



# KONDININ WIND AND SOLAR FARM

Stage 1 – Referral

Supplementary Report

## Project Details

<b>Project</b>	Kondinin Wind and Solar Farm
<b>Client</b>	Kondinin Energy Pty Ltd
<b>Prepared by</b>	Lacour Energy Pty Ltd
<b>Revision</b>	0

## Document Control

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## INTRODUCTION

Kondinin Energy Pty Ltd, as the Proponent of the Kondinin Wind and Solar Farm is referring the Proposal to the EPA under section 38 of the Environmental Protection Act 1986, to decide whether or not to assess it.

This Supplementary Report (Report) document has been produced to supply supporting information to Kondinin Energy's EPA Referral Form and is to be read in conjunction with the form.

## PART A: PROPONENT AND PROPOSAL DESCRIPTION

### 1. Land Tenure

Table 1: Land tenure/ Legal access required for the implementation of the Proposal

<b>Land tenure</b>	<p>The land tenure of the Development Envelope is freehold. Exceptions and other rights to this are:</p> <ul style="list-style-type: none"> <li>• Arterial and minor road reserves throughout the Development Envelope; and</li> <li>• Western Power easements intersecting the Development Envelope through multiple landowner lots.</li> </ul> <p>For all activities proposed on freehold land the proponent, Kondinin Energy, has negotiated with relevant land owners for any required easements, land leases or acquisitions and/or the payment of any agreed consideration or compensation.</p> <p>Kondinin Energy will have lease agreements of at least 25 years length with all freehold landowners hosting wind turbines and solar farm infrastructure as part of the Project. The landowners will continue to use their land at they see fit for rural and agricultural purposes, except for the small areas where Project infrastructure is located.</p>
	<p>The Project will be established encompassing parts all or part of 19 freehold rural lots comprising approximately 3,105 ha. Kondinin Energy is seeking approval to undertake the Kondinin Wind Farm project at the following lots adjacent to Notting-Karlgarin Road, Kondinin; Lot 19719 on DP85416, Lot 23430 on DP147204, Lot 25744 on DP155096, Lot 21728 on DP146996, Lot 200 on DP300389, Lot 23407 on DP147049, Lot 23412 on DP147029, Lot 16619 on DP225574, Lot 41 on DP300369, Lot 202 on DP65471, Lot 40 on DP300369, Lot 22503 on DP225574, Lot 16620 on DP225574, Lot 15100 on DP225574, Lot 16621 on DP225574, Lot 26226 on DP225574, Lot 21301 on DP225574, Lot 23753 on DP147837, Lot 25704 on DP151492.</p> <p><i>[Refer to Figure 2]</i></p>
<b>Owners Consents</b>	<p>All landowners have signed the required forms for the Development Assessment Panel (DAP) and for the Shire of Kondinin.</p> <p>Copies of all land titles and signed Owners Consents can be provided to the EPA upon request.</p>

### 2. Proposal type

Following a meeting with the Principal Environmental Officer, Kathryn Schell, and Environmental Officer, Annarie Boer from the Department of Water and Environmental Regulation on 10 July 2018, it was recommended the Proposal be referred to the Environmental Protection Authority as it was deemed a 'significant' new proposal. This recommendation was largely due to the nature of the

project, i.e. utility scale wind and solar farm and the size and value of the project (approximately \$250 million).

The Project is wholly within the Local Government Authority of the Shire of Kondinin. This Proposal will be assessed under the Kondinin Town Planning Scheme Number 1 (TPS1) and Planning Bulletin 67 (WAPC 2004) by the Mid-West/Wheatbelt Joint Development Assessment Panel.

### 3. Key Proposal Characteristics – New proposal

Table 2: Summary of the Proposal

<b>Proposal title</b>	Kondinin Wind and Solar Farm
<b>Proponent name</b>	Kondinin Energy Pty Ltd
<b>Short description</b>	The Kondinin Wind and Solar Farm project involves the construction and operation of up to 46 wind turbines, an accompanying 125 ha of solar farm, energy storage and all associated infrastructure in a development to be known as the Kondinin Wind and Solar Farm ('Project').
	The Project is located at a site 5km north east of Kondinin, and approximately 270 kilometres east of Perth, Western Australia. Refer to Figure 1.
<b>Development Envelope</b>	The Project will be established encompassing parts all or part of 19 freehold rural lots comprising approximately 3,105 hectares. (Note that the Development Envelope is referenced in the Development Application documentation as the 'Project Area'). Refer to Figure 2.

