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22 November, 2024

Re: Limondale BESS SSD-8025-MOD2 – Extended Construction Hours Request

Dear Katie,

Summary

In relation SSD-8025-MOD2, we are seeking the Department's approval to extended construction hours for the project to allow for TransGrid night works, as well as allow for additional time to complete overrun works and unloading of late deliveries. Requested new construction hours are:

TransGrid construction works:

- Monday-Friday **6am-11:59pm**
- Saturday **0:00-11:59pm**; and
- allow construction on Sundays and public holidays **6am-7pm**

All other construction works:

- Monday-Friday: **6am-6pm**
- Saturday: **6am-6pm**
- Allow construction on Sundays and public holidays: **6am-6pm**

Deliveries:

- Monday-Saturday: **6pm-8pm**

Measures for noise, traffic and lighting will be put in place to ensure any potential impacts are mitigated for members of the public and any nearby sensitive receivers.

1. Background

The Limondale Solar Farm is a large-scale solar photovoltaic (PV) generation facility in south-western New South Wales (NSW). The Limondale Solar Farm has been developed on a site within the Balranald Shire local government area (LGA), approximately 14 kilometres (km) south of the township of Balranald,

The Limondale Solar Farm is a State significant development (SSD) under the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP). Development consent (SSD 8025) under Section 89E of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act) was granted on 31 August 2017. That Currently has two modifications approved.

...

MOD 1 (SSD-8025-Mod-1) was approved on 27 July 2018 to modify the development consent including landscape changes, relocation of substation and other minor administrative changes.

MOD 2 (SSD-8025-Mod-2) was approved on 7 October 2022 to modify the development consent for the construction of a battery energy storage system (BESS).

The original approval of SSD-8025 on 31 August 2017, Schedule 3, Condition 12, limited construction hours to:

Monday to Friday 7am – 6pm, and

Saturday 8am – 1pm.

At no time on Sundays and NSW public holidays

There was no change to the approved construction hours in the subsequent SSD-8025-MOD1 approval.

A request to extend construction hours for the Limondale Solar Project was submitted to the Department on 31 August 2018 and was subsequently approved on 19 October 2018 (Appendix A). The approved extended construction hours were:

Monday to Friday 6am – 6pm, and

Saturday 6am – 6pm.

Allow construction on Sundays and NSW public holidays

The Modification 2 report prepared by ERM, submitted the Department on 17 March 2022, mentioned construction hours of:

Monday to Friday 6am – 6pm, and

Saturday 6am – 6pm.

The Department's extended working hours approval letter (Appendix A) was also cited for approved construction works on Sunday and public holidays, stating that "the Modification works may occur on these days between 6am and 6pm, should they be required".

The Modification 2 Assessment Report (Appendix B), prepared by the Department of Planning and Environment (DPE), refers to the approval of extend hours of construction, however, no hours or time periods were stated.

The Modification 2 was approved on 7 October 2022, with the original hours of construction stated in Schedule 3, Condition 12:

Monday to Friday 7am – 6pm, and

Saturday 8am – 1pm.

At no time on Sundays and NSW public holidays

With the Assessment Report stating extended hours were approved, however the SSD-8025-MOD2 Consolidated Condition of Consent, not clearly stating the previously approved extended construction hours, RWE sort clarity and confirmation from the Department as to whether the extended hours approval letter applied to SSD-8025-MOD2.

Through email correspondence with the Department (Appendix C) between 10 July 2023–25 August 2023, it was outlined to RWE that the approval letter from DPE for extended construction hours of:

Monday to Friday 6am – 6pm, and

Saturday 6am – 6pm;

Allow construction on Sundays and NSW public holidays;

should still apply.

The subsequent reply to the Department (Appendix C) on 29 August 2023, stated our agreement with the Departments feedback that the extended hours approval letter should still apply for SSD-8025-MOD2 and we have proceeded with the construction of the Limondale BESS project with this understanding of approved construction hours in mind.

2. Current allowable construction hours as per SSD-8025-MOD2 Consolidated conditions of consent:

The current approved construction hours for the Limondale BESS project as defined by SSD-8025-MOD2, Schedule 3, Condition 12 are:

Unless the Planning Secretary agrees otherwise, the Applicant may only undertake construction, upgrading or decommissioning activities on site between:

- 7am to 6pm Monday to Friday
- 8am to 1pm Saturdays; and
- at no time on Sundays and NSW public holidays.

The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Planning Secretary:

- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of life, property and/or material harm to the environment.

3. Requested Change to allowable construction hours

3.1 TransGrid works:

- Monday-Friday **6am-11:59pm**
- Saturday **0:00-11:59pm**; and
- allow construction on Sundays and public holidays **6am-7pm**

The nature of the works that would be undertaken by TransGrid, would generally include:

- o low to minimum noise based works from standard hand tools and small diesel generator which would be positioned behind a building where possible to improve noise shielding;
- o electrical isolations and associated works;
- o cable works such as cable pulling, joining and terminations;
- o metering installations.

Night works for grid connection related tasks, would give flexibility to minimise impacts on the operations of the solar farm as well as mitigate health and safety issues relating to photovoltaic energy production.

Duration:

15 nights between March 2025 – end of May 2025.

3.2 All other works:

- Monday-Friday: **6am-6pm**
- Saturday: **6am-6pm**
- Allow construction on Sundays and public holidays: **6am-6pm**

Standard morning briefings and tool box meetings would occur during the additional hour between 6am-7am, followed by standard construction activities. The additional hour in the morning will allow for early works to occur to mitigate the possible effects of excessive heat, particularly (but not limited to) the summer and autumn months.

Duration:

December 2024 – July 2025

3.3 Extended Delivery hours:

- Monday-Saturday: **6pm-8pm**

An additional 2 hour delivery window will allow for the acceptance and unloading of required building and construction materials (predominately but not limited to battery containers), which have been unexpectedly delayed during transit.

Unless approved by the Planning Secretary, no building and construction works would be conducted between 6pm and 8pm other than for:

- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of life, property and/or material harm to the environment.

