



# Beryl Solar Farm Modification 1

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Project layout update  
State Significant Development Modification Assessment  
(SSD 8183 MOD 1)

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# Executive Summary

First Solar Pty Ltd has approval to develop the Beryl Solar Farm (the project), located approximately 5 kilometres (km) west of Gulgong and 80 km east of Dubbo in the Mid-Western Regional Council local government area. FS NSW Project No 1 AT Pty Ltd has acquired the project from First Solar Pty Ltd.

The approved project involves the construction, operation, upgrading and decommissioning of a solar farm with 87 megawatts capacity. The project has been operational since August 2019. The overall total constructed development footprint is 153 hectare and less than approved footprint.

The modification application seeks approval to amend the consent to reflect the smaller constructed project layout and corresponding reduction in biodiversity impacts and offset credits requirements. The modification would reduce the ecosystem credit requirements from 684 to 600. The project boundary would remain unchanged.

The Department published the application on its website on 20 July 2020 and sought comments from the Department's Biodiversity, Conservation and Science Directorate (BCS), Transport for NSW (TfNSW) and Mid-Western Regional Council. None of the agencies objected to the proposed modification and provided advice related to the respective regulatory responsibilities.

The Department's assessment has concluded that the modification should be approved to reflect the amended layout and the corresponding reduction in biodiversity impacts of the constructed project, in comparison with the assessed project.

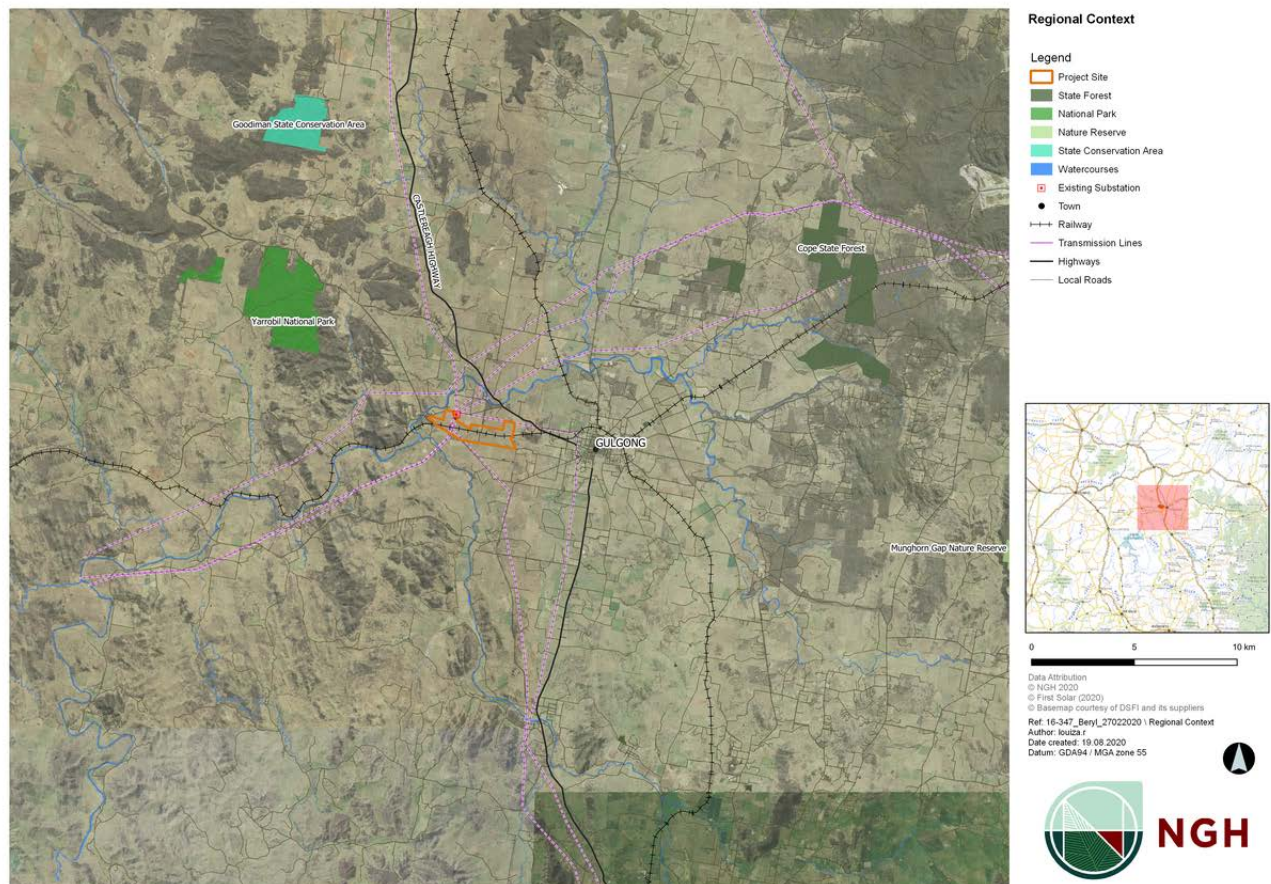
Importantly, the constructed project reconfigured and reduced its total development footprint, within the parameters of the approved project. As such, the overall biodiversity impacts have been reduced.