Table 3: Location and proposed extent of physical and operational elements

<b>Element</b>	<b>Location</b>	<b>Proposed Extent</b>
<b>Physical Elements (Construction)</b>		
Construction footprint of Project (All Project infrastructure)	Kondinin Wind and Solar Farm Development Application Report section 2.2; Figure 4;	Approximately 288 hectares.  Up to 46 wind turbines and hardstand infrastructure; Up to 4 temporary wind monitoring towers; Up to 4 permanent wind monitoring towers; Up to 2 new substations; Up to 2 permanent site offices, workshops and warehouses; Up to 2 small office, lunch room, amenities and ablutions; Up to 43 km of gravel capped roads; Up to 4 new permanent site entries; Underground and above ground power and communication cables; Up to 10 km of medium/high voltage overhead powerlines; New fencing with grids and gates; Up to 4 laydown and stockpile areas; Up to 3 temporary construction compounds; Temporary concrete batching plant and storage facilities; Energy storage infrastructure; Up to 125 Hectares of Solar farm infrastructure; and Power conversion stations (the PCS) within the Solar Farm, which include central inverters, step up transformers and switchgear in 40 ft (approximately 12 m) containers or container skid pads.

		<p>All infrastructure (listed above) can be located in any part of the Development Envelope outside of vegetated areas shown in Figure 6. Furthermore, the Solar farm location is only to be on Lot 16621 and wind turbines are restricted to those areas with the Wind Farm Envelope</p>
<p>Clearing for Construction footprint</p>	<p>Figure 6; Development Application Report section 2.4; Level 1 Flora and Fauna Assessment, section 5.1; Figures 5.5 Proposed clearing locations, 5.2, 5.3 &amp; 5.4.</p>	<p>The Proposal footprint is predominantly in previously cleared, agricultural land which proposes to clear 0.15 hectares of highly disturbed, degraded vegetation, representing less than 1 percent of the remnant vegetation in the 3,105 ha Development Envelope.</p> <p>The Development will also avoid all areas of good or better quality vegetation, including a neighbouring Threatened Ecological Community which has been considered during the site planning, and will be avoided during construction and operation.</p> <p>Clearing impacts proposed are summarised below:</p> <ul style="list-style-type: none"> <li>• Clearing includes up to 0.15 ha at three locations which are at the crossovers from the Notting-Karlgarin gravel roads to the lot boundary (approximately 0.1% of the native vegetation within the Development Envelope).</li> <li>• No flora of conservation significance will need to be impacted (proposed impacts are 20m away based on infrastructure locations provided).</li> <li>• Threatened fauna is unlikely to be significantly impacted by the clearing proposed.</li> </ul> <p>The proposal is not likely to trigger the need for federal referral for Carnaby’s Black Cockatoo based on clearing (note collision impact risks below).</p> <p>The bird and bat risk assessment identified:</p> <ul style="list-style-type: none"> <li>• Several common and secure species as ‘at risk’ species, indicating that they have potential to suffer collision mortality at the proposed wind farm from time to time, should they occur on site.</li> <li>• Carnaby’s Black Cockatoo and Rainbow Bee-eater as being ‘at risk’ conservation significant species. A qualitative risk assessment found Carnaby’s Black Cockatoo to have a rare likelihood of collision as individuals would normally fly below the RSA height, but a moderate risk, mainly due to the endangered status of the population rather than the likelihood of</li> </ul>