Duration:

December 2024 – end of March 2025

4. Benefits to the project

Extending permissible working hours under SSD-8025-MOD2 for the Limondale BESS project, will benefit the project by:

- o helping to mitigate the effects of extreme weather events and conditions;
- o provide flexibility in workforce rostering;
- o understanding and managing the difficulties of working in remote locations;
- o assisting the project mitigate timeline and scheduling pressures due to the remoteness of the site;
- o making the most of available time on site to complete scheduled works;
- o providing additional time for the workforce to travel to and from the worksite at the beginning and end of each roster;
- o completing grid connection related tasks when the solar farm is not generating energy, will improve safety for workers as well as avoid interrupting daytime generation and operations;

5. Sensitive Receptors

Figure 1 below shows the distance of the construction works for the Battery Energy Storage System (BESS) and 6 nearest sensitive receptors identified in *Limondale Sun Farm Noise and vibration assessment* (EMM, 2017). There are no changes to sensitive receptors in the area, however it is noted that R5 is no longer considered a sensitive receiver by EMM, following the construction of Sunraysia Solar Farm.

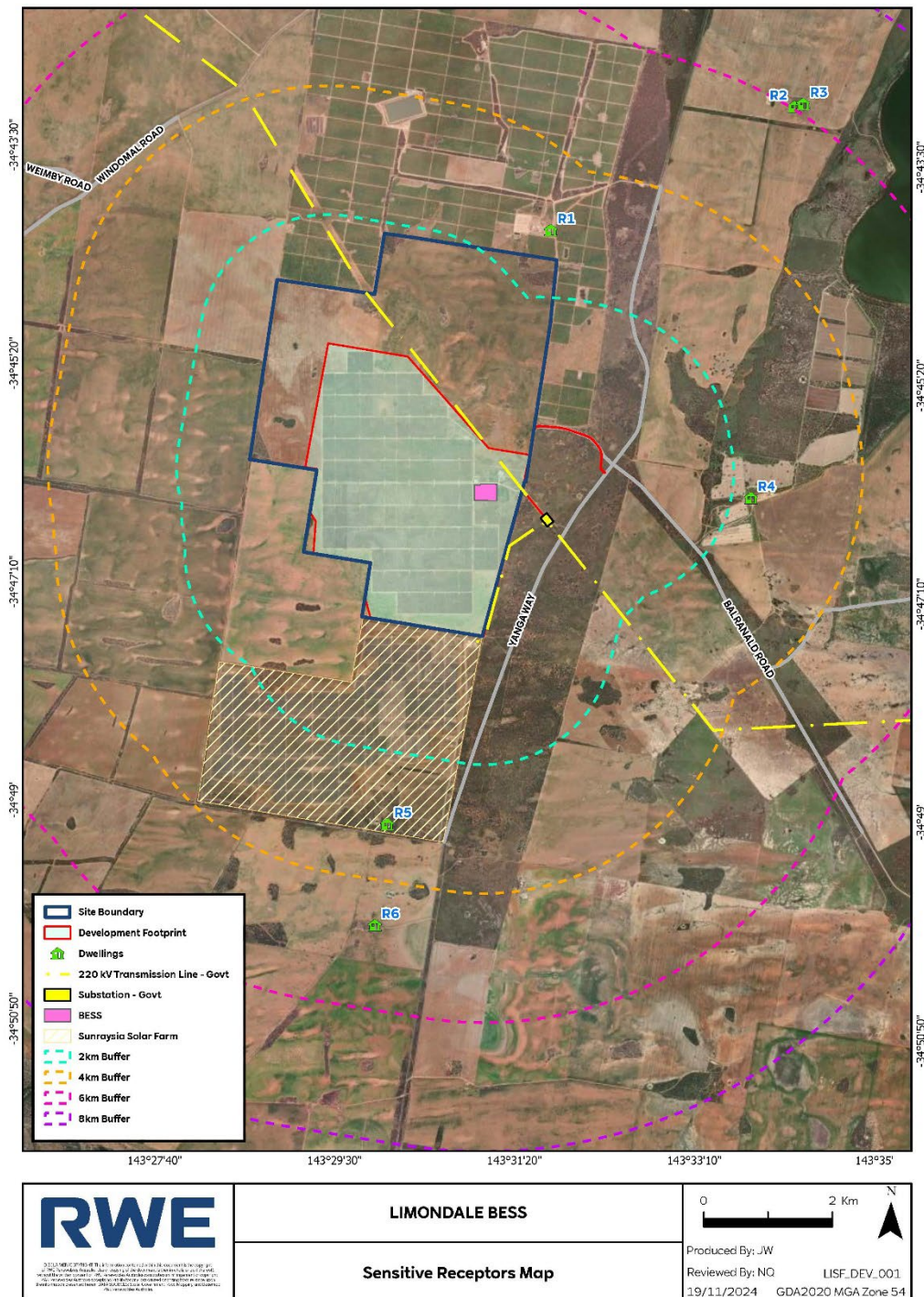


Figure 1. Sensitive receiver locations

Table 1, outlines the distance from the site to each to the sensitive receivers. R5 is no longer considered a sensitive receiver following the construction of Sunraysia Solar Farm.

Location ID	Land use (as defined in the NSW INP and NSW ICNG)	Approximate distance from the development footprint (km)	Distance to BESS Footprint (km)
R1	Residential	2.9	4
R2	Residential	6.3	7.5
R3	Residential	6.4	7.6
R4	Residential	3.5	4
R5	Residential	3	5.2
R6	Residential	4.7	6.8

Table 1: Sensitive receiver distance from development footprint and BESS footprint

6. Mitigation measures.

6.1 Noise

There will be considerably less construction activity and construction generated noise for the installation of the BESS facility and associated infrastructure as compared to the original solar farm development. The project team are committed to ensuring any noise generated during construction are in accordance with Schedule 3 Condition 13(a) of SSD-8025-MOD2 Consolidated Conditions of Consent, which requires works to be conducted in as per best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.

To assist in reducing the possible impacts of noise generated during night works, activities will be limited to:

- the use of standard hand tools;
- the use of a low capacity, small diesel generator positioned which where possible, be positioned behind a building to add additional noise shielding;
- working in and around buildings rather than in an open area environment;

6.2 Traffic

Construction related vehicle movements and traffic will be managed in accordance with the approved *Traffic Management Plan Limondale Solar Farm* (September 2024). for SSD-8025-MOD2. It is noted that headlights will not reach the nearest sensitive receiver, as they are between 3-4km from the development footprint as BESS footprint. Added to this the is adequate line of sight barriers through tree lines and natural sand dune undulations, which protect occupants from light intrusion from vehicle headlights.