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# 1 Introduction

FS NSW Project No 1 AT Pty Ltd (FS) has approval to develop the Beryl Solar Farm (the project), located approximately 5 kilometres (km) west of Gulgong and 80 km east of Dubbo in the Mid-Western Regional Council local government area (see **Figure 1**).



**Figure 1 | Regional Context**

## 1.1 Consent history

The project was granted development consent on 5 December 2017 by the then Planning Assessment Commission, as delegate of the then Minister for Planning. The consent was granted to First Solar Pty Ltd and subsequently FS NSW Project No 1 AT Pty Ltd (FS) acquired the project.

The consent permits the construction, operation, upgrading and decommissioning of a solar farm with a generating capacity of approximately 87 megawatts (MW) and includes:

- approximately 950,000 solar panels (up to 2.7 m in height), up to 40 inverter stations (up to 2.9 m in height), and an onsite substation;
- an overhead, 66 kilovolt (kV) transmission line, connecting the project to TransGrid's Beryl substation to the north;
- internal access tracks, staff amenities, offices, parking, laydown area, security fencing; and
- vegetation screening along parts of the western and northern boundaries of the site.

The project has been operational since August 2019.



## 2 Proposed modification

The modification proposes to:

- amend project layout to reflect the smaller constructed footprint; and
- reduce the approved biodiversity offset credits to reflect the smaller constructed project layout footprint.

The consent requires the applicant to retire 684 ecosystem credits associated with the Plant Community Type (PCT) 281 (Rough-Barked Apple – Red Gum – Yellow Box woodland on alluvial clay to loam soils on valley flats in the NSW South Western Slopes and Brigalow Belt South Bioregions) (Box Gum Woodland).

The need for the proposed modification has arisen following the construction of the project, as the constructed project layout reconfigured the approved layout of solar array areas, resulting in less area impacted than anticipated in the original application. A summary of the proposed changes is outlined in **Table 1**.