		<p>collision. Rainbow Bee-eater was found to be low risk species.</p> <p>The Kondinin Wind Farm presents an overall low risk to birds and bats as a potential wind farm site. Clearing impacts proposed are likely to be very low in scale and nature if the recommendation below are incorporated.</p>
Wind Farm Envelope	Figure 6; Kondinin Wind and Solar Farm Development Application Report section 2.2	<p>The Wind Farm Envelope is 2,682 ha (which excludes the vegetated areas within the Wind Farm Envelope, refer to Figure 6) forms part of the 288 ha Construction footprint.</p> <p>The final number, make and model of the wind turbines that will comprise the wind farm is not yet finalised. The final wind farm design will be completed once the turbine model is known. Therefore, the development application is for a 46-turbine wind farm and all associated infrastructure to be located within the Wind Farm Envelope, as shown on this Figure. Within the Wind Farm Envelope are a number of exclusions where no turbines or associated infrastructure will be located. These are the Vegetation areas marked on the Figure which will not have infrastructure of any type within them.</p>
Solar Farm Envelope	Figure 2 and Figure 6	<p>The Solar Farm Envelope consists of one area containing the solar farm infrastructure. The total Solar Farm Envelope area of 125 ha and forms part of the 288 ha Construction footprint.</p> <p>The Solar Farm Envelope of 125 ha can host a solar farm of around 50MW in capacity. As the final solar farm design will be undertaken at a later stage, the development application is for a maximum solar farm footprint of up to 125 ha in total. The solar arrays, ancillary infrastructure, substation can be located anywhere within the Solar Farm Envelope.</p>
Construction water supply	Kondinin Wind and Solar Farm Development Application Report Table 7	<p>The provision of water is essential for the construction of the Project. The construction activities likely to require water are:</p> <ul style="list-style-type: none"> <li>• Bulk earthworks and material conditioning</li> <li>• Dust suppression</li> <li>• Concrete batching</li> <li>• Drinking water for personnel and water for ablution facilities.</li> </ul> <p>Water demand will vary over time, depending on the stages of the work. The total expected water requirement over the construction period is estimated to be approximately 65ML.</p> <p>Water demands for the Project will require different water quality standards. Potable water fit for human consumption will be required at the</p>

		<p>site offices, while both medium (suitable for use in the concrete batching) and low quality raw water (for earthworks and dust suppression) may be used for construction purposes. Water will be tested from various supply options and allocated to the most appropriate use.</p> <p>A water sourcing strategy will be developed so that water used during the construction phase does not cause issues to adjacent landowners or other stakeholders. Where possible, potable water will be obtained from the local government water reticulation network or otherwise trucked to the site. The proposed source of medium quality water for concrete production is proposed to be trucked to site. Lower quality water (for earthworks and dust suppression) is to be investigated.</p> <p>Construction water supply options will be determined during the detailed design of the Project and confirmed with the Department of Water and Environmental Regulation and the Water Corporation prior to construction. However, it is estimated that approximately 75KL per day is required over a 24-month construction period.</p>
<b>Operational Elements</b>		
Operational footprint of Project (All Project Infrastructure)	Kondinin Wind and Solar Farm Development Application Report	<p>Approximately 260 hectares.</p> <p>The operational footprint is all the constructed infrastructure minus the temporary construction compounds and laydown areas.</p>
Noise	Kondinin Wind and Solar Farm Development Application Report, section 3.5.2; Noise Impact Assessment	<p>A noise impact assessment has been conducted for the operation of the Project in general accordance with the requirements of the South Australian EPA's Wind farms – Environmental noise guidelines – July 2009 for the wind turbines and the Western Australian Environmental Protection (Noise) Regulations 1997 (EPNR) for fixed infrastructure including the substation.</p> <p>An environmental noise model of the site was created to predict noise levels at the nearest sensitive receptors to the Project. The noise predictions comply with the Project noise criteria at all receptors with the conservative baseline noise criteria. The low-frequency L<sub>Ceq</sub> 60 dB(C) is predicted to be achieved at all residential receiver locations.</p> <p>It will be required that the wind turbines are properly maintained by the wind farm operator to ensure that the noise emission of the turbines are not adversely affected by turbine wear, potentially resulting in audible tonality. Similarly, should amplitude modulation be detected upon commissioning, the wind farm operator would</p>



		<p>be required to alter the operating parameters of some turbines to remove this effect.</p> <p>Compliance measurements should be undertaken at a selected number of potentially most affected sensitive receptors following the commissioning of the Project in accordance with the procedure outlined in the SA Guidelines.</p> <p>Testing should be undertaken once all noise sources associated with the Project are in operating mode, i.e. all turbines have been commissioned and are operating correctly.</p>
Water	Figure 4; Development Application Report section 3.2.10	<p>Permanent Site Offices, Workshops and Warehouse are to be located at two locations in the Development Envelope. These areas typically contain vehicle parking space, septic ablutions and wash down areas as appropriate.</p> <p>The Project site does not currently have access to scheme reticulated water and the sewerage network. Once operational, the Project is expected to utilise scheme reticulated water and an on-site septic system, which will be installed to comply with the Building Code of Australia and will be positioned adjacent to the operations and maintenance compound.</p>

#### 4. Spatial data

Shapefiles (and associated QGIS files) of the following spatial data are attached in Appendix A (GDA94 / MGA Zone 50 coordinate system).