Further to this, all members of the workforce will be required to behave in a respectful and understanding manner both during daylight and night hours, to all members of the public while working on the project.

6.3 Lighting

Any lighting required to undertake activities for the construction of the project, will be in accordance with Schedule 3 Condition 16 of SSD-8025-MOD2 Consolidated Conditions of Consent and comply with *Australian Standard AS4282 (INT) 1997 - Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

To assist in reducing the possible impacts of required artificial lighting,

- lighting will be limited to the immediate work and transit area;
- lights will be angled down towards the active working area to avoid glare and impairing vision of oncoming traffic;
- artificial work lighting will regularly inspected to ensure safe operations;
- where possible, artificial lighting towers and/or panels will face towards the active working area and way from sensitive receivers and roads.

7. Complaints

Should any complaints be received regarding the project throughout the construction phase, these will be managed in accordance with Section 5 of the approved Environmental Management Strategy (August 2024).

If any further information is required, please contact me at namha.quach@rwe.com as needed.

Yours sincerely,



Nam Ha Quach
Construction Project Manager
RWE Renewables Australia Pty Ltd



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Appendix A: Original Extended Hours Approval Letter (19 October 2018)



Resource Assessments

Contact: Leesa Johnston

Phone: 02 82896861

Email: leesa.johnston@planning.nsw.gov.au

Mr William Radford
Project Manager
Limondale Sun Farm Pty Ltd

By email to: William.radford@belectric.com

Dear Mr Radford

**Limondale Solar Project SSD 8025
Construction Hours Extension**

I refer to your letter dated 31 August 2018, requesting the Secretary's approval to extend the construction hours for the Limondale Solar Project.

The Department notes that Belectric proposes to:

- extend construction hours on Monday to Friday from 7am-6pm to 6am-6pm;
- extend construction hours on Saturday from 8am-1pm to 6am-6pm; and
- allow construction on Sundays and public holidays.

The Department has reviewed your request and considers that the risk of noise emissions affecting neighbouring residents during day-time construction works is low.

Accordingly, under Condition 12, Schedule 3, of development consent SSD 8025, the Secretary approves your request to vary the construction hours for the Limondale Solar Project.

The Department will continue to monitor the project to ensure that it complies with the conditions of consent, particularly in relation to construction activities. If any complaints are received about the extended construction hours; please notify the Department immediately and consider ceasing works.

If you have any further enquiries, please contact Leesa Johnston on 02 82896861.

Yours sincerely

19/10/18

Steve O'Donoghue
A/Director
Resource and Energy Assessments
as the Secretary's nominee



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Appendix B: NSW Department of Planning and Environment Modification 2 Assessment Report (October 2022)



Limondale Solar Farm Modification 2

Addition of Battery Energy Storage System
State Significant Development Modification Assessment

(SSD 8025 MOD 2)

October 2022



Published by the NSW Department of Planning and Environment

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Title: Limondale Solar Farm Modification 2

Subtitle: State Significant Development Modification

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Executive Summary

Limondale Sun Farm Pty Ltd (LSF) received development consent in 2017 to develop the 250 megawatt (MW) Limondale Solar Farm (the project) approximately 14 km south of the township of Balranald in NSW. The project has been operational since 2020.

This modification application seeks to introduce a battery energy storage system (BESS) with a capacity of up to 200 MW / 800 MW hours within the approved development footprint. Approval is sought for three BESS options:

- a decentralised direct current (DC) coupled lithium-ion BESS;
- a centralised alternating current (AC) coupled lithium-ion BESS; and
- a centralised AC-coupled flow battery system.

The Department publicly exhibited the modification application from 25 May until 7 June 2022. No public submissions were received. Advice was received from Balranald Shire Council and eight Government agencies, none of which objected to the modification.

The Department considers that the proposed modification would have only minor, incremental impacts, noting that all proposed BESS formats would be located entirely within the approved development footprint. Hazard risks (fire and bushfire) would be minimal subject to revised conditions, and there would be minimal biodiversity, visual, traffic and noise impacts.

The Department's assessment has concluded that the modification should be approved as it would provide an existing operational solar farm with a battery storage facility, which would contribute to increased grid stability and energy security. Any residual environmental and amenity impacts associated with the proposed modification could be mitigated and managed through the revised conditions of consent. The project, as modified, would provide flow-on benefits to the local community, including an additional 20 construction jobs and a capital investment of \$175 million.

Consequently, it is in the public interest and should be approved.

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1 Introduction

Limondale Sun Farm Pty Ltd (LSF) received development consent in 2017 to develop the 250 megawatt (MW) Limondale Solar Farm (the project), approximately 14 km south of Balranald in the Balranald Shire local government area. The project has been operational since 2020.

The development consent has been modified on one occasion in July 2018 for subdivision and increase in maximum panel height.

2 Proposed modification

LSF is proposing to modify the development consent for the installation and operation of a Battery Energy Storage System (BESS) within the approved development footprint. The proposed BESS would provide storage for energy generated by the solar farm that would otherwise be lost.

The modification is described in detail in the Modification Report (**Appendix A**). LSF is considering three BESS options, all entirely within the approved development footprint as summarised in **Table 1**. All three BESS options have a capacity of up to 200MW / 800MWh. The key components of the proposed modification are shown on **Figure 1**.

Table 1 | BESS options

Option	Description
Decentralised Direct Current (DC) coupled lithium-ion	<ul style="list-style-type: none">• 260 battery containers, distributed throughout the solar arrays.• Combined area of 28.9 ha.
Centralised Alternating Current (AC) lithium-ion	<ul style="list-style-type: none">• 320 battery containers, located adjacent to the existing solar farm access point, within the proposed 'AC-coupled zone'.• Area of 30.7 ha has been assessed for the 'AC-coupled zone' however the actual development footprint of this BESS option once constructed would be significantly less.• The AC-coupled zone may also include a new substation and connection options to nearby existing substations.
Centralised AC iron flow	<ul style="list-style-type: none">• 48 flow energy centres and associated infrastructure including, power train enclosures, external anolyte and catholyte storage tanks and fluid pumps located within secondary containment basins.• Located within the 'AC-coupled zone'.• Combined area of 13.9 ha.