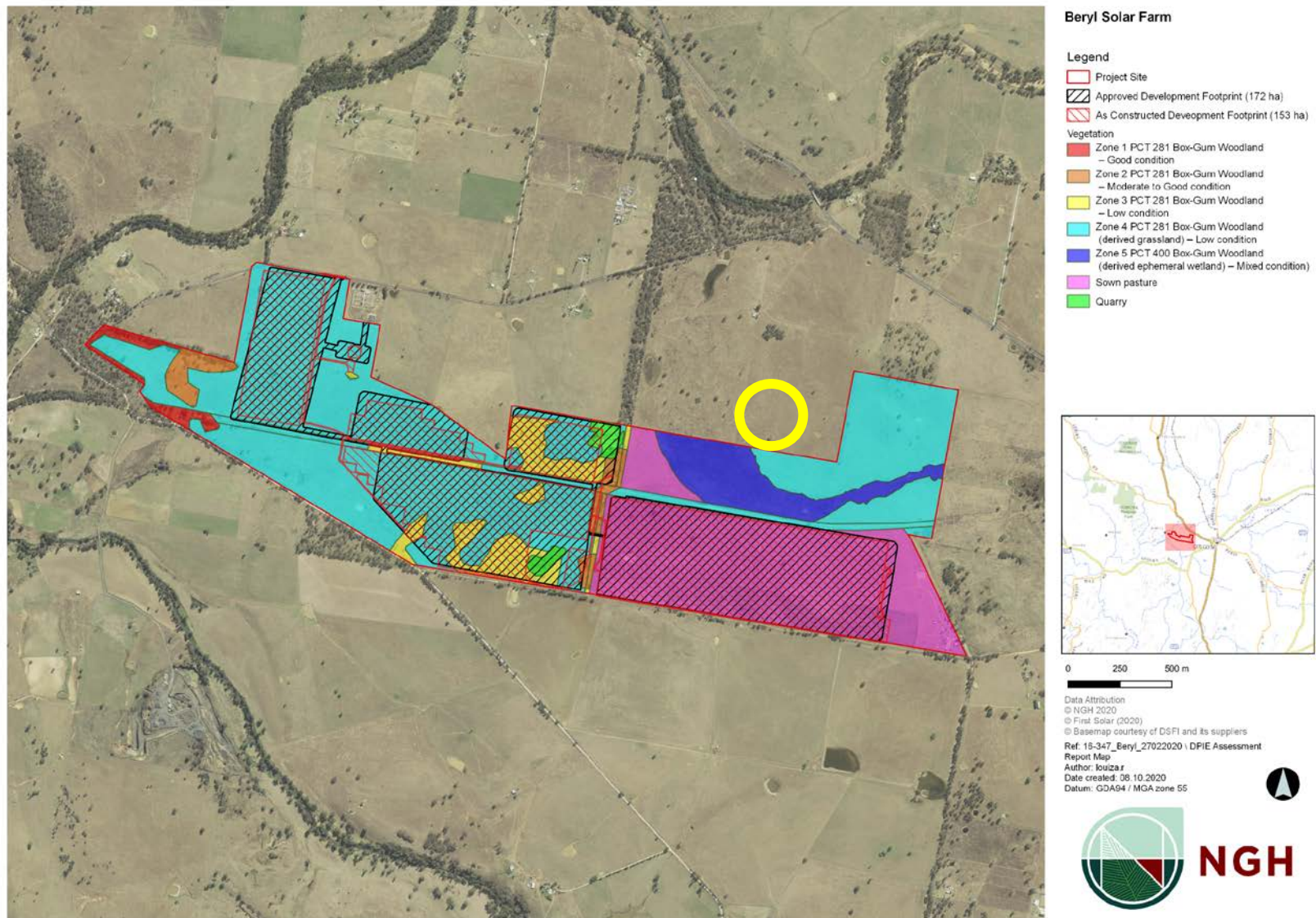
**Table 1 | Summary of proposed changes**

Parameter	As approved	As constructed (proposed modification)	Change (reduction)
Project layout footprint	172 ha	153 ha	19 ha (11.0%)
Impact to Box Gum Woodland (PCT 281)	17.13 ha	15.16 ha	1.97 ha (11.5%)
Ecosystem credits	684	600	84 (12.3%)

**Figure 2** shows both the approved and constructed project layouts. It also illustrates vegetation zone areas, indicating areas impacted and avoided during project construction, compared with the approved project layout. The project was constructed within the approved development boundaries.

The proposed modification seeks an overall decrease to the development footprint by 19 ha, and the net reduction of impacted area of Box-Gum Woodland that generates biodiversity credits is 15.16 ha.

The constructed layout in **Figure 2** is consistent with the works as executed plans provided to the Department upon completion of project construction.



**Figure 2 | Approved and constructed project layouts**

## 3 Statutory context

### 3.1 Scope of modifications

#### Consideration as modification

The project was originally approved under Section 4.38 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and any modification to this consent must be made under Section 4.55 of the EP&A Act.

FS has given an undertaking that the modified project remains substantially the same as the project that was originally approved in accordance with Section 115(1) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

The Department has considered the scope of the modification application and the original consent and considers that the modification is substantially the same development as originally approved and can be considered as a modification and does not require a new development application.