Table 4: List of spatial data files for infrastructure footprints

Description	Total Footprint Area (ha)	File name
Development Envelope	3,105	20171218_ApplicationBoundary.shp
Wind Farm Envelope	2,682	171218WindFarmEnvelope.shp
Solar Farm Envelope	125	20171212SolarFarmArea.shp
Wind turbine hardstands 100m x 50m (Labelled 1 to 46)	23	20180102_Hardstands_100x50.shp
Substation (also contains energy storage) (Options labelled L, M)	8.2	20171212_Substation.shp
Site offices and workshops (Labelled N, P)	5.1	Site Offices and Workshops.shp
Permanent meteorological masts (Labelled A, B, C, D)	0.008	20171219_MetMastsV3.shp
Wind Farm internal roads 43km (10m corridor) and underground cables	43	20180110Roads_10m.shp
Overhead powerline route 10km	0.2	20171218Powerline.shp

Temporary compounds (Labelled E, F, G) and	4	20171212_Compound_Batching_Plant.shp
Temporary laydown and stockpile areas (Labelled H, I, J, K)	13	20171212TemporaryLaydownArea.shp
<i>The following files are also included for additional information</i>		
Wind turbine positions		20171213Layout_with_Coordinates.shp
Site entrances		20171218SiteEntrances.shp
Vegetated areas to be avoided		Veg Areas to Avoid_Wind Farm EnvelopeV2.shp

## 5. Maps and figures

The following figures have been provided in PDF format (attached) in Appendix B.

Table 5: List of Figures

<b>Description</b>	<b>File name</b>
Location of Proposal	Figure 1 - Regional Context and Site Location.pdf
Development Envelope	Figure 2 - Project Area.pdf
Infrastructure and footprint	Figure 4 - All Project Infrastructure (satellite).pdf
Wind Farm Envelope / Solar Farm Envelope	Figure 6 - Wind Farm Envelope (satellite).pdf
Examples of key Project infrastructure elements	Indicative Infrastructure Images.pdf
Proposed clearing locations	Figure 5.5 - Proposed clearing locations.pdf

## PART B: ENVIRONMENTAL IMPACTS

### 6. Environmental impacts

An assessment of the Proposal against the EPA's environmental factors was undertaken by Kondinin Energy (refer to attached Planning Compliance Report in Appendix C). It also includes the clearing principles based on the Flora and Fauna Assessment and is shown below in Table 6.

Table 6: Assessment against EPA factors

Theme	Factor	Objective	Discussion
<b>Sea</b>	Not applicable	Not applicable	Not applicable
<b>Land</b>	Flora and Vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.	The Flora and Fauna Assessment (SW Environmenta1, 2017) notes: Clearing of approximately 0.15 ha of native vegetation at three locations associated with access tracks and less than 10 paddock trees. Proposal is unlikely to be at variance with any of the clearing principles provided Priority flora and the TEC are avoided.
	Landforms	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected.	A Landscape and Visual Impact Assessment has been undertaken for the project and is discussed in section 4.2.12 of the Planning Compliance Report.
	Subterranean Fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.	Not applicable
	Terrestrial Environmental Quality	To maintain the quality of land and soils so that environmental values are protected.	Low risk of Acid Sulfate Soils.
	Terrestrial Fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.	Threatened or priority fauna species have the potential to occur within the Development Envelope, including Carnaby's Black Cockatoo and Rainbow Bee-eater as discussed in section <b>Error! Reference source not found.</b> of the Planning Compliance Report.
<b>Water</b>	Hydrological Processes	To maintain the hydrological regimes of groundwater and surface water so that environmental values are protected.	Not applicable
	Inland Water Environmental Quality	To maintain the quality of groundwater and surface water so that environmental values are protected.	Not applicable
<b>Air</b>	Air Quality	To maintain air quality and minimise emissions so that	There will be no significant impact on air quality.

Theme	Factor	Objective	Discussion
		environmental values are protected.	Dust is expected to be generated by construction activities and managed through the Construction Environmental Management Plan.
<b>People</b>	Social Surroundings	To protect social surroundings from significant harm.	<b>Aboriginal Heritage</b> - No lodged or registered Aboriginal artefacts or heritage sites have been recorded. <b>Non-indigenous Heritage</b> - No impacts on non-indigenous heritage sites are expected.
	Human Health	To protect human health from significant harm.	The Noise and Vibration Assessment has identified that the Development is expected to comply with noise guidelines and regulations (refer to sections 4.2.9 and 4.2.10 of Planning Compliance Report).
<b>Clearing Principles</b>			
<p>As noted in the FFA, the clearing for the project is unlikely to be at variance with any of the clearing principles</p> <p>No flora of conservation significance will be impacted</p> <p>The TEC will require pruning based on current designs. It should be avoided if possible, as outlined below.</p> <p>Threatened fauna are unlikely to be significantly impacted by the clearing proposed.</p> <p>Based on the Table 5-1 the proposal is not likely to trigger the need for federal referral as a result of clearing activities in relation to Carnaby's Black Cockatoo</p>			

Kondinin Energy do not believe that the Proposal is considered 'significant' based on our findings. However, the likely significant environmental factors as identified by DWER for this Proposal are:

- Flora and Vegetation
- Terrestrial Fauna
- Human Health (Noise)

And as such, the Proponent is referring this Proposal to the EPA to decide whether it should be assessed.