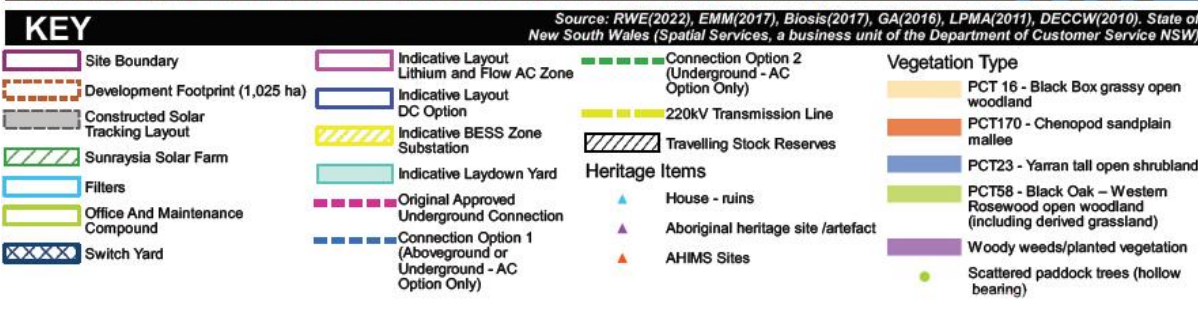
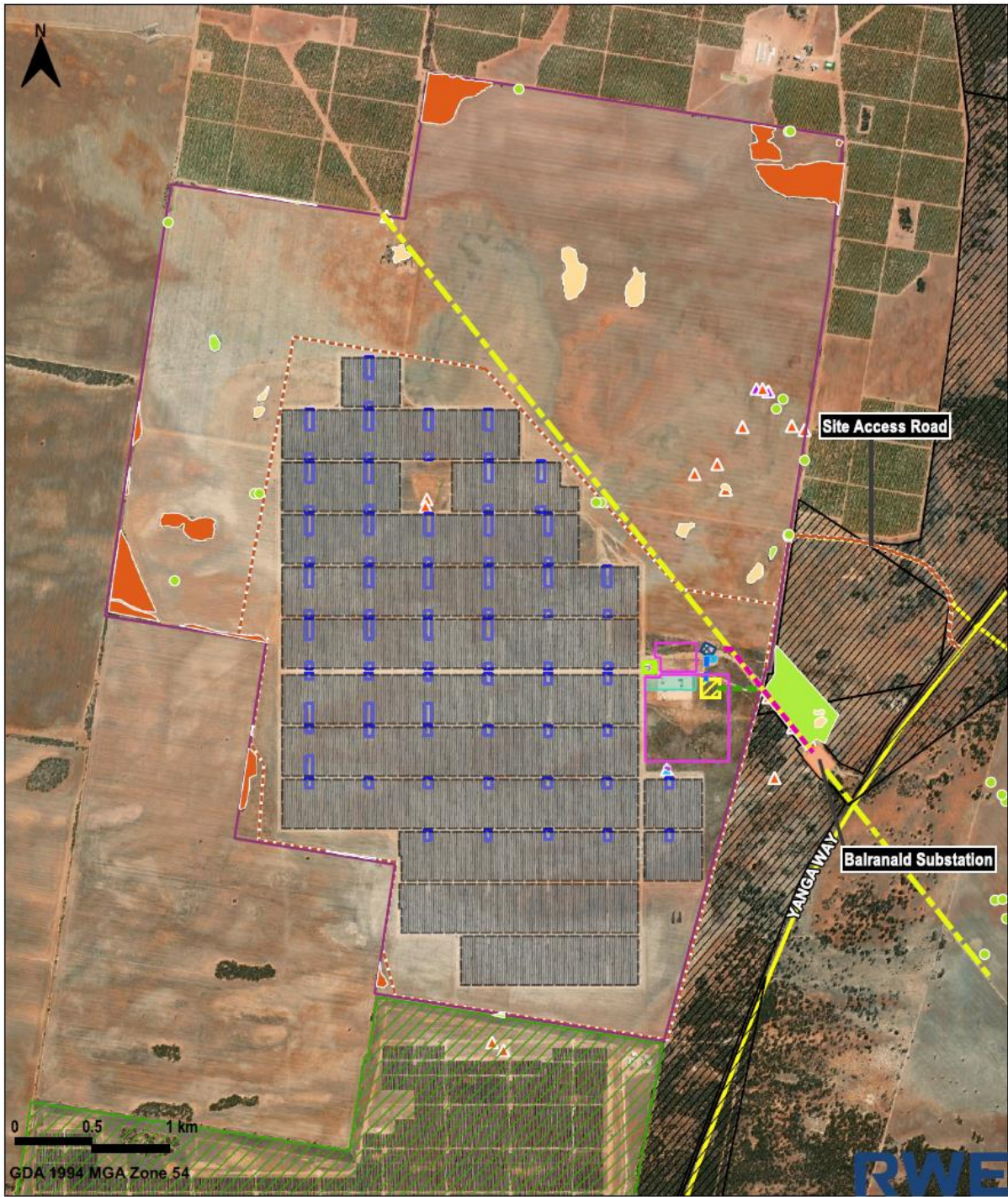


Figure 1 | Project Layout

3 Strategic Context

As NSW transitions away from coal fired power, there is an increasing need for battery storage to firm renewable energy sources.

The NSW Electrical Strategy (2019) notes that all coal fired power plants in NSW are scheduled for closure within the next twenty years and that firmed renewables are the lowest cost option to replace aging coal power stations. In addition, AEMO's 2022 Integrated System Plan (ISP) states that battery storage (such as the proposed Limondale BESS) is required to provide firming capacity and to support intra-day energy shifting.

4 Statutory context

The project is permissible development and the Department considers that the application is substantially the same development as originally approved, noting the project footprint would not change, and the environmental impacts of the modification would not significantly increase. Consequently, the Department considers that the proposed modification is within the scope of section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Minister for Planning is the consent authority for the application under section 4.5 (a) of the EP&A Act. However, under the Minister's delegation to determine SSD modifications, signed 9 March 2022, the Director, Energy Assessments, may determine the application as the Council did not object to the proposal, LSF did not make any political donations and there were less than 15 public objections.