#### Type of modification

The Department has reviewed the scope of the modification application and considers that the application can be characterised as a modification involving minimal environmental impacts as the proposal:

- would not significantly increase the environmental impacts of the project as approved;
- would not substantially change the approved development footprint; and
- is substantially the same development as originally approved.

Consequently, the Department is satisfied that the application can be characterised as a modification to the existing consent under Section 4.55(1A) of the EP&A Act, as it would involve minimal environmental impact and result in substantially the same project as originally approved.

### 3.2 Consent authority

Although the Minister for Planning and Public Spaces is the consent authority for the application, the Director, Energy Assessments, may determine the application under the Minister's delegation dated 9 March 2020 as Mid-Western Regional Council (Council) did not object to the proposal, FS did not make any political donations and there were no public objections. The modification application was not required to be formally exhibited.

### 3.3 Permissibility

The modification is entirely within the approved project site boundary, specifically within land zoned RU1 – Primary Production under the *Mid-Western Regional Local Environmental Plan 2012*.



### 3.4 Mandatory matters for consideration

In accordance with Section 4.55(3) of the EP&A Act, the following must be considered in granting the modification application as relevant to the application:

- environmental planning instruments, proposed instrument or development control plan;
- any planning agreement;
- EP&A Regulation;
- likely impacts of the modification application, including environmental impacts on both the natural and built environments, and social and economic impacts;
- suitability of the site;
- any submissions;
- the public interest;
- the reasons for granting the consent for the original application.

The Department has considered the relevance of the considerations for the modification application below.

#### ***Environmental planning instruments, proposed instrument or development control plan***

The environmental planning instrument relevant to this modification is the *Mid-Western Regional Local Environmental Plan 2012* (the LEP). There are no proposed or draft LEPs or development control plans (DCPs) for Mid-Western Regional Council LGA for consideration in this modification. Permissibility is considered in **section 3.3**.

#### ***Any planning agreement***

There are no voluntary planning agreements between FS and Mid-Western Regional Council.

#### ***EP&A Regulation***

The modification application satisfies the requirements of Section 115 of the EP&A Regulation. There are no additional considerations relevant to the modification application in the EP&A Regulation.

#### ***Likely impacts of the modification application***

The likely impacts of modification are considered in **section 5**.

#### ***Suitability of the site***

The Department's assessment of the original application concluded that the site was suitable for a solar farm subject to the conditions of consent. FS is proposing to modify the development footprint within the approved project boundary. The permissibility of the land use of the proposed modification is considered in **section 3.3**.

#### ***Submissions***

The Department notified and sought advice from BCS, TfNSW and Council, as discussed in **section 4**.

#### ***Public Interest***

The consideration of public interest is provided in **section 6**.

***The reasons for granting the consent for the original application***

The Department has considered the reasons for granting consent to the original application and is satisfied that the proposed modification is consistent with those reasons. The Department also considered the impacts and benefits of the solar farm in accordance with the EP&A Act in granting consent.

## 4 Engagement

### 4.1 Department's engagement

In accordance with the EP&A Regulation, the Department is not required to notify any other parties of the modification application. Notwithstanding, the Department sought comments from the Department's Biodiversity, Conservation and Science Directorate (BCS, formerly Biodiversity and Conservation Division), Transport for New South Wales (TfNSW) and Mid-Western Regional Council (Council). The application was also made publicly available on the Department's website on 20 July 2020. There were no public submissions.

### 4.2 Key Issues – Government Agencies

While none of the government agencies objected to the proposed modification, BCS provided advice, summarised below and considered in more detail in **section 5**.

**BCS** is satisfied with FS approach to determine the amended credit requirements.

**TfNSW and Council** did not object to the proposed modification and raised no specific concerns.

## 5 Assessment

The Department has considered the merits of the proposed modification application in accordance with the relevant matters for consideration described in **section 3.4**.

In assessing the merits of the proposed modification, the Department has considered the existing development consent; previous environmental assessments for the project; the modification application; applicable government policies and guidelines; agency advice and requirements of the EP&A Act. A list of the key documents that informed the assessment is provided in **Appendix A**.

The Department has considered whether the proposed changes would result in any material increases in the impacts of the project. The key matter for consideration is biodiversity.