## 6.2 Potential environmental impacts

The potential environmental impacts for the EPA Factors raised by DWER are summarised below. It references external studies and figures, which are attached.

Table 7: Potential environmental impacts: Flora and Vegetation

<b>Potential environmental impacts</b>		
<b>1</b>	<b>EPA Factor</b>	<b>Flora and Vegetation</b>
<b>2</b>	<b>EPA policy and guidance</b>	Refer to attached Flora and Fauna Assessment, section 1.3 Regulatory Context.
<b>3</b>	<b>Consultation</b>	<p>Third party specialist, SW Environmental (Shane Priddle, Certified Environmental Practitioner) was engaged to undertake the Level 1 Flora and Fauna Assessment for the Project (refer to Appendix D for detailed report).</p> <p>A Spring reconnaissance flora survey was initially carried in 2016 across the whole Development Envelope (circa 4740 ha at the time) and targeted surveys at proposed impact sites (access points and transmission line easement).</p> <p>Follow-up targeted Spring flora surveys were undertaken in 2017 focussing on current project design, potential impact locations for access points and reduced Development Envelope to 3227 ha.</p>
<b>4</b>	<b>Receiving environment</b>	Refer to attached Flora and Fauna Assessment, section 3.1 & 3.2.
<b>5</b>	<b>Proposal activities</b>	<ul style="list-style-type: none"> <li>• Clearing 0.15 ha for construction</li> <li>• Operation of up to 46 wind turbines, solar farm, and battery storage for at least 25 years.</li> </ul> <p>Refer to attached Figure 4. All Project Infrastructure.</p>
<b>6</b>	<b>Mitigation</b>	<p>Clearing impacts proposed (0.15 ha of degraded vegetation) would be very minor in scale and nature, if the recommendations below are incorporated. Recommendations to avoid and mitigate potential impacts of the proposal include:</p> <ul style="list-style-type: none"> <li>• Minimise disturbance to remnant native vegetation.</li> <li>• Minimise impact at the TEC locations where pruning of trees will currently be required, north of the substation (617362E 6408104S) and the existing entrance to Lot 16619 off Notting-Karlgarin Road (621930E 6408104S). This should be possible by aligning the transmission line to avoid most of the large trees north of the substation, and by relocating the easement north by approximately 30m, away from the TEC along the Notting-Karlgarin Road. If significant pruning is required within the TEC then an Assessment of Significance should be carried out to determine if a significant impact is likely, and therefore the need to refer to DotEE.</li> <li>• Avoid disturbing mapped populations of Priority flora.</li> <li>• Avoid paddock trees &gt;30cm DBH that may support hollows. If any hollow bearing paddock trees do require clearing, schedule clearing outside of Black Cockatoo key breeding periods (August-February). Ensure an experienced and licensed fauna specialist is present during clearing of hollow trees to manage any displaced/injured wildlife.</li> </ul> <p>Refer to attached Flora and Fauna Assessment, section 6.</p>

<b>7</b>	<b>Impacts</b>	<p>Clearing impacts are summarised below:</p> <ul style="list-style-type: none"> <li>No flora of conservation significance will be impacted (proposed impacts are 20m away based on infrastructure locations provided).</li> <li>The TEC will require pruning based on current designs. It should be avoided if possible, as outlined in Mitigation.</li> </ul> <p>The Kondinin Wind Farm presents an overall low collision risk to birds and bats as a potential wind farm site.</p> <p>Refer to attached Flora and Fauna Assessment, section 5.</p>
<b>8</b>	<b>Assumptions</b>	Refer to attached Flora and Fauna Assessment, section 2.2 and Table 2.2.