The Department has considered the matters prescribed for determining a modification application in accordance with section 4.55(3) of the EP&A Act.

5 Engagement

The Department publicly exhibited the modification application from 25 May 2022 until 7 June 2022 and advertised the exhibition in the Hay Riverine Grazier and the Swan Hill Guardian. The Department also sought comments from Balranald Shire Council (Council), previous submitters and relevant government agencies.

During the exhibition period, the Department received no public submissions. Advice was provided by eight government agencies and comments were also received from Council. Full copies of the submissions are attached in **Appendix B**. LSF submitted a Submissions Report (**Appendix C**) providing a response to issues raised by agencies, which are summarised in **Table 2**.

Table 2 | Summary of Advice from Agencies and Council

Agency	Key Issue
Transport for NSW (TfNSW)	Raised no objection subject to an updated Traffic Management Plan.
Fire and Rescue NSW	Recommended a Fire Safety Study, Emergency Response Plan and an Emergency Services Information Package be prepared. Resolved through Submissions Report and revised conditions.
Transgrid	Advised the project will need a Connection Agreement. Resolved through Submissions Report and revised conditions.

Agency	Key Issue
Balranald Shire Council	Raised no objections, but suggested refinements to the workforce accommodation and waste management strategies and details of road construction materials sourcing. Resolved through Submissions Report and revised conditions with LSF committing to consult with Council during construction for these matters.

The Department’s Biodiversity, Conservation and Science Directorate (BCS), the Department’s Water Group (DPE Water), NSW Department of Primary Industries (DPI Agriculture), Heritage NSW and Crown Lands raised no concerns with the proposed modification.

6 Assessment

6.1 Energy Transition

The proposed modification to add a battery to the project aligns with a range of State policies (see Section 3), 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.

The proposed modification would support the State’s continued transition away from power generation derived from fossil fuels, which is largely dispatchable, to renewable energy generation such as wind and solar, which is inherently variable. The project would provide ‘firming capacity’ by contributing to dispatchable energy availability during peak energy demands or when renewable production is low.

Importantly, the project would also contribute to energy security and reliability by providing frequency control ancillary services and system restart ancillary services, meaning the project would contribute to energy supply meeting energy demands, within defined technical parameters, and without disruption.

6.2 Hazards and Bushfire Risk

Due to the proposed use of large-scale battery modules, the Department has considered whether the proposed modification would increase the hazard potential of the project.

LSF’s preliminary hazard analysis (PHA) considered risks associated with transport and storage of hazardous materials and with the operation of the BESS itself, in accordance with the Department’s *Hazardous Industry Planning Advisory Paper (HIPAP) No 6 – Hazard Analysis* and a *Multi-Level Risk Assessment*. The PHA considered both Lithium-ion and flow BESS options.

Lithium-ion BESS Option

The PHA considered both the AC and DC options and concluded that any potential thermal radiation, explosion or toxic gas effects of a Lithium—ion BESS fire would be confined within the site and there would be no potentially harmful offsite effects.

The PHA recommendations include provision of adequate separation distances between BESS components and between the site and surrounding land use, installation of relevant infrastructure and engineering controls (such as ventilation, fire-fighting equipment and site containment), implementation

of technology controls (such as automatic shutdown) and appropriate management processes during construction and operation.

With the implementation of the PHA recommendations, the Department notes compliance with *HIPAP No. 4 – Risk Criteria for Land Use Safety Planning*, and considers the risk associated with this technology is acceptable.

Flow BESS Option

The flow BESS option includes an electrolyte storage component being a Class 8 substance under the Australian Dangerous Goods Code. The PHA found the risks, including electrolyte leak and exposure, hydrogen generation in cells and hydrogen explosion, satisfied the risk criteria in *HIPAP No. 4 – Risk Criteria for Land Use Safety Planning* and no off-site consequences and no impact on land uses outside the site boundary were identified.

The PHA recommendations include testing and inspections for leaks, ventilation, appropriate handling procedures and use of personal protective equipment.

With the implementation of the PHA recommendations, the Department considers the risk associated with this technology is acceptable.

Bushfire Risk

The project site is not mapped as bushfire prone land, and LSF's bushfire assessment concluded that the bushfire risks for the modification is unlikely to be greater than that already assessed and approved for the project. LSF's bushfire assessment recommended mitigation measures including an automated fire suppression system within the BESS, fuel load management and establishing defendable space around the BESS and associated infrastructure.

Conclusion

FRNSW and Council raised no objection to the modification, subject to the implementation of the recommendations in the bushfire assessment and regular maintenance of the asset protection zones.

The Department concludes the fire hazard risk for the development can be satisfactorily managed subject to additional and revised conditions, including revised requirements for the safe storage and handling of dangerous goods, an updated Emergency Response Plan and preparation of a Fire Safety Study.

6.3 Other issues

The potential impacts of the proposed modification on other issues are considered in **Table 3**. The Department has also taken the opportunity to make other administrative updates to the consent as described in **Appendix G**.

Table 3 | Other issues

Biodiversity

- The modification is within a previously disturbed area and requires no additional clearing or changes to the approved development footprint.
- The Department and BCS consider that a Biodiversity Development Assessment Report (BDAR) is therefore not required for the modification under section 7.17(2)(c) of the *Biodiversity Conservation Act 2016*.
- The modification would result in no additional biodiversity impacts

Aboriginal Heritage

- The Department and Heritage NSW note that the modification is located entirely within the approved development footprint and will not impact any additional Aboriginal heritage sites.
- The approved Heritage Management Plan would cover any unanticipated finds during BESS construction.

Traffic and Transport

- Traffic generation due to the modification will be well below the 54 daily heavy vehicle movement limits applicable under the development consent, with traffic during construction predicted to peak at 26 daily heavy vehicle movements.
- The modification would not impact operational traffic volumes or site access.
- The Department and TfNSW consider that traffic would be managed effectively through the existing conditions subject to an updated Traffic Management Plan.