### 5.1 Biodiversity

The existing development consent allows for solar panels and associated infrastructure in a 172 ha development footprint within the 332 ha project site. During project construction, the revised footprint was reduced to 153 ha with a total area of 19 ha avoided (see **Table 1**).

To quantify the changes to biodiversity impacts as a result of the constructed project layout, FS conducted surveys to determine the vegetation zones impacted and avoided by project construction, compared with the approved project.

The constructed project avoided areas of Box-Gum Woodland (see **Figure 2**). **Table 2** compares the approved and constructed areas for Box-Gum Woodland and its associated ecosystem credits. The Department supports the changes to avoid Box-Gum Woodland as it is a Threatened Ecological Community (TEC) and results in an improved biodiversity outcome.

**Table 2 | Native vegetation impacts and ecosystem credits**

Zone ID <sup>1</sup>	PCT 281 (Box-Gum Woodland) condition	As approved		As constructed (proposed modification)	
		Area impacted (ha)	Ecosystem credits	Area impacted (ha)	Ecosystem credits
1	Moderate to good	0	0	0	0
2	Moderate to good	0.99	54	0.55	30
3	Low	16.14	630	14.61	570
4	(Derived grassland) – low <sup>2</sup>	95.04	0	70.55	0
5	(Ephemeral wetland) – mixed condition <sup>3</sup>	17.89	0	0	0
<b>Total</b>		<b>112.17</b>	<b>684</b>	<b>85.71</b>	<b>600</b>

Notes: <sup>1</sup> Vegetation zones as specified in the project's Biodiversity Assessment Report (2017), and as entered in the BioBanking Credit Calculator (BCC).

<sup>2</sup> It does not generate credits as this zone is too degraded.

<sup>3</sup> Not an EEC or threatened species habitat, therefore offsets not required.

The approved credit requirement was determined in the BioBanking Credit Calculator (BCC). The proposed modification credits were calculated updating the same retirement calculation file under the BCC, with the updated 15.16 ha for PCT 281.



BCS is satisfied that the additional areas of impact outside the approved project layout and the excised areas have been adequately assessed. BCS noted that the methods used to determine the amended credit requirement are acceptable and in accordance with the Framework for Biodiversity Assessment, and concurs with the summary of credits listed in **Table 2**. The current consent does not require FS to retire any species credits.

Both the Department and the BCS consider that the proposed changes constitute a reduction in the biodiversity impacts of the project.

## 5.2 Other impacts

The potential for changes resulting from the amended project layout are considered in **Table 3**.

**Table 3 | Summary of other impacts as a result of the proposed modification**

Issue	Assessment	Potential for additional impacts
Visual	Previous visual assessment identified potential impacts to residences located to the north and north-west of the project site (EIS viewpoints 17 and 19). The constructed layout slightly increases setback from north and north-west boundaries. Existing consent conditions are adequate.	No
Noise	Noise assessment considered the whole project site, and the constructed project is entirely within it. Previous assessment concluded that the operational noise would comply with the relevant noise criteria of 35 dB(A) established under the Industrial Noise Policy at all residences under all scenarios and meteorological conditions. Existing consent conditions are adequate.	No
Aboriginal and historic Heritage	The constructed layout is within the assessed project site. Existing consent conditions required salvage and relocation of items IF1, IF2, IF3 and AS1 prior of the commencement of construction. All of which were salvaged before the commencement of construction, in accordance with existing consent conditions.	No
Soils and water	Previous assessment included the project site, where the project was constructed. Existing consent conditions are adequate.	No
Traffic	Impacts consistent with those assessed for the original application. Operational vehicle movements are covered by existing consent conditions. TfNSW noted that no change to transport-related consent conditions are required.	No
Land use	The constructed project layout is within approved land zoned RU1. The Appendix 1 of the existing consent would be updated to reflect the constructed project layout.	No
Socio-economic	No additional impacts as per previously assessed.	No
Hazards	Previous assessment included the whole project site, where the project layout is constructed. Existing consent conditions are adequate, including the hazards conditions related to operation and emergency response plan.	No
Waste	No changes from assessed and approved project. Existing consent conditions are adequate.	
Decommissioning	Project layout modification does not require amendments to the existing decommissioning and rehabilitation consent conditions.	No

The Department is satisfied that the modification would not result in any significant additional environmental or amenity impacts, beyond those currently approved for the project and that the revised conditions of consent would adequately address any potential impacts.