Table 8: Potential environmental impacts: Terrestrial fauna

<b>Potential environmental impacts</b>		
<b>1</b>	<b>EPA Factor</b>	<b>Terrestrial fauna</b>
<b>2</b>	<b>EPA policy and guidance</b>	Refer to attached Flora and Fauna Assessment, section 1.3 Regulatory Context.
<b>3</b>	<b>Consultation</b>	<p>Third party specialist, SW Environmental (Shane Priddle, Certified Environmental Practitioner) was engaged to undertake the Level 1 Flora and Fauna Assessment for the Project (refer to Appendix D for detailed report).</p> <p>Level 1 Fauna surveys were carried out in Spring 2017 with additional survey elements considered to be 'at risk' in relation to wind farms:</p> <ul style="list-style-type: none"> <li>Hollow bearing tree (black cockatoo breeding) assessment at potential clearing (access and transmission line) locations;</li> <li>Additional survey effort for bats (bat call analysis); and</li> </ul> <p>A bird and bat risk assessment.</p>
<b>4</b>	<b>Receiving environment</b>	Refer to attached Flora and Fauna Assessment, section 3.1, 3.3 & 3.4.
<b>5</b>	<b>Proposal activities</b>	<ul style="list-style-type: none"> <li>Clearing 0.15 ha for construction</li> <li>Operation of up to 46 wind turbines, solar farm, and battery storage for at least 25 years.</li> </ul> <p>Refer to attached Figure 4. All Project Infrastructure.</p>
<b>6</b>	<b>Mitigation</b>	<ul style="list-style-type: none"> <li>Avoid paddock trees &gt;30cm diameter at breast height (DBH) that may support hollows. If any hollow bearing paddock trees do require clearing, schedule clearing outside of Black Cockatoo key breeding periods (August-February). Ensure an experienced and licensed fauna specialist is present during clearing of hollow trees to manage any displaced/injured wildlife.</li> </ul> <p>Refer to attached Flora and Fauna Assessment, section 6.</p>
<b>7</b>	<b>Impacts</b>	<p>Clearing impacts are summarised below:</p> <ul style="list-style-type: none"> <li>Threatened fauna are unlikely to be significantly impacted by the clearing proposed. Based on the Table 5-1 (in Flora and Fauna report) the proposal is not likely to trigger the need for federal referral for Carnaby's Black Cockatoo based on clearing.</li> <li>The bird and bat risk assessment identified:</li> </ul>

		<ul style="list-style-type: none"> <li>○ A number of common and secure species have been identified as 'at risk' species, indicating that they have potential to suffer collision mortality at the proposed wind farm from time to time, should they occur on site.</li> <li>○ Carnaby's Black Cockatoo and Rainbow Bee-eater as being 'at risk' conservation significant species. A qualitative risk assessment found Carnaby's Black Cockatoo to have a rare likelihood of collision as individuals would normally fly below the RSA height, but a moderate risk, mainly due to the endangered status of the population rather than the likelihood of collision. Rainbow Bee-eater was found to be low risk species.</li> <li>○ Given that Carnaby's Black Cockatoo was found to be a moderate risk species for the wind farm based on bird and bat risk assessment, the proponent may wish to liaise further with Department of the Environment and Energy (DotEE) in relation to whether the project should be referred for legal certainty.</li> </ul> <p>The Kondinin Wind Farm presents an overall low collision risk to birds and bats as a potential wind farm site.</p> <p>Refer to attached Flora and Fauna Assessment, section 5.</p>
<b>8</b>	<b>Assumptions</b>	Refer to attached Flora and Fauna Assessment, section 2.2 and Table 2.6.

Table 9: Potential environmental impacts: Human health (Noise)

<b>Potential environmental impacts</b>		
<b>1</b>	<b>EPA Factor</b>	<b>Human health (Noise)</b>
<b>2</b>	<b>EPA policy and guidance</b>	<p>The Project must demonstrate compliance with:</p> <ul style="list-style-type: none"> <li>• Planning Bulletin 67;</li> <li>• The South Australia Environment Protection Authority's Wind farms – Environmental noise guidelines, July 2009 (which are the guidelines recognised by the DWER for the assessment of noise generated by wind farms in WA); and</li> <li>• The Western Australia Environmental Protection (Noise) Regulations 1997 (EPNR) for fixed infrastructure including the substation and transformers.</li> </ul> <p>Refer to Noise Impact Assessment, section 1.</p>
<b>3</b>	<b>Consultation</b>	<p>Third party specialist, AECOM, was engaged to undertake the Noise Impact Assessment. Refer to attached full report in Appendix E.</p> <p>Background noise measurements for the purpose of establishing site-specific noise emission criteria were undertaken at three representative noise monitoring locations near the Project site.</p> <p>Noise monitoring was conducted between 25 August 2017 and 22 September 2017 to measure background noise levels</p>