Visual

- The nearest non-associated sensitive receiver is 2.9 km from the site, with a further 5 non-associated receivers within 8 km.
- The approved project (with 4m high solar panels) was assessed as having minimal visual impacts on receivers due to separation distance, topography and intervening vegetation.
- Both lithium-ion BESS options would be similar in height to the approved project, whilst the flow BESS enclosures would be up to 5.8m in height, with storage tanks up to 7.6 m in height.
- Most of the transmission cabling for all options would occur underground.
- LSF's visual assessment found the inclusion of a BESS is highly unlikely to impact the visual landscape of the wider area beyond the project boundary and has committed to colour and design selections of the BESS to be compatible with existing infrastructure.
- Noting the above, the Department considers that any change in the visual impacts of the project would be minor, and the rural character and visual quality of the area would not be impacted beyond what is already approved.

Water, Soil and Erosion

- The proposed modification will not require significant earthworks or changes to the general topography of the site and is therefore unlikely to impact on local or regional flooding.
- The Department is satisfied that the existing conditions of consent would be adequate to manage run off, surface water, groundwater and flood risks.

Noise

- The nearest non-associated sensitive receiver is 2.9 km from the site.
- Construction noise is predicted to be below noise management levels of 45 dB(A) under the *Interim Construction Noise Guideline* (DECC, 2009), at any of the surrounding sensitive receivers.
- Operational noise is predicted to be below the most stringent noise criteria of 35 dB(A) under the EPA's *Noise Policy for Industry* (EPA, 2017) for all BESS options.
- The construction and operation of the BESS is not anticipated to result in any significant increase in road traffic noise.
- Noting the above, the Department is satisfied the noise impacts associated with construction and operation of the BESS are acceptable.

Waste

- Construction and decommissioning activities would generate waste which would be managed and recycled or disposed of in accordance with existing conditions of development consent. Operation of the BESS is expected to generate minimal waste.
- The applicant has committed to producing a Waste Management Plan to the satisfaction of Balranald Shire Council in the Submissions Report.

Accommodation

- Construction of the BESS will involve up to 40 workers which is significantly less than the 250 workers required for the construction of the solar farm, and as such the modification is unlikely to significantly impact on the availability of local accommodation.
- LSF has committed to amending their Accommodation Strategy Plan to the satisfaction of Balranald Shire Council in the Submissions Report.

7 Evaluation

The Department has assessed the modification application and advice received from relevant government agencies. The Department has also considered the objectives and relevant considerations under sections 4.55 (3) and 4.15 of the EP&A Act.

The proposed modification seeks to construct a 200MW / 800MWh BESS on up to 30.7 ha of previously disturbed land within the approved development footprint.

The Department considers the proposed BESS is a compatible land use and any hazards can be appropriately managed by conditions. visual and noise impacts would be minor, and impacts on biodiversity, traffic, heritage, water, waste and land use would also be substantially the same as previously assessed and approved.

In summary, 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 modification achieves an appropriate balance between maximising the benefits of the project through the provision of an energy storage system and minimising the potential impacts on surrounding land users and the environment.

The Department has drafted a Notice of Modification (see **Appendix D**) and consolidated version of the development consent (see **Appendix E**). Balranald Shire Council, FRNSW and LSF have reviewed the conditions and no objections have been raised.

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

8 Recommendation

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

- **considers** the findings and recommendations of this report;
- **determines** that the application Limondale Solar Farm Modification 2 (SSD 8025 MOD 2) falls within the scope of section 4.55(2) 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;
- **modify** the consent SSD 8025; and
- **signs** the attached approval of the modification.

Recommended by:



6/10/2022

Julia Green

Senior Environmental Assessment Officer
Energy Assessments

Recommended by:



6/10/2022

Karl Okorn

Team Leader
Energy Assessments

9 Determination

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



7/10/2022

Iwan Davies

A/Director
Energy Assessments

as delegate of the Minister for Planning

Appendices

Appendix A – Modification Report

Appendix B – Submissions and Agency Advice

Appendix C – Submissions Report

Appendix D – Notice of Modification

Appendix E – Consolidated Consent

Appendices A to E available at: <https://www.planningportal.nsw.gov.au/major-projects/projects/mod-2-battery-energy-storage-system>

Appendix F – Statutory considerations

Under section 4.55(3) of the EP&A Act, the consent authority must consider the matters referred to in section 4.15(1) of relevance to the development. **Table 4** identifies the matters for consideration under section 4.15 of the EP&A Act that apply to the proposed modification. The table represents a summary for which additional information and consideration is provided in other sections of this report, as referenced in the table.

Table 4 | Assessment of Section 4.15(1)

Section 4.15(1) Matters for consideration	The Department's assessment
(a)(i) any environmental planning instrument	The modified proposal complies with the relevant legislation as addressed in Section 4 .
(a)(ii) any proposed instrument	
(a)(iii) any development control plan	
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the <i>Environmental Planning and Assessment Regulation 2021</i> , including the procedures relating to modification applications (Part 5), the requirements for notification (Part 5, Division 2) and fees (Part 13) (refer to Section 4).

(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The Department considers the proposed changes to be minor and would not result in adverse environmental impacts (refer to Section 6).
(c) the suitability of the site for the development	The site is suitable for the development as addressed in Sections 4 and 6 .
(d) any submissions	The Department has considered the submissions received. Refer to Sections 5 and 6 .
(e) the public interest	The Department considers the modified proposal to be in the public interest as it would achieve an appropriate balance between maximising the benefits of the project through the provision of an energy storage system and minimising the potential impacts on surrounding land users and the environment.

Appendix G – Summary of minor and administrative changes to conditions

Condition Number	Minor and Administrative Changes	Reason for Change
Definitions	Insert additional definitions for 'Ancillary infrastructure', 'Battery storage' and 'Commissioning'	To reflect additional terminology used as a result of the modification
Definitions	Update the definition of the EIS in the consent	To include the modification report and submissions report provided to the Department in the assessment of the modification application
Definitions and throughout	Update titles and definitions for BCS, Heritage NSW and TfNSW	To reflect current department names
Throughout	Replace all references to 'Secretary' with 'Planning Secretary'	To reflect current departmental titles
Schedule 3, Condition 1	Replace the condition with a new condition	To allow for battery storage and provide a limit on the total capacity
Schedule 3, Condition 13	Add an additional part to the condition (b)	To provide for limits on noise generation in accordance with relevant noise policy
Schedule 3, Condition 24	Update requirements for storing and handling of dangerous goods	To capture the latest standards and guidelines
Schedule 3, Condition 25	Update to include relevant fire management and defendable space conditions for the BESS	To ensure this condition covers both the solar farm and BESS components
Schedule 3, Condition 26	Include '(excluding battery storage)'	To differentiate between requirements for the solar farm compared to the battery storage requirements