### **5.3 Conclusion**

The Department is satisfied that the modification is necessary to amend the project layout and accurately reflect the biodiversity impacts and ecosystem credits requirements. The modification does not have any additional significant environmental or amenity impacts, subject to the existing conditions. The Department has also taken the opportunity to update the original consent with new agency names, and new standard compliance conditions (see summary of administrative changes in **Appendix E**). FS has reviewed these changes to the conditions and does not object to them.

## 6 Evaluation

### Proposed modification

The Department has assessed the modification application in accordance with the relevant statutory requirements, having regard to the Modification Report and documentation relating to the current approved project. The Department has assessed the proposed modification to reduce the biodiversity offset credit requirement, consistent with the impacts associated with the constructed project, as described in **section 2**.

### Likely impacts of the modification application

In assessing the merits of the proposal, the Department has considered the:

- relevant matters for consideration identified in **section 3.4**;
- existing conditions of approval;
- previous Environmental Assessments for the project; and
- requirements of the EP&A Act.

The Department considers that the proposed modification application meets these requirements as:

- the modification is consistent with the objectives of the LEP;
- the proposed modification would not significantly impact on the natural and built environments, and there would not be any social and economic impacts beyond those already assessed;
- there are no draft environmental planning instruments, development control plans and planning agreements or requirements in the EP&A Regulation relevant to the modification application;
- there are no land use conflicts between the land and the use of surrounding land in the locality (including agricultural land) noting that the solar farm and associated infrastructure have been assessed in detail and the existing consent would effectively manage and minimise any residual impacts associated with the project; and
- the modification application is consistent with the reasons given for the original consent.

The Department's assessment has found that the proposed modification would not result in any significant impacts beyond those that were assessed and approved under the existing consent.

The Department has drafted a Notice of Modification (see **Appendix C**) and a consolidated version of the development consent (see **Appendix D**). The Department has recommended updated conditions for revised biodiversity offset liability and an updated development layout plan. FS has reviewed the conditions and does not object to them.

The Department is satisfied that the proposed modification is in the public interest and should be approved subject to these conditions.

## 7 Recommendation

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

- **considers** the findings and recommendations of this report;
- **determines** that the application Beryl Solar Modification 1 (SSD 8183) falls within the scope of Section 4.55(1A) of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification;
- **modifies** the consent (SSD 8183);
- **signs** the attached approval of the modification (**Appendix C**).

Recommended by:



**Javier Canon**  
Senior Assessment Officer  
Energy Assessments

Recommended by:



**May Patterson**  
Team Leader  
Energy Assessments



## 8 Determination

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



27/1/2021

**Nicole Brewer**

Director

Energy Assessment

as delegate of the Minister for Planning and Public Spaces

# Appendices

## Appendix A – List of referenced documents

Beryl Solar Farm Modification Application, NGH, 17 July 2020.

Project owner letter, FS NSW Project No 1 AT Pty Ltd, dated 11 August 2020.

## Appendix B – Modification Application

## Appendix C – Notice of modification

## Appendix D – Consolidated consent

Appendices B to D – See the Department's Major Projects Website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/27161>

## Appendix E – Summary of Administrative Changes to Conditions

Condition Number	Administrative changes	Reasons for Change
Definitions	Delete old agency names and acronyms and insert current agency names and acronyms.	These updates ensure the correct agencies are consulted in accordance with the consent following changes to agency names and divisions.
Definitions	Update the definition of EIS.	To include the Modification Application Report and additional information provided to the Department.
Schedule 3: condition 13	Delete 'two years' and replace with 'three years'.	To reflect the Secretary's approval to extend the timeframe to retire credits by 12 months (granted on 5 May 2020).
Schedule 4: conditions 3 and 4	Insert the Department's current website portal details into the incident and noncompliance reporting condition.	The Department no longer operates incident and non-compliance reporting by email and instead requires notification via its website portal.