		<p>for a minimum of two weeks, in accordance with the SA Guidelines; four weeks' data was collected.</p> <p>A computational noise model was created to predict the noise levels from the operation of the Project at 14 noise sensitive receptors in the vicinity of the Project.</p> <p>Refer to Noise Impact Assessment, section 2.</p>
<b>4</b>	<b>Receiving environment</b>	Refer to Noise Impact Assessment, section 2 & 3.
<b>5</b>	<b>Proposal activities</b>	<ul style="list-style-type: none"> <li>• Operation of up to 46 wind turbines, solar farm, and battery storage for at least 25 years.</li> </ul> <p>Refer to attached Figure 4. All Project Infrastructure.</p>
<b>6</b>	<b>Mitigation</b>	Refer to Noise Impact Assessment, section 8.7 Proposed Mitigation Options.
<b>7</b>	<b>Impacts</b>	<p>The Noise and Vibration Assessment has identified that the Proposal is expected to comply with noise guidelines and regulations for all Participating and Non-Participating Landowners.</p> <p>Refer to Noise Impact Assessment, sections 6 &amp; 8 and Table 7.</p>
<b>8</b>	<b>Assumptions</b>	Refer to Noise Impact Assessment, section 5.3.



## PART C: OTHER APPROVALS AND REGULATIONS

A Planning Compliance Report was prepared by third party specialist (AECOM) to assess the anticipated planning requirements in support of the Kondinin Wind and Solar Farm Proposal.

The report considers, and provides evidence of, meeting the main planning and environmental legislation and guidance requirements applicable to this type of development in the Shire of Kondinin. The document identifies the planning framework which governs developments in Western Australia and examines whether the project has met the criteria at Federal, State and Local perspectives.

The current planning framework considerations are also presented including:

- Federal planning and environmental frameworks;
- State planning framework considerations (including noise, landscape and visual assessment requirements specifically related to wind farms);
- Regional planning framework considerations; and
- Local planning framework considerations.

### 7. State and Local Government approvals

Refer to attached Planning Compliance Report, sections 4.2, 4.3 and 4.4 State, regional and local planning framework.

#### 7.1 Local planning framework

The Shire of Kondinin Town Planning Scheme No.1 (TPS1) provides the local statutory framework for land use and development control within the Kondinin Locality. With respect to the Scheme's aims, the Proposal is aligned generally with each of the scheme's aims as it demonstrates to provide a sustainable ecological and amenity conscious development.

The proposals attempts to protect and enhance the environmental values of the rural locality and safeguard the amenity of the Shire through locating in an area which is away from town views and involves minimal native vegetation clearing, the sustainable source of energy will provide a viable energy source which enables economic growth of this part of the Wheatbelt.

#### 7.2 Zoning

The proposed Development is located within a 'rural' zone of the Shire, according to Map 1 of the TPS1. Developments within the rural zone are to abide by the restrictions as set out in clause 5.24 (Rural Zone), excluding where clearing of native trees or substantial vegetation is required for firebreaks, access to building sites, area of buildings and cash crops. As clearing of less than 2,000 m<sup>2</sup> is required, the additional provisions under this scheme do not apply. The TPS also recognises the importance of prime agricultural land in the rural zone and further subdivision of existing lots will only be supported where the land has already been physically divided which prevent the use of the land as a single unit.

The Proposal, while not a typical form of farming, is a diversified form of farming that has local, regional and state benefits. The project footprint will occupy land which is currently used for agricultural purposes and it is envisaged that on the site the existing farming activities would be able to continue during the lifetime of the project.

As outlined in Planning Bulletin 67, the Model Scheme Text does not include a definition for wind farms or wind energy facilities, hence wind farm developments are typically classified as a 'use not listed' in town planning schemes. A 'wind farm' as a use class is not specifically defined in the Shire of Kondinin TPS1 and therefore it is classified as a 'use not listed' in accordance with Clause 4.4.2.

It is expected that the Shire will determine that either the use is or may be consistent with the objectives of the Rural zone.

#### 7.2 Approvals

It is anticipated that the following decision-making authorities are required to approve various aspects of the Proposal. Refer to Table 10 below.

Table 10: Required approvals

<b>Proposal activities</b>	<b>Land tenure / access</b>	<b>Type of approval</b>	<b>Legislation regulating the activity</b>
Project	Shire of Kondinin	Development Approval	Shire of Kondinin Town Planning Scheme No.1 (TPS1); Planning Bulletin 67 (WAPC 2004)
Project construction	Shire of Kondinin	Building licence BA4	Building Act 2011, Building Regulations 2012; Health Act 1911
Clearing for construction	Clearing to occur within: Lot 25704 in DP151492 (Sites Entrance Q); Lot 202 in DP065471 and Lot 200 in DP300389 (Site Entrance S & T).	Native Vegetation Clearing Permit	Environmental Protection Act 1986 – Part V
Water usage for construction and operation	Water Corporation	Water Supply Application for supply from Distribution Mains	
Water abstraction for construction and operation (if required)	Department of Water and Environmental Regulation	Water abstraction licence (5C licence) 26D licence to construct a bore	Rights in Water and Irrigation Act 1914
Over Size Over Mass Vehicles (OSOM) transportation of wind turbine components	Access to state roads / Main Roads WA Heavy Vehicle Operations Branch	Class 1 RAV Over Size Period Permit; Class 1 RAV Over-mass Period Permit (up to 92.5 tonnes);	Road Traffic (Vehicles) Regulations 2014; Road Traffic (Vehicles) Act 2012
Over Size Over Mass Vehicles (OSOM) transportation of wind turbine components	Access to local roads / Shire of Kondinin; Shire of Kondinin, Restricted Access Vehicles RAV Networks 4 to 7	Planning Approval	Road Traffic (Vehicles) Regulations 2014; Road Traffic (Vehicles) Act 2012;
Access to high voltage transmission network	Western Power	Access contract	Applications and Queuing Policy; Electricity Networks Access Code 2004
Landowner leases	WAPC Approval of lease agreements exceeding 20 years	Form 1B	Planning Development Act 2005, Section 136

## 8. Commonwealth Government approvals

Refer to attached Planning Compliance Report, section 4.1 Federal planning framework.

### 8.2 EPBC Act

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is administered by the Commonwealth Department of the Environment and Energy (DoEE). Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have, or is likely to have, a significant impact on a Matter of National Environmental Significance (MNES) or Commonwealth land, then the action may not be undertaken without prior approval of the Minister. Actions which adversely affect these matters may be deemed to be a 'controlled action' under the Act. If an action is likely to have a significant impact on an MNES this action must be referred to the Minister for the Environment for a decision on whether assessment and approval is required under the EPBC Act.

Table 11: Compliance evaluation EPBC Act

Compliance evaluation
<p>Impacts to potential conservation species are discussed in section 5.4 of the <i>Flora and Fauna Assessment (FFA) (SW Environmental 2017)</i>.</p> <p><b>Threatened Ecological Communities</b>                      The FFA notes that the project will not require the clearing of any TEC. Two points where the proposed transmission line easement (30 metres) may cross areas of mapped TEC and pruning of trees will be required at these locations have been identified and are addressed in Table 8 of the Development Application Report.</p> <p><b>Conservation Significant Flora</b>                      The FFA notes that for the infrastructure locations proposed, no conservation significant flora will be directly impacted by clearing. Although several populations of Priority flora were located across the site, none of these is within 20m of the proposed infrastructure location and should be able to be avoided.</p> <p><b>Conservation Significant Fauna</b>                      The FFA notes that eight conservation significant fauna were identified as potentially occurring, or having suitable habitat, within the project area. Although clearing impacts are unlikely to impact the fauna above considering the small amount of clearing across the entire project area, the potential for impact to Rainbow Bee-eaters and Carnaby's Black Cockatoos was identified, on the basis that these species are endangered, rather than the likelihood of collision, which was assessed to be rare. The Rainbow Bee-eater was found to be a low risk species. However, a qualitative risk assessment found the Carnaby's Black Cockatoo to be a moderate risk species, although the likelihood of collision was considered rare as individuals would fly below the rotor swept area.</p> <p>Based on Table 5-1 of the FFA, the proposal is not likely to trigger the need for referral. However, Kondinin Energy commits to liaising with the DoEE to seek advice as to whether a referral should be submitted.</p>

Kondinin Energy intends to refer the Proposal to the Department of the Environment and Energy in August 2018. Based on the various environmental studies undertaken, it is not expected that the Proposal will be determined as a controlled action.

## 7. Appendices

*Appendix A – Electronic spatial data*

*Appendix B – Maps and Figures*

*Appendix C – Planning Compliance Report*

*Appendix D – Flora and Fauna Assessment*

*Appendix E – Noise Impact Assessment*