitated.	• Include rehabilitation objectives requiring the site to be rehabilitated within 18 months of cessation of operations.

6 Evaluation

The Department has assessed the development application, EIS, submissions, Submissions Report, Amendment Report and additional information provided by X-Elio and advice received from relevant government agencies. The Department has also considered the objectives and relevant considerations under Section 4.15 of the EP&A Act.

The project site is wholly located on land zoned RU1 and RU2, where electricity generating works are permissible with consent. The solar farm development is a suitable land use for the site as it located within the Central-West Orana Renewable Energy Zone, has good solar resources, direct access to the local road network and there is available capacity on the existing electricity network located in an area.

Although only the road upgrade component of the project, and not the site, fall within the mapped boundary of the Regional City, the project requires consideration under the Transport and Infrastructure SEPP. The Department considers it is unlikely to have a significant impact on the regional city's capacity for growth or scenic quality and landscape character, particularly given that only the road upgrade component of project falls within the boundary.

The project has been designed to largely avoid key constraints, including amenity impacts to nearby non-associated residences, agricultural land, watercourses, remnant native vegetation and Aboriginal heritage sites. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.

The project would not result in any significant reduction in the overall agricultural productivity of the region, as it would avoid all areas of BSAL. Following decommissioning, the site could return to agricultural land as the inherent agricultural capability of the land would not be affected in the long term.

The Department considers that there would be no significant visual impacts on surrounding residences, due to distance from non-residences or intervening topography and vegetation providing screening, setbacks from solar arrays and the public road network. To address the residual impacts including traffic and transport, surface water, flooding, erosion and hazards, the Department has recommended a range of stringent conditions, developed in consultation with agencies and Council, to ensure these impacts are effectively minimised, managed or offset.

The Department considered the submissions made through the exhibition of the project and the issues raised by the community and agencies during consultation. These matters have been addressed through changes to the project and the recommended conditions of consent.

Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources and is consistent with the goals of the NSW's Climate Change Policy Framework, the Net Zero Plan Stage 1: 2020 – 2030. It would have a generating capacity of 90 MW of clean electricity, which is enough to power approximately 33,600 homes, and 25 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.

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

On balance, the project is in the public interest, subject to the recommended conditions of consent.

7 Recommendation

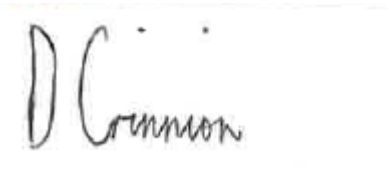
It is recommended that the Director, Energy Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision;
- **grants consent** for the application in respect of Forest Glen Solar Farm (SSD-9451258) as amended; and
- **signs** the attached development consent and recommended conditions of consent (see **Appendix H**).

Prepared by:

Nestor Tsambos, Senior Environmental Assessment Officer
Dominic Crinnion, Acting Director Infrastructure Management

Recommended by:



Dominic Crinnion
Acting Director
Infrastructure Management

8 Determination

The recommendation is Adopted / ~~Not adopted~~ by

Nicole Brewer
Director
Energy Assessments

Appendices

Appendix A – List of referenced documents

Forest Glen Solar Farm – Environmental Impact Statement, NGH, October 2021

Forest Glen Solar Farm – Submissions Report, NGH, March 2022

Forest Glen Solar Farm – Amendment Report, NGH, April 2022

Forest Glen Solar Farm – Biodiversity Development Assessment Report, NGH, November 2022

Appendix B – Environmental Impact Statement

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix C – Submissions

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix D – Submissions Report

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix E – Amendment Report

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix F – Additional Information

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix G – Statutory Considerations

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

- the objects found in Section 1.3 of the EP&A Act; and

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

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

Aspect	Summary
Objects of the EP&A Act	The objects of most relevance to the Minister's decision on whether to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act. The Department considers the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project: • is a permissible land use on the subject land; • is located in a logical location for efficient solar energy development; • is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; • would contribute to a more diverse local industry, thereby supporting the local economy and community; • would not fragment or alienate resource lands in the LGA; and • is consistent with the goals of NSW's *Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030* and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions. The Department has considered the encouragement of ESD (Object 1.3 (b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences. In addition, the Department considers that appropriately designed SSD solar facility development, in itself, is consistent with many of the principles of ESD. X-Elio has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD. Consideration of environmental protection (Object 1.3(e)) is provided in **Section 5.4** of this report. Following its consideration, the Department considers that the project could be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts could be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits. Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in Section 5.5 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality, and any residual impacts can be managed and/or mitigated by imposing appropriate conditions.
State significant development	Under Section 4.36 of the EP&A Act the project is considered a State Significant Development. The Minister for Planning is the consent authority for the development. Under the Minister's delegation of 9 March 2022, the Director, Energy Assessments, may determine the project.

Environmental Planning Instruments (EPIs)	The Dubbo Local Environmental Plan 2011 (LEP) applies and is discussed in **sections 3.3** and **5.2** of this report, particularly regarding permissibility and land use zoning. As discussed in **Section 5.2**, while the proposal would be prohibited under the LEP, it is permissible under the Transport and Infrastructure SEPP. In accordance with the Transport and Infrastructure SEPP, the Department has given written notice of the project to Transgrid and TfNSW. X-Elio completed a preliminary risk screening in accordance with the Hazards SEPP and confirmed the project was not categorised as potentially hazardous or potentially offensive development. The Department has also considered the remediated land provisions of the Hazards SEPP. The site is not listed as a contaminated site in the NSW EPA Contaminated Land Record and list of NSW contaminated sites. Given the site has historically been used for agricultural uses, the Department considers the site would be suitable for the proposed development. The Department has also reviewed the proposal against the Transport and Infrastructure SEPP. The Department considers that the proposal is located so as to avoid land use conflicts with existing and approved uses of land (see **Section 5.2**), would not have a significant impact on, or conflict with, land that would be required to support the growth of a regional city (see **Section 5.5**), as the site is not located in an identified future growth area, and would not significantly impact the scenic quality and landscape character of a regional city, including on any approaches to the city (see **Section 5.3**).

Appendix H – Recommended Instrument of Consent

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm

Appendix I – Notice of Decision

See the Department's website at:

https://www.planningportal.nsw.gov.au/major-projects/projects/forest-glen-solar-farm