Schedule 3, Condition 26A	Insert new condition	To outline the emergency response plan requirements for the BESS
Schedule 3, Condition 27	Insert new condition	To outline the fire safety study requirements for the BESS
Schedule 3, Condition 28	Insert new condition	To outline the hazard analysis requirements for the flow BESS option
Schedule 3, Condition 29	Insert new condition	To outline the safety management system requirements for the flow BESS option
Schedule 3, Condition 32	Add 'and battery storage'	To specify that rehabilitation objectives are required for the BESS components
Schedule 4, Condition 3, 4 and 5 and Appendix 3	Insert conditions relating to compliance, non-compliance notification and independent environmental audit	To capture the Departments current incident and auditing requirements.
Appendix 1	Replace the figure with the updated project layout figure	To show the proposed location of BESS infrastructure
Appendix 3	Insert requirements relating to incident notification and reporting	To capture the Departments current incident and reporting requirements.



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Appendix C: Email correspondence with the Department of Planning, Housing and Infrastructure (10 July 2023–25 August 2023)

Quach, Nam Ha

From: Quach, Nam Ha
Sent: Tuesday, 29 August 2023 3:52 PM
To: Carl Dumbleton
Cc: Megan Ramsdale; Radford, William; john@bzrenewables.com.au; Huber, Thomas; Greenham, Ross
Subject: RE: Limondale BESS - Questions
Attachments: Limondale Solar Farm Approval Letter extension to construction hours.pdf; Limondale Solar Farm Approval Letter extension to vehicle length df.pdf

Categories: Tracked To Dynamics 365

Dear Carl,

Thank-you for your responses. They have been helpful in solidifying our thoughts and processes for the project.

Based on your feedback, we will conduct our environmental audit in accordance with the SSD 8025 MOD2 requirements, Condition 5 of Schedule 4.

In relation to the extension of vehicle lengths and construction hours, please see attached department approval letters for previously requested changes to the SSD 8025. We agree with your feedback that these approvals should stand for SSD 8025 MOD2 and are proceeding with preparing management plans based on these approvals.

In regards to the use of the terminology 'flow' relating to Battery technology, RWE will be utilising lithium-ion as the battery technology as per our approved MOD2 application. Should another modification be required, RWE will look to remove this wording as advised.

Based on this, I will now mark these items as resolved.

We have no further queries relating to SSD 8025 MOD2 at this stage.

Please let me know if there is anything else required from RWE.

Kind regards

Nam Ha Quach
Development Officer
RWE Renewables Australia

RWE

Suite 5, Level 9
350 Collins Street
Melbourne, 3000, Australia
M+61 (0) 457 816 266
W: www.rwe.com
E: namha.quach@rwe.com

From: Carl Dumbleton <Carl.Dumbleton@planning.nsw.gov.au>
Sent: Friday, 25 August 2023 10:36 AM
To: Quach, Nam Ha <NamHa.Quach@rwe.com>
Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; Radford, William <william.radford@rwe.com>;

john@bzrenewables.com.au; Huber, Thomas <thomas.huber@rwe.com>; Greenham, Ross <ross.greenham@rwe.com>

Subject: [EXT] RE: Limondale BESS - Questions

Hi Nam,

Responses below in blue.

Regards,

Carl Dumbleton
Senior Team Leader
Resources, Energy and Industry Assessments

Planning and Assessment | Department of Planning and Environment
T 02 9274 6283 | E carl.dumbleton@planning.nsw.gov.au

4PSQ, 12 Darcy Street, PARRAMATTA NSW 2150
www.dpie.nsw.gov.au



The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: NamHa.Quach@rwe.com <NamHa.Quach@rwe.com>
Sent: Friday, 25 August 2023 10:20 AM
To: Carl Dumbleton <Carl.Dumbleton@planning.nsw.gov.au>
Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; william.radford@rwe.com; john@bzrenewables.com.au; thomas.huber@rwe.com; ross.greenham@rwe.com
Subject: RE: Limondale BESS - Questions

G'day Carl,

I have left a message on your voicemail, however thought I would follow-up via email as well for ease of reference.

Just wondering if you have had a chance to talk to your team regarding questions 1, 2 & 3 below? Note I have re-attached the letters for Q2 for reference.

Q1 – I will need to consult with the compliance team before I can supply an answer. I will supply an answer next week.

The frequency of the audits following the completion of the 1st is detailed in the Independent Audit Post Approval Requirements (2020) – as detailed in condition 5 of Schedule 4. Refer to that document for your answer.

Q2 – I would need to see the original request made on the 31st August 2018 seeking to extend the size of constructive heavy vehicles to understand the circumstances of what approval was being sought. Please supply the letter requesting the extension.

I need to see the Department's original approval letter. It should continue to apply, why don't you think it does?

Q3 – I need to discuss this further internally and will provide an answer next week.

Implement the conditions for the technology that is approved and being implemented on site. If flow is a typo and needs to be removed from the conditions, take note and ensure it is removed in the next mod, if required.

Thanks for your time and looking forward to your reply.

Kind regards

Nam Ha Quach
Development Officer
RWE Renewables Australia

RWE

Suite 5, Level 9
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W: www.rwe.com
E: namha.quach@rwe.com

From: Quach, Nam Ha

Sent: Wednesday, 2 August 2023 11:59 AM

To: Carl Dumbleton <Carl.Dumbleton@planning.nsw.gov.au>

Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; Radford, William <william.radford@rwe.com>;
john@bzrenewables.com.au; Huber, Thomas <thomas.huber@rwe.com>; Greenham, Ross
<ross.greenham@rwe.com>

Subject: RE: Limondale BESS - Questions

Hi Carl,

Just wondering if you have had a chance to chat with your team about Q1, 2 & 3 as per below?

I have re-attached the letter for ease of reference.

Kind regards

Nam Ha Quach
Development Officer
RWE Renewables Australia

RWE

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W: www.rwe.com
E: namha.quach@rwe.com

From: Quach, Nam Ha

Sent: Wednesday, 19 July 2023 2:12 PM

To: Carl Dumbleton <Carl.Dumbleton@planning.nsw.gov.au>

Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; Radford, William <william.radford@rwe.com>;
john@bzrenewables.com.au; Huber, Thomas <thomas.huber@rwe.com>; Greenham, Ross
<ross.greenham@rwe.com>

Subject: RE: Limondale BESS - Questions

Hi Carl,

Thanks for your email and responses.

In relation to Q2, please see attached letter requesting the change during the Limondale Solar Farm construction for your information as requested.

We look forward to your responses to Q1&3 as well as Q2 in light of the attached, some time next week.

Please feel free to contact me as needed.

Kind regards

Nam Ha Quach
Development Officer
RWE Renewables Australia

RWE

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W: www.rwe.com
E: namha.quach@rwe.com

From: Carl Dumbleton <Carl.Dumbleton@planning.nsw.gov.au>

Sent: Wednesday, 19 July 2023 12:53 PM

To: Quach, Nam Ha <NamHa.Quach@rwe.com>

Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; Radford, William <william.radford@rwe.com>; john@bzrenewables.com.au; Huber, Thomas <thomas.huber@rwe.com>; Greenham, Ross <ross.greenham@rwe.com>

Subject: [EXT] RE: Limondale BESS - Questions

[EXTERNAL EMAIL **]:** This email originated from outside of the organization - be CAUTIOUS, particularly with links and attachments.

Hi Nam response below,

Q1 – I will need to consult with the compliance team before I can supply an answer. I will supply an answer next week.

Q2 – I would need to see the original request made on the 31st August 2018 seeking to extend the size of constructive heavy vehicles to understand the circumstances of what approval was being sought. Please supply the letter requesting the extension.

Q3 – I need to discuss this further internally and will provide an answer next week.

Q4 – No issue with lodgement of these plans in Oct 2023.

Kind regards,

Carl Dumbleton
Senior Team Leader
Resources, Energy and Industry Assessments

Planning and Assessment | Department of Planning and Environment
T 02 9274 6283 | E carl.dumbleton@planning.nsw.gov.au



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From: NamHa.Quach@rwe.com <NamHa.Quach@rwe.com>
Sent: Monday, 10 July 2023 3:27 PM
To: Carl Dumpleton <Carl.Dumpleton@planning.nsw.gov.au>
Cc: Karl Okorn <karl.okorn@planning.nsw.gov.au>; Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; william.radford@rwe.com; john@bzrenewables.com.au; thomas.huber@rwe.com; ross.greenham@rwe.com
Subject: FW: Limondale BESS - Questions

Dear Carl,

I have had an automated response requesting the below email (including attachments), be sent to yourself in lieu of Karl Okorn.

Please feel free to contact me if further information is required.

Kind regards

Nam Ha Quach
Development Officer
RWE Renewables Australia

RWE

Suite 5, Level 9
350 Collins Street
Melbourne, 3000, Australia
M+61 (0) 457 816 266
W: www.rwe.com
E: namha.quach@rwe.com

From: Quach, Nam Ha
Sent: Monday, 10 July 2023 2:47 PM
To: Karl Okorn (karl.okorn@planning.nsw.gov.au) <karl.okorn@planning.nsw.gov.au>
Cc: Megan Ramsdale <megan.ramsdale@planning.nsw.gov.au>; Radford, William <william.radford@rwe.com>; John Zammit <john@bzrenewables.com.au>; Huber, Thomas <thomas.huber@rwe.com>; Greenham, Ross <ross.greenham@rwe.com>
Subject: Limondale BESS - Questions

Dear Karl,

Thank you for the discussion last week regarding the Limondale BESS.

Below are the items that we are seeking further clarification on, one regarding the timing of the Independent Audit, the second regarding extended conditions applied to the Limondale Solar farm, third the specific wording in the mod-2 consent conditions; details of each are below;

In addition we also discussed the proposed timing of deliverables required for pre-construction, I've added a list below with expected timing for the assistance of DPE's post consent resourcing.

1. The Independent Audit -

The requirement for the Independent Environmental audit was added into the conditions of consent under Modification 2, SSD-8025-MOD 2 determined on 07/10/2022 (Limondale BESS), the original conditions of consent and Modification 1 did not have the IEA requirement.

Our team has had discussions with Katrina O'Reilly regarding this and we have engaged an independent auditor to satisfy the requirements of the Post Approval audit requirements, scheduled to be completed by Q3 2023. We took the position that it is in all parties' interests to complete the audit to the current timelines.

Our question is does the Independent Audit Post Approval Requirement re-start, requiring a further audit to be conducted during the BESS construction period, which would be within 12-18 months of the last one?

2. Limondale Solar / BESS extended conditions -

During the construction of the Limondale Solar Farm, RWE (Under EPC Belectric) sought the Secretary's approval for two items, extending the hours of construction and increasing the length of the heavy vehicles to 36.5m. These were both approved on 19/10/18 by A/Director of the Resource and Energy Assessment team at the time. *(See letters attached)*

Could you please confirm that the Secretary Approval letters still apply for the construction of the BESS?

3. Clarification or wording in the Development Consent -

As we are now proceeding with a lithium BESS solution, the consent conditions specifically include the word 'flow' in three items under Schedule 3 & 4 of the consent;

- Schedule 3, item 28 - Final Hazard Analysis
- Schedule 3, item 29 - Safety Management System
- Schedule 4, item 5 - Independent Environmental Audit

Could the department please confirm if each item would be still required to be completed as written without the word 'flow' included, or that because the technology will be lithium based that the items would not apply in these cases?

4. Deliverables and Timing -

We have currently identified the following plans that will need to be either created or updated and subsequently reviewed by the relevant agencies such as Balranald Council, TfNSW, RFS etc - we are estimating the including agency review we can deliver these plans to DPE in late October 2023.

- Cultural Heritage Assessment (Updated)
- Traffic Management Plan (Updated)
- Emergency Response Plan (Updated)
 - Hazards Assessment (Update)

- Fire Safety Study (New)
- Accommodation and Employment Strategy (Updated)
- Environmental Management Strategy (Update)
- Safety Management System (New)

Does the department have any comments on the timing or deliverables at this stage?

Kind regards

Nam-Ha Quach
Development Officer
RWE Renewables Australia